INNOVATIVE COOPERATION AND COLLABORATION: A STUDY ON RWANDAN COFFEE COOPERATIVES

A Thesis

by

ROBERT MATTHEW STELLBAUER

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

May 2010

Major Subject: Agricultural Leadership, Education, and Communications

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Approved by:

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Glen C. Shinn

Committee Member, Edwin Price Head of Department, Jack Elliot

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ABSTRACT

Innovative Cooperation and Collaboration: A Study on Rwandan Coffee Cooperatives.

(May 2010)

Robert Matthew Stellbauer, B.S., Texas A&M University

Co- Chairs of Committee: Dr. James R. Lindner Dr. Glen C. Shinn

The purpose of this study is to describe and examine the attitudes of coffee cooperative members towards the ownership of the SPREAD cooperatives in relation to cooperative sustainability. In addition this study identifies barriers faced by member farmers and subsequently provides recommendations on ways in which SPREAD can help its member farmers achieve a more sustainable livelihood.

Previous analysis of the SPREAD project and its member cooperatives has suggested that coffee cooperative members do not feel ownership of the cooperative and have not benefited from the cooperatives, leaving the sustainability of the cooperatives to question. The research questions used for this study focused on issues of sustainability, ownership and organizational impact and barriers.

All of the cooperatives studied over the course of this project receive funds from the USAID funded project SPREAD. The population of interest comprised members from three of the fourteen cooperatives receiving aid from the SPREAD project.

A sample of 52 individuals participated in the study, with the data being collected from mid-July to mid-August, 2009. Quantitative data were collected using a close-ended category-scale questionnaire. The close-ended category-scale questionnaires were analyzed based on the frequency and percentage of responses.

Major findings of this study included that coffee cooperative members felt that in the absence of SPREAD, the coffee cooperatives would be unable to function. In regards to ownership, members felt as if they owned the cooperatives. The disparity between these two constructs shows that once SPREAD no longer supports the cooperatives, then sustainability is to question and further they are more susceptible to collapse.

DEDICATION

My work is dedicated to my parents; without your support I am not sure that this thesis would have been possible. Growing up I never quite understood why you demanded so much from me. After completing this work, I now know it's because you saw something in me that I had yet to realize in myself. Thank you for your enduring love, thank you for your patience, and thank you for never giving up on me.

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NOMENCLATURE

- ICA- International Cooperative Alliance
- ILO- International Labor Organization of the United Nations
- PEARL- Partnership for Enhancing Agriculture in Rwanda through Linkages
- SPREAD Sustaining Partnerships to Enhance Rural Enterprise and Agribusiness

Development

USAID- United States Agency for International Development

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CHAPTER I

INTRODUCTION

Eradicating poverty in Sub Saharan Africa continues to be one of the biggest challenges facing the global community today (Develtere, 2008, ix). Over the past 25 years the number of those living in poverty has doubled from 150 million to 300 million, with half of the population surviving on less than 1\$ per day. The Commission for Africa (2005) notes that, "the continent needs successful African entrepreneurs and a strong and vibrant small enterprise sector to provide the innovation and productivity growth necessary for long-term poverty reduction" (p. 87).

The Rwandan Patriotic Force Leader and later president of Rwanda, Paul Kagame and his newly inherited government faced a daunting task in the aftermath of the Rwandan Genocide. Having overthrown a government that incited ethnic tension and promoted a conflict which saw 10 percent of its population slaughtered in just 100 days, Kagame saw the rebuilding of Rwanda as a battle for hearts and minds. Further he knew that in order to bring stability to a war torn country that swift action would be needed.

The United States Agency for International Development points out that, "In many developing countries the agriculture sectors performance determines the overall

This thesis follows the style of *Journal for International Agricultural and Extension Education*

economic growth, trade expansion and increased income earning opportunities" (2004, p.3). Embracing this ideal, Kagame took a sector that was once under tight government control and restructured it in such a way that power was placed back in the hands of average Rwandans. With the embargos relaxed, industry in Rwanda began to flourish. One such industry was that of coffee, particularly the development of a new niche product—specialty coffee. Since the 1930s, coffee has been a mainstay of the Rwandan economy. Belgian colonial officials encouraged coffee production as they saw it as a high value commodity. To this day, coffee production in Rwanda has generated millions of dollars in export revenue and continues to receive praise from the international community for the high quality of its local beans.

Through Kagame's swift action, the liberalization of the Rwandan economy will continue to change the lives of countless of Rwandans. Incomes have increased and new avenues for entrepreneurship have materialized. "You can see that people are together now and they can think in terms of profits, not in terms of what divides them." (Van Dyk, 2005). This empowerment has led the average to Rwandan to raise their standard of living, which in turn helps them to better care for themselves and their families.

Boudreaux (2007) notes "by using a liberalized economy as the platform from which to spark development in a post conflict environment, Rwanda has seen substantial impacts in the way individuals have responded to the development of agriculture and more importantly peace" (p. 3).

In the last two decades, the coffee industry in Rwanda has taken great strides to move from an industry that was once tightly controlled and politicized to one that is

quickly developing a highly desired niche product-specialty coffee. It should be noted however that the coffee industry is not the only one receiving benefits. The creation of this market has created an environment where small business can flourish and people can trade freely allowing those that work within the other facets of the agriculture sector to also benefit. Coffee producers now have market access and are presented with avenues in which to sell their product. With that comes more opportunity to develop greater trade relations and skills training.

As Boudreaux (2007) points out, "the liberalized coffee sector appears to be providing an unexpected benefit. By relaxing the policies on the coffee industry, Rwandans now see it to their benefit to collaborate and cooperate with each other" (p. 5). The freedom to sell their coffee on international markets provides producers throughout Rwanda with incentives to form cooperatives. In 1995, the International Co-operative Alliance (ICA, 1995, ¶1), the apex organization that represents cooperatives worldwide, defined a cooperative as:

An autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically- controlled enterprise.

Cooperatives can be found throughout the African continent and represent a significant part of the private sector in most African countries. Cooperatives in Africa Developed as a result of colonization, Develtere notes that colonial authorities "introduced mechanisms that would foster cooperative development, including legal frameworks, promotional schemes and funding systems" (p. 2, 2008) thus the

cooperative movement is not indigenous to the African Continent rather it is the result of colonial social and economic engineering.

As elsewhere in Africa, The Rwandan cooperative movement is part of a vast voluntary sector that can be found in both town and country. Its roots lie in the history of development cooperation and in the evolution of the country's political, social and economic life. From the 1950s to the mid-1980s, postcolonial government as well as other developing nations saw cooperatives as central to their economy. Further, because of the nature of cooperatives, these organizations were often times targets for large amounts of development assistance. Birchall (2003) pointed out that "this aid proved beneficial in producing cooperatives that were self sustaining with many producers benefiting such as farmers close to urban markets, who found it easier to export their produce as a result" (p. 12).

Boudreaux notes, "in an effort to revitalize the cooperative system in Rwanda, innovative approaches are being used to try to close the gap between Rwandan producers and consumers in distant markets" (p. 5). By placing emphasis on bottom up decision making and cooperatives that are member owned, organizations such as the Maraba cooperative are beginning to close the gap between the decision makers and those of rural poor, allowing the cooperatives to tailor their approaches to the needs of its members. While difficult, it is imperative that development interventions be based on an understanding of the local context. In this respect, the variation in household livelihoods is a central issue, since it is through a better understanding that interventions can be

focused on poverty, and can be effective to include disadvantaged groups in development.

Goff (2006) notes that one such intervention is through the use of adult education as a platform for capacity building, for "it is through this that individuals are given the ability to achieve their dreams and control a destiny that often goes unrealized" (p. 28). By taking an innovative approach to adult education, Rwandans are able to obtain the knowledge, skills, and attitudes needed to operate their own enterprises. Moreover, it is only thorough a collaborative effort that coffee producers are able to exceed gains achieved in the revitalization of human resources and productivity, and as a result, increase incomes and improve material conditions. Capacity buildings chief aim is to provide people with the increased knowledge base needed to solve their own problems, increase self-confidence and self-reliance, as well as improve their quality of life.

Birchall (2003) notes that, "there are many internal and externals constraints that have caused many development professionals to argue against the cooperative model for sustainable development" (p. 6). Such barriers include lack of autonomy due to government interference, inadequate market access, and males dominating membership and decision-making positions while women did most of the production. It is only through innovative collaboration that these barriers can be surpassed-creating an environment of upward mobility thus increasing the viability of cooperatives. However, for this to become more than just ideas on paper, an investment in human resource development needs to be made by governments and international aid agencies alike.

Foreign assistance should also work to enhance the capacity of national institutions to undertake development activities. Institutions such as SPREAD (Sustaining Partnerships to enhance Rural Enterprise and Agribusiness Development), receives funding from the United States Agency for International Development (USAID) and works in collaboration with fourteen coffee cooperatives throughout Rwanda.

SPREAD was born out of the success of the USAID project, Partnership for Enhancing Agriculture in Rwanda through Linkages (PEARL), which was implemented in 2001 (Ottaway, 2004). PEARL, having recognized the cooperative's tenacious spirit, developed a plan that would help strengthen their operational capacity. Goff (2006) noted, "project leaders offered technical assistance in all aspects of the production and sale of high-grade coffee for specialty markets throughout the world" (p. 4). From the very beginning, the PEARL project placed an emphasis on the revitalization of the coffee cooperatives' human resource base.

Like PEARL, SPREAD is an "alliance of public and private institutions and businesses that increase rural incomes by linking small producer groups directly with high value international markets" (Sustainable Partnership to Enhance Rural Enterprise and Agribusiness Development, 2010). SPREAD targets rural agriculture by providing services such as skills training, and access to credit as well as health related services to high value agriculture enterprises in hope that it will result in higher incomes and a platform from which to build a sustainable livelihood

Through this integrated approach coffee producers are able to propel its targeted value chain into high end, high value markets. SPREAD prides itself on being market-

driven and capitalizing on four key trends: quality, traceability, farmer first, and Africaphillia (Sustainable Partnership to Enhance Rural Enterprise and Agribusiness Development, 2010).

- 1.) Quality: Meeting consumer demand for higher quality coffee
- 2.) *Traceability*: Providing consumers with information on the origins and production practices of their coffee.
- 3.) *Farmer First:* Ensuring consumers that the coffee is being bought at the fairest possible price from the farmer.
- 4.) *Africaphillia:* Fulfilling the consumers desire to support African products, as well as share in the story of Rwanda's rebirth.

SPREAD is designed to ensure long-term sustainability by identifying high value product supply chains, perfecting each link in the chain from production, processing, packaging and on to transport to the market selling direct to buyer. SPREAD "professionalizes" each chain by first empowering the producer as the core of the critical mass of human resources to establish and maintain the targeted value chains. SPREAD works within the value chain to create sustainable capacities at the farm level. Utilizing extension agents, health professionals, and various media outlets coffee producers have a degree of professionalism that has left them empowered, enabling them to see that improving livelihoods is not only about increasing coffee production, but also about better healthcare and improved skill sets. As Price (2006) notes, The SPREAD approach consists of six key components, they are: quality, environmental stewardship,

sustainability, new opportunities, information and communication technology, and promoting better health.

- Quality –Improvement in Quality drives the Specialty Coffee Market. SPREAD
 prides its self on providing farmers with the knowledge and technology needed to
 make improvements along this value chain.
- 2. Environmental Stewardship SPREAD seeks to be a friend of the environment. By helping farmers seek out and obtain organic certifications.
 These certifications help them sustaining both the quality of the coffee but also, help to preserver Rwanda's slowly degrading soils.
- 3. **Sustainability** In order to sustain improvements along the value chain, SPREAD recognizes that two critical program elements are needed:
 - a. Capacity Building By strengthening the producer's capacity to make decision related to the production and sell of specialty, SPREAD can begin to create and environment where it is no longer needed.
 - b. Partnerships The ability for producers to call on partners with resources and a knowledge base needed to sustain these value chains is essential in the long-term sustainability of the specialty coffee industry.
- 4. **New Opportunities** SPREAD encourages producers to move beyond specialty coffee and create small businesses such as Coffee Roasters and Tea shops.
- 5. **Information and Communication Technology** Internet access is essential to the sustainability of high Value Commodity chains. Communication between

- U.S. and European companies and Rwanda's rural agribusinesses are necessary to sustain rural economic growth.
- 6. Promoting Better Health SPREAD sees an integrated approach to development as essential to sustaining value chains but also to sustaining rural livelihoods. By integrating outreach programs focused on rural health, SPREAD is able to address issue that contemporary aid donors may overlook, yet are still essential in the fight against poverty.

Statement of the Problem

Previous analysis of the SPREAD project has suggested that coffee cooperative members do not feel ownership of the cooperatives and further, have not benefited from the cooperatives, leaving the sustainability of the cooperatives to question.

An assessment performed in 2008 (Swanson, 2008) on the SPREAD cooperatives states that one of the of the principal root problems facing coffee cooperatives in Rwanda today, is that the farmer producers themselves – the supposed actual owners of these cooperatives – have not kept pace with the capacity building that has taken in other areas of the coffee value chain.

Swanson (2008) noted, "that many times training conducted with cooperatives is focused exclusively on the board of directors who fail to implement the training throughout the organization" (p. 5). Does this accurately portray the farmer's perception of the cooperative organization or are assessments such as these trying to fit a western understanding of cooperative principles into a uniquely African situation?

Swanson continues by writing that, "when focus and some training is given to the cooperative, much of this goes no further than the board of directors who tend to run their cooperative like a social welfare organization – without consideration of business principles" (p. 5, 2008). Yet, those that are running the cooperatives are simple farmers, many with no formal training in business. Despite all this, coffee producers still manage to produce a high quality product, which is allowing them to raise their standard of living and create greater future for their families. While many may approach the Rwandan situation with very contemporary ideas, local producers may be looking at the situation from a very different vantage point rooted in their history and culture. So whose window are we looking through and how do the member farmers perceive cooperative sustainability?

The last point that Swanson makes is that, through his assessment, he found that members have almost no ownership of their cooperatives, and only see the cooperative as one option, among others, for selling their coffee cherries. Is this a contradiction on the part of the farmers or those carrying out assessments? How do the farmers perceive ownership and how does it relate to the idea of cooperative sustainability?

Purpose

The purpose of this study is to describe and examine the attitudes of coffee cooperative members towards the ownership of the SPREAD cooperatives in relation to cooperative sustainability. Understanding the cooperative members' attitudes towards cooperative ownership and sustainability, may allow us to further understand ways in which the SPREAD model of innovative cooperation and collaboration has helped as

well as hindered the process of poverty alleviation. In addition an, assessment of members attitudes will allow us to begin developing innovative strategies for closing the knowledge gap between the decision makers and that of the rural poor.

Objectives

This study consisted of five objectives:

- Describe and examine the relationship between the attitudes of coffee
 cooperative members towards cooperative associations and the specialty
 coffee industry and by gender, age, identity of the cooperative, recipients of
 monies from the survivors of the genocide fund and number of children.
- 2. Describe and examine the relationship between coffee cooperative members' perception of the benefits received through their association with the cooperative by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.
- 3. Describe and examine the relationship between the coffee cooperative members' attitudes towards money earned from the cooperative association as well as its impact by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.
- 4. Describe and examine the relationship between coffee cooperative members' attitudes towards cooperative sustainability and by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.

5. Describe and examine the relationship between coffee cooperative member's perception of cooperative ownership and the SPREAD project and by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.

Methods

A survey research design comprised of a quantitative, close-ended category-scale questionnaire. Ary (2009) noted that, "the quantitative method has many positive attributes, the greatest being its ability to ask many questions in a limited period of time, allowing direct comparison of responses as well as analysis that is easy to carry out" (p.35).

The sample population was composed of the member farmers from three of the SPREAD assisted coffee cooperatives. The three cooperatives studied received support from SPREAD as do eleven other coffee cooperatives. The SPREAD project director, and the SPREAD staff, selected Maraba, Humury, and Muhundo for this study, as they believed that looking at cooperatives of varying sizes would provide a clearer picture of the social economic impact of its members. (Jean Claude Kayisinga, Personal Communication, June 24th, 2009).

Participation of the member farmers was based solely on their availability at the time the questionnaire was administered. A total of 52 individuals participated in the research task. The interviewer's role was critical in helping to ensure the content validity of the instrument questions. The five interviewers consisted of two students from the National University of Rwanda, and three SPREAD staff members, four were male and

one was female. All five were fluent in English, French, and Kinyarwanda (the local dialect).

The data were collected from mid-July to mid-August, 2009. Prior to the administration of the questionnaire, the researcher and interviewers introduced themselves to the participants. The researcher addressed the issue of confidentiality before beginning the survey, explaining that the participants' names would not be released, ensuring a level of confidentiality among the three cooperatives.

In the data analysis process, the names of the participants were coded in such a way that the confidentiality of the participants was insured.

Limitations of the Study

There are three major limitations in this study:

- 1. The tendency for the researcher to introduce social desirability bias is high.

 There is potential for the interviewee to share what they believe the interviewer wants to hear, thus limiting the validity of the results. Building relationships was crucial in limiting the amount of bias in this study.
- 2. The participants of this study were cooperative members who were present at the cooperatives during the time that the survey was being administered. The sample may not have been representative of the larger cooperative membership.

Basic Assumptions

Within this study there are three basic assumptions:

- 1. Literature on the SPREAD project accurately portrays the attitude of the farmers.
- 2. Member farmers have a sense of ownership and see the cooperative organization as sustainable.
- 3. Innovative collaboration and cooperation in the form of innovative policy that creates an environment for non-formal adult education programs to flourish can greatly impact the long-term sustainability of the cooperatives.

Definition of Terms

Cooperative- A co-operative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. (ICA, 1995)

Developing country- low and middle-income countries in which most people have a lower standard of living with access to fewer goods and services than do most people in high-income countries (World Bank, 2000)

Indigenization - the transfer of economic power to the local people (Craig, 2002) *Path Dependency*- The Antecedent conditions and past choices or decisions that determine the route that cooperative development takes. (Develtere, 2008)

CHAPTER II

LITERATURE REVIEW

This chapter provides a framework for this study by providing a review of literature related to the issues of cooperative development and capacity building.

Secondly, this chapter places Rwanda in a contextual setting by providing a description of the countries geography, history and economy.

Cooperative Development in Africa: A Path to Dependency

Three works have been chosen that will provide a framework for the issue of cooperative development. Develtere report, *Cooperating out of Poverty: The renaissance of the African Cooperative* movement and Swanson's assessment of the Spread cooperatives entitled *SPREAD-Growers First Coffee Cooperative Assessment & 2008 Cooperative Development Work Plan* and Boudreaux's work, *State Power Entrepreneurship, and Coffee: The Rwandan Experience*. All three works provide an overview of the topic at hand.

Cooperative development models in Africa were never designed to teach indigenous people about self-sufficiency, much less provide them lessons in cooperative ownership and sustainability. Rather, as Develtere (2008) notes that in order to understand the cooperative model in Africa, you must first understand that "the cooperative model in Africa is an inherited one, and second the cooperative sector carries a long heavy legacy that conditions its path" (p. 1). Cooperatives in Africa Developed as a result of colonization, Apthorpe (1977) indicates that cooperative

development throughout Africa was "more about State building rather than Nation Building" (p. 5). As Develtere points out, colonial authorities "introduced mechanisms that would foster cooperative development, including legal frameworks, promotional schemes and funding systems" (p. 2, 2008). Thus, the cooperative movement is not indigenous to the African Continent rather it is the result of colonial social and economic engineering.

Further, Develtere notes that the key to understanding how coffee cooperative members perceive ownership of the cooperatives is rooted in the idea of Path Dependency. Path Dependency is defined as the "Antecedent conditions and past choices or decisions that determine the route that cooperative development takes" (p. 2, 2008). For colonial authorities the development of cooperatives was tied to their export strategy rather than the marketing strategies of its members. Kerr (1978) notes that cooperatives lacked the "aspect of being self-generated and the staff who administer them seldom are members or dependent upon the co-ops or their success for their income (p. 87). Further, path-dependency was connected to the specific government-cooperatives rapport that was established in most colonies "It made government the prime patron of the cooperatives, contrary to the internationally accepted view that cooperatives are primarily membership, voluntary and autonomous organizations" (Develtere, 2008, p. 3). So it was that path dependency, created an environment in which cooperative organizations became followers and not leaders.

In the case of Rwanda, path dependency played a large role in the development of their cooperative systems. "In order to introduce the cooperative system to this

country, colonizers taught indigenous producers a set of administrative rules known as universal cooperative principles" (Develtere, 2008, p. 282). This taught producers to organize around high value export crops such as tea and coffee. While these principles taught Rwandans what a cooperative was and how they should function, these principles were still based on the idea that cooperatives should serve an outside agenda.

Kerr (1978) wrote that colonial authorities felt that "the principles of cooperation were natural to African peasants and stem from the traditional past" (p. 87). Migot-Adholla (1970) noted, "It was thought that cooperatives could mobilize local energies to overcome social and cultural obstacles to development" (p. 18). Throughout the literature it has been shown that cooperatives were seen as a way to educate peasants seen to be deficient in economic motivation and also bring equality and mutual aid into otherwise unequal and hierarchical societies.

Apthorpe (1977) states that co-ops had a great ideological attraction, "being neither capitalist nor communist, it was a channel to "socialism"-a form of cooperation seen as natural to Africa" (p. 6). This was farther from the truth however, as African nations began to gain independence, it soon became apparent that little thought was given to a postcolonial cooperative development model. This left cooperative members with a legacy of dependency and little training in the areas of cooperative management and ownership.

The void left by colonial authorities, was often filled by transitional government who like their predecessors used the cooperative system to serve their own purposes, many times contributing to conflicts such as the Genocide seen in Rwanda. As was the

case in Rwanda, leaders felt that in order to rebuild the country, they needed to learn from the mistakes of the past, this meant utilizing cooperatives in such a way that they became "an instrument of poverty reduction in both rural and urban areas" (Develtere, 2008, p. 289).

Capacity Building through Innovative Cooperation and Collaboration

Boudreaux (2007) provides a glimpse into how Rwandan coffee cooperatives have helped rebuild and shape the identity of a nation. Throughout her article, Boudreaux shows how innovative collaboration and cooperation has transformed a once fledgling coffee industry into a mainstay of Rwanda's economy. Further, she points out how appropriate government intervention and support from Non Governmental Organization has impacted the way in which farmers are making improvements to the value chain; which in turn has led to an increase in income and a climb out of poverty.

Boudreaux (2007) points out that "before 1994, the official coffee policies mandated by the Rwandan government created no incentives for coffee producers to collaborate with each other" (p. 5). After the genocide, when producers began to see greater flexibility with the markets, the incentive began to shift and people have now begun the process of collaboration allowing them to work together in a variety of new ways. It has been suggested by the international community that the ability of a country to follow sustainable development paths is determined to a large extent by the capacity of its people and its institutions as well as by its ecological and geographical conditions (United Nations, 1992).

While the transfer of Agricultural skills is the main purpose for the cooperative they also began to be used as tools for Human Resource Development and Adult Education. Swanson (1996) defines human resource development as "a process of developing and/or unleashing human expertise through organizational development and personnel," (p. 8). Yet as Knowles et al. (2005) points out, "the largest issue that separates adult learning from human resource development is the issue of control" (p. 170). Within adult education the learner is given a great deal of control over the content and delivery methods used in programming. In human resource development, on the other hand, the learners' domain of influence is a more restricted because of organizational constraints.

Birchall (2003) notes that that by definition, "cooperatives are independent of government and not owned by anyone other than the members" (p. 3). Further he stresses the need for the training and education of its members, pointing out that in order to recover from past mistakes that it is imperative for cooperatives to "make a commitment to the education and training of their members and though they exist primarily for the benefit of their members, they also have responsibility for their wider community" (p. 3). As Wilson (1987, p. 407) points out "cooperatives should been seen as a rural network of training centers" embracing this idea, cooperative members began to learn new skills such as basic health skills, functional literacy, basic arithmetic as well as basic western notions of credit in kind and cash can be taught. By using cooperatives as training centers, members are gaining added benefit, while also strengthening their operational capacity. Further, The United States Agency for International Development

points out that "in Sub Sahara Africa, one-third of all rural households are now headed by women" (2004, p. 7). Following the genocide women were expected to continue farm operations in the absence of their husbands, providing a substantial share of farm labor and ultimately becoming responsible for household food security. The cooperative association has provided both women and children a resource base from which they can gain access to productive resources—land, knowledge, and capital.

Innovations such as the formation and management of cooperatives have allowed cooperative members to focus on the ideal of indigenization or the "transfer of economic power to the local people" (Craig, 2002, p. 3). Focusing on this ideal has forced coffee producers to seek out way in which their capacity to create joint strategies to market and sell coffee could be increased. As a result, people are now able to rebuild their communities and start the process of reconciliation. Because the coffee cooperative acts as a catalyst for poverty reduction, it is imperative that they maximize their gain.

Otherwise social and political objectives will not be met, which are both factors that play into the concept of a sustainable livelihood.

It is shown throughout Boudreaux's work that the introduction of the specialty coffee market has allowed Rwandan coffee growers opportunities to collaborate with other coffee producers resulting in an improved product, as well as introduced them to an international coffee market that is providing them with a knowledge base and a platform from which to sell their product. This article points to four ways in which this niche market is helping to build capacity and transform, the lives of coffee producers throughout the country:

- 1. The specialty coffee industry alleviates poverty and creates jobs
- Skills training in business and management are now available as a result of this industry
- The lives of ordinary Rwandans have been affected by the actions of specific coffee entrepreneurs
- 4. The specialty coffee industry promotes an atmosphere of post-conflict reconciliation

Cooperative Management Structure

Goff (2006) note that "The management structure of a cooperative is made up of three components: the membership, the board of directors, and the management.

Showing the interconnected roles of the three components" (p.20). Further, Mendoza (1980) delineated the three steps for the establishment of a cooperative.

First, the members collectively elect the members of the board of directors. Second, the board of directors, acting as a body, appoints a manager and authorizes management authority. Third, the manager recommends to the board of directors the hiring of the staff and performs the functions of management in the cooperatives' day-to-day activities (p.30).

Mendoza (1980) emphasized that it is the members who ultimately determine the quality of the management of a cooperative. "The ideal is that the members elect among themselves qualified and competent members of the board, who in turn, also appoint qualified and competent hired management" (p.31). However, when cooperative members elect directors who are inadequate for the task, it is likely that the hired

management will follow suit. For these reasons, Mendoza stated that the "quality of the management depends on the quality of the membership" (P.32). The membership must understand the weight of their responsibility in ensuring the proper management of their cooperative.

Goff (2006) notes that "The first component of cooperative management, the cooperative members, are responsible for adopting and amending corporate papers, selecting and removing cooperative directors, preparing for management position through constant exposure to the actual workings of the cooperative and training" (p.19). Members who patronize the cooperative consistently are entitled to receive a patronage refund in proportion to the volume of business contributed to the cooperative and to control the affairs of the cooperative.

Goff (2006) points out that "The second component of cooperative management, the board of directors, is charged with the responsibility of managing the cooperative on behalf of the members" (p.20). As outlined by Mendoza, the responsibilities assumed and handled by the board of directors are to act as a trustee for the members, "especially in relation to financial matters, establish and develop basic objectives, broad policies, and long-range plans, and appoint the manager" (p.33). In addition, the board of directors delegate authority to the manager and the staff, controls the affairs and business of the cooperative, require the installation by the hired management of an adequate accounting system, and maintain a constant two-way channel of communication with the members and the public.

Goff notes that, "The third component of cooperative management, the hired management, attends to managing the day-to-day activities of the cooperative" (2006, p.20). The manager is the driving force in management. For this reason, most people believe that the manager's position is to be equated with the management itself. He notes that this is an erroneous assumption. "Each component, hired management, members, and board of directors, play a vital role in the effective management of the cooperative" (Goff, 2006, p. 20)

Poverty Alleviation and Job Creation

Munker (2001) states that "cooperatives do not help the poor, but by working together, by pooling their resources, by submitting themselves to group discipline and by accepting to combine self-interest and group solidarity the poor can solve some of their problems by way of organized self-help and mutual aid better than alone" (p. 4). As a result of the specialty industry, coffee producers are now able to link their efforts with those of the international markets for high-grade coffee. Rwandans are making skills training a priority, which is allowing them to control a greater share of the market.

Birchall (2003) "notes that it was poor people who originally invented cooperatives as a form of economic association that would help them climb out of poverty" (p. ix). Boudreaux (2007) illustrates that by using cooperative association to organize coffee production and turn it into a tool for poverty reduction, "farmers are now able to pick up skills and techniques such as learning the best way to care for their coffee trees, how to process their cherries, how best to store and transport beans, how to cup coffee, and how to market it" (p. 5). At cooperatives Rwandans are learning these and

other skills all with the hope that these technical innovations will result in the ability to sell their product at higher prices to coffee buyers throughout the world.

After the Genocide, coffee production in Rwanda had ceased. As a result of the conflict, the fields had gone fallow. Because the technical skills needed to produce this coffee were unknown to most farmers, less than half of them produced coffee. Years of conflict had left the nation in shambles and this, compounded with the fact that coffee prices were falling world wide, left the industry on life support. Many of the former producers were dead or missing and the resource base from which to maintain the trees had been destroyed. With no resources, the remaining coffee producers found themselves unable to contribute to reconstruction efforts much less the bigger problem of poverty alleviation.

In 2006, revenues from coffee production accounted for more than half of all Rwandan export income. With this revenue, producers were able to establish more stations for the production of coffee cherries, allowing for an increase in the amount of fully washed coffee. In the spring of 2006, Boudreaux (2007) notes, that, "producers' confidence in the coffee industry as well as the success of projects like SPREAD is evident when you take into account that in 2006 there were 46 washing stations in Rwanda where as in 2000, there were only two" (p. 10).

In the decades prior to the genocide, Rwandan coffee rarely moved past

European markets. However due to the liberalization of the economy and the increased
focus on market access, consumers from other countries are now able to find Rwandan
coffee on the shelves of their local supermarket. In fact, Boudreaux (2007) notes that

"now U.S. importers and coffee roasters are going to great lengths in seeking out Rwandan coffee" (p. 11). They see it as not only as an important market but also as an example of an African country that has used development aid to empower its people. Due in part to the liberalization of the coffee trade and the elimination of the legal mulching requirements, coffee producers now have the ability to freely contract with buyers as well as form cooperatives which enables farmers to take advantage of economies of scale.

Cooperatives are now able to contract directly with buyers putting Rwandan farmers at a distinct advantage. Boudreaux (2007) shows that "Cooperatives negotiate its sales price directly with these buyers and do not have to take a price offered by the monopsony purchaser" (p. 17). Because the middle men are all but eliminated, cooperative can now retain a greater share of their earnings allowing the farmers to keep more of their coffee's added value.

New Skills and Opportunities

As members of cooperatives, specialty coffee producers are receiving skills trainings in such areas as marketing and contract negotiation as well as learning how to secure fair-trade certification. While this is only a small sample of the skills aquired through the production and sale of speciality coffee, it should be noted that these are skills which can be used in other sectors. Boudreaux (2007) suggest that a "person who learns how to manage a coffee washing station will acquire skills that can be put to good use in other managerial positions" (p. 21) While Boudreaux presents a compelling case for cooperatives as a tool for development, she does not explain why cooperatives are a

different development agent compared to International NGOs, bilateral cooperation and other international initiatives? Pollet and Develtere (2004) explains, "Cooperative development agencies give more specialized cooperative and business related expertise. To put it differently, international NGOs provide a more holistic approach to development and technical assistance and focus on particular target groups and their needs" (p. 2).

With help from projects like SPREAD, farmers are acquiring other technical skills needed to produce specialty coffee. Pollet and Develtere (2004) points out "due to their integrated approach and their size, cooperatives may act as a vehicle for inducing more sustainable ways of farming" (p. 4). SPREAD has provided coffee producers in Rwanda with a constant flow of information on the operation of the coffee industry and consumer preferences in relation to their product. Through centrally located quality control labs, also known as cupping labs, SPREAD offers volunteer programs where producers can "cup coffee" allowing them to taste the product they have grown and learn about its different traits as well as some of its defects.

SPREAD also arranges for coffee experts from around the world to come to Rwanda and provide lessons on quality control, teaching producers to identify the various flavors within coffee, so that consumer preference and quality control are one in the same. SPREAD has trained members from the assisted cooperatives and provided them with specialized training that teaches how to detect the desirable characteristics of coffee as well as identify any possible defects. As a result, Rwandans are now able to

collaborate with producers around the country and offer them advice on how to grow the best product, which in turn increases the growers' skill level.

Opportunities for Entrepreneurs

Pollett and Develtere (2004) notes that "Cooperatives should emerge as leading protagonists in the current tendency that development is something for all agents in society, not just for the government and NGOs" (p. 12). Due to the innovative collaboration and cooperation of the Rwandan government and institutions such as SPREAD, Rwandan entrepreneurs now have real reason to invest in the industry as more and more entrepreneurs are beginning to recognize that world tastes in coffee are shifting and that the demand for higher-quality coffee is increasing.

Through such innovations, entrepreneurs are collaborating with SPREAD as well as other producers to develop strategies that will enable them to produce small amounts of high-quality product rather than large amounts of a low-quality coffee. While Rwanda's production volume remains low, the demand for the product is high. While the impacts of specialty coffee industry has been high, producers are still facing barriers to development that are impeding the success of cooperative development. Develtere (2008), points out that it is "observable that cooperative leaders still have limited knowledge of management practices and that there is not a clear division between the roles of elected and executive bodies" (p. 298). Barriers such as these are make it harder for cooperatives to experience sustained level of growth and in turn making it harder for Rwandans to increase their standards of living.

In contrast to Boudreaux's article, Swanson (2008) carried out an assessment in the spring of 2008 that evaluated the long term sustainability and viability of those cooperatives assisted by SPREAD. Through this assessment, Swanson noted that he wanted to help initiate activities that will "increase cooperative communication channels to its members and form an empowered strong, cohesive, and solid grass roots organization" (p. 5).

Barriers to Innovation

To accomplish this goal however, Swanson points out that the SPREAD assisted cooperative will have to first overcome some large internal problems that threaten the sustainability of these organizations. Swanson points out, that in order for a business or organization to be sustainable its members must first feel a sense of ownership. Birchall (2005), points out that "without a strong membership organization to meet their needs, farmers are reliant on intermediaries, merchants who often find it easy to exploit them (particularly when they supply credit in exchange for produce or have control over transport systems)" (p. 7). Throughout the assessment, Swanson points out that the farmers those who are the supposed owners of the cooperatives, feel as if they have little ownership, thus resulting in a lack of urgency on their part to keep pace with the capacity building that has taken place in other parts of the value chain such as linking producers with the final markets.

Wanyama et al. (2009) notes, "by the time the cooperative movement was liberalized, most of the cooperatives in Africa were financially unstable while some had already become insolvent." (p. 10). Attention given to this link in the upper levels of the

value chain, outside the cooperative organization itself, has played a key role in launching Rwanda into the specialty coffee market something available to any group, organization, or entrepreneur capable of competing. Swanson warns that unless the Rwandan cooperatives, their board of directors, and their members are able to make the organizational and behavioral changes needed, the future of the specialty coffee industry in Rwanda is at stake.

Develtere (2007) notes, "cooperatives in the Third World have alternately been associated with high expectations and dismal failure" (p. 1). Swanson begins his critique by stating that many of the problems these cooperatives face are complicated and in fact rooted in history and culture. Despite this however, it is pointed out in his assessment, that instead of the root issues being addressed the cooperatives are still being propped up by organization such as RWASHOSCCO, the national coffee board and TRANSFAIR USA, a Non Governmental Organization that helps Rwandan cooperatives becomes fair trade certified. Because of this support, cooperative organizations are able to secure loans from the banks, allowing them to continue production, while still using poor business practices.

It is shown throughout the assessment that this is an unstable situation, with RWASHOSCCO, one of the cooperative movement's biggest supporters conceding to the fact that "while producing excellent coffee, Rwandan farmer-based cooperatives are not capable of managing promotion, sales, negotiations, quality control, or marketing" (Swanson, 2008, p. 6). Swanson notes that there are many reasons for this. Chief among them is that the cooperatives' boards of directors have refused to hire the kind of

accounting staff and general manager capable of assuming executive line leadership of the cooperative business. Goff (2006) points out that this is a dangerous situation for cooperative members, noting, "if power is too heavily concentrated the cooperative will be negatively" (p. 131). Swanson suggests that for cooperative leadership to decentralize power would be seen as a loss of power over the cooperative. The cooperative leadership would see hiring capable management as hiring an outsider who would require a salary greater than any members and possibly dominate the cooperative for their own advantage.

Swanson offers solutions to these issues and suggests that SPREAD play a key role in helping these cooperatives refocus their efforts in becoming more business minded. In order to do this however, much greater oversight, ownership and participation from cooperative members will be needed. Mendoza (1980) agrees, stating, "the members must be aware that the cooperative society is their business and that it is to their advantage to make full use of their democratic rights as members" (p. 22).

Due to limited resources, not all cooperatives will be able to be supported and hard decisions will have to be made as to which cooperatives will get the support.

Swanson points out that general managers will have to step up and play the role of the entrepreneurial leader that their job requires without the insertion into executive management decisions.

Lastly Swanson touches on the issue of the value chain. In his assessment, he notes that the link between producers and markets needs to be shorter and more efficient.

The trend within Rwanda today is to add layers to the value chain between the farmer

run cooperative and the market, thus increasing the cost at every step and decreasing the income that coffee producers actually receive. Birchall (2003) notes that empowerment in terms of development means, expanding the freedom of choice and action to shape ones life" (p. 21). Further he explains that "wherever possible poor people should have as much control as possible over the resources being invested" (p. 21).

Swanson points out in his assessment that coffee producers coffee cherries will go where the farmers best interest are served in terms of using the money to be able to feed and clothes his family. The bottom line for the farmer is what they actually receive for their coffee cherry sales plus dividends. Birchall (2003) notes, "unless poor people own the solutions being tried, then there will be no solutions, at least none that are sustainable" (p. 21). Swanson reiterates this pointing by pointing out that failure to keep the interest of the cooperative in mind will likely result in the bankruptcy of a number of cooperatives, removing competition from the markets, and making the farmers the ultimate losers in that they will receive less money than they might have for their valuable coffee.

The Context of Rwanda

In this section the geography, economy, and history of Rwanda will be touched upon, allowing for a better understanding of the research task at hand.

Geography and Economy

Rwanda is located in the eastern part of central Africa. Land locked and slightly smaller than the state of Maryland, it is bordered by Uganda to the north, Tanzania to the east, Burundi to the south, and Democratic Republic of Congo to the west (Figure 1).

Rwanda has a temperate climate consisting of; two rainy seasons (February to April, November to January); with the mountains having a more moderate climate sometimes receiving frost and snow. Known as the land of a thousand hills, the topography is comprised of grassy uplands and hills; with mountains in the north. Altitudes range from 950 to 2,500 meters above sea level in the southern part of the country to 4,500 meters in the mountainous volcanic regions of the northwest (CIA, 2009).



Figure 1. Map of Rwanda

Rwanda has a population of 8.2 million, with an average of about 338 people per square mile, making Rwanda the most densely populated country in Africa (CIA 2009.) With the average woman having about 6 children, this factors compounded with the high rate of arability and small land holdings, keeps agriculture productivity at a minimum. Further, when you consider only the arable area, population density increases to 955

inhabitants per square kilometer (Rwanda Development Gateway, 2010, Demography, ¶2). Goff (2006) notes, "it is tradition in Rwanda that land holdings be divided between the children of the deceased which leads to smaller land holdings over time" (p. 32). Estimates indicate that the typical Rwandan family' has landholdings that are less than half an acre. With 90 percent of the population dependent on agriculture, it is important to point out that, with the use of mechanization and fertilizers at a minimum, "the soils have become nutrient depleted and highly eroded, leaving Rwandans at distinct disadvantage" (Goff, 2006, p. 32). As a strategy for ensuring food security, Rwandan peasant farmers intercrop several food crops, including bananas, beans, sorghum, cassava and sweet potatoes (Clay, et al., 1996). Despite the variety of food and cash crops however, it has been estimated by the World Bank that the annual per capital income is 220 USD. (World Bank, 2009).

History of Coffee in Rwanda

In 1905, German Missionaries introduced coffee into Rwanda. Between 1909 and 1914, colonial authorities saw it in their best interest to increase coffee production. Increased production meant increased export earnings for the colonial government. Bourdeax (2007) notes that, "Starting in the 1930's, under colonial mandate, coffee producers in Rwanda were required to dedicate one-fourth of their land to the planting of coffee trees, making coffee production mandatory" (p. 4). This would lay the groundwork for future conflicts to come. Further De Graaff (1986) states that, "throughout the colonial period, policies were created forcing farmers to grow only a single crop" (p. 53). Following the genocide, the new government lifted many of the

restrictive policies constricting farmers and began the process of liberalizing the coffee sector. Tea and coffee are the main cash crops making them the main source of government foreign exchange.

Swanson (2008) points out that "worldwide, coffee roaster firms and large wholesale buyers are seeking new origins for specialty coffee and Rwanda has recently become a highly desired destination" (p. 8). Further the Rwandan national coffee strategy notes that by forming "long term relationships with companies such as Starbucks and Mark & Spencer, the coffee industry is on the verge of completing it's transformation" (p. 31). The numbers of coffee washing stations have increased from only 5 in 2003 to over 96 in 2007 (Boudreaux, 2007, p. 10). Tons of fully washed coffee has grown from 150 tons to over 7,000 tons during this same period. The current demand for quality Rwandan coffee far exceeds supply, and prices given for quality coffee have been rising. "Coffee has been described by Rwanda's coffee farmers as "their gold", but the real challenge for the industry is to turn this potential gold into the amount of cash required to entice farmers to make the effort needed to fully exploit this resource within the country" (Swanson, 2008, p. 8).

History, Education, and Human Resources

Rwanda is an ethnically diverse country composed of three main groups; the Hutu (roughly 84%), Tutsi (roughly 15%) and Twa (1%) (CIA, 2009). Of those, the Twa, were the first to settle in Rwanda.

Kinzer (2008) writes that by the 18th century, Rwanda had developed one of the most highly organized societies in Africa. "Rwandan society was an elaborate system of

shared obligation with a hierarchy of nobles, chiefs, and sub chiefs to connect the ruler and the ruled" (p. 23). Further, Rwandan warriors fought neighboring tribes and conquered their territories; they did not stray far from their homelands, for they found safety in being a land locked nation. Kinzer (2008) notes that isolation is a theme that runs throughout Rwandan history and it is this same isolation that has kept Rwanda cut off from and unaffected by developments in the rest of east Africa and the world beyond.

Yet it is the history of the Hutu and the Tutsi that pose the most perplexing questions. Prunier writes that:

The first explorers who reached Rwanda and Burundi were immediately struck by the fact that the population though linguistically and culturally homogeneous, was divided into three groups, the Hutu, the Tutsi and the Twa. . . . They shared the same Bantu language, lived side by side with each other without any 'Hutuland' or 'Tutsiland' and often intermarried. But they were neither similar nor equal (1995, p. 5).

Further as Kinzer points out, no one, has yet come to agreement as to whether they are each a race, caste, ethnicity, tribe, or simply just two groups. He notes "that what is certain however is that they lived side by side, spoke the same language, obeyed the same laws, learned the same myths, and followed the same religion" (Kinzer, 2008, p. 23). Ethnographers believe it was during the 14th and 15th century that Tutsi made their way to Rwanda. Arriving, they reshaped the society they found both through peaceful means but also through conquering Hutu principalities. Prunier (1995) writes "Tutsi composed the governing class and tended to be taller than their Hutu counterparts.

[Tutsi] also raised cattle as opposed to tilling the soil" (p. 5). Aside from the small differences, there was little that set these two groups apart. Kinzer (2008) notes, "if a Hutu became an owner of many cattle, he also became a Tutsi" (p. 25). A Tutsi family that turned to farming would eventually become Hutu. Intermarriage was accepted and communal conflict was all but nonexistent.

A radical shift took place after Europeans seized control of Rwanda; its colonization began late, yet another legacy of its isolation. Germans, the first Europeans to reach Rwanda, did not arrive until 1892. Boudreaux (2007) notes "little did those in Rwanda know that as a result of the Berlin Conference a few years prior that Germany was awarded control of the twin nations of Rwanda and Burundi" (p. 2). Upon arriving in the newly formed German East Africa, German officials were deeply impressed by the kingdoms efficiency and high level of organization. Kinzer (2008) writes that it was a this point that German official "Aligned themselves with the Tutsi monarchy, Helping to conquer the remaining Hutu principalities in the country as they saw an advantage in pitting Rwanda's two groups against each other (p. 27).

Boudreaux notes "Following the end of World War I, a league of nations mandate transferred control of Rwanda to the Belgians, a country that was already ruling the neighboring country of modern day Congo and brutally exploiting its resources" (p. 2). Being assigned to Belgium as a "trust territory" meant that its rule was subject to oversight from the League of Nations and later the United Nations. Kinzer (2008) points out that "With neither body providing much oversight, the Belgian's governance went largely unchecked" (p. 25).

Throughout the early decades of the Twentieth century; Europeans were marked by an obsession with the idea of race. Kinzer (2008) points out "Generalizations and prejudices of past generations soon became firm, eventually claiming a solid base in science" (p. 24). In believing that races were entirely distinct from one another, many Europeans felt that this led to a natural hierarchy, leaving some races to rule and some to be ruled. In Rwanda, this line of thought led to a series of misjudgments that would eventually culminate in genocide.

Chief among these misjudgments was the idea of power vs. race. Over the course of history, Rwandans had developed a society based on a complex web of rights and responsibilities. While Tutsi constituted the ruling class, they only ruled with the consent of the governed, with roles in society being distributed by a system of checks and balances. Kinzer (2008) writes "While some kings managed this better than others, most of the country's pre-colonial history people lived side by side without much conflict" (p. 25). Arriving in the country, the Belgians saw none of this. The idea of a monarchy living in harmony with ordinary people, or of a hierarchical society built on consent, was an abstract idea. Looking at Rwanda from a European point of view, they immediately saw the Rwandan monarchy as a close replica to European feudalism, with the Tutsi being the overlord and the Hutus the serf. This led the Belgians to believe that they could rule through an already existing monarchy which they mistook for dictatorship, and with a little encouragement it soon became one.

A little more than a decade after taking control of Rwanda, the Belgians took their racial principles to what they saw as the next step. Goff (2006) notes that "by using

a series of special rulers and calipers, they began measuring the heights of the foreheads, width of the noses, length of the ears, all done in the belief that this would allow them to place every Rwandan in a racial category" (p. 34). Boudreaux(2007) writes "with these standards, the Belgians were now able to issue each Rwandan an identity card that would serve to separate them along racial lines" (p. 3). It was with these cards that Hutu and Tutsi became legally classified as a race and it would be the same cards that would consign hundreds of thousands of Tutsis; to their death. Kinzer points out, "this system had the effects of inflating the Tutsis ego and crushing the Hutu's spirits until it manifested into an aggressively resentful inferiority complex" (2008, p. 27).

In 1962 that Rwanda received its independence from Belgium. Goff (2006) writes that "over the next three decades, with an economy on life support, rampant food shortages and little to no human resources Rwanda, was reaping the consequences of year's of poor governance" (p. 34). To compound the situation even further, the two Hutu military rulers (Kayibanda, 1960 to 1973, and Habyarimana, 1973 to 1994) did little to calm the racial tensions that were engulfing the country. Further, Kinzer (2008) writes that in 1994, "that this situation reached its apex when ethnic tension exploded and in a span of 100 days, radical Hutus slaughtered 800,000 Tutsis and Hutu moderates" (p. 26). As a result Rwanda was left with little leadership and a country that was in shambles.

With support from the Ugandan military, the Rwandan Patriotic Front (RPF), a band of Rebel Tutsi, invaded the country and the perpetrators of the genocide were forced to flee. It is estimated that as many as two million may have fled to Burundi,

Tanzania, Uganda, and present day Congo in fear that they would face swift punishment at the hands of the RPF As the years past and the countries' support for Hutu refugees began to wane, they too returned home. Goff (2006) points out that "as the conflict began to cool, Rwandans found new hope in a post-genocide government, led by a Tutsi president pushing a movement of reconciliation that continues to this day" (p. 30).

SPREAD Project

Inspired by Rwanda's efforts in rebuilding and reconciliation, international development agencies from around the world are creating strategy and developing projects that will bring Rwanda out of poverty and away from a reliance on foreign aid an addiction that many African nations are struggling to overcome. With the population's high dependence on agriculture and its low levels of education, development institutions such as USAID are helping to build capacities through an increased focus on agricultural and educational sectors of the Rwandan economy. Goff (2006) notes, "projects such has SPREAD have embraced the reconciliation movement being pushed by the Rwandan government, making it easier for both Hutu and Tutsis to work together for a common goal" (p. 32). As a result, these group do not consider themselves separate factions, but as one people working to improve their lives and their country. Through the increased incomes earned from coffee production smallholder farmers are now able to pay school fees for children, buy clothing, and fix homes. As Boudreaux (2007) notes, "another benefit, perhaps incalculable, of this improved trading environment in Rwanda is that the people of Rwanda are working together" (p. 8). This

increased focus has helped Rwandans think in terms of the profits made from the cooperatives rather than the radical ideology that once divided them.

In Rwanda, coffee companies currently pay about \$1 a pound for low quality coffee beans, while the higher-grade coffees preferred by business such as Starbucks and Green Mountain generally fetch about \$1.50 a pound or more. Fraser 2006 points out that "in Rwanda, premium roasters will pay as much as \$3.50 a pound for the best beans" (¶ 8). Further she shows that because these prices are paid to cooperatives as opposed to private dealers that the profits go directly to farmers, "20 percent of whom are widows and orphans because of the Genocide" (Fraser, 2006, ¶ 9).

Traditionally coffee farmers were men. However, following the genocide, many widows returned to the land once worked by their husbands. Goff (2006) writes "despite their lack of knowledge in producing coffee, many felt that this crop would bring them the fastest return and provide them with a little income" (p. 36). While their efforts did provide some income, at the time the international price for bulk coffee was too low, thus providing a disincentive for producers to increase their coffee production. Many pulled up their coffee trees, and planted alternatives crops such as bananas, beans and maize instead (Ottaway, 2004).

Fraser (2006) points out that "until the 1990's, coffee accounted for 60 percent of total exports, but that declined to about 20 percent in 2001 because of the economic devastation of the genocide and a worldwide crash in coffee prices" (¶ 11). However, having the perfect the climate, altitude, and acidic soils for growing high-grade coffee, Rwanda had an advantage that most other surrounding countries did not have. Further,

Rwanda's long history of coffee production included the Bourbon variety, one of the most sought after coffee varieties.

Yet, in order for Rwanda to become a coffee giant, they were going to have to move from an attitude that emphasized the quantity of the coffee beans as opposed to the quality of the beans. Goff (2006) notes that prior to the genocide, "coffee beans were harvested with little thought given to quality and as a result, fertilizers and liming agents were seldom used" (p. 37). Additionally, producing coffee using the dry processing method decreased the quality of the beans, resulting in producers receiving a lower price for their coffee.

Fraser writes that it was "in 1999, that A group of 220 coffee growers in the District of Maraba, Butare Province, decided to form an association to increase their incomes by pooling their coffee harvest and selling directly to exporters based in Kigali (2006, ¶12). They named the Association, ABAHUZAMUGAMBI, "which implies that together they will work to achieve the desired result" (Partnership to Enhance Agriculture in Rwanda through Linkages, 2004, ¶1).

Goff (2006) points out that "the PEARL project during this time was not involved with cooperatives; rather its primary focus was helping the National University to rebuild its faculty of agriculture" (p. 37). It was through the work at the National University that an opportunity was recognized that allowed PEARL to begin supporting a grassroots effort that would assist coffee producers. Moreover, "By helping coffee producers to establish cooperatives, they were now able to focus primarily on providing

farmers with the skills needed to sell specialty coffee to markets both in the United States and Europe" (Goff, 2006, p. 37).

Before The PEARL project introduced the concept of a centralized coffee washing station, there were only two within the whole country. Now, thanks to projects such as PEARL and SPREAD, this innovation has taken root and there are over 100 stations throughout the country. Now it is seen as a required technology for the appropriate production of coffee.

SPREAD is a direct result of six years of documented success beginning with the USAID funded PEARL and PEARL II. "Through these endeavors, more than 20,000 rural families have seen increased incomes" (Sustaining Partnership to Enhance Rural Enterprise and Agribusiness Development—our approaches, 2010, ¶1). The approach undertaken through this project builds on the successes of PEARL by focusing on quality interventions across the entire value chain and spreading them throughout the country, increasing efficiencies and profits for a greater number of rural families.

The approach taken by SPREAD is designed with sustainability in mind. Through the identification of high value products such as chili and coffee, SPREAD is then the process of perfecting each link in the value chain beginning with production straight through to the sale of the product. Price (2006) notes that, "SPREAD is able to empower the producer as the core force necessary to establish and maintain target value chains, thus creating a degree of professionalism along each link of the chain" (p. 1). Their approach is one of results-oriented management and leadership. "Through streamlined financial management, this project places the greatest effort on producing

SPREAD results, thereby maximizing the impact of improving livelihoods in rural Rwanda (Sustainable Partnership to Enhance Rural Enterprise and Agribusiness Development—our approach, 2010, ¶3).

Through the SPREAD project, Rwanda's rural farmers are being pulled out of poverty by connecting to a market-driven value-chain that ends in the cups or on the plates of the final consumer. SPREAD'S technical approach is centered on the relentless pursuit of quality. Price (2006), writes that 'quality programs are executed and delivered by a synergistic group of public and private partners who share the same vision and expected results" (p. 4). To educate Rwandan producers, SPREAD works with extension agents, health professionals, and the media. "SPREAD cultivates the sustainability of their programs through well-designed public and private partnerships and through working at all levels to build Rwandan capacity in value-chain management" (Sustainable Partnership to Enhance Rural Enterprise and Agribusiness Development, — technical, 2010, ¶3). This fosters a culture of innovation and continuous improvement in the product as well as amongst the rural families.

SPREAD consistently encourages entrepreneurs to start up small businesses, as this is a direct result of the type of success that can be achieved through this approach; Price (2006) writes, "creating spin-off enterprises in turn creates higher value local markets for smallholder produce and new employment opportunities" (p. 4). Using state-of-the-art technology, SPREAD empowers rural producers, cooperatives, and institutions through direct access to information, communications, and decision-support tools.

Currently SPREAD is focusing its efforts and programs on three promising agricultural products produced in Rwanda: specialty coffee and chili peppers and pyrethrum. For all three products, SPREAD identifies targeted interventions throughout the value-chain with the focus always on improving and sustaining quality. "Through quality research, SPREAD identifies programs that are the most effective in improving product quality while strengthening partnerships, local cooperatives, and the environment to ensure that improved quality of product means improved quality of life" (Sustainable Partnership to Enhance Rural Enterprise and Agribusiness Development, 2010—programs, 2010, ¶2). For the purposes of this paper, I will focus specifically on the coffee program.

SPREAD's coffee programs assist Rwanda in becoming one of the worlds most sought-after specialty coffee origins through a series of technical interventions executed throughout the coffee value-chain. The SPREAD project achieves this in a variety of ways such as "including helping them organize cooperatives, introducing them to better agricultural practices, reducing transportation time to coffee stations and helping them professionalize their coffee stations" (Schattenberg, 2009, ¶7).

In coordination with public and private partners, these interventions help to build Rwanda's specialty coffee sector in a manner that leaves the sector strong, prosperous, and autonomous. "Each intervention focuses on coffee quality improvement and control, which, through established fair-trade practices, provides direct benefits to Rwanda's rural farmers" (Sustainable Partnership to Enhance Rural Enterprise and Agribusiness Development—coffee, 2010, ¶2). By empowering Rwanda's coffee farmers with access

to resources and information, they become the driving force behind the growth and success of specialty coffee industry in Rwanda.

SPREAD's targeted projects emerge from their continuing efforts in quality research. For Rwanda's specialty coffees, "cupping" is SPREAD'S key assessment method for quality, focusing on the sensory attributes of acidity, aroma, body, and flavor. For chili peppers, as well as coffee, each potential modification to production, transport, or packaging is scientifically researched before it is put into practice. "Simultaneously, SPREAD is using GIS technology to precisely locate specific areas throughout Rwanda's hills that produce the highest quality coffee or the most distinct characteristics" (Price, 2006, p. 28). SPREAD is managing this information as a powerful resource and planning tool for current and potential projects their mission is as follows:

SPREAD is an alliance of public and private institutions and businesses that increase rural incomes by linking small producer groups directly with high value international markets.

SPREAD targets rural Rwandan agricultural cooperatives and enterprises involved in high value commodity chains and provides them with appropriate technical assistance and access to credit and health related services that results in increased incomes and improved livelihoods. (Sustainable Partnership to Enhance Rural Enterprise and Agribusiness Development, —mission, 2010)

A SPREAD Approach to Innovative Cooperation and Collaboration

Now that Rwanda's coffee industry has begun to rebound and its reputation as a country of origin for specialty coffee has begun to catch the eyes of coffee buyers worldwide, due in large part to Rwanda being selected to host Africa's first Cup of Excellence in 2008. The Cup of Excellence is an international coffee competition of the best specialty coffees in the world.

Having taken place in Rwanda in 2008, this marked the first time the cup of excellence was held in Africa. The Cup of Excellence was a coming out party for Rwandan coffee, for this competition strives to select the best coffee produced in a country for that particular year. However for Rwanda it was more than that, producers saw this competition as a means to help restore the country's infrastructure. Through this competition, farmers and their product would be showcased, and for the best coffee, a monetary reward would be given. Moreover, "this competition served to build bridges and sustain long-term relationships between the international marketplace and their country" (Sustainable Partnership to Enhance Rural Enterprise and Agribusiness

Development—cup of excellence, 2010, ¶2). For a country whose coffee industry was almost nonexistent, the competition was of the utmost significance. It was as recent as 2001 that coffee farmers were literally pulling up trees because they couldn't sell their product. However, it is through the efforts of projects such as SPREAD and PEARL that the Rwandan coffee industry has made a remarkable comeback.

CHAPTER III

METHODS

This chapter provides details about the type of research and research process; population sampling techniques used to select participants; the survey instrument used to collect data; a description of the data analysis process and statistical procedures used in analyzing data collected.

To accurately describe and examine the attitudes of coffee cooperative members towards the ownership of the SPREAD cooperatives in relation to cooperative sustainability, the following steps were taken to achieve the required results. A survey research design was selected and a close-ended category-scale questionnaire was used to gauge the perception of cooperative members on cooperative impacts.

In compliance with human subject research requirements, a copy of the research instruments and personal consent forms were submitted to Texas A&M University's Institutional Review Board (IRB). Approval of the research instruments was granted by the IRB. In this Research Methodology chapter, the following topics are discussed: research design, target population, sampling, instrument development, methods of data collection, and data analysis.

Research Design

A survey research design was used in order to investigate trends among three coffee cooperatives. When investigating trends it is important to use a survey research design due to its ability to measure attitudes and perceptions. Creswell (2008) points out "that through the survey design variables can be correlated; however the main focus is

on learning about a population and less on relating variables or predicting outcomes" (p. 230).

This is an advantage for the researchers for it allows them to collect quantitative, numbered data using questionnaires and interviews which then can undergo statistical analysis that will aid in describing trends about the responses to questions but also test research questions and their hypotheses. All the survey participants were asked questions relating to the five objectives of this study:

- Describe and examine the relationship between the attitudes of coffee
 cooperative members towards cooperative associations and the specialty
 coffee industry and by gender, age, identity of the cooperative, recipients of
 monies from the survivors of the genocide fund and number of children.
- 2. Describe and examine the relationship between coffee cooperative members' perception of the benefits received through their association with the cooperative by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.
- 3. Describe and examine the relationship between the coffee cooperative members' attitudes towards money earned from the cooperative association as well as its impact by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.
- 4. Describe and examine the relationship between coffee cooperative members' attitudes towards cooperative sustainability and by gender, age, identity of

- the cooperative, recipients of monies from the survivors of the genocide fund and number of children.
- 5. Describe and examine the relationship between coffee cooperative member's perception of cooperative ownership and the SPREAD project and by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.

A close-end questionnaire was developed to collect data for this research. This allowed the researcher to ask many questions in a short time period and secondly, the researcher was able to provide the same frame of reference for all respondents, which lead to the comparability of responses thus making data analysis less complex. Using this method in countries recovering from periods of conflict makes it easier for subjects to respond to questions of a sensitive nature. This method also allows for the responses to be tabulated with ease. Following the tabulation, the responses can then be coded and analyzed using a computer database. While the survey design method provides simplicity in data collection, it also ask respondents to fit answers into the predetermined categories, which forces the respondent to select from a pre determined answer, leading to a distortion in the respondents true beliefs. The four-point summated scale included the following markers: Strongly disagree, disagree, agree, and strongly agree.

To account for low levels of literacy, having the respondents present at the time of questionnaire implementation helped to account for any ambiguity that may have existed within the survey. Establishing a rapport as well as a trusting relationship with the respondents was critical to the success of this study. Because this research study was

done as part of a three month long internship with the SPREAD project, the researcher was able to spend two months working alongside the respondents with the understanding that in the third month, the study would be conducted, allowing the researcher to establish a rapport with those who provided the data.

Population

Population is defined as the complete set of subjects studied (Ary, 2009). Selecting the right population helps in identifying the participants for the study and as well as creating a frame of reference. This study was comprised of members of three coffee cooperatives in the Northern, Southern and Eastern parts of Rwanda. The three cooperatives studied are aided by the SPREAD project, along with 11 other cooperatives across Rwanda.

- Maraba Coffee Cooperative is located in Butare Province, Maraba District. The
 first of the eleven cooperatives to be recognized by the government, it is
 composed of a total of 1,311 cooperative members.
- Humury Coffee Cooperative in eastern Rwanda is located in the Kibungo
 Province and is composed of a total of 385 cooperative members.
- Muhundo Coffee Cooperative is located in Northern Rawanda in the Kigali
 Province and is composed of a total of 128 cooperative members.

Sampling

The sample population was composed of the member farmers from three of the SPREAD assisted coffee cooperatives. The three cooperatives studied received support from SPREAD as do eleven other coffee cooperatives. The SPREAD project director,

and the SPREAD staff, selected Maraba, Humury, and Muhundo for this study, as they believed that looking at cooperatives of varying sizes would provide a clearer picture of the social economic impact of its members. (Jean Claude Kayisinga, Personal Communication, June 24th, 2009).

Participation of the member farmers was based solely on their availability at the time the questionnaire was administered. A total of 52 individuals participated in the research task. The interviewer's role was critical in helping to ensure the content validity of the instrument questions. The five interviewers consisted of two students from the National University of Rwanda, and three SPREAD staff members, four were male and one was female. All five were fluent in English, French, and Kinyarwanda (the local dialect).

The data were collected from mid-July to mid-August, 2009. Prior to the administration of the questionnaire, the researcher and interviewers introduced themselves to the participants. The researcher addressed the issue of confidentiality before beginning the survey, explaining that the participants' names would not be released, ensuring a level of confidentiality among the three cooperatives.

In the data analysis process, the names of the participants were coded in such a way that the confidentiality of the participants was insured.

Instrument Development

The researcher developed a questionnaire composed of close-ended questions (Appendix A). The instrument was designed based on the review of literature. The manuals *Putting a livelihood perspective into practice*, *Systemic Approach to Rural*

Development A Guide for Analysis, Appraisal and Planning in Rural Areas (Ruedin, 2008) and Cooperating out of poverty The renaissance of the African cooperative movement (ILO, 2007) were primary sources used to develop the instrument. To reduce survey error (particularly measurement error), recommendations made by Dillman (2007) in Mail and Internet Surveys: The Tailored Design Method, were used in the construction of the research instrument. These included:

- Begin with simple questions
- Use caution when using emotional or sensitive words
- Never make assumptions
- Make questions easy to understand
- Try to ask question in various ways

The five research objectives served as the base upon which the survey instrument was constructed. The survey instrument consisted of six parts, including five constructs and one personal characteristic, they are as follows:

- 1. General Disposition
- 2. Cooperative Benefits
- 3. Cooperative Impacts
- 4. Cooperative Ownership
- 5. Cooperative Sustainability
- 6. Follow Up Questions

The completion of the draft instrument was followed by a thorough critique from those that would be involved in the survey implementation process. This critique served to

verify the content validity of the instrument. This step agreed with the observation by Patten (2002) when he suggested "that many times judgments are made on the appropriateness of the research instrument in order to validate its content" (p. 5). Through this process, the clarity and cultural sensitivity of the questions were improved.

Those individuals helping to implement the survey were trained professionals composed of staff members from the SPREAD project. All were fluent in at least French, English, and Kinyarwanda. With the help of the implementers, the written instrument was translated from English into the mother language Kinyarwanda. Working together, the implementers modified the instrument in such a way that it ensured the most literal translation and thus ensured the content validity of the instrument.

On the questionnaire, participants were asked to indicate their agreement with 41 statements. Their responses were based on an interval-scale, four-point Summated-type scale. The level of agreement on the research constructs were interpreted as follows:

- 1-1.49 tends to strongly disagree
- 1.5-2.49 tends to disagree
- 2.5-3.49 tends to agree
- 3.5-4 tends to strongly agree

Data Collection

In compliance with human subject research requirements, a copy of the research instruments and personal consent forms were submitted to Texas A&M University's Institutional Review Board (IRB). Approval of the research instruments was granted by the IRB.

Data collection took place from July to mid-August, 2009. From the months of May to June 2009, this researcher arrived in Rwanda with the intended purpose of meeting the cooperative members. This allowed the researcher to establish positive working relationships, which proved to be crucial during survey implementation. It was during this time that the researcher spent many hours talking to members of the cooperatives, as well as observing all aspects of coffee production in Rwanda. The wealth of knowledge gained from the members as well as the time spent observing production, allowed the researcher to develop a base of knowledge from which to build an appropriate instrument. Having already established relationships with members of the three cooperatives, follow up visits to the cooperatives were made at the end of June and times were set for the researcher to conduct the survey implementation needed to complete the study.

On the day the surveys were to be implemented, the researcher and data collectors made formal introductions and explained the objectives of the research task. All of the interviews took place at the location of the cooperative being studied. Before the survey was implemented, the researcher spoke on the topic of confidentiality, noting that the surveys would remain anonymous and that they would only be coded with a number to ensure the confidentiality of their identity. Survey implementation lasted about two hours. If the respondent found parts of the survey to be ambiguous, then, he/she could ask the researcher or data collectors for further clarification.

Data Analysis

When investigating trends, it is important to use a survey design due to its ability to measure attitudes and perceptions. Creswell (2008) points out that "through the survey design variables can be correlated; however their main focus is on learning about a population and less on relating variables or predicting outcomes" (p. 234).

This is an advantage for it allows the researcher to collect quantitative, numbered data using questionnaires and interviews which then can undergo statistical analysis that will aid in describing trends about the responses to questions but also test research questions and their hypotheses

Goff (2006) notes, "external validity is achieved when the same or similar results are gained from multiple sources and observations" (p. 84). Further, having an instrument that has a high degree of transparency will allow others to replicate the study, thus increasing the reliability of the study. (Dooley, 2002) points out that, it is through the collection of the raw data that the researcher attempts to describe and examine the attitudes of coffee cooperative members towards the ownership of the SPREAD cooperatives in relation to cooperative sustainability. Findings from the survey instrument will help to guide this cooperative as they continue to build on the progress achieved since the completion of the PEARL.

CHAPTER IV

RESULTS AND FINDINGS

This chapter presents the results and analysis of data obtained from respondents.

The data is presented in tables with findings categorized according to the specific research questions and objectives.

The five research objectives provided a base from which the data gathered could be analyzed. The five research objectives were:

- Describe and examine the relationship between the attitudes of coffee
 cooperative members towards cooperative associations and the specialty coffee
 industry and by gender, age, identity of the cooperative, recipients of monies
 from the survivors of the genocide fund and number of children.
- 2. Describe and examine the relationship between coffee cooperative members' perception of the benefits received through their association with the cooperative by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.
- 3. Describe and examine the relationship between the coffee cooperative members' attitudes towards money earned from the cooperative association as well as its impact by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.

- 4. Describe and examine the relationship between coffee cooperative members' attitudes towards cooperative sustainability and by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.
- 5. Describe and examine the relationship between coffee cooperative member's perception of cooperative ownership and the SPREAD project and by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.

Table 1 shows coffee cooperative research participants by gender. Participants (n = 52) included 22 females (42.3%) and 30 males (57.7%).

Table 1

Gender of Participants

Gender Category	f	%
Female	22	42.3
Male	30	57.7
Totals	52	100.0

Table 2 shows that research participants varied in age with 13 being between the ages of 17 and 27, 14 were between the ages of 28 and 36, 14 were between the ages of 37 and 50, 11 were age 50 or older.

Table 2

Age of Participants

Age Category	f	%
17-27	13	25.0
28-36	14	26.9
37-50	14	26.9
51 and above	11	21.2
Totals	52	100.0

Table 3 breaks down the cooperative by membership. It was shown that the Maraba cooperative composed a majority of participants while the cooperative Humury had 18, followed by Muhundo with 14.

Table 3

Cooperative Membership

Cooperative	f	%
Maraba	20	38.5
Humury	18	34.6
Muhundo	14	26.9
Totals	52	100.0

Table 4 Shows whether participants had received monies from FARG/Victim of the Genocide Fund. It is shown that only approximately ten percent of the research sample participated in the FARG/Victim of the Genocide Fund.

Table 4

Participation in the FARG/Victim of the Genocide Fund

No 47 90.	Participation	f	%
	Yes	5	9.6
	No	47	90.4
Totals 52 100.	Totals	52	100.0

Due to the risk of compromising trust gained while working with these three Coffee Cooperatives, this researcher felt that it was not prudent to ask the respondents

whether they were of a certain ethnicity. Rather this researcher felt that by addressing questions from the standpoint of those who received monies from the Survivors of the genocide fund that it would be a way of looking at the issue of ethnicity in relation to cooperative sustainability. As shown on pages 74-77, monies received through the survivors of the genocide fund played a very small role when addressing issues associated with cooperative sustainability, due in part to a small number of participants indicating that they had received monies (n = 5).

When looking at a country with a history of ethnic conflict such as Rwanda and its remarkable achievements in terms of agricultural productions, it would be unwise to not try and address the issue of ethnic identity. However, this must be done in a socially responsible way. While this researcher was unable to draw a definitive conclusion, several assumptions can be made from these tables. First, with the low number of respondents indicating that they receive monies from this program, these results might suggest that while participants may receive monies from program that the economic gain is such that ethnic identity is secondary to the gains made by being part of the cooperative association. Secondly, it might also suggest that there may be some ethnic tension present within the association and that by stating whether they receive support from this program would also be singling themselves out. Lastly, it may show that through innovative collaboration and cooperation SPREAD allowed these participants to achieve a gain in income decreasing the need for social welfare programs such as this.

Table 5 provides an illustration of number of children by research participants. It was shown that 19% had possessed no children, 37% of participant reported that they

had between one and two children, 33% had between three and four children, while only 12% had over five children.

Table 5

Number of Children by Participant

Number of Children	\overline{f}	%
0	10	19.2
1-2	19	36.5
3-4	17	32.7
5 or more	6	11.5
Totals	52	100.0

Attitudes of Coffee Cooperative Members towards Cooperative Associations and the Specialty Coffee Industry

Table 6 shows participants general disposition towards the cooperative association and the specialty coffee industry. Overall participants tended to have a positive disposition toward the cooperative association (M = 3.37, SD = .63). Participants tended to strongly agree that "today is better than yesterday" (M = 3.81, SD = .44), "tomorrow will be better than today" (M = 3.75, SD = .44), and "coffee is my most lucrative crop" (M = 3.67, SD = .44). Participants tended to disagree with the statement "coffee is my only agricultural enterprise"

$$(M = 2.35, SD = .84)$$

Table 6

Attitudes of Coffee Cooperative Members towards Cooperative Associations and the Specialty Coffee Industry (n=52)

Item	M	SD
Today is better than yesterday	3.81	0.44
Tomorrow will be better than today	3.75	0.44
Coffee is my most lucrative crop	3.67	0.51
I am living better because I am a member of the cooperative	3.37	0.71
I would live worse if I stopped producing coffee	3.29	0.85
Coffee is my only agriculture enterprise	2.35	0.84
Note. 1-1.49 = strongly disagree, 1.5-2.49 = disagree, 2.5- $3.49 = a_3$	gree,	
3.5- 4 = strongly agree; overall $M = 3.37 SD = .63$		

The Coffee Cooperative Member's Perception of the Benefits Received through Their Association with the Cooperative

Table 7 shows research participants perception of the benefits received through their association with the cooperative. Overall research participants tended to agree that the cooperative provided benefits to its members (M = 3.45, SD = 0.48). Participants tended to strongly agree that "the cooperative is respected in my community" (M = 3.54, SD = .58), "the cooperative has allowed me to provide better healthcare for my family"

(M = 3.52, SD = .58) and that "the cooperative has helped my community to grow in size" (M = 3.52, SD = .58). Participants also agreed that "the cooperative provides me training on the use of organic fertilizers and mulching" (M = 3.48, SD = .85), "the cooperative has helped me achieve a sustainable livelihood" (M = 3.46, SD = .73), and that "the cooperative has given me increased access to credit" (M = 3.15, SD = .98).

Table 8 illustrates coffee cooperative members perception of cooperative benefits by gender, as shown in the table this table there is no significant differences t(51) = .12, p = .91) between males or females. This table indicates that, both males (M = 3.44, SD = .47) and females (M = 3.45, SD = .50) tended to agree that the benefits received from the cooperatives is helping them to achieve a sustainable livelihood.

Table 7

Coffee Cooperative Members Perceptions of Cooperative Benefits (n=52)

Item	M	SD
The cooperative is respected in my community	3.54	.58
The cooperative has allowed me to provide better healthcare for my family	3.52	.58
The cooperative has helped my community to grow in size	3.52	.58
The cooperatives provides me training on the use of organic fertilizers & mulching	3.48	.85
The cooperative have helped me achieve a sustainable livelihood.	3.46	.73
The cooperative has given me increased access to credit	3.15	.98

Note. 1-1.49 = strongly disagree, 1.5-2.49 = disagree, 2.5- 3.49 = agree, 3.5- 4 = strongly agree; overall M = 3.45, SD = 0.48

Table 8

Coffee Cooperative Members Perceptions of Cooperative Benefits by Gender

Category	N	М	SD	T	Р
Male	30	3.44	.47	.12	.91
Female	22	3.45	.50		
Note. 1-1.49 = strongly disagree, 1.5-2.4	9 = disaş	gree, 2.	5- 3.4	19 = a	agree,
3.5- 4 = strongly agree					

Table 9 illustrates coffee cooperative members perception of cooperative benefits by age. This table shows that there is no significant difference among age groups F(3, 48) = 1.52, p = .22. Participants ages, 17-27 (M = 3.53, SD = .40), 28-30 (M = 3.60, SD = .32) tended to strongly agree that the benefits received from the cooperatives is helping them to achieve a sustainable livelihood, while participants ages, 37-50 (M = 3.25, S = .63) and 51 and above (M = 3.39, SD = .48) tended to agree with this idea. Overall Participants agreed that the benefits received from the cooperative helped to achieve a sustainable livelihood.

Table 9

Coffee Cooperative Members Perceptions of Cooperative Benefits by Age

Age	N	M	SD	F	P
17-27	13	3.53	.40	1.53	.22
28-30	14	3.61	.32		
37-50	14	3.25	.63		
51 and above	11	3.39	.48		

Note. 1-1.49 = strongly disagree, 1.5-2.49 = disagree, 2.5-3.49 = agree,

3.5-4 = strongly agree

Table 10 illustrates coffee cooperative members' perception of cooperative benefits by cooperative. This table shows no significant difference among the three cooperatives F(3,48) = 1.52, p = .34. The Maraba cooperative (M = 3.35, SD = 0.48), Humury cooperative (M = 3.04, SD = 0.56) and Muhundo cooperative (M = 3.60, SD = .34) all tended to agree that the benefits received from being a member of the cooperative organization has helped them to achieve a sustainable livelihood.

Table 10

Coffee Cooperative Members Perceptions of Cooperative Benefits by Cooperative

Cooperative	N	М	SD	F	p
Maraba	20	3.35	0.48	1.09	.34
Humury	18	3.44	0.56		
Muhundo	14	3.60	0.34		
Note. 1-1.49 = strongly disagr	ree, 1.5	-2.49 = 0	disagree	, 2.5-3.4	9 =
agree, 3.5- 4 = strongly agree					

Table 11 shows coffee cooperative members perceptions of cooperative benefits by those that received money from the genocide fund. This table shows that those that received money from the genocide fund tended to strongly agree (M = 3.57, SD = .40) that the benefits received from being a member of the cooperative organization helped them to achieve a sustainable livelihood, while those that did not receive monies only tended to agree (M = 3.43, SD = .49), this indicates a difference, t(51) = .59, p = .56, among the research participants.

Table 11

Coffee Cooperative Members Perceptions of Cooperative Benefits by Those That

Received Money from the Genocide Fund

Monies received from genocide fund	N	M	SD	T	p
Yes	5	3.57	.40	.59	.56
No	47	3.43	.49		
Note. $1-1.49 = \text{strongly disagree}, 1.5-2.4$	19 = di	sagree,			
2.5-3.49 = agree, 3.5-4 = strongly agree					

The Attitudes of Coffee Cooperative Members towards Cooperative Impact

Table 12 illustrates perceived impacts of cooperative membership on coffee cooperative members. Participants tended to agree that they have "used the money earned from the cooperative to maintain food security" (M = 3.26, SD = .86), "purchase a domestic animal" (M = 3.07, SD = .78), "able to save a portion of the money earned as a member of the cooperative" (M = 3.00, SD = .92), "the money earned from the cooperatives allows me to pay my children's school fees" (M = 2.98, SD = .99), "received a loan from the cooperative to by chemical fertilizer" (M = 2.78, SD = 1.0), "the money earned from the cooperatives has allowed me to purchase more land" (M = 2.75, SD = 1.06) and "the money earned from the cooperatives has allowed me to build a house" (M = 2.75 SD = 1.11). Participants tended to disagree with the statement that the "income earned from the cooperative is enough to help them prepare for next year's harvest" (M = 2.44, SD = .87), "the money earned from the cooperative allows me to pay my children's school fees" (M = 2.30, SD = .96), and "the loan received from the cooperative is enough to purchase fertilizer and pay for my children's school fees" (M = 2.30, SD = .96), and "the loan received from the cooperative is enough to purchase fertilizer and pay for my children's school fees" (M = 2.30, SD = .96), and "the loan received from the

2.07, SD = .78). Overall participants tended to agree (M = 2.74, SD = .54) that being a member of the coffee cooperative had a positive impact on their lives.

Table 13 illustrates the perceived impacts of cooperative membership on coffee cooperative members by gender. As shown in the table there is a significant difference, t(51) = -2.1, p = .04, between males and females with the males tending agreeing (M = 2.88, SD = .59) that the impact is greater for them than that of females (M = 2.56, SD = .43).

Table 12

Perceived Impacts of Cooperative Membership on Coffee Cooperative Members (n=52)

Item	М	SD
I have used the money earned from the cooperatives to maintain food security	3.26	.86
I have used the money earned from the cooperatives to buy a domestic animal	3.07	.78
I am able to save a portion of the money earned from the cooperatives	3.00	.92
The money earned from the cooperatives allows me to pay my children's school fees.	2.98	.99
I receive a loan from the cooperative to by Chemical fertilizer	2.78	1.09
The money earned from the cooperatives has allowed me to build a house	2.75	1.11
The money earned from the cooperatives has allowed me to purchase more land	2.75	1.06
The money earned from the cooperative is enough to help me to prepare for next Year's harvest	2.44	.87
I receive a loan from the cooperative to pay for my children's school fees.	2.30	.96
The loan received from the cooperative is enough to purchase fertilizer and pay for my children's school fees.	2.07	.78
Note. 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongl overall $M = 2.74$, $SD = .54$	y agree	· ,

Table 13

Perceived Impacts of Cooperative Membership on Coffee Cooperative Members by

Gender

Category	n	M	SD	T	P
Male	30	2.88	.59	-2.1	.041
Female	22	2.56	.43		
Note. 1-1.49 = strongly disagree, 1.5-2.49 =	disagree	e, 2.5-3.	49 =	agree,	,
3.5- 4 = strongly agree					

Table 14 illustrates the perceived impacts of cooperative membership on coffee cooperative members by age. This table shows that there is no significant difference among age groups F(3,48) = 2.68, p = .57. Participants ages, 17 - 50 (M = 2.92, .47), 28-30 (M = 2.94, SD = .47), 37-50 (M = 2.64, .SD = 62) tended to agree that the cooperative organization has provided a substantial impact on their lives. Those aged 51 and above tend to disagree (M = 2.42, SD = .51), holding the perception that the cooperative organization has had little impact on their livelihoods. Overall participants (M = 2.7, SD = .51) that the cooperative has had a positive impact on their lives.

Table 14

Perceived Impacts of Cooperative Membership on Coffee Cooperative Members by Age

Age	N	М	SD	F	P
17-27	13	2.92	.47	2.68	.57
28-30	14	2.94	.47		
37-50	14	2.64	.62		
51 and above	11	2.42	.51		

Note. 1-1.49 = strongly disagree, 1.5-2.49 = disagree, 2.5-3.49 = agree, 3.5-4

= strongly agree

Table 15 illustrates perceived impacts of cooperative membership on coffee cooperative members by cooperative. This table shows a significant differences among the three cooperatives, F(3,48) = 4.61, p = .02. While all three cooperative participants tended to agree Maraba (M = 2.54, SD = .55), Humury (M = 3.03, SD = .50), Muhundo (M = 2.66, SD = 0.47) that that the cooperative organization has had a positive impact, the Humury cooperative had significantly higher perceptions toward a positive impact than the Maraba cooperative.

Table 15

Perceived Impacts of Cooperative Membership on Coffee Cooperative Members by

Cooperative

Cooperative	N	M	SD	F	P
Maraba	20	2.54	0.55	4.61	.02
Humury	18	3.03	0.50		
Muhundo	14	2.66	0.47		
Note. 1-1.49 = strongly disagree,	1.5-2.49 =	disagre	e, 2.5-3	5.49 = aş	gree,

3.5-4 = strongly agree

Table 16 illustrates the perceived impacts of cooperative membership on coffee cooperative members by those that received money from the Genocide Fund. This table shows that there is no significant difference, t(51) = .92, p = .36, among those that received money from the genocide fund (M = 2.96, SD = .46) and those that did not (M = 2.72, SD = .56).

Table 16

Perceived Impacts of Cooperative Membership on Coffee Cooperative Members by

Those That Received Money from the Genocide Fund

Monies received from genocide fund	N	M	SD	t	P
Yes	5	2.96	.46	.92	.36
No	47	2.72	.56		
Note. $1-1.49 = \text{strongly disagree}$, $1.5-2.49 = d$	isagre	e, 2.5-3	3.49 =	agree	,
3.5-4 = strongly agree					

Coffee Cooperative Members" Perception of Cooperative Ownership and the SPREAD Project

Table 17 illustrates coffee cooperative members' perception of ownership. Participants tended to strongly agree that they "owned a share in the cooperative" (M=3.69, SD=.6), that "the cooperative is member owned" (M=3.62, SD=.6), "ownership in the cooperative allows members to be more competitive economically" (M=3.54, SD=.7), "the government should play a larger role in the management of the cooperative" (M=3.54, SD=.7) and that "I am familiar with cooperative by laws" (M=3.50, SD=.7). Participants tended to agree that "I know the worth of my share" (M=3.46, SD=.8), "the cooperative is operating efficiently" (M=3.46, SD=.6), "I am aware of my rights as a member" (M=3.40, SD=.7), "members and work subgroups (e.g. bean sorters) are able to approach their cooperative's board and management whenever they need to" (M=3.37, SD=.7), " my life continues to improve because I

am a member of the cooperative" (M = 3.33, SD = .6) and "my actions affect how the cooperative is run" (M = 3.19, SD = .9). Overall participants tended to strongly agree (M = 3.46, SD = .37) that they have ownership in the cooperative organization.

Table 17

Coffee Cooperative Members Perceptions of Ownership (n=52)

Item	M	SD		
I own a share of the cooperative	3.69	0.67		
The cooperative is member owned	3.62	0.60		
Ownership in the cooperative allows members to be more	3.54	0.64		
competitive economically				
The government should play a greater role in the management of	3.54	0.73		
the cooperative				
I am familiar with the cooperative by laws	3.50	0.73		
I know the worth of my share	3.46	0.85		
The Cooperative is operating efficiently	3.46	0.67		
I am aware of my rights as a member of the cooperative	3.40	0.75		
Members and work subgroups (e.g. bean sorters) are able to	3.37	0.71		
approach their cooperative's board and management				
whenever they need to				
My life continues to improve because I am a member of the	3.33	0.62		
cooperative				
My actions affect how the Cooperative is run	3.19	0.95		
Note. 1-1.49 = strongly disagree, 1.5-2.49 = disagree, 2.5-3.49 = agree,				
3.5-4 = strongly agree; overall $M = 3.46$, $SD = 0.37$				

Table 18 illustrates coffee cooperative members' perception of ownership by gender. As this table points out there is a significant difference, t(51) = -1.97, p = .05, between males and females. Males tended to agree strongly (M = 3.55, SD = .31) that they own a share of the cooperative and while the females only tended to agree (M = 3.35, SD = .32) with this statement.

Table 18

Coffee Cooperative Members Perceptions of Ownership by Gender

Category	n	M	SD	t	P
Male	30	3.55	.31	-1.97	.054
				-1,	
Female	22	3.35	.32		
Note. 1-1.49 = strongly disagree, 1.5-2.49 = dis	sagre	e, 2.5-	3.49	= agree	,
3.5-4 = strongly agree					

Table 19 illustrates coffee cooperative members' perceptions of ownership by age. This table shows no significant difference among age group, F(3, 48) = 1.60, p = .20, with those aged between 17 -27 (M = 3.54, SD = .33) and 28-30 (M = 3.53, SD = .29) tending to agree strongly that they possessed ownership of the cooperative while those aged 37-50 (M = 3.28, SD = .47) tended to agree that they owned a share of the

cooperative and those aged 51 and above (M = 2.43, SD = .51) tended to disagree with the idea that they had ownership in the cooperative organization.

Table 19

Coffee Cooperative Members Perceptions of Ownership by Age

Age	N	M	SD	\overline{F}	P
17-27	13	3.54	.33	1.60	.20
28-30	14	3.53	.29		
37-50	14	3.28	.47		
51 and above	11	2.43	.51		

Note. 1-1.49 = strongly disagree, 1.5-2.49 = disagree, 2.5-3.49 = agree,

3.5-4 = strongly agree

Table 20 illustrates coffee cooperative members' perceptions of ownership by cooperative. As shown in this table, there are no significant difference among the three cooperatives F(3,48) = 1.17, p = .31. Among the three cooperatives,

Maraba (M = 3.36, SD = .45) tended to agree that they possessed ownership of the cooperative while both Humury (M = 3.54, SD = .34) and Muhundo (M = 3.51, SD = .27) tended to agree strongly with the statement.

Table 20

Coffee Cooperative Members Perceptions of Ownership by Cooperative

Cooperative	N	M	SD	F	P
Maraba	20	3.36	0.45	1.17	.32
Humury	18	3.54	0.34		
Muhundo	14	3.51	0.28		

Note. 1-1.49 = strongly disagree, 1.5-2.49 = disagree, 2.5-3.49 = agree, 3.5-

4 = strongly agree

Table 21 illustrates coffee cooperative members' perception of ownership by those that received money from the genocide fund. This table shows no significant differences, t(51) = .29, p = .78, among those that received monies from the Genocide Fund (M = 3.51, SD = .33) and those that did not (M = 3.46, SD = .38).

Table 21

Coffee Cooperative Members Perceptions of Ownership by Those That Received Money from the Genocide Fund

Monies received from genocide fund	N	M	SD	t	P
Yes	5	3.51	.33	.29	.78
No	47	3.46	.38		
Note. 1-1.49 = strongly disagree, 1.5-2.49 =	disag	ree, 2.5	-3.49	= agre	ee,
3.5-4 = strongly agree					

Coffee Cooperative Members' Attitudes towards Cooperative Sustainability

Table 22 illustrates coffee cooperative members' perception of cooperative sustainability. Participants tended to agree strongly that they "see the promotion of youth in the leadership and management as important for the sustainability of the cooperatives" (M = 3.73, SD = .56). Participants tended to agree that "the cooperative has a strategic plan" (M = 3.48, SD = .78), "without the assistance of SPREAD the cooperative will be unable to function" (M = 3.40, SD = .66), "cooperatives can continue to function in the absence of SPREAD" (M = 2.87, SD = .95), "there is a shared vision by all members, management, and the leadership board" (M = 2.62, SD = 1.01), and that "the amount of money I put into producing cherries is greater that the profit I receive from selling to the cooperatives" (M = 2.52, SD = 1.02). Participants tended to disagree with the statements "I know the current financial status of the cooperative"

(M=2.29, SD=.82), and that "the cooperative always has enough money on hand to pay the participants for their coffee cherries" (M=2.19, SD=.82). Overall participant tended to agree that (M=2.89, SD=.33) they felt like the cooperatives were sustainable.

Table 22

Coffee Cooperative Member's Perception of Cooperative Sustainability (n=52)

Item	М	SD
I see the promotion of youth in the leadership and management as	3.73	.56
important for The sustainability of the cooperative.		
The cooperative has a strategic plan	3.48	.77
Without the assistance of SPREAD the cooperative will be unable to	3.40	.66
function.		
Cooperatives can continue to function in the absence of SPREAD	2.87	.95
There is a shared vision by all the members, management, and the	2.61	1.01
leadership board?		
The amount of money I put into producing cherries is greater than the	2.51	1.01
profit I receive from selling to the cooperatives.		
I know the current financial status of the cooperatives	2.28	.82
The cooperative always has enough money to pay me for my cherries	2.19	.81
Note. 1-1.49 = strongly disagree, 1.5-2.49 = disagree, 2.5-3.49 = agree	,	
3.5- 4 = strongly agree; overall $M = 2.89$, $SD = 0.33$		

Table 23 illustrates coffee cooperative members' perception of cooperative sustainability by gender; this table indicates a significant differences, t(51) = 2.22, p = .03, among genders with both genders in agreement that the cooperative organization is sustainable. Males attitudes towards cooperative sustainability is stronger (M = 2.97, SD = .29) while females take a more conservative position (M = 2.77, SD = .35).

Table 23

Coffee Cooperative Member's Perception of Cooperative Sustainability by Gender

Category	N	M	SD	T	p
Male	30	2.97	.29	2.22	.031
Female	22	2.77	.35		

Note. 1-1.49 = strongly disagree, 1.5-2.49 = disagree, 2.5-3.49 = agree,

3.5-4 = strongly agree

Table 24 illustrates coffee cooperative members' perception of cooperative sustainability by age. This table shows no significant difference among age groups, F(3, 48) = .23, p = .88, with age groups 17-27 (M = 2.89, SD = .26),

28-30 (M = 2.87, SD = .22), 37-50 (M = 2.85, SD = .38), and those between the ages of 51 and above (M = 2.95, SD = .46) tending to agree that the cooperative organization is sustainable.

Table 24

Coffee Cooperative Member's Age	N	M	SD SD	F	$\frac{y ngc}{P}$
17-27	13	2.89	.25	.23	.87
28-30	14	2.86	.21		
37-50	14	2.84	.38		
51 and above	11	2.95	.46		

Note. 1-1.49 = strongly disagree, 1.5-2.49 = disagree, 2.5-3.49 = agree,

3.5-4 = strongly agree

Table 25 illustrates coffee cooperative member's perception of cooperative sustainability by cooperative. As shown in this table there is no significant difference between the three cooperatives F(3, 48) = .19, p = .82). Maraba (M = 2.90, SD = .43),

Humury (M = 2.85, SD = .26), and Muhundo (M = 2.91, SD = .26) tended to agree that the cooperative organization is sustainable.

Table 25

Coffee Cooperative Member's Perception of Cooperative Sustainability by Cooperative

Cooperative	N	M	SD	F	P
Maraba	20	2.90	0.43	0.20	.82
Humury	18	2.85	0.26		
Muhundo	14	2.91	0.26		

Note. 1-1.49 = strongly disagree, 1.5-2.49 = disagree, 2.5-3.49 = agree,

3.5-4 =strongly agree

Table 26 illustrates coffee cooperative member's perception of cooperative sustainability by those that received money from the genocide fund (M = 3.05, SD = .48) and those that did not receive monies (M = 2.87, SD = .31). This table shows no significant differences among recipients, t(51) = 1.17, p = .25.

Table 26

Coffee Cooperative Member's Perception of Cooperative Sustainability by Those That

Received Money from the Genocide Fund

Monies received from genocide fund	N	М	SD	T	p
Yes	5	3.05	.48	1.17	.25
No	47	2.87	.31		

Note. 1-1.49 = strongly disagree, 1.5-2.49 = disagree, 2.5-3.49 = agree,

3.5-4 = strongly agree

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of the study, objectives of the study, type of research, population, instrumentation, data collection, data analysis, and summaries of findings, conclusions, and recommendations are presented in this chapter.

Purpose of the Study

The purpose of this study was to describe and examine the attitudes of coffee cooperative members towards the ownership of the SPREAD cooperatives in relation to cooperative sustainability. Understanding the cooperative members' attitudes towards cooperative ownership and sustainability, will allow us to further understand ways in which the SPREAD model of innovative cooperation and collaboration has helped as well as hindered the process of poverty alleviation. In addition an, assessment of members attitudes will allow us to begin developing innovative strategies for closing the knowledge gap between the decision makers and that of the rural poor. The following research objectives were used to accomplish the purpose of this study:

- Describe and examine the relationship between the attitudes of coffee
 cooperative members towards cooperative associations and the specialty coffee
 industry and by gender, age, identity of the cooperative, recipients of monies
 from the survivors of the genocide fund and number of children.
- 2. Describe and examine the relationship between coffee cooperative members' perception of the benefits received through their association with the cooperative

- by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.
- 3. Describe and examine the relationship between the coffee cooperative members' attitudes towards money earned from the cooperative association as well as its impact by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.
- 4. Describe and examine the relationship between coffee cooperative members' attitudes towards cooperative sustainability and by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.
- 5. Describe and examine the relationship between coffee cooperative member's perception of cooperative ownership and the SPREAD project and by gender, age, identity of the cooperative, recipients of monies from the survivors of the genocide fund and number of children.

Methods

A survey research design comprised of a quantitative, close-ended category-scale questionnaire. Ary (2009) noted that, "the quantitative method has many positive attributes, the greatest being its ability to ask many questions in a limited period of time, allowing direct comparison of responses as well as analysis that is easy to carry out" (p. 25).

The sample population was composed of the member farmers from three of the SPREAD assisted coffee cooperatives. The three cooperatives studied received support

from SPREAD as do eleven other coffee cooperatives. The SPREAD project director, and the SPREAD staff, selected Maraba, Humury, and Muhundo for this study, as they believed that looking at cooperatives of varying sizes would provide a clearer picture of the social economic impact of its members. (Jean Claude Kayisinga, Personal Communication, June 24th, 2009).

Participation of the member farmers was based solely on their availability at the time the questionnaire was administered. A total of 52 individuals participated in the research task. The interviewer's role was critical in helping to ensure the content validity of the instrument questions. The five interviewers consisted of two students from the National University of Rwanda, and three SPREAD staff members, four were male and one was female. All five were fluent in English, French, and Kinyarwanda (the local dialect).

The data were collected from mid-July to mid-August, 2009. Prior to the administration of the questionnaire, the researcher and interviewers introduced themselves to the participants. The researcher addressed the issue of confidentiality before beginning the survey, explaining that the participants' names would not be released, ensuring a level of confidentiality among the three cooperatives. In the data analysis process, the names of the participants were coded in such a way that the confidentiality of the participants was insured. The five interviewers consisted of 2 students from the National University of Rwanda, and three SPREAD staff members, four were male and one was female. All five were fluent in at least English, French, and Kinyarwanda (the local dialect).

The data were collected from mid-July to mid-August, 2009. Prior to the administration of the surveys, the researcher and interviewers introduced themselves to the participants. The researcher addressed the issue of confidentiality before beginning the questionnaire, explaining that the participants' names would not be released, ensuring a level of confidentiality among the three cooperatives

Conclusion 1 Implications and Recommendation

Objective 1: Describe and examine the relationship between the attitudes of coffee cooperative members towards cooperative associations and the specialty coffee industry and by gender, age, cooperative, survivors of the genocide fund and number of children.

This study found that participants had a positive disposition toward the cooperatives association and the specialty coffee industry. The data showed that among participants there is a relationship between the cooperative association and the participant's belief that they were better off than they were yesterday. In regards coffee, the data show that participants regard it as their most lucrative crop and that without it their standard of living would not be as great. The data also found that while coffee was the participants' most lucrative crop, it was not the only agricultural enterprise carried out by participants.

Throughout Develtere's (2008) work, it is noted that throughout Rwanda "the main strengths of the cooperatives are the enthusiasm of the low-income population, especially in rural areas and in the informal urban economy, and their increasing awareness that solidarity offers the only hope of progress" (p. 302). It is implied

throughout the study that the research participants' enthusiasm towards the cooperative association is related to their participation in coffee cooperatives and the increasing awareness that the organized production of specialty coffee is having a substantial impact on their lives. Further, it is implied that while coffee is the participant's most lucrative crop, being tied to one crop is not a good economic position. SPREAD recognizes that Fix citation "the development of the value chain is not a linear process" (Sustainable Partnership to Enhance Rural Enterprise and Agribusiness Development, spin off, 2010, ¶1), and that taking an integrated approach to agriculture development will contribute to the long-term sustainability of producers' livelihoods. It is recommended that producers continue to work with organizations such as SPREAD to create spin-off business centered on value-added processed goods. This will bring more money to Rwanda, and offer increased employment opportunities to Rwanda's increasing population.

As Wilson (1987) points out, that in order for a large cooperative to be successful, they will have to "use the associations not only for spreading knowledge about agricultural production, but as tools for adult education" (p. 407). It is recommended that to increase perceptions of ownership and sustainability among cooperative members, the cooperative association should begin by building on the enthusiasm of its members. Using the cooperative as resource centers, from which to offer classes on management and book keeping would be a good first step in strengthening member's capacity to lead.

Conclusion 2 Implications and Recommendation

Objective 2: Describe and examine the relationship between coffee cooperative members' perception of the benefits received through their association with the cooperative and by gender, age, cooperative, survivors of the genocide fund and number of children.

This study found that of the benefits received from being a member of the cooperative, research participants regarded the respect that it brings to the community, as well as the ability to help their community to grow in size, as two of the biggest benefits they receive as a member of these associations. This implies that the cooperative association can be used as a tool for community development.

Develtere's (2008) notes that "The largely rural population of Rwanda has long organized itself by means of social structures based on solidarity with a view to ensuring mutual protection, managing conflicts and providing mutual assistance" (p. 306).

Despite "Swanson's (2008) argument that "Cooperative members do not feel valued" (p. 8), this study implies the opposite finding that members perception of value stems from a desire to impact their community as well as those living in it. In regards to understanding how members perceive ownership and sustainability, it is recommended that projects such as SPREAD, become more involved at the grass roots level. Partnering with volunteer organization such as the United States Peace Corps, would allow for such project to have staff based in the community. Such staff could help develop links between macro level policy development and micro level realities.

This study also found that cooperatives are functioning as "an instrument that enables poor people to subsist in a situation in which the means of production are scarce and incomes are low" (Develtere, 2008, p. 323). It is implied that through the cooperatives ability to create mutual assistants mechanism, such as providing members access to health insurance and accessible credit. Access to reliable credit will allow producers to buy and plant more coffee cherry trees, send children to school, and create small start up businesses, which can only help to engender a sense of ownership among members as well as help sustain livelihoods and alleviate poverty. It is recommended that the cooperatives continue to maintain this role, and look for further ways in they can support their members.

Birchall (2003) notes, "in order for a cooperative to be truly sustainable it must be innovative and forward looking" (p. 31). There is an implication throughout this data that through the research and training that SPREAD is currently undertaking on the use of techniques such as Verimiculture, to produce organic fertilizers has increased participant's perception that the cooperative association has left them with added training opportunities. Such trainings will help producers become self sustaining, and more importantly teach them how use their resources to create farm inputs, that will allow them to cut production cost and retain more of the profit received from coffee cherry sales. It is recommended that cooperatives seek out opportunities where they can receive technical training in the areas such as the use of organic inputs. Obtaining such skills will help cooperatives to become self-sufficient and get closer to a point where assistance from foreign donors is no longer needed.

Conclusion 3 Implications and Recommendation

Objective 3: Describe and examine the relationship between the coffee cooperative members' attitudes towards money earned from the cooperative association as well as its impact and by gender, age, cooperative, survivors of the genocide fund and number of children.

Birchall (2003) defines Opportunity as the "means that poor people have the chance to lift themselves out of poverty and all the other forms of deprivation that go with it" (p. 20). On the supply side, opportunities are created when economic growth is stimulated and markets are made to work for the rural poor. On the demand side, the rural poor must have the capacity to take advantage of the opportunities, and this means building self- confidence through education, training, and self-organization. Moreover, Cooperatives have a contribution to make both on the supply and demand sides. "They open up markets by organizing supply of inputs and marketing of outputs. They provide a means by which credit can be given when needed, and a safe form in which poor people's savings can be invested" (Birchall, 2003, p. 20).

This study showed that, in terms of poverty reduction, producers are using the money earned from the SPREAD assisted cooperatives to maintain a level of personal sustainability. The study shows that through the cooperative process research participants are better able to maintain food security, purchase domestic animals, as well as save a portion of the money earned from the cooperatives. Throughout his assessment, Swanson (2008) points out "members do not think of their cooperative as a business enterprise, in which they have specific stock, rights and obligations. It is a place where

they are asked to sell their cherries, with expectations for a later dividend. They also think of their cooperative as a kind of social welfare institution" (p. 15). An important implication resulting from this study is that through the cooperative process, poverty is being reduced; yet at the same time cooperatives risk creating an environment where the difference between an organized business and social welfare organization may become indistinguishable.

The findings also showed that participants have to struggle to prepare for next year's harvest and that loans received from cooperatives are viewed by the participants as unequal. In his assessment Swanson (2008) also draws the same conclusion, stating "Management of loans to members, and sometimes non-members alike, is poorly handled, with the cooperative taking substantial losses – having difficulty in collecting loans" (p. 15). The implication suggest that that while the cooperative associations provide opportunities for poverty reduction, the loans received from the cooperatives are to be used to help members send their children to school, however they can also be used to purchase inputs such as fertilizers. Unless, the leadership can regain member confidence, instilling a sense of ownership among producers will be difficult.

It is recommended that in order to distinguish itself from a social welfare organization that cooperative stay out of the banking business, and focus on their own business of collecting and processing parchment coffee. Cooperatives should undertake special 'ventures' that would allow private entrepreneurs to handle the distribution of benefits such as providing access to micro credit, and let the distribution of benefits be run as private business ventures. It is also recommended that, because most cooperative

members are able to have their own individual bank accounts, cooperatives should consider transferring funds owed to farmers from a season's sales to these accounts, and let banks manage the cash flows from them as farmers access their accounts – including loans

Conclusion 4 Implications and Recommendation

Objective 4: Describe and examine the relationship between coffee cooperative members attitudes towards cooperative ownership and by gender, age, cooperative, survivors of the genocide fund and number of children.

Swanson (2008), indicates in his assessment "that coffee cooperative general members do not feel 'valued', nor have a sense of ownership in their cooperative; they know absolutely nothing about the finances of their cooperative, and don't feel they have a right to even ask for such information" (p. 8). This study contradicted Swanson by indicating, that the research participant's recognized their ownership of the cooperatives and that it was a member owned organization. Further participants tended to agree strongly ownership in the cooperatives allows members to be more competitive economically.

Develtere (2008) attributes this to the fact that the Rwandan cooperative initially developed out of a "collective practices relating to production primarily involved calling on neighbors' assistance to cultivate a field. This practice, organized on an ad hoc basis and unpaid, developed into the formation of mutual-aid associations known as "tontines" (p. 305). As previously pointed out, the present picture of the Rwandan cooperative movement tends to blend traditional forms of mutual aid within the community and that

of the modern cooperative structure, often making it hard to distinguish between the two.

This implies that Rwandan's may perceive ownership, differently than that of someone addressing the issue from a strictly economic perspective.

In sustainable development more generally, the most important contribution that cooperative promoters can make is in human resources, (Birchall, 2003, p. 65). While most members, do agree that they own a share in the cooperative organization; it is shown that older members tend to disagree that the cooperative is member owned. This implies that cooperatives need to continue to develop their human resource base, with continued focus on the principle of education.

Sustainable development is driven by the people; therefore the most important investment a cooperative can make is in its human resources. It is recommended the cooperative continue to develop their human resource base, devoting a portion of cooperative activities' to that of the older members. Cooperative leadership should reach out to its older members and seek their participation when ever possible. Out reach programs focused on the to the health and welfare of the elderly, will allow older members to begin to learn about the principle of ownership and further, "The principle of education is needed in order to bridge the power distance between members and leaders that often, due to local culture, inhibits participation." (Birchall, 2003, p. 85).

In order to maintain producers perception that they own the cooperative organization it is recommended that cooperatives continue to be a place where producers can utilize the organization as "a forum for discussion, to mobilize local resources, to build up bargaining power and claim-making power, to widen the options for income-

generating activities, and to enhance local control over factors of production" (Birchall, 2003, p. 65). In order to accomplish this, the cooperatives will have to create an environment where there is a perception of low risk; poor people are very averse to risk, there first priority is to conserve what ever they have.

Conclusion 5 Implications and Recommendation

Objective 5: Describe and examine the relationship between coffee cooperative member's perception of cooperative sustainability and the SPREAD project and by gender, age, cooperative, survivors of the genocide fund and number of children.

Cooperative development in its traditional form is still a new concept in Rwanda. The move from a government-controlled enterprise to a member owned organization has only taken place in the last fifteen years. Swanson (2008) notes that SPREAD assisted cooperatives face structural weakness that are a threat to their sustainability, he notes that "unless cooperative board members are prepared to make the changes necessary, and quickly, it is likely that many will in fact collapse" (p. 11). Such practice include a greater focus on planning, organizing, staffing, leading, and human resource development.

Data, support earlier finding, showing that participants perceive the cooperative to have a strategic plan and there was a shared vision by all members, management, and the leadership board, but yet support Swanson's argument by acting negatively when asked about the sustainability of the cooperative. Data shows that most participants felt that without the assistance of SPREAD, the coffee cooperatives will not be able to sustain themselves. Further, the participants indicated that it is SPREAD and not the

members who have contributed to their success. These findings imply that the coffee cooperative members may still be path dependent, and have not matured to the point where they will be able to sustain themselves apart from outside assistance. Choosing to address the issue of sustainability from the vantage point of small, medium, and large cooperatives allowed me to maintain stability among the data. Further, with little variability among the three cooperatives, it can be implied that once SPREAD is no longer able to provide these cooperatives with support, that they run a real risk of collapse.

The data also shows that, equity does not mean equality. Throughout this study it is shown that women take a more conservative position on the issues of cooperative ownership and cooperative sustainability. As USAID (2006), suggested earlier, that while women may do a majority of the work and may be cooperative members, it is not within the cultural norm to make decisions' on how the cooperatives are run. This implies that while cooperative development in Rwanda is progressing at a fast rate, culturally it is unable to keep pace with a system that has long history of male dominance.

Birchall (2003) points out that in developed countries, "it was not until women organized themselves into women's guilds that they began to gain equal status" (p. 66). In this respect, it is recommended that cooperative development be aimed directly at women. There needs to be more awareness of the cooperative form of enterprise among women, perhaps through spin off business, aimed specifically at women. In this way they can begin to encourage existing male-dominated cooperatives to have a rule that

according to which households are involved more than one person should become a member.

Working through the SPREAD sponsored health program, capacity-building workshops could be created that address women's rights as well as provide them with training in leadership and management. Including women in the management and leadership of the cooperatives would help to reinforce the idea of ownership but also add to the long term sustainability of the cooperatives in order for the cooperative organization to progress and evolve; women will have to play a greater role in the development of the long-term goals of the cooperatives.

It is further recommended that the promotion of the cooperatives vary on the stage of development reached, on going needs assessments are needed that will ensure cooperative development is keeping pace with the needs of its members. More importantly cooperatives need to have member led trainings. Moreover, there is a need for continued human resource development, in the form of member led training programs. By addressing issues such as effective management practices, members can begin to build the confidence needed to ensure long-term sustainability.

It is also recommended that SPREAD continue to promote international coffee competition such as the Cup of Excellence and the Golden Cup as a way to enhance their marketing and empower their members. Increased marketing will increase the attention that the Rwandan farmer receives and the attention that their coffee product gets. The best way for SPREAD to work its self out of a job is to increase the capacity of its

cooperative leadership, to training members in cooperative principles and cooperative management.

Additional Recommendations

Throughout this thesis I have worked to answer the central question, do coffee cooperative members in Rwanda feel ownership of the SPREAD supported cooperative, and have they benefited from their membership.

Swanson (2008) found many ways in which SPREAD assisted cooperatives were not living up to their desired goals. While this study supported a few of his findings, it also worked to show that cooperative development in Rwanda is a work in progress. The ideals and principles that are attempting to be instituted will require Rwandans to change behavior and attitudes and in the case of sustainable development, this change is often generational.

In order for these changes to take place, however, cooperatives will have to continue to be studied. While research is widely available on the issue of cooperative development, very little is known as to whether rural farmers can participate in a global market and further, can technology drive overall community development—health, education and overall wellbeing? It is recommended that these questions be used to further the research being done on the development of cooperatives both in Rwanda, but also in Africa as a whole.

Boudreaux (2007) notes that a "person who learns how to manage a coffee washing station will acquire skills that can be put to good use in other managerial positions" (p. 21), these findings agree with Boudreaux in that they suggest that the

benefits received as a member of the cooperative associations, are the same principle elements that have made the Rwandan coffee sector such a success. It is recommended that cooperatives continue to focus on the implementation of sound business management practices; training in this area will prove to be essential in the long-term sustainability of the Rwandan coffee cooperative associations.

Through a focus on the education and training of its members, cooperatives are now beginning to learn what it means to own a cooperative and further, what is needed to make these agriculture enterprises sustainable. It is recommended that the cooperatives continue to "be used as a rural network of training centers" (Wilson, 1987, p. 407) and further "make a commitment to the education and training of their members and though they exist primarily for the benefit of their members, they also have responsibility for their wider community" (Birchall, 2003, p. 3). Further research could be conducted to explore other factors impacting the sustainable development of cooperatives in Rwanda. Recommendations for further research include the following:

- 1.) Should the promotion of cooperatives vary, depending on the stage of development reached?
- 2.) What role does adoption and diffusion theory play in cooperative development?
- 3.) How can cooperatives enhance the status of women?
- 4.) What are the limits to cooperative development?
- 5.) Can rural farmers participate in a global market?
- 6.) Can technology drive overall community development—health, education and overall wellbeing?

REFERENCES

- Apthorpe, R. (1977). The cooperatives' poor harvest. *New Internationalist*, 48,4-6.
- Ary, D. (2009). *Introduction to research in education*. Belmont, CA: Wadsworth Publishing.
- Birchall, J. (2003). Re-discovering the cooperative advantage: Poverty reduction through self-help. Geneva: International Labor Organization.
- Birchall, J. (2005). *Cooperatives and the millennium development goals*. Geneva: International Labor Organization.
- Boudreaux, K. (2007). State power, entrepreneurship and coffee: The Rwandan experience. *Policy Comment*, *15*, 1-38.
- Central Intelligence Agency (CIA). (2009). *The world fact book*. Retrieved September 3rd, 2009 from https://www.cia.gov/library/publications/the-world-factbook/geos/rw.html
- Clay, D. C., Byiringiro, F., Kangasniemi, J., Reardon, T., Sibomana, B., Uwamariya, L., et al. (1996). *Promoting food security in Rwanda through sustainable*agricultural productivity: Meeting the challenges of population pressure, land degradation, and poverty. Retrieved November 7, 2005, from http://www.afr-sd.org/publications/28rwanda.pdf
- Commission for Africa. (2005). Our common interest. London: Penguin.
- Craig, J. (2002). Privatization and indigenous ownership: Evidence from Africa. *Annals of Public and Cooperative Economics*, 73, 559-576.

- Creswell, J. W. (2008). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. Upper Saddle River, NJ: Pearson Education.
- De Graaff, J. (1986). *The economics of coffee*. Wageningen, The Netherlands: Center for Agricultural Publications and Documents.
- Develtere, I. P. (2008). *Cooperating out of poverty*. Geneva: International Labor Office.
- Develtere, P. (2007). Cooperative movements in the developing countries: Old and new orientations. *Annals of Public and Cooperative Economics*, 64(2), 179-208
- Dooley, L. (2002). Case study research and theory building. *Advances in Developing Human Resources*, 4(3), 335-354.
- Fraser, L. (2006, August 6). Coffee, and hope, grow in Rwanda. *The New York Times*,

 Retrieved from

 http://www.nytimes.com/2006/08/06/business/yourmoney/06coffee.html?n=Top/

 News/Business/Small%20Business/Going%20Global&pagewanted=all#
- Goff, S. (2006). A case study of the management of coffee cooperatives in Rwanda.

 Retrieved February 8, 2010 from http://repository.tamu.edu/handle/1969.1/3746
- International Cooperative Alliance (ICA). (1995). *Statement on the co-operative identity*.

 Retrieved February 8, 2010, From http://www.coop.org/coop/principles.html
- Kerr, G. (1978). Associations in west Africa: "Hidden" agents of social change. *African Studies Review*, 21(3), 87-100.

- Kinzer, S. (2008). A thousand hills: Rwanda's rebirth and the man who dreamed it. Hoboken, NJ: Wiley.
- Knowles, M.S., Holton, E. F., III, & Swanson, R. A. (2005). The adult learner: The definitive classic in adult education and human resource development.Burlington, MA: Elsevier.
- Mendoza, E. V. (1980). Agricultural cooperation in developing countries: A management approach. Geneva: International Cooperative Alliance.
- Migot-Adholla, S. E. (1970). Traditional society and cooperatives. In G.G. Widstrand (Ed.), *Cooperatives and rural development in East Africa* (pp. 17-37). New York: Africana.
- Munker, H. H. (2001). Innovative approaches to co-operative solutions of housing problems of the poor: Case studies from member-organizations. Marburg, Germany: Volker &Ritter.
- Ottaway, A. (2004, March/April). From café ordinary to café extraordinaire. *Roast Magazine*, 40-48.
- Partnership for Enhancing Agriculture in Rwanda through Linkages. (2004, January 24).

 The Maraba bourban coffee story. Retrieved from http://www.iia.msu.edu/pearl/maraba-story.htm
- Pollet, I., & Develtere, P. (2004). Cooperatives and development: Action speaks louder than words. *IRU Courier*, 1-13. Retrieved Feb 1, 2010 from, http://www.caledonia.org.uk/pollet.htm

- Price, E. C. (2006). USAID Sustaining partnerships to enhance rural enterprise and agribusiness development (SPREAD) project: An application to USAID.

 Retrieved from,
 - http://www.spread.org.rw/documents/SPREAD%20Project%20Proposal.pdf
- Prunier, G. (1995). *The Rwanda crisis: History of a genocide*. New York: Columbia University Press.
- Ruedin, A.W. (2008). Putting a livelihood perspective into practice, Systemic approach to rural development: A guide for analysis, appraisal and planning in rural areas. SDC. Retrived form, poverty wellbeing.net/en/document.php?itemID=2855&langID=1
- Rwanda Development Gateway. (2010). *Agricultural sector in Rwanda*. Retrieved September 3rd, 2009, from http://www.rwandagateway.org/article.php3?id article=98
- Schattenberg, P. (2009, July 29). Spread project sniffing out new method of helping rwandan coffee farmers. Retrieved from http://agnews.tamu.edu/showstory.php?id=1328
- Sustaining Partnerships to Enhance Rural Enterprise and Agribusiness

 Development (SPREAD). (n.d.). *Mission statement*. Retrieved February,1, 2010 from http://www.spreadproject.org/mission.php
- Swanson, R.A. (1996). Analysis for improving performance: Tools for diagnosing organizations and documenting workplace expertise. San Francisco, CA: Barrett-Koehler.

- Swanson, T.B. (2008). SPREAD-growers first coffee cooperative assessment & 2008 cooperative. New Brighton, MN: Development and Information Systems.
- United Nations. (1992). National mechanisms and international cooperation for capacity building in developing countries. In *Agenda 21*. (chap.37). Retrieved October 5, 2009, from http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21chapter37.
- United States Agency for International Development, (2004). *USAID agricultural*strategy: linking producers to markets (PD-ABZ-800). Washington, DC: IBI—
 International Business Initiatives.
- Van Dyk, D. (2005, August 29). The coffee widows. *Time*, A12.

htm

- Wanyama, F. O., Develtere, P., & Pollet, I. (2009). Reinventing the wheel? African cooperatives in a liberalized economic environment. *The Annals of Public and Cooperative Economics*, 80,(3), 345-497
- Wilson, W. (1987). Cooperatives as a vehicle of adult education in Africa: The Niger case. *The Journal of Negro Education*, *56*(3), 407-418.
- World Bank. (2000). Development education program: Bringing sustainable

 development into the classroom. (2000). Retrieved November 10, 2009, from

 http://www.unesco.org/education/tlsf/theme_c/mod13/www.worldbank.org/depw
 eb/english/index.htm

World Bank. (2009). The World Bank operational manual: Operational policies:

Countries ranked by per capita income. Retrieved November 5, 2009, from http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,,contentMDK:21721065~menuPK:51508119~pagePK:64141683~piPK:4688102~theSitePK:502184,00.html

APPENDIX A

Data Collection Instrument

Participant	
Cooperative	
Gender	
Age	
Number	
Scale 1 = Strongly of 2 = Disagree 3 = Agree 4 = Strongly A	

General Disposition Questions

	Statement	Response
1	Today is better than yesterday	
2	Tomorrow will be better than today	
3	I would live worse if I stopped producing coffee	
4	Coffee is my most lucrative crop	
5	Coffee is my only agriculture enterprise	
6	I am living better because I am a member of the cooperative	

Benefits

	Statement	Response
7	The cooperative has helped my community to grow in size	
8	The cooperative is respected in my community	
9	The cooperative have helped me achieve a sustainable livelihood	
10	The cooperative has allowed me to provide better healthcare for	
	my family	
11	The cooperative has given me increased access to credit	
12	The cooperatives provides me training on the use of organic	
	fertilizers and mulching	

Use of Money

	Statement	Response
13	The money earned from the cooperatives has allowed me to build	
	a house	
14	The money earned from the cooperatives has allowed me to	
	purchase more land	
15	The money earned from the cooperatives allows me to pay my	
	children's school fees	
16	I have used the money earned from the cooperatives to maintain	
	food security	
17	I have used the money earned from the cooperatives to buy a	
	domestic animal	
18	I am able to save a portion of the money earned from the	
	cooperatives	
19	The money earned from the cooperative is enough to help me to	
	prepare for next years' harvest	
20	I receive a loan from the cooperative to by Chemical fertilizer	
21	I receive a loan from the cooperative to pay for my children's	
	school fees	
22	The loan received from the cooperative is enough to purchase	
	fertilizer and pay for my children's school fees	

Ownership

	Statement	Response
23	I am familiar with the cooperative by laws	
24	The cooperation is member owned	
25	I am aware of my rights as a member of the cooperative	
26	Ownership in the cooperative allows members to be more	
	competitive economically	
27	I own a share of the cooperative	
28	I know the worth of my share	
29	My actions affect how the Cooperative is run	
30	The Cooperative is operating efficiently	
31	My life continues to improve because I am a member of the	
	cooperative	
32	Members and work subgroups (e.g. bean sorters) are able to	
	approach their cooperative's Board and Management	
	whenever they need to	
33	The government should play a greater role in the management of	
	the cooperative	

Sustainability

	Statement	Response
34	Cooperatives can continue to function in the absence of SPREAD	
35	I know the current financial status of the cooperatives	
36	There is a shared vision by all the members, management, and the	
	leadership board	
37	Without the assistance of SPREAD the cooperative will be unable	
	to function	
38	The cooperative has a strategic plan	
39	I see the promotion of youth in the leadership and management as	
	important for the sustainability of the cooperative	
40	The cooperative always has enough money to pay me for my	
	cherries	
41	The amount of money I put into producing cherries is greater than	
	the profit I receive from selling to the cooperatives	

ronow up quest	HOHS		
Please indicate th	he number of children you have that attend second	dary school	
I receive money	from FARG/ Victim of the Genocide Fund	Yes	No
Please indicate th	he number of livestock you currently own		
Cattle _			
Chicken _			
Pig			
Goat			

VITA

Student: Robert Matthew Stellbauer

Permanent Address: 4508 Kensington Drive, Bryan, TX

Education: Bachelor of Science Political

Science (2005)

Texas A&M University College

Station, TX

Master of Science, Agricultural Leadership, Education, and Communications (2010) Texas A&M University College Station,

TX

Experience: United States Peace Corps

Volunteer, Saint Vincent and the

Grenadines 2006-2008

The Norman Borlaug Institute for International Agriculture, Student

Technician, Iraq projects

Sustaining Partnerships to Enhance Rural Enterprise and Agribusiness Development (SPREAD), Summer

Intern