FARM BUSINESS CHALLENGES AND SURVIVAL OF SOCIALLY DISADVANTAGED FARMERS: THE CASE STUDY OF GEORGIA'S AFRICAN AMERICAN FEMALE FARMERS

by

ADENOLA OLUMAYOWA OSINUBI

(Under the Direction of Cesar L. Escalante)

ABSTRACT

This study examines challenges facing African American female farmers in their business operations in Georgia and throughout the United States. Farm Service Agency (FSA) lending terms on loans granted 1999-2013 are scrutinized for possible trends and indications of unfair lending practices towards African American female farmers, and other minority farmers at the national level. This study incorporates both qualitative and quantitative approaches. A case study is conducted focusing on African American female farmers in the state of Georgia. A seemingly unrelated regression (SUR) is used to analyze the FSA loan data. The case study confirmed that these farmers still experienced sexism and discrimination, and also helped to build a profile of female African American farmers. Results from the SUR analysis show that although on the front end, discrimination may not be obvious, unfair practices within loan packaging may still be present.

INDEX WORDS: African American Female Farmers, Limited Resource Farmers, Minority Farmers, Discrimination, USDA, FSA, Seemingly Unrelated Regression

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DEDICATION

Dedicated to my motivating and supporting parents and sister. African American female farmers, socially disadvantaged farmers, minority farmers, and all that believe in the fair treatment of all.

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND AND MOTIVATION

In the United States, the stereotypical image of a farmer is that of a sun-kissed older white male in overalls. Women on the other hand are often perceived as holding subordinate roles on the farm. The face of a farm woman is usually secondary to her husband; she is seen as a farmer wife, and a helper on the farm. In a sense, this depiction is somewhat accurate. According to the 2007 Census of Agriculture, of the 2.2 million farms in the United States, 1.89 million have white males as the principal operators (2007 Census of Agriculture Demographics). Figure 1.1 illustrates a comparison between male and female principal farm and ranch operators from 1978 to 2007, in which males have always dominated the farming and ranching industry.

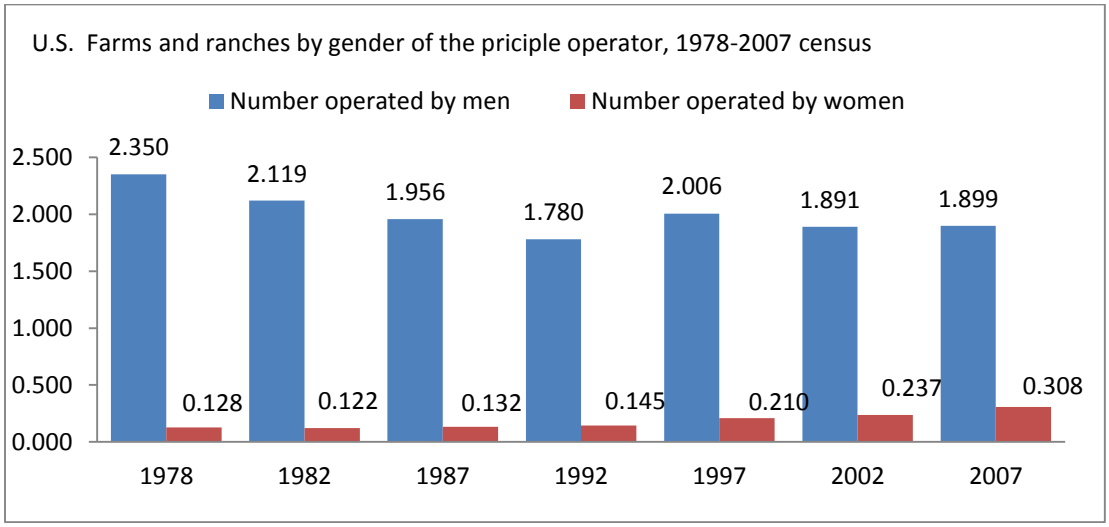

Figure 1.1: Farms and Ranches by Gender
Source: Hoppe and Korb, 2013; USDA, ERS, Characteristics of women Farm Operators and their farms

In addition, 83% of the principal farm operators being white, their average age in 2007 was 57.1 which is demonstrated in figure 1.2 below.

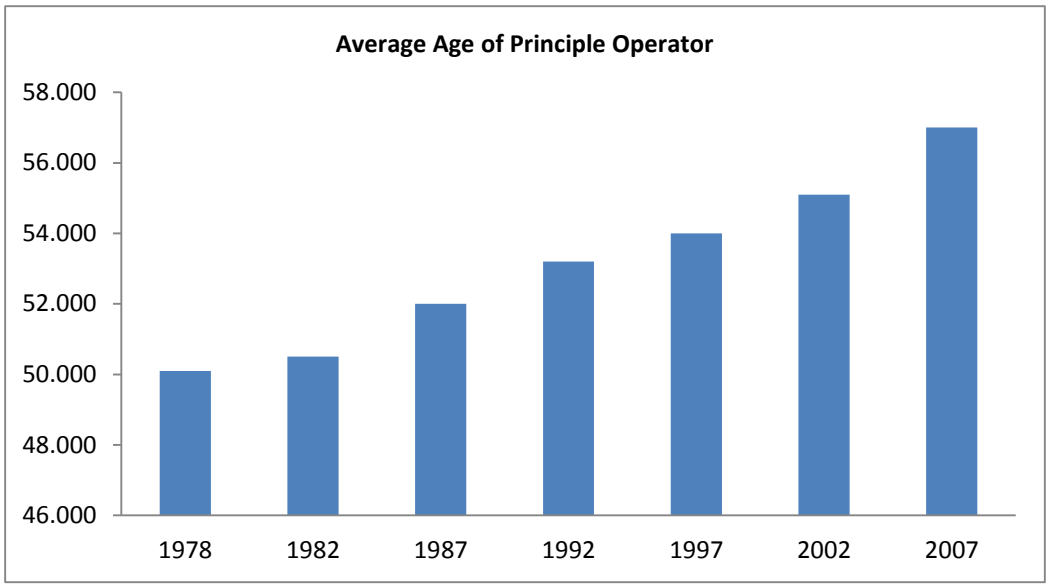

Figure 1.2: Average Age of Principal Operator
Source: 2007 Census of Agriculture, Demographics

1.1.1 Structural Transformation in U.S. Agriculture: An Historical Perspective

The United States, one of the largest economies in the world, is a country like many others built on the resources and profits from the agricultural industry. Dating back to the time of the early settlers, agriculture has been at the center of economic survival. Historically, a large proportion of the United States population was engaged in farming. In 1896, the U.S. farm population was about 18 million people equaling 46.3% of the total population in the nation; and in 1916 the population reached just over 32.5 million people or 31.9 % of the total population (Alston, Anderson, James, and Pardey, 2010). After 1916, the farm population started to decline. By 2006 the U.S. farm population declined to 2.9 million people, which was just 1.0 % of the 299.4 million people in the United States (Alston et al., 2010). In addition to the decrease in the farm population, there was also a decrease in the number of farms (Alston et al., 2010). As the actual

number of farms decreased, the number of larger concentrated farms grew, from 24 % in 1900 to about 67 % in 2002 (Alston, et al., 2010).

In 1862, President Abraham Lincoln signed the law that established the Department of Agriculture for the United States (Rasmussen, 2012). Prior to the 1920s, agricultural policies were focused on supporting areas like family farms, farm inputs, agricultural research, and human labor (Rasmussen, 2012). These policies included the Land Act of 1820, the Homestead Act, and the Morrill Act of 1862 (Rasmussen, 2012). As a result of the Great Depression, many farmers were losing a great deal of money, and facing bankruptcy and foreclosure. Consequently, President Franklin D. Roosevelt signed the Agricultural Adjustment Act, in 1933 under The New Deal (North Carolina Digital History). Under this Act, the Agricultural Adjustment Administration was created; and it regulated agricultural production and also provided subsidies to farmers, to encourage them to limit the production of certain crops (North Carolina Digital History).

The United States initially began as an agrarian society, meaning it relied on the cultivation of crops through the use of plows and draft animals (Elwall, 2006). Although since colonial times, the United States exported and imported goods, many farmers still relied mainly on the their farms as a mean of survival for their family. As time progressed, the agricultural society moved away from mainly providing food for one's family. This shift stimulated the rapid growth of a more commercialized industry as land owners were able to produce on a larger scale. As demand increased, the need for labor also intensified. In order to augment the labor resources of the nation, the first African slaves were brought to Jamestown, Virginia in 1619; many of them helped in the production of lucrative crops like tobacco (History, 2009). For over 200 years, slave

owners, mainly in what is now known as the Southern States, depended on the free and cheap labor of many black slaves to work on their farms and plantations (History, 2009).

American agriculture has changed significantly over the centuries. An industry historically built and strengthened from the backs of African slaves, in the 18th and 19th centuries, American agriculture has gone through many phases and changes. The picturesque plantations have turned into industrial corporate farms. Although the faces of farm owners are no longer limited to that of a white male, and agriculture in the United States is now a diverse industry, a majority of farm owners and operators are still white and male.

1.1.2 Racial and Gender Minority Farming

Due to the white male predominance in American agriculture demographics, it is easy to forget about the minority population that makes up the remaining 17% of principal farm operators. Policies and incentives are created using a blanket method, with the majority as a guide for what is the norm. Practices like this cause many underrepresented groups, like African Americans, Native Americans, and women, to fall between the cracks and not benefit from these opportunities. In addition, other unethical factors, like discrimination and unfair denials of funding, have played a major role in the misappropriation of agricultural opportunities for the agricultural minority community.

In recent times, the idea of small family farms have been pushed away and replaced with large corporate farms. In 1973, the Secretary of the United States Department of Agriculture (USDA), Earl Butz, coined and promoted the slogan “get big or get out” (Philpott, 2008). This phrase referred to the idea that larger farms are better and more efficient, and promoted the consolidation of farm lands. Prior to Butz’s period

in office, overproduction of goods was an issue. When farmers produced too much, prices declined. To discourage this practice, the government paid farmers as an incentive to not grow on a certain portion of their land (Philpott, 2008). When prices began to get too high, the government would stop the payments and farmers would grow on the rest of their land (Philpott, 2008). The government also bought and stored excess grain from farmers; and in the midst of a disaster like drought where production was drastically reduced, the government would release the grain in order to control price (Philpott, 2008). The government set up this system to protect both the consumer and the producer, and also to protect the land from overuse.

Butz and his supporters believed that this program was similar to that of a socialist society. He steered away from the idea of production management and moved towards the encouragement of overproduction (Philpott, 2008). He convinced Midwestern farmers that the days of foreclosure, vast overproduction, and low prices were over. He suggested that excess production can be sold overseas into the international market (Philpott, 2008). Butz organized the sale of a large portion of the excess grain produced, but this was also right before a drought in 1973 (Philpott, 2008). Butz encouraged farmers to plant and grow as much as possible. Many farmers took out loans to purchase more land, larger equipment, and more inputs, some fell into debt, and others had to give up their land, which was consolidated by many corporate farms, to create even larger farms (Philpott, 2008).

By the 1980, producers were producing more than the market could handle. Prices decreased and interest rates increased, causing many farms to go into foreclosure (Philpott, 2008). This caused another crisis for the rural community known as the Second

Farm Depression, which lasted from 1980 to 1986. In 1980, the United States farm net income decreased by 42%. By 1983 the farm income loss was steeper that of the Great Depression, making real farm income actually lower in 1983 that it was in 1933 (Schiller, Hill, and Wall, 2013). During this period, the cost of production increased faster due to higher fuel, fertilizer, and interest rate costs (Schiller, Hill, and Wall, 2013). From 1979 to 1983 the average production costs rose by 30%, but the price of farm products only increased by 1.5%, causing a drastic decrease in farmer profit (Schiller, Hill, and Wall, 2013). Many farmers were unable to maintain their farms and afford the ballooning production costs. The combination of these occurrences caused farm prices to decline, resulting in an explosion of foreclosures.

This classic display of survival of the fittest weeded many smaller "weaker" farms out of the agricultural industry, forcing them to be absorbed by larger entities. It also encouraged larger "stronger" farms to try and remain competitive, and continue to produce at low rates with the hope of making a profit (Philpott, 2008). The concept of "get big or get out" is still a present trend. Even today, many smaller farms are closing and getting absorbed by larger farms. Policies are being created for larger farms. Unfortunately, for many minorities, this is not the type of farm that they have. They generally have smaller farm operations. This puts them at a disadvantage when it comes to funding opportunities. In addition, there have been multiple reports and allegations of discrimination when it comes to support from the USDA and other private lenders. For minorities it is especially hard to receive support in an industry that is generally dominated by white males.

Although the agricultural industry is still dominated by white males the number of female farmers and farm operators are steadily increasing. According to the 2007 census, female farm operators accounted for 30% of the 3.3 million farm operators in the Unites States. In addition, 14% of the female farm operators were primary farm operators. Both of these numbers increased from 2002 by 19% for the number of farm operators which accounted for over 1 million women and 29% for the number of female primary farm operators (see table 1.1, from 2007 Census of Agriculture Women Farmers)

Table 1.1: Women Farm Operators in The United States

	2007	**2002**	**% Change**
All Farm Operators	3,337,450	3,115,172	+7
Woman Farm Operators	1,008,943	847,832	+19
Woman as % of Total	30%	27%	+11
All Principal Farm Operators	2,204,792	2,128,982	+4
Women Principal Operators	306,209	237,819	+29
Woman as % of Total	14%	11%	+24

Source: 2007 Census of Agriculture, Women Farmers

Even though statistics show that women are entering the agricultural industry, it is still difficult for women to start an enterprise, because the agricultural establishment again is a male-dominated industry. For women, the struggles of equality have been a long hard fight, yet in these modern times, women are not always seen as equals. Within the minority group of being a female farmer, African American female farmers are again a minority subgroup. Of the over a million female farmers, African American female farmers accounted for only 9,148 farm operators, and 4,429 primary farm operators in the

United States, according to the 2007 census (2007 Census of Agriculture Women Farmers).

Table 1.2: Female Farm Operators by Race, 2007

	All women Operators	Women Principal Operators
White	935,256	287,092
American Indian or Alaska Native	22,845	10,103
Spanish, Hispanic or Latino Origin	21,670	677
More than One Race Reported	10,359	2,285
Black or African American	9,148	4,429
Asian	6,690	2,033
Native Hawaiian or Other Pacific Islander	894	267

Source: (2007 Census of Agriculture, Women Farmers).

For African American females, both their race and gender are major factors that could make survival in many industries especially agriculture difficult. Due to their small numbers and also the historical difficulties that had plagued this population, it can be easy for this group to be overlooked.

1.1.3 The United States Department of Agriculture, Farm Service Agency and Discrimination Lawsuits

Within the last two decades, the Farm Service Agency, also known as the FSA, has experienced a number of transformations making it the entity that it is today. Over time the FSA has evolved from a portion of President Franklin Delano Roosevelt's 1933 New Deal to a consolidation of numerous branches of the USDA. The current FSA's responsibilities are separated into five areas which include: Farm Programs, Farm Loans, Commodity Operations, Management, and State Operations (FSA, 2008). The agency's

purpose is to provide those in the American farming community, with a strong safety net through administration of farm commodity programs (FSA, 2008). Although this is the intention of this agency, there have been questions as to whether the agency is fulfilling its duty to all members of the farming community or if the agency has been playing favorites to what is known as the "traditional farmer".

Over the past thirty to forty years, the FSA and the USDA have been under fire, as many minorities have accused them of discrimination. These accusations and issues were not new; in 1965, the U.S. Commission on Civil Rights found discrimination problems both in the USDA program delivery and in the USDA's treatment of minority employees (CRAT, 1997). Some refer to the USDA as the "last plantation". In addition, the USDA was one of the last federal agencies to integrate and was possibly the last to include women and minorities in leadership positions (CRAT, 1997). In 1982, the Civil Rights Commission produced a report, where they found that the Farmers Home Administration (FHA), which is under the USDA, did not focus on the crisis that were plaguing black farmers. The report also suspected that the FHA also participated in acts of racial discrimination, even though the agency was supposed to be working towards correcting this issue. A 1990 report by the Congressional Committee on Government Operations identified the FHA as one of the key causes of the drastic decline in black farm ownership (CRAT, 1997).

Like the FHA, the FSA was supposed to be an agency that aided underrepresented farmers like minorities, women, and small farm owners, yet their practices showed otherwise. Under the United State Governments mission, FSA lending programs were established to assist underserved sectors of the farm economy (Escalante et al., 2009). In

addition to these underserved farmers, beginning farmers who are unable to obtain commercial loans because of insufficient net worth and/ or credit history are considered for possible loans through this agency (Escalante et al., 2009). When assessing potential clients, the FSA uses the traditional definition of creditworthiness, which asks applicants to have: (1) character, industry and ability to carry out the proposed operation, (2) honesty in endeavoring to carry out obligations associated with the loan, and (3) realistic payment plans (Escalante et al., 2009). The FSA also gives special consideration for borrowers who have been unable to pay their loans or have delinquent payments as a result of temporary circumstances like job loss, loss of benefits or other income, increase in living expenses due to illness, injury, or death, and lastly those who have no credit history (USDA/FSA, 1995 as cited by Escalante et al., 2009). These conditions seem highly favorable for many minority groups and those of a lower income bracket. Unfortunately this has not been the case, given the number of lawsuits and accusations that have been brought against the USDA and FSA by the very population that these agencies claim they are serving.

As a result of the constant mistreatment from the USDA agencies, on December 12, 1996, a group of black farmers demonstrated in front of the white house, in Washington, DC, asking President Clinton to assure fair treatment for them in agricultural lending programs (CRAT, 1997). By 1997, Timothy Pigford along with 400 other African American farmers filed a lawsuit against the Secretary of Agriculture Dan Glickman of the USDA in an historic case that would be known as Pigford vs. Glickman. The farmers asked for an end to farm foreclosures and restitution for financial ruin they claimed was brought by discrimination (CRAT, 1997).

In response to the allegations brought forth by the African American farmers, secretary Glickman appointed a team of USDA leaders to assess the issues and also make recommendations for change (CRAT, 1997). Also the Civil Rights Action Team (CRAT) was created to address institutional and underlying problems and ways to implement actions to ensure accountability and follow-through at USDA (CRAT, 1997). The CRAT also organized listening sessions across the United States, where farmers and even USDA employees were able to give testimonials of their negative experiences with the USDA agencies and personnel. Minorities, the socially disadvantaged, and women alleged that the USDA participated in a conspiracy to acquire land belonging to them and transfer it to wealthy landowners. Minorities, women, and disabled employees charged that discrimination, sexual harassment, favoritism, and reprisals were common at the USDA (CRAT, 1997). A farmer from Belzoni, Mississippi, said that small scale farmers were treated worse than dogs by USDA employees (CRAT, 1997).

Minority farmers consistently commented that the Federal Government writes off millions of dollars in loans to foreign countries that cannot pay, but forecloses on U.S. farmers when they become delinquent in their loan payments (CRAT, 1997). An African American farmer in Brooks County, GA, where the black population was 62%, stated that the FSA did not serve black farmers in his community. A white female farmer mentioned that female farmers are not taken seriously in the financial community. Another farmer said “If county officials don’t like you, they won’t give you a loan” (CRAT, 1997). In addition to the statements of blatant mistreatment or discrimination, farmers also complained about the stringent regulations and paperwork that did not consider small farmers. Minority farmers described how the county committee system would ignore

them and only catered to a select population. Reports surfaced of field-level employees who worked closely with farmers and make decisions based on incentives that countered serving minorities and small farmers. Many complained that their loans were processed slowly or sometimes not at all, which caused the previously available money to become unavailable to the applicant because it was too late. When measuring performance, the rubric used for gauging prosperity favored large wealthy land owners. Although within the USDAs mission the dedication to helping low income and socially disadvantaged farmers is stated, its management practices and performance measurement systems do the opposite (CRAT, 1997).

The FSA also was singled out as an agency where discrimination occurred periodically. Minorities and limited resource farmers described examples of attempts to apply for farm operating loans. Although they would attempt to apply for loan long in advance of the planting season, the FSA County office often claimed to not have any applications available and made them come back at a later date. When the farmers came back to the office they were forced to fill out the applications with no assistance from the officials. They would then be asked repeatedly to correct mistakes or oversights over a long period of time, and in many cases, the only time the application was attended to, was when the actual farmer contacted the office to check on the status of the application. By the time the process was over, the planting season would have already passed, and the farmer would have lost out on potential profits because of their inability to purchase the necessary materials. Sometimes, the amount of the loan that the farmer was initially promised would be significantly reduced. This made it difficult for the farmers to repay suppliers and other debtors, because the money they were expecting was reduced without

their knowledge or consent. Some farmers experienced promised loans that never arrived from the FSA, hindering them from utilizing the credit efficiently on their farms. These occurrences put many minority farmers in debt, forcing them to either sell their land or allow it to go into foreclosure. The FSA would then turn around and lease the land back to the farmer, but at a highly appraised rate, which made the repurchasing of the land almost impossible for many limited resource farmers, essentially causing them to lose their land forever (CRAT, 1997). Even while there were complaints and investigations of the allegations of discrimination and unfair practices, the USDA still proceeded with wrongful foreclosures of many minorities' properties (CRAT, 1997).

In 1999 the monumental Pigford vs. Glickman class action lawsuit against the USDA that alleged discrimination of black farmers between 1983 and 1997 was settled. The USDA admitted to denying black farmers loans based on race (McManus, 2010). The settlement awarded eligible farmers $500,000, forgave their debts, offered tax credits, and priority for future loans (McManus, 2010). This case inspired other minority groups to bring forth their own lawsuits, against the USDA, also alleging discrimination.

In 2000, female farmers headed by Rosemary Love brought a lawsuit against the USDA for gender discrimination in the administration of the FSA farm loan program in a case known as Love vs. Johanns (Escalante et al., 2007). Under this case, applicants were categorized under three different sections for those that: (a) were not provided loan applications; (b) were denied an initial farm loan; and (c) received an initial loan but "were denied servicing, had difficulty obtaining subsequent loan servicing, or received less loan servicing than they needed" (Escalante et al., 2007). With the support of almost 2000 women across the country, in 2004 the plaintiffs filed a motion for class

certification for categories (a) and (b). Unlike the success won by the African American farmers almost 5 years before, the lawsuit against the USDA brought by the female farmers was denied at both the U.S. District Court, and also the U.S. Court of Appeals. It was found that the case lacked commonality in its allegations of discrimination against the USDA (Escalnte et al., 2007).

Although the claims brought forth by the female farmers was denied, it is still evident that there has been mistreatment and discrimination towards this particular population. Based on testimonials from the Love vs. Johanns, the investigation conducted by the CRAT, and also by the admittance of the USDA during the Pigford vs. Glickman case, the USDA and its agencies have participated in unfair lending and discriminatory actions towards minorities. Although time has passed, it is hinted that in some cases, changes of certain unfair practices have not occurred.

1.2 OBJECTIVES

The purpose of this study is to determine what challenges the African American female farmers face in their business operations, in the State of Georgia, and also the United States. The primary objectives of this study are to:

1) Bring awareness of the operating challenges of African American female farmers through a case study approach, give special focus to credit issuance, given the FSA past discrimination allegations.
2) Scrutinize/review loan terms of FSA loans granted 1999-2013 for possible trends and indications of unfair lending practices towards African American female farmers, and other minority farmers.

1.3 ORGANIZATION

The remainder of this study is organized as follows: Chapter 2 reviews and summarizes the existing literature providing background knowledge on the agricultural industry, farm business specifications, financial experiences, and lastly, gender and race. Chapter 3 introduces the methods and conceptual framework used for this study. In this chapter, the interview questions and procedures used for the case study will be clarified. The theoretical framework and specific model used to analyze the Farm Service Agency (FSA) national data will be explained and discussed. Chapter 4 analyzes and discusses the findings and trends of the case study. In addition to the case study, an empirical analysis including the data, descriptive statistics, and the variable selection will be discussed for the FSA national data. Chapter 5 concludes this study, by discussing on the implications of the research, contributions of existing research, and suggests further research opportunities.

CHAPTER 2

LITERATURE REVIEW/CONCEPTUAL BACKGROUND

This chapter presents a review of literature on issues in this research that shed light on the situations and conditions surrounding farms operated by racial and gender minorities. While there may be a dearth of studies available that have a specific focus on female African American farmers, this review of literature compiles related works on the pertinent topics that altogether could provide an adequate background and understanding of this study's major research objectives.

2.1 THE EVOLUTION OF WOMEN FARMERS

Agricultural production has been through much change especially in the 20th century. During this period, agricultural production became more concentrated in the Southern and Midwestern states (Alston, Anderson, James, and Pardey, 2010). During the 1920s, the Central Region States produced over one third of the U.S. agricultural output (Alston et al., 2010). In addition Texas and Iowa led the country in agricultural production. Although agricultural production experienced a heavy increase, a large portion of the United States population moved to off-farm employments and opportunities. With the shift of population off farm, coupled with improved infrastructure for communication, electrification, transportation, and logistics, agricultural production and distribution became more efficient (Alston, et al., 2010).

These improvements, allowed perishables and pre-prepared foods to be transported to longer distances and allowed the population to live farther away from the farm.

In addition to the historical background of agriculture is also essential to have a better understanding of the dynamic of the female farmer.

Under the Economic Research Services (ERS) department of the United States Department of Agriculture (USDA), Hoppe and Korb (2013) analyze female farmer operators and their farms in the United States. Hoope and Korb use data from the Census of Agriculture from 1978 through 2007 (for unavailable 1978 data, the year 1982 was used) to produce a detailed report about women and the types of farms they operate. In addition to the census data, the authors also used data from the Agricultural Resource Management Survey (ARMS) and an annual USDA Survey. Census data before 1978 on a national level is unavailable, because prior to 1978 the Census of Agriculture did not ask for the gender of the principal farm operator (Hoppe and Korb, 2013).

For the purpose of this report, Hoppe and Korb (2013) define "women-operated farms" as those whose principal operator—the individual most responsible for the day-to-day decision of the farm (or ranch)—is a woman. Under this report, the characteristics analyzed were: changes in the distribution of women operated farms and ranches by sales and class; age, education and off-farm work and income of women principal farm operators; financial performance of women-operated farms; farm operator characteristics by commodity specialization; characteristics of women-operated farms selling at least $100,000 in farm products; trends in women's farmland holdings; and sources of government payments to women-operated farms.

This study found that women-operated farms experienced an increase from 1982 to 2007. In 1982, the number of women-operated farms totaled 121,600, and by 2007 this number increased to 306,200. Using the same years, male-operated farms decreased by 220,800. Hoppe and Korb (2013) also concluded that most women-operated farms were small, with a majority having annual sales of less than $10,000 in 2007. Only 5% of the women-operated farms had farm sales of more than $100,000 in 2007, and a majority of those farms specialized in grains and oilseeds, specialty crops, poultry and eggs, beef cattle, or dairy.

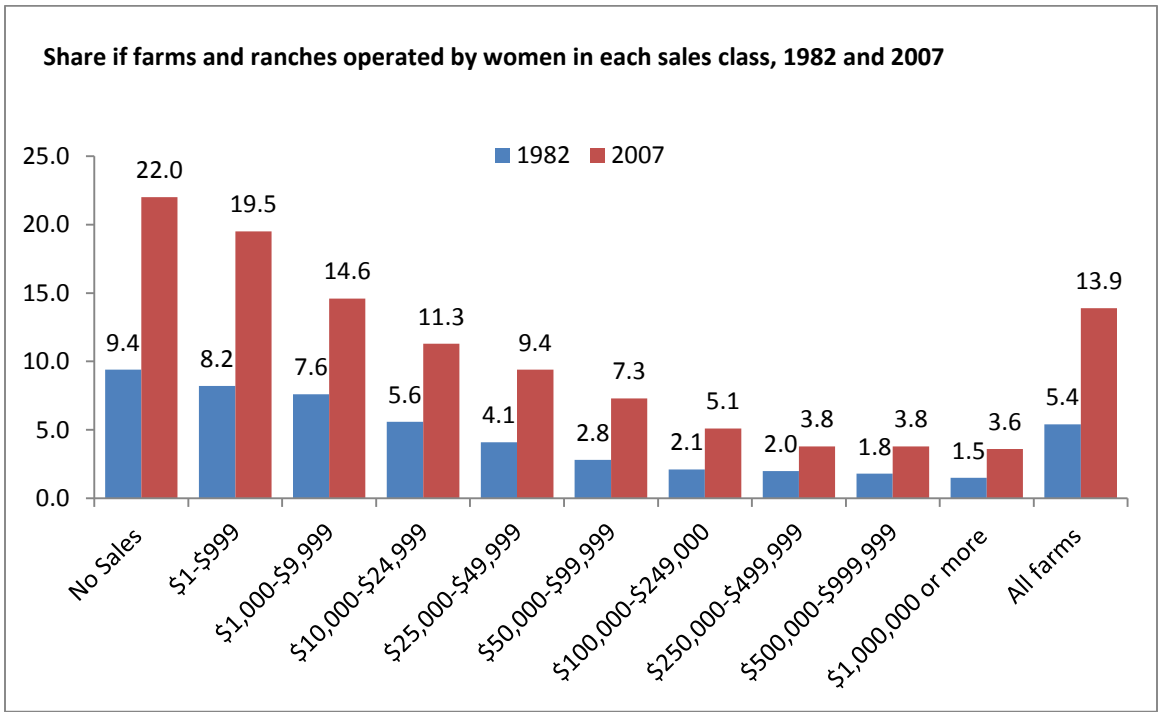

Figure 2.1: Share of farms and ranches operated by women in each sales class, 1982 and 2007
Source: Hoppe and Korb, 2013; USDA, ERS, Characteristics of women Farm Operators and their farms

Hoppe and Korb (2013) also found that the average age of women-operators in 2007 was 59 which were slightly older than male-operators whose average age was 57. Unlike their male counterparts, more women are entering the farming industry than

leaving, whereas for males, fewer men are entering the farming industry. Women farmers and ranchers are on average more educated than males. Approximately 61% of women principal operators have education beyond high school, with 32% having a college degree and 29% completing some college. For males, only 47% were educated beyond high school in 2007 (Hoppe and Korb, 2013).

In 2007, 59% of the women combined off-farm work with their farm operation, this was an increase from the 42% in 1982 (Hoppe and Korb, 2013). Most of the women that had off-farm employment were in the farm sales class of less than $10,000. Hoppe and Korb (2013) also found that women-operated farms experienced a negative rate of return in sales classes lower than $999,999 which accounted for almost 80% of women. Although this factor would be an indicator that it is time to sell the farm, the authors explain that farming provides the opportunity for capital gains in the long run; the opportunity to leave a legacy to heirs, as well as the valuation of the farm lifestyle, in addition to other significant benefits are, reasons the farm operation is kept ongoing

Poultry and eggs, grains and oilseeds, and specialty crops and ranching are the top areas for women-operator sales. About half of the women-operated farms specialized in grazing livestock like beef cattle, horse and other equines, or sheep and goats. These farms only accounted for 16 % of sales. The women operated farms that specialized in poultry, specialized crops, grains or dairy only accounted for 21% of women, but generated 72% of the sales by women in 2007 (Hoppe and Korb, 2013). It was also found that 98% of the women that had primary production under the category of miscellaneous crops had no sales. Crops such as grass seed, herbs, hops, maple syrup, or tea were under this category (Hoppe and Korb, 2013).

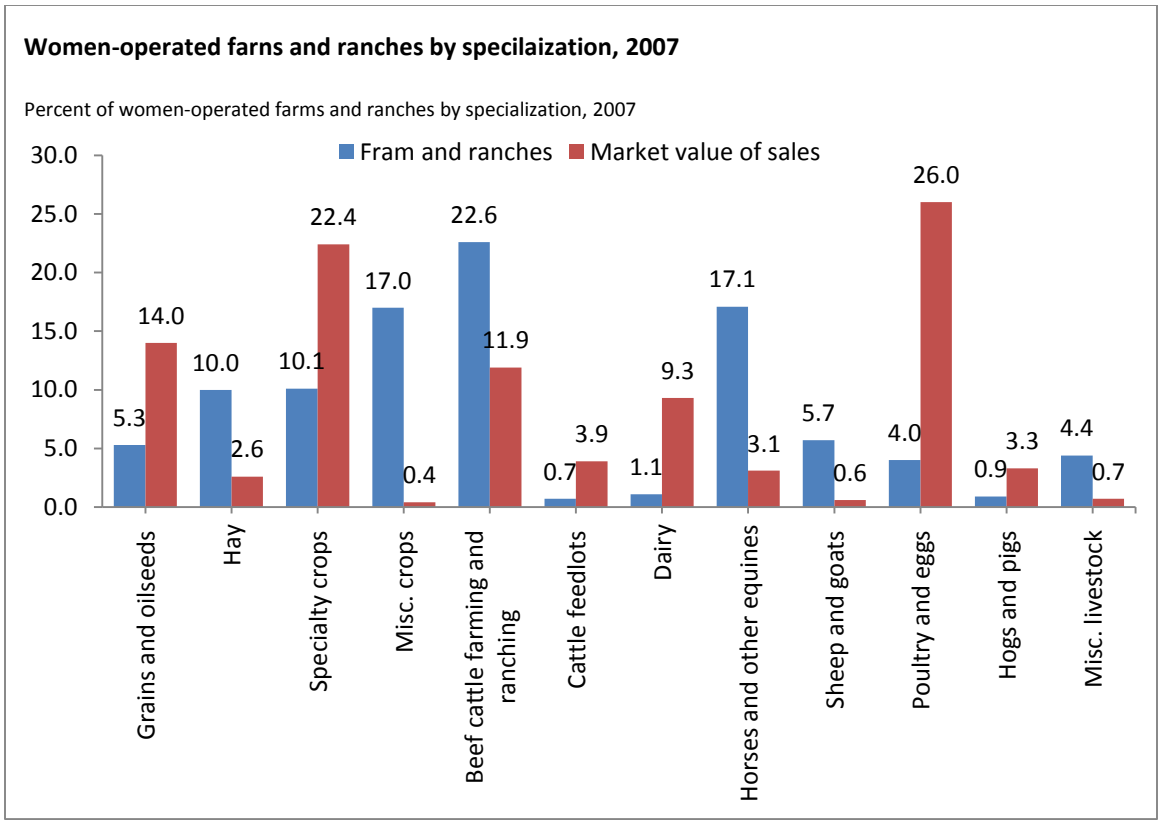

Figure 2.2: Women Operated Farms and Ranches by Specialization, 2001
Source: Hoppe and Korb, 2013; USDA, ERS, Characteristics of women Farm Operators and their farms

When women as secondary operators were added to the analysis, they increased the count of women farmers from 306,200 to 985,200 based on the 2007 Agriculture Census (Hoppe and Korb, 2013). Although these additional women are less involved with the farm operation, 32 % consider farming as their major occupation (Hoppe and Korb, 2013). Many farms in the United States are jointly run and operated by married couples with both spouses as acting as operators. Usually operations with this specific dynamic are more likely to list the husband as the principal operator.

For the purpose of this study, three specific areas of literature were reviewed to get a better understanding of the United States Agricultural industry and African

American Female farmers. The areas include, Farm Labor, Management, and Land Ownership, Financial, and Race and Gender.

2.2 GENDER ISSUES IN LAND OWNERSHIP, FARM MANAGEMENT, AND FARM LABOR

Geisler, Waters, and Eadie (1985) compare women to male and joint male-female land ownership in the United States, for the years 1946 and 1978. This study attributes the drastic change to the dynamics of United States agriculture to the increase in the number of corporate agricultural establishments. Land ownership among women in the 20th century is an area that has experienced poor documentation (Geisler, et al., 1985). After World War II, family farms were replaced by larger agricultural units and agribusiness entities. This shift caused women to experience a decline in direct ownership and control over farmland. States that were founded under the "common law principles" have until recently, legally undermined chances for land ownership equality between the sexes (Younger, 1981; as cited by Geisler, et al., 1985). Under this study, the variable "female owners" was specifically for women sole proprietors. In addition to sole male ownership, husband-wife joint ownerships were grouped under male landlords (Geisler et al, 1985). The study found that in 1946, females owned more acres of farmland on average. During the same period, the average female-owned holding was 75% of the average male and joint-owned holdings, compared to 1978 which increased to 85% (Geisler et al., 1985). It was also concluded that the value of female-owned farmland declined over the 32-year period (Geisler et al., 1985). Female-owned land was more valuable than male-owned land in 1946, but less valuable in 1978 (Geisler, et al., 1985).

With regard to land ownership, in both 1946 and 1978, females were more likely to be landlords than males. This finding suggests that women are more likely to rent out their land than to participate in farming as owner-operators (Geisler et al., 1985). This may have been as a result to the quota system that was put in place during that period, where the value of the quota was incorporated in the value of the land. If the land produced a small quota, relative to its size, it was difficult to survive on just that. For women, who had land, but did not have the ability to cultivate the land, it was beneficial for them to rent out the land to satisfy the quota that was put in place. It was also found that 50% of the females that owned farmland were 65 years or older in 1978 (Geisler et al., 1985).

In a similar study, Zeuli and King (1998) conducted a study attempting to identify differences and similarities in relation to the gender of the principal farm decision maker of commercial farms. Zeuli and King focused on operator characteristics, farm characteristics, farm financial performance, record keeping, and computer usage. Since 1978, the number of female commercial farmers increased from 5.8% or 128,170 people to 7.5% or 145,156 people in 1992 (Zeuli and King, 1998). Not only was there an increase in the female presence in the commercial farming industry, but 40% of all private agricultural land in the United States, was owned solely by women (Rogers and Vandeman; as cited by Zeuli and King, 1998). Zueli and King recognized in their study that although statistics show a presence of women in food production and farm ownership, little is known about how women manage farms. It is also discussed that a majority of the studies of women in agriculture in the United States, focus on farm women, or women who live on farms (Zeuli and King, 1998). The authors conclude that

this trend in studies may be due to the fact that although some farm women operate their own farms, a larger majority of farm women, share farm operation tasks with their husbands. To differentiate their study from previous studies, Zeuli and King only focused on women who operated their own farms. The study used a multistate survey of farmers conducted in 1991. The population targeted for this survey was commercial farmers defined as farms with annual sales greater than $100,000, in thirteen states located in Northern and Midwestern regions; 2,888 useable responses were received, and 112 of those respondents were women. Concerning farmer characteristics, the authors found that the age of female farmers is slightly higher than males and also a higher proportion of women have formal education beyond high school (Zeuli and King, 1998). For farm characteristics, the study concluded that there are more female farmers involved in specialty farms compared to males. It was also found that more female farmers in the sample own and cash-lease the land they farm compared to males who share-lease more than female farmers. They found that when it comes to the farm financial performance, gross farm income and net farm profit were significantly lower for farms run by females. The average outstanding debt was lower for farms operated by women (Zeuli and King, 1998). Lastly they found that gender was not significant when measuring computer usage, but found a higher portion of the sampled males subscribed to information services (Zeuli and King, 1998).

In a study conducted by Bartlett, Lobao, and Meyer (1999), the attitudes towards farming and farm work by farm women are analyzed. Two regions, The Georgia Coastal plain region and the Ohio Corn-belt region, are both analyzed and compared for similarities. Bartlett et al. (1999) state women's attitudes towards farming are neglected

when it comes to farm work patterns. For the Georgia Coastal Plain region, data obtained by surveys from Dodge County was used as a representative. For the Midwest, farmers in Ohio were surveyed. They found that although a majority of the county's population was African American, only 11% were farm operators. Both the Midwest and Dodge County had farms that were operated by one man and enlisted the help of some family. They also found that of the women surveyed in Ohio, less than one percent of the respondents were non-white (Bartlett et al., 1999).

2.3 FINANCING ISSUES: ACCESS TO CREDIT

Jones Harvard (2001) conducted a study focusing on how to measure loss when racial discrimination dominates economic policies and results in identifiable economic injustices. In addition, Jones Harvard also discusses the relationship between credit availability and intergenerational property transmission (Jones Harvard, 2001). Jones Harvard (2001) criticizes the USDA's credit granting procedures as atypical. It is explained that unlike traditional lenders, there is a lack of neutrality in the lending process. The article points out the presence of farmers in the USDA offices, explaining that these farmers responsible for determining eligible borrowers are also eligible for the same USDA loan funds. Another difference between the USDA lending practices and the traditional lender is that if a USDA loan request is denied, the application must go through an administrative review of the decision, which results in a conflict of interest. Jones Harvard (2001) states that for African Americans, the lack of neutrality in the decision making process and suspension of the administrative process used to challenge denials creates a political system that limits their economic rights. Like other articles

discussing the African American plight in the agricultural industry Jones Harvard focusses on the USDA. Jones Harvard (2001) explains that many small farmers favor USDA loans because many of them are unable to get credit from commercial lenders, and also the USDA loan rates are lower than commercial rates The USDA has a special interest rate for “low-income, limited-resource” borrowers, and subsidized interest rates are available for guaranteed loans (Jones Harvard, 2001).

Unlike commercial lenders, the USDA uses a county committee system to determine who will be able to participate in its direct lending and benefit program (Jones Harvard, 2001). Farmers in the community elect three to five local farmers to a committee that the USDA authorizes to make these decisions. Members of the committee then elects a county executive who has the responsibility to assist farmers on applying and receiving program funds and make recommendations to the committee on who should receive the USDA funds (Jones Harvard, 2001). In the case of denial of loans, the farmer has the opportunity to appeal to the state board and then the federal review board (Jones Harvard, 2001). Although this is the correct procedure for handling the specific situation, the article suggests that African American farmers stated that their complaints and appeals were never processed, investigated or forwarded to the appropriate agency.

Jones Harvard (2001) concludes that small minority-owned farms were discriminated against as an economic unit, and the county committee system organized by the USDA, allowed room for biased decision-making. Jones Harvard points out that the current USDA lending structure is insufficient. The author expresses that the current structure allows room for local farmers to bypass or disregard national policies and goals for the purpose of maximizing their own self-interest. Jones Harvard expresses a need for

the USDA to implement a more direct federal involvement in the decision-making process for USDA lending.

Brooks, Escalante, Epperson, and Stegelin (2004) conduct a study, examining if in the recent years the FSA has been operating as a "lender of last resort" for farm borrowers considered highly risky by other lenders without discriminating against any particular group of borrowers in Georgia. The study consisted of FSA borrower data for the years 1999-2002; the data was used to analyze the relationship between certain variables used in the conventional loan making process and the amount of loans granted by the FSA. The study found that the FSA did not scrutinize the financial backgrounds of borrowers, unlike the expectations from commercial lenders. The authors also found that financial backgrounds of the borrowers did not seem to have a major effect on the size of the loans granted by the FSA. It was also found that the incidence of racial and gender biases was rationally justifiable (Brooks et al., 2004). The data for non-white and female farmers was small and limited relative to the sample size. Due to the limited available data, the statistical evidence could not provide more solid evidence that a pattern of discrimination exists, but it could not also be ruled out.

The fact that many non-white farmers had smaller farm operations than their white counterparts is also discussed. Due to their smaller farm operations loan amounts were also smaller. Decisions to grant or deny loans are made on a county level, allowing room for bias (Brooks et al., 2004). Loan officers are from the community that they are serving, they are familiar with the potential borrowers. Due to this, some loan officers may make subjective loan decisions without adhering to the procedures that the FSA set up for proper screening (Brooks et al., 2004). The authors suggest that this factor in

addition to the USDA accepting that discriminatory practices occurred in the past, may cause minority borrowers to ask for smaller loans with the idea that because the loan is small it would improve the odds of being approved (Brooks et al., 2004). Based on this analysis, it was discovered that female borrowers received significantly higher loans in the Guaranteed Loan program (Brooks et al, 2004). Overall the study confirmed that the FSA is carrying out its mission to provide loans to those who would normally be denied by private lenders. The authors discussed how limited data in essential areas did not allow a more extensive analysis.

In an expanded study Escalante, Epperson, Stegelin, and Brooks (2005), revisit the controversy surrounding the USDA and analyze randomly selected FSA borrowers in the state of Georgia from 1999 to 2002. This study investigates if loan decisions made by the FSA lending officers were without racial prejudice. Like their earlier study, the analysis seeks to determine if the FSA lending decision framework reinforces its "lenders of last resort" role. Borrowers' structural and demographic attributes like farm size, race and gender were considered to determine the relative strength of objective credit-risk assessment criteria. The data for this study was obtained from the FSA Georgia State office, and consisted of 348 loan applications filed between 1999 and 2002; 222 of these applications were filed under the direct lending program and 126 applied for guaranteed loans. A majority of the loan applicants were white farmers, who comprised of 85% of the dataset.

The study again concluded that evidence of racial discrimination in the implementation of the FSA loan programs was not present. The non-white applicants that were included in this study had significantly smaller farm operations, and more inferior

liquidity and financial efficiency positions than their white counterparts (Escalante et al., 2005). These applicants still had as much of a chance as any borrower to obtain an FSA loan. The authors conclude that based on the results, the FSA is indeed acting fairly and carrying out its mission of providing opportunities for those that may not be eligible for loans on the private sector (Escalante et al., 2005). The authors revealed that their study was limited to just the state of Georgia, and other essential information was either limited or unavailable, that could have aided in a more extensive analysis.

Unlike the previous studies which focus on race, Escalante, Epperson, and Raghunathan (2009), focus primarily on the emergence of female farmers as primary farm owners. They attribute this increase to the inheritance or purchase of farm land and the assumption of more active roles in farm business. Escalante et al. (2009) suggest that due to stereotypes of women as supporters of their spouses, many female farm operators have experienced barriers to business survival and success. In an analysis conducted by the Experian National Score Index it was found that women are more credit worthy than their male counterparts. In another study conducted by the Consumer Federation of America, it showed that although women may have better credit ratings, they also have a higher probability of being charged subprime interest than male borrowers (Guy, 2007; Tedeschi, as cited by Escalante, et al., 2009).

In the past, gender bias was a blatant occurrence. Before the 1974 Equal Opportunity Act, when lenders evaluated a wife's mortgage application, her income was discounted by 50%, and if she was of childbearing age, it was discounted even more. Many studies of entrepreneurship show that women entrepreneurs striving to enter self-

employment were disadvantaged by their gender through discrimination by bank lenders (Fay and Williams, 1993; Carter and Kolvereid, 1997; as cited by Escalante et al., 2009).

Inspired by African American farmers who brought a class action lawsuit against the USDA, female borrowers also brought a suit against the USDA where they alleged gender biases by the administration of FSA lending programs. Their lawsuit known as the Love v. Johanns became one of several discrimination complaints against the USDA. Unfortunately the suit brought by the female farmers was unable to attain a class action lawsuit status.

Escalante, Epperson, and Raghunahan's (2009) study was inspired by the gender bias allegations made by female farmers against the FSA, the judicial courts contention of a "lack of commonality" in the evidence presented by the plaintiffs, and the corroborating testimonies presented by approximately 2000 female witnesses across the country (Escalante, et al., 2009). Escalante et al. (2009) used data from Georgia FSA borrowers from 1999-2002. In respect to the gender analysis of this study, the authors found that their results were consistent with the courts findings that there was a lack of commonality in loan and business circumstances of rejected female loan applicants (Escalante et al., 2009). Their study did not prove that there was any overwhelming evidence that discrimination occurred against Georgia female loan applicants in the FSA loan approval process. The authors explained that the results should be observed with caution considering the small sample size of the dataset. Also data for rejected loan applications were unavailable unlike the data for approved loan applications. In addition to these factors other forms of rejection like face-to-face rejections and on the phone rejections were unaccounted for. Due to the lack of these other major factors, the findings of this

study may not provide an accurate representation of the actual occurrences that these women experienced.

2.4 RACIAL ISSUES IN FARMING

African Americans historically have played a vital role in agriculture in the United States. During the 1990s, the United States had about 15,000 black farmers, which was a decline of 98 % since the 1920's (Wood and Gilbert, 1998). Black farmers have experienced losses that can be attributed to public policy, economic pressure, and racial oppression (Wood and Gilbert, 1998). In research conducted by Wood and Gilbert (1998), United States Census data and a follow-on survey were used in a Mississippi Delta county, to assess the current situation of black farmers. The authors also introduce the concept of "re-entering farmers" which suggests that a significant number of black farmers, who are not defined as "farmers" by the Census, still own land and want to farm again (Wood and Gilbert, 1998). In an overview of the southern region, the authors point out that historically the South had always had the largest number of farm residents until the middle of the century. The loss of the farming population was due to an increase in mechanization and the dismantling of the sharecropping system, the latter at least partially a product of federal policy implementation (Daniel 1985; Wimberley, Morris, and Bachtel, 1992; U.S. Commission on Civil Rights, 1982; as cited by Wood and Gilbert, 1998). Most black-operated farms have always been in the South, and by 1992 approximately 94% of black farms were in seventeen Southern States (Wood and Gilbert, 1998). Using the data collected from the Census, Woods and Gilbert (1998) concluded that the number of black farmers and the land they farmed are declining at a rate faster

than their white counterparts. The amount of land operated by black farmers was also declining slowly compared to the number of black farmers. It was also concluded that most black-operated farms were very small in acreage and gross sales. Lastly it was found that most black farmers are older men who are primarily engaged in livestock, cash grain, and field crop production, and they derive the majority of their income from sources other than farming (Wood and Gilbert, 1998).

Alternatively Craig-Taylor (2004) examines the idea of inferiority in relation to African American land loss and also discusses other suggestions for land loss within this population. According to Craig-Taylor (2004), the concept of inferiority is an explanation that has been associated with the loss of land of African Americans. African Americans have suffered a great deal for the most basic liberties, rights, and continue to face continuing challenges to hold on to one of the most cherished privileges of citizenship, the ownership of property (Craig-Taylor, 2004). Craig- Taylor confers that the civil rights movement and other anti-discrimination legislations were supposed to balance the playing fields, in areas like employment and property ownership, and because of this African Americas today are experiencing a better life than their ancestors. Although there has been progression, many African Americans still remain trapped by intractable practices, and the beliefs of racial inferiority (Craig-Taylor, 2004).

Historically, the legal system in the United States, in its treatment of African Americans is characterized by domination, oppression, and racism, which ultimately shaped the African American economic experience (Craig-Taylor, 2004). These factors have played a large factor in the survival of the African American farmer. According to the United States census, the numbers of African American farmers are reducing

drastically especially compared to their white counterparts. The rate of decline of African American owned farms between 1985 and 1987 was 3.6 times that of white owned farms. This was also the period of the farm crisis of the 1980s. While other minority owned farms either stayed the same, African American owned farms decreased (Craig-Taylor, 2004). African American farmers alleged discriminatory practices by the United States Department of Agriculture. In 1997, a study was conducted by the Department of Agriculture that confirmed that African American farmers were denied credit needed to sustain their farming operations (CRAT Report, 1997; as cited by Craig-Taylor, 2003). The study also confirmed that many African Americans were victims of fraud by agricultural agents because of the color of their skin (CRAT Report, 1997; as cited by Craig-Taylor, 2004). It is indicated that these lending biases initiated a cycle of failure for African American farmers. Farmers explained that they were discouraged from applying for loans; their pleas for loans were ignored and their applications delayed as white farmers received loans and assistance in a much timelier manner (CRAT Report, 1997; as cited by Craig-Taylor, 2004). The delays and denials caused many African American farmers to lose their land, which had been in their families for years (Craig-Taylor, 2004). As a result of the unfair practices a class action lawsuit was filed against the USDA and many African American farmers were awarded a settlement.

Craig-Taylor (2004) affirms that over the last decade, approximately 94% of African Americans have lost their land. African American farmers make up only one percent of the nation's farming population. It has been argued that the loss of land by African American farmers is as a consequence of their "inferior" skill set, and over time more efficient producers forced African American farmers out of the market (Craig-

Taylor, 2004). The author counters this argument with the fact that prior to African American farmers becoming landowners they managed the farms of white farm owners. Another issue with the inferiority idea is that it does not address if African American farmers had access to the same community support, subsidies, loans, and training that were available to white farmers in order to sustain their farms (Craig-Taylor, 2004).

Beauford, Miller, and Walker (1984) also focus on nonwhite famers in the United States, but scale their study to a more micro analysis by examining the South, and Georgia. The study analyzes the impact of selected changes in agriculture on non-white farming in America during 1954-1978 (Beauford, et al., 1984). In 1920, almost half of the black population lived on farms, compared to one fourth of the white population (Beauford, et al. 1984). According to the United States Bureau of Census, as of 1978, the black population living on farms fell to one percent, and the white farm population declined to three percent (Beauford, et al., 1984). Also by 1978 the number of black-operated farms decreased by 94%, while white-operated farms also decreased by a considerable 56.4%, but was still significantly less than the change in black owned farms (Beauford, et al., 1984). The study emphasizes, that Georgia was not the state with the largest black farm population, but has an extensive history when it comes to blacks in agriculture. The authors suggest that the decline in black farmers is due to a number of factors, but attribute the advances in technology as a major factor that has had an impact on the presence of black farmers. According to Beauford et al. (1984) black farmers have always been disproportionately represented among tenant farmers especially in the production of cotton, corn, and tobacco. As the presence of mechanized production increased, the number of black tenant farmers decreased as landowners stopped

employing tenant farmers. Another factor discussed was the marginal economic situations and the smaller acreage and sales of black-operated farms. A majority of black-owned farms produced less than $20,000 of products annually, in addition to having a relatively small size of land. All of these factors put black-owned farms at a competitive disadvantage, as white-owned farms are on average three times as large as black-owned farms. In a 1982 report conducted by the Commission on Civil Rights, it was found that black small farmers in many cases experience difficulties accessing information and assistance from educational institutions and federal agents (Beauford et al., 1984). The last factors discussed were the generational changes of attitudes towards rural life. This factor affects the agricultural community as a whole. Children of farmers and those with an agricultural background seek to move to larger cities and seek off farm employment. Also for African Americans, the reminders of farming and agriculture to the historical slave association, has caused many descendants to reject the idea of an agricultural life.

CHAPTER 3

METHODS

3.1 INTRODUCTION TO METHODS

This study employs both qualitative and quantitative analytical techniques to analyze primary and secondary data. The first phase involves the qualitative analysis of case studies conducted on six farms operated by African American female farmers. The second phase utilizes secondary lenders' data on farm loan records. This extensive farm borrowers' dataset from the Farm Service Agency will be analyzed using a quantitative (econometric) modeling approach.

3.2 CASE STUDY METHODS

In order to truly gain a better understanding of the business struggles and experiences of African American female farmers, a case study of a sampling of this minority group was conducted. For this analysis, six African American female farmers located in different parts of the state of Georgia were interviewed. Using information, ideas and facts obtained from prior studies, 27 questions were developed and separated into seven focus areas: Basic Information, Background Information, Product Decisions, Labor Input Management, Financial Issues, Marketing Issues, and Gender and Race Issues. The purpose of using these specific questions was to get a better understanding of each farmer's experience within a consistent framework. A majority of the questions

asked of each farmer were open-ended questions, giving the respondent the opportunity to answer the questions with a lower chance of bias and higher chance of personal accuracy. The interviews were conducted at the location of the female farmers' choice to ensure a comfortable environment. Each interview was recorded and transcribed with the written and signed consent of the subject to ensure accuracy and accountability. Once all interviews were completed, each farmer's responses to the seven major sections and 27 questions were analyzed, compared, and contrasted to see if there were any apparent trends or commonality among the farmers' experiences, opinions and perceptions. The specific interview questions and subsections were important because they help in the discovery of what each individual's story is in order to help depict a possible profile of what female African American farmers are experiencing, especially in the state of Georgia.

3.2.1 Case Study Analysis

As stated in the previous section, the responses of each female farmer to the 27 interview questions were analyzed to see if any trends exist. Each section was reviewed and analyzed in order to produce results for the case study. Due to the nature of this analysis, a simple comparison was conducted to analyze the data of the case study.

3.2.2 Case Study Explanation

Using evidence from literature and theory, seven major sections were identified as areas of importance for the purpose of this study. These sections are: Basic Information, Background Information, Product Decisions, Labor Input Management, Financial Issues, Marketing Issues, and Gender and Race Issues. The following discussions will explain the importance and components of each topical section in the interview guide.

Basic Information: Questions under this section are designed to collect the demographic and structural characteristics of the case study farmers. Such information will provide the necessary background and profile for the respondents that will help understand each farmer's responses to the other sets of questions.

Background: In this section, questions about the farmers' farming history, how they got into the industry, devotion to the farm and faming system, and the growth of their operation are discussed. The purpose of this section is to allow the farmer to tell their story as far as what inspired them to get into the agricultural industry. Most of the questions in this section are open-ended so each farmer is given the opportunity to share extensive information as they see fit.

Product Decision: This section focuses on what the farmers specializes in and what is done with the product. This allows the interviewee to explain their products, if they have any value added products, how long they have produced this product and how much of their farm is dedicated to this product. For purposes of this analysis, this section is important because a possible trend could present itself concerning what is typically grown among this specific focus group.

Labor Input Management: Labor is an important factor in both small and large scale farmers. It is an especially difficult area for smaller scale farmers. Prior literature and research has expressed the importance of understanding the dynamics of labor in the agricultural industry. The questions in the section focus on the farmers' family members' availability and willingness to assist with the farming operation, difficulties locating skilled workers, labor management experiences, and problems in that sector. This section is extremely important because these problems and experiences are obtained directly

from the farmer and not based on theory or speculation. This allows for a better understanding of areas and issues that need to be carefully addressed in order to help improve the farmers' labor sourcing and hiring conditions.

Financial Issues: This section deals with potentially sensitive issues about the farmers' financial experience in the agricultural industry. In this section questions involving farm loans, economic hardships, and loan application experiences are discussed. The purpose of this section is to potentially discover or expose any evidence of discrimination or unfair lending practices. In the past, female farmers, like African American farmers presented a lawsuit against the USDA for alleged discriminatory practices, but unlike the successful class action lawsuit won by African American farmers, the lawsuit for the female farmers was dismissed, and it was concluded that there were not any findings of discriminatory practices against the particular group. This section will provide a deeper look into this subject and will allow the interviewee to actually describe certain experiences that in most cases go undocumented or often overlooked.

Marketing Issues: Another area that literature mentions as important to focus on is marketing. The introduction and utilization of technology has allowed those in the agricultural industry to market their products more effectively, but there are still challenges in this area. Under this section, the interviewee is asked specific questions about their marketing experience, what practices have been effective and ineffective and where support is needed. These questions will provide a firsthand response to what people in the agricultural industry are experiencing and what they feel could benefit them as far as support.

Gender and Race Issues: The last section is also one of the most important portions of this case study. This section focuses on gender and race. This section is what sets this study apart from many of the other studies conducted in the past. As African American females, these farmers are sometimes considered to be at the bottom of the totem pole when it comes to a hierarchy of not only farmers but as citizens of the community. Studies have shown that in many cases, African Americans receive the least support, are in many cases overlooked in relation to opportunities, and also discriminated against. In addition, historically women have been seen as inferior, of lesser intelligence, and incapable of being as successful as their male counterparts. These stereotypes are often more pronounced in the agricultural industry because of the fact that the industry has been traditionally white male dominated. To be an African American female farmer, these two potentially damming factors are combined and it is important to see what effects they have on their success. Under this section, questions focusing on their personal challenges in the farming industry as a woman, their perception of the farming industry compared to a man's, if they have experienced sexism and racism, and what the support the female farming industry is lacking are asked.

3.2.3 Case Study Data

Individuals for the case study were identified using a number of different approaches. Because this population of farmers is extremely small, it was difficult to pinpoint potential participants in this research. Different techniques were used to reach out to this group of farmers. For instance, cold calls and emails using information found on online list serves, e-mails sent to different extension agents, and attendance in multiple workshops and conferences throughout the state of Georgia, were all used to identify and

locate potential case study participants. These activities were conducted from May 2013-November 2013. Six participants were identified and subsequently interviewed independently. Each individual was met at a location of their choosing to ensure that the interviewee will feel comfortable. Each participant signed a consent form authorizing the use of a voice recorder to document the interview accurately. Each interview was then transcribed verbatim and used to develop a case study write up for each individual (these case write-ups are attached as Appendix A). From the case study write up, each interview was analyzed for trends, similarities and differences to formulate research issues and areas of concern in dealing with this group of farmers.

3.3 JUSTIFICATION FOR QUALITATIVE METHODS OF RESEARCH

The case study approach is vital for the study of African American female farmers. Case studies have a qualitative nature, which allows for theoretical flexibility for research (Eisenhardt, 1989). Critics maintain that data collected for the case study cannot be used as a generalization of a wider population, allowing the data to in some cases be irrelevant or useless (McLeod, 2008). Another criticism is that case studies are usually conducted one-on-one which could potentially lead to researcher biased results (McLeod, 2008). Lastly critics feel that case studies can be difficult to replicate and are time consuming (McLeod, 2008).

Although there are disadvantages of the case study approach, this method provides a great deal of advantages for especially difficult to obtain information like the population examined in this study. Case studies focus on understanding the dynamics present within single settings (Eisenhardt, 1989). Detailed rich information can be

collected from subjects that would otherwise be difficult using other research methods. Case studies are also used when large samples of similar participants are unavailable, and from the data collected from case studies, initial hypothesis assumptions can be formulated (McLeod, 2008). Case studies force investigators to look beyond initial impressions allowing evidence to be seen thru multiple lenses, and to take advantage of emergent themes and unique case features (Eisenhardt, 1989).

This study reconnoiters an underrepresented and understudied subject. Exploring the business strategies, experiences, and difficulties of female African American farmers could potentially expose a subject area and circumstances that have gone untapped. The uniqueness of this study and sensitivity of the case at hand cannot be simply approached using only qualitative research. An intensive study of a single unit for the purpose of understanding a larger class of similar units in needed for this type of study (Gering, 2004). A start to accomplish this is to conduct interviews of women in this specific population to help build a profile of this understudied population. Unlike other majority populations within the farming industry, information or data for African American female farmers is extremely limited and in some cases nonexistent. Awareness of this population could potentially be increased by conducting in-depth case study research.

3.4 FSA DATA THEORETICAL FRAMEWORK AND THE EMPIRICAL MODEL SPECIFICATION

For the empirical analysis portion of the research, an econometric analysis using the Seemingly Unrelated Regression, a model first proposed by Arnold Zellner in 1962, is used to analyze the data obtained from the FSA. The purpose of this analysis was to see

if there were any evident of trends or indications of unfair lending practices towards African American female farmers and other minority farmers. In the sections below, the theoretical framework of the model, data, variables, and the model specification will be discussed in detail.

3.4.1 Seemingly Unrelated Regression

The Seemingly Unrelated Regression model (SUR) is a generalized linear regression model that consists of several regression equations, that have separate dependent variables, and in some cases different independent variables. What is unique about this model is that each equation can be regressed separately using ordinary least squares (OLS), but the error terms are assumed to be correlated across the equations. Although the equations under the SUR model can be estimated using OLS, the results are not as efficient as the SUR model. SUR can provide estimates of how relationships can vary over the data dimensions as well as providing a convenient vehicle for testing (Fiebig, 2001).

There are two main motivations for using this particular model: (1) to gain efficiency in estimations by combining information on different equations; (2) to impose and/or test restrictions that involve different equations (Moon and Perron, 2006). A seemingly unrelated regression system comprises several individual relationships that are linked by the fact that their disturbances are correlated (Moon and Perron, 2006). SUR can be used for equations explaining some phenomenon in different cities, states, countries, firms, or industries because they are likely to be subject to spillovers from economy wide or worldwide shocks (Moon and Perron, 2006). SUR is used when a model contains multiple linear equations. For models like this, it is unrealistic to expect

the equation errors will be uncorrelated (IDRE, 2014). A set of equations that has contemporaneous cross-equation error correlations, which is when the error terms in the regression are correlated, is known as a seemingly unrelated regression (IDRE, 2014). Initially, these equations seem unrelated, but the equations are related through the correlation of errors (IDRE, 2014).

This particular model is suitable for this study because multiple dependent variables are assessed using shared independent variables, to see if there are indications of unfair lending practices. The independent variables used for this model all influence lending practices and outcomes, and with this particular model, they can be measured jointly. Cross regression or ordinary least squares (OLS) was considered as an option to regress the FSA, but it was determined that this specific model would not work for the data used within this study. With an OLS regression it is assumed that there is no correlation between the error terms, but it is evident that there will be correlation between the terms within the data. Due to the nature of this study, several exogenous variables must be analyzed because of their interrelation to each other.

3.4.2 Data Description

For this portion of the study, the data used for the empirical analysis was obtained from the Farm Service Agency Guaranteed Loan System with the help of Dr. Charles Dodson, Agricultural Economist, at the USDA under the Farm Service Agency. A number of different factors related to FSA loans were present in the dataset. The dataset was for the fiscal year 1999- September 1, 2013, and included over 156,000 observations, and 109 categorical identifiers. To protect the identities of the applicants, the

observations were not identifiable. For the purpose of this study, the dataset was narrowed down to 112,024 observations and 24 category identifiers.

3.4.3 The Empirical Model Specification

A Seemingly Unrelated Regression system is developed to analyze the FSA borrowers' data to see if there were any trends or indications of unfair lending practices towards African American female farmers and other minority farmers. The model used in this analysis is a classic SUR model (Moon and Perron, 2006) defined as follows:

$$y_i = \beta'_1 x_{1t} + u_{1i}$$
$$\vdots$$
$$y_i = \beta'_N x_{Nt} + u_{Ni}$$

where y_{it} is the dependent variable, $x_i = (1, x_{it,1}, x_{it,2 \ldots} x_{it}, k_{i-1})'$ is a k_i-vector of explanatory variables for observational unit *i*, β represents the regression coefficients of the standardized variables and u_{it} is an unobservable error term, where the double index *it* denotes the t^{th} observation of the i^{th} equation in the system, and t denotes time (Moon and Perron, 2006; Gujarati and Porter, 2009). In an SUR model, y_i and u_i are T-dimensional vectors, x_i is $T \times K_i$ and β_i is a K_i-dimensional vector, when all N Equations are stacked it can be displayed in vector form (Fiebig, 2000):

$$\begin{bmatrix} y_1 \\ y_2 \\ \vdots \\ y_N \end{bmatrix} = \begin{bmatrix} X_1 & 0 & \cdots & 0 \\ 0 & X_2 & \cdots & 0 \\ \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & \cdots & X_N \end{bmatrix} \begin{bmatrix} \beta_1 \\ \beta_2 \\ \vdots \\ \beta_N \end{bmatrix} + \begin{bmatrix} u_1 \\ u_2 \\ \vdots \\ u_N \end{bmatrix}$$

This equation can be expressed as (Fiebig, 2000; Green, 2003):

$$\boldsymbol{y_{ij}} = \boldsymbol{X_{ij}\beta_{ij}} + \boldsymbol{e_{ij}} \qquad i=1, \ldots, N, j=, \ldots, M$$

The distinct property of the SUR model is that it allows nonzero covariance between error terms e_{ij} and e_{ik} for a given individual I across equations j and k:

$$\boldsymbol{Cov}(\boldsymbol{e_{ij}}, \boldsymbol{e_{ik}}) = \boldsymbol{\sigma_{ij}},$$

$$\boldsymbol{cov}(\boldsymbol{e_{ij}}, \boldsymbol{e_{i_k}'}) = \mathbf{0} \qquad \text{if } i \neq i'$$

For the purpose of this study, the command *sureg* is used with the statistical software *Stata* which uses the asymptotically efficient feasible generalized least-squares algorithm developed in Green (2003). As a result, the GLS estimator, which was designed to address heteroscedastic and autocorrelated disturbances, is portrayed by the following:

$$\beta = [X'\Omega'X]^{-1}X'\Omega^{-1}y = [X'(\Sigma^{-1} \otimes I)X]^{-1}X'(\Sigma^{-1} \otimes I)y$$

3.4.4 Variables for Empirical Analysis

Three equations are used to estimate the presence of possible discriminatory trends using the FSA data in the form of different packaging scenarios. The expanded model for each equation share similar explanatory variables for each packaging scenario. Using the SUR model, the equations are as follows:

$$loanamount_{it} = \beta'_1(femaledum)_{1t} + \beta'_2(singlepropdum)_{2t} + \beta'_3(nonwhitedum)_{3t} + \beta'_4(marrieddum)_{4t} + \beta'_5(kbankdum)_{5t} + \beta'_6(foloandum)_{6t} + \beta'_7(contractintrestrate)_{7t} + \beta'_8(fixedintrestdum)_{8t} + \beta'_9(fsaloanforrefinancing)_{9t} + \beta'_{10}(interstassistance)_{10t} + e_{Ni}$$

$$effectiveinterestrate_{it} = \beta'_1(femaledum)_{1t} + \beta'_2(singlepropdum)_{2t} + \beta'_3(nonwhitedum)_{3t} + \beta'_4(marrieddum)_{4t} + \beta'_5(kbankdum)_{5t} + \beta'_6(foloandum)_{6t} + \beta'_7(interestassitancepct)_{7t} + \beta'_8(fixedintrestdum)_{8t} + \beta'_9(fsaloanforrefinancing)_{9t} + e_{Ni}$$

$$loanmaturity_{it} = \beta'_1(femaledum)_{1t} + \beta'_2(singlepropdum)_{2t} + \beta'_3(nonwhitedum)_{3t} + \beta'_4(marrieddum)_{4t} + \beta'_5(kbankdum)_{5t} + \beta'_6(paymentsperyear)_{6t} + \beta'_7(foloandum)_{7t} + \beta'_8(loanrefinancing)_{8t} + e_{Ni}$$

Loanamount, effectiveintrestrate, and loanmaturity represent the dependent y_i variables used for the model. Definitions of the three dependent variables occur in Table 3.1 below.

Table 3.1 Variables Defined

Variable Abbreviation	Definition of Variable
loanamount	Loan obligation amount (loan size)
effectiveinterestrate	Interest rate that the applicant is actually charged
loanmaturity	Calculated term of loan
femaledum	Dummy variable representing gender, 1 if female; 0 if male
singlepropdum	Dummy variable for entity type, 1 if single proprietor 0 if otherwise
Nonwhitedum	Dummy variable for race, 1 if nonwhite; 0 if white
Marrieddum	Dummy variable for marital status, 1 if married 0 if single
Kbankdum	Dummy variable for the type of lending institution, 1 if commercial bank; 0 if otherwise
Foloandum	dummy variable for type of FSA loan accommodation, 1 if farm ownership loan accommodations; 0 if otherwise
loanrefinancingdum	dummy variable for use of loan proceeds for refinancing an existing loan, 1 if refinanced, 0 if not used for loan refinancing
contractinteretsrate	Loan interest rate as stated, that has been agreed upon between the FSA and the borrower
fixedinterestratedum	Dummy variable for interest rate type, 1 if fixed; 0 if variable
fsaloanforrefinancing	Loan amount used to refinance direct FSA indeptness
interestassistancepct	Interest assistance percent
paymentsperyear	Scheduled loan payments per year

3.4.5 Described Variables and Hypothesis

Table 3.1 displays a list of the variables used in the empirical analysis. For this study three endogenous or dependent variables are observed. The dependent variables, $Y_{i,}$ for this study are:

Loanamount: Dependent variable representing approved loan amount granted to each applicant or entity during the years 1999 to 2013.

Effectiveinterestrat: Dependent variable representing the loan interest percent rate that the borrower was charged given other changes and price adjustments during the years 1999 to 2013.

Loanmaturity: Dependent variable representing the calculated term of the loan of each applicant during the years 1999 to 2013.

13 independent or exogenous variables are observed. The independent variables, X_i for this study are:

Femaledum: Independent dummy variable representing gender, female applicants are represented by 1, all non-female applicants are represented by 0 during the years 1999 to 2013. For the *loanamount,* this variable is expected to have a negative relationship; meaning if the applicant is a female, the loan amount will be decreased. The basis for this hypothesis is from prior studies that concluded that women are generally granted lower loan amounts and also feel as though they are not respected in the financial market. In regards to the to the *effectiveinterestrate* variable, the *femaledum* variable is expected to have a positive relationship, meaning if the borrower is a female, it will increase their effective interest rate. The reasoning behind this again is similar to that of the loan amount where, lenders may not trust female borrowers' financial competencies ultimately

cheating them. In regards to *loanmaturity*, variable, the *femaledum* variable is expected to have a negative relationship; meaning if the applicant is a female, the loan maturity term will be decreased. The assumption behind this is similar to that of the loan amount variable and the effective interest rate variable, where lenders may not trust the female borrower's ability to handle the loan and so they set it up in a way to maximize their profits without worrying about the impact it will have on the actual borrower.

Singlepropdum: Independent dummy variable representing the entity type for the applicant, single proprietors are represented by 1, and all others are represented by 0 during the years 1999 to 2013. For the *loanamount* variable, it is expected that this variable will have a negative impact; meaning if the borrower states that they are a single proprietor, the loan amount will be decreased. The *effectiveinterestrate* is expected to have positive relationship with the *singlepropdum* variable, meaning if the applicant files as a single proprietor, their interest rate will be higher than if they did not. In regards to *loanmatutity*, it is expected that the relationship will be a negative one, meaning it will decrease the loan maturity term. The reasoning behind this is because many financial institutions, are wary of lending to sole proprietors, because although they have set themselves up as business, in the eyes of financial investors, due to the ease of setting up these entities, they are like individual borrowers and see them as a high lending risk.

Nonwhitedum: Independent dummy variable representing race, all nonwhite applicants are represented by 1, all white applicants are represented by 0 during the years 1999 to 2013. The *loanamount* variable is expected to have a negative relationship with the *nonwhitedum* variable, meaning if the applicant is not white, are expected to be granted a lower loan amount. The *effectiveinteretrate* variable is expected to have a positive

relationship with this variable, meaning it if the borrower is not white, their effective interest rate will be higher than if they were white. Lastly, the *loanmaturity* variable is expected to have a negative relationship with this variable meaning if the borrower is not white, their loan maturity term will be less than if they were white. Reasoning for these predictions comes from past practices with the financial sector.

Marrieddum: Independent dummy variable representing marital status, all married applicants are represented by 1, all others are represented by 0 during the years 1999 to 2013. The *loanamount* variable is expected to have a positive relationship with this variable, meaning if the applicant is married, their loan amount will be higher than if they were single. For the *effectiveinterestrate* variable is expected to have a negative relationship, meaning if the applicant is married, their effective interest rate will be lower than that of a single applicant. The *loanmaturity* variable is expected to have a positive relationship with this variable, meaning if the applicant is married, they will have a longer loan maturity term than a person who is single. The reasoning behind this, is that because the applicant is married, lenders may trust them more and provide them with more favorable options, because there is a potential dual household income, and a possible need for the loan.

Kbankdum: Independent dummy variable for the type of lending institution where commercial banks take the value of 1; all other are represented by 0, during the years 1999 to 2013. The *loanamount* variable is expected to have a positive relationship with this variable, meaning if the lending institution is a commercial bank, the loan amount will be higher than if it were not. The thought behind this is if the lending institution is a commercial bank, the liquidity flexibility will be more than say a government institution

with limited lending funds. Also this entity is expected to be more selective. For the *effectiveinterestrate* variable, the *kbankdum* is expected to have a positive relationship meaning, if the lending institution is a commercial bank, the interest rate will be higher than if it were not. The reasoning for this is because it is a private institution and can charge borrowers higher rates, given certain regulations, and risk assessments. The *loanmaturity* variable is expected to have a positive relationship with this variable, meaning that if the lending institution is a private bank, the loan maturity term will be higher. The thought behind this is, that because it is a private institution, it is possibly more profit driven, meaning it would want to continue to have interest accrue on the loan, making the borrower pay more in the long run. Loans from FSA may have a subsidy in the terms or higher interest rates due to them being "lenders of last resorts".

Foloandum: Independent dummy variable, for type of FSA loan accommodation where farm ownership loans accommodation takes the value of 1 and 0 for otherwise during the years 1999 to 2013. This particular variable is expected to have a positive relationship with the *loanamount* variable, meaning if the loan was a farm ownership (mortgage) loan, it will increase the loan amount. The effective interest rate is expected to have a negative relationship with this variable, meaning if the loan was a farm ownership loan, the effective interest rate will be lower than if it were not. Lastly for the *loanmaturity* it was expected that *foloandum* variable was expected to have a positive relationship with the variable, meaning that if the loan was a farm ownership loan, it will have a longer maturity term than if it was not. The reasoning behind this is because a farm ownership loan generally are larger loans and they have a longer maturity life than other loans.

Loanrefinancingdum: dummy variable for the use of loan proceeds for refinancing, where if the loan was used for the refinancing of an existing loan, it takes the value of 1, if it was not used for loan refinancing it takes the value of 0 during the years 1999 to 2013. This variable is only present in the *loanmaturity* equation and is expected to have a positive relationship with the variable. The reasoning behind this is because if an applicant is refinancing a loan, they are probably doing so with the intention of getting a better loan package which could possibly extend their loan maturity.

Contractinteretsrate: Independent variable representing loan interest rate percent that was agreed upon between FSA and the borrower during the years 1999 to 2013. This variable is different from the *effectiveinterestrate* variable. *Loanamount* is the only equation that this variable is present, and it is expected to have a negative relationship, meaning if the higher the contact interest rate, the lower the loan amount. The though behind this is if an applicant has a higher interest rate, through the financial market they were deemed unworthy of a lower rate which will also make the financial institution grant a lower loan amount.

Fixedinterestratedum: Independent dummy variable for interest rate type, 1 represents fixed interest rates, 0 represents variable interest rates during the years 1999 to 2013. For the *loanamount* equation, this variable is expected to have a negative relationship, meaning that if the borrower was granted a fixed interest rate, their loan amount will be lower than if a fixed interest rate was not granted. The thought behind this is if a fixed interest rate is granted, it is probably granted at a lower interest rate, so the financial institution would be more inclined to decrease the loan amount. For the *effectiveinterestrate* equation, this variable is expected to have a very small impact,

because if the interest rate is fixed, then it will be similar to the effective interest rate which is the interest rate that was granted to the borrower.

Fsaloanforrefinancing: Independent variable representing the loan amount used to refinance direct FSA indebtness during the years 1999 to 2013. It is expected that this variable would not have a major impact on the *loanamount* variable, the reasoning behind this is because… For the *effectiveinterestrate* this variable is expected to have a negative relationship, meaning that if the loan was used for the purpose of refinancing a debt owed to the FSA, more than likely, they are possibly refinancing because the new loan package is better than the old one, perhaps with a better interest rate.

Interestassistancepct: Interest rate assistance in percentage form, during the years 1999 to 2013. *Loanamount* is expected to have a positive relationship with the *interestassitancepct* variable, meaning the higher the interest rate assistance, the larger the loan amount. The theory behind this is, if the applicant qualifies for the interest rate assistance, they may be more inclined to ask for a larger loan amount because since they are receiving a favorable interest rate. The *effectiveinteretrate* variable is expected to have a negative relationship with this variable, meaning the larger the value of the assistance, the lower the effective interest rate. The reasoning for this hypothesis comes from the fact that this is assistance for the interest rate, meaning the applicant will receive a lower interest rate than a borrower that did not receive this particular assistance.

Paymentsperyear: Independent variable representing the scheduled loan payments per year during the years 1999 to 2013. *Loanmaturity* is expected to have a negative relationship with this variable, meaning the more payments per year, the less the loan

maturity term will be. The reasoning for this is that if the borrower pays towards the loan multiple times a year, it could possibly reduce the time it would take to pay off the loan. Justification for the empirical issues for the equations is addressed using the Breusch-Pagan test of independence conducted on the different models. The Breusch-Pagan test is used to indicate the presence of contemporaneous correlation between residuals of the equation in each system/model.

CHAPTER 4

RESULTS

This chapter presents two sets of empirical evidence on the farming situations of African American female farm operators obtained from two different perspectives—those of the farmers and one of their major farm lenders (the Farm Service Agency). Data collected from these two sources are discussed and examined using two contrasting analytical techniques. The farmers' inputs were collected through the case study approach and will employ qualitative data analysis methods. In contrast, the data provided by the Farm Service Agency is an extensive national database of more than 100,000 observations of guaranteed loans extended to its borrowers from 1999 to 2013. This dataset will be analyzed using appropriate econometric techniques. The results of these analytical methods are presented in the following sections.

4.1 CASE STUDY RESULTS AND ANALYSIS

An analysis was conducted on each case study to localize trends or similarities from the respondents. All six transcribed interviews were thoroughly reviewed multiple times and a case study write up of each individual interview was completed. Each interview was then combined under the 27 interview questions and summaries for each question were created based on the each respondents answer. Once the consensus was completed, each question and the responses were analyzed for trends, similarities and differences. Based on the results of this analysis, each question and results were

summarized and also transformed into quantitative data represented by pie charts to show the results numerically. The consensus of each individual's general answers and highlighted trends are discussed and displayed in this chapter. More lengthy and detailed accounts of each case are presented in Appendix 1. Of the 27 questions, 13 areas were identified to provide an idea of the experiences and practices used by this population. The original 27 questions contained questions that asked multiple items. For the purpose of this analysis, each question was separated.

4.1.1 Demographic and Structural Characteristics of Respondents

A number of the results from the case study are consistent with that of the literature. Almost all of the women interviewed produced vegetables as part of their primary product or service. In addition they also produced other secondary products like fruits, eggs, and value added items. In the study conducted by the ERS under the USDA, 45% of female farmers were involved in specialty grazing livestock like beef cattle, horses, sheep, and goats, but this only accounted for 16% of female farmer's total sales. 21% specialized in poultry and specialty crops, which include: vegetables, melons, fruits, tree nuts, and greenhouse, nursery, and floriculture products. They also specialized in grains, oilseeds, or dairy products (Hoppe and Korb, 2013). Although this section accounted for a small number of the female farming population, sales in this area were around 72%. It is suspected that the women interviewed chose this line of products to produce because it is an area that is potentially most lucrative and requires less capital for upkeep and maintenance, thus the operations can be done on a smaller scale with less land.

The average age of the women interviewed for the case study was 52.8 years, which was slightly lower than the 2007 average of 59 based of the study conducted by the ERS using 2007 Census of Agriculture data. Almost all of the women interviewed were college educated or had taken some college coursework. Eighty-three percent of the women interviewed had at least completed some college coursework. Of the 83 percent, 66% had obtained at least a bachelor's degree and 33% had obtained an advanced graduate degree. This was higher than the average conducted by the ERS that found that in 2007 61% had educational experience beyond high school. Of the 61 percent, 29% had some college experience and 32% had completed college and beyond (Hoppe and Korb, 2013). A possible reason for the clear difference is because the sample size used for the case study analysis is significantly smaller than the analysis conducted by the ERS. Using data from a sample conducted by the United States Census Bureau, under the 2013 Current Population Survey, it was found that 85% of the black women that were sampled had obtained at least a high school degree, and 54% had at least some college experience or more (United States Census Bureau Educational Attainment, 2013). Both of these results were similar to the results found from the case study analysis.

The 2007 Census of Agriculture and the analysis conducted by the ERS in addition to previous studies and literature concluded that female farmers generally have smaller farm operations and less land. This was consistent with the case study results. Sixty percent of the women interviewed had land that was 1 acre or less. The remaining 40% had land at least 10 acres or more with the largest piece of land equaling 35 acres. Although land acreage does not always determine productivity and prosperity, all of the women interviewed were producing on a small to medium scale. Concerning the land

that was being used by the women in the case study, the tenure of the land varied. A majority of the women interviewed did not actually own the land that they farmed on, a large portion of the women leased land, some of the women had access to land that they were able to use free of charge, and the rest owned their land. There were cases where some of the women had a combination of land tenure, where they owned land but also leased land, and in one case, land was owned but not cultivated, and was rented out to hunters during game season. For this particular case, the respondent was not included in the category of owning land, because the land that she did own was not used for the purpose of her farm business. These results were not consistent with the study conducted by the ERS that found that women were owners of 72% of the land that they operated (Hoppe and Korb, 2013).

A reason for the disproportionate results could possibly be explained by a number of factors. Beuford et al. (1984) and Craig-Taylor (2004) conducted studies where the loss of African American farmland was discussed. Beuford et al. (1984) explained that by 1978, the number of black operated farms decreased by 94%. Both Beuford et al. (1984) and Craig-Taylor (2004) attribute the lack of farm interest by African Americans to the negative stigma and historical correlation to slavery in the United States. This is a possible reason why many African Americans relinquished the ownerships of their land. In addition, many black owned farms produced less than $20,000 in annual sales, and due to the expenses of farm upkeep, they were unable to maintain ownership.

Another possible explanation discussed was the difficulty of acquiring land due to the large capital investment involved; which could discourage those interested in actually purchasing land. A factor that also could be a reason for the lack of land ownership is

inheritance. Land is generally passed down from generation to generation, if land is not owned, then it cannot be inherited. Based on prior studies, it is apparent that many African Americans do not own farm land and therefore cannot pass land down to their successors. All the women analyzed in the case study were principal operators and they were also owners or joint owners with a husband of their actual farm business either through an LLC or sole proprietorship.

An interesting trend that was observed from the case study was that almost all of the women that were interviewed were actually not from Georgia and lived a majority of their life outside of Georgia. The area that they mainly came from was the Midwest and Northern States. None of the women interviewed had formal education in agriculture, but a majority of them had experience in farming or gardening. A possible explanation for the reason for the migration to the south could be due to the cheaper and more abundant availability of land.

Half of the women interviewed stated that they farmed full time and 33% of the women stated that in addition to their farm income, they also had off farm employments or investments. In the 2007 ERS study, it was concluded that 36% of women had off farm employment, it was also found that 75% of the women with sales of $10,000 or less had off farm employments (Hoppe and Korb, 2013). It stated that farms at lower ends of the sales bracket used off farm investments to supplement losses or incomes from their farms (Hoppe and Korb, 2013). Some of the women interviewed were retired and used their farm business as supplemental income or as an after retirement profession regardless of if they worked full time or part time. All women interviewed expressed that their farm operation has expanded. This is also consistent with the trends found by the ERS study,

which also found that female farm operation increased in farm production sales from 1982 to 2007.

4.1.2 Production Decisions

Figure 4.1 below shows all of the women interviewed described their farming practices as organic, but none were USDA Certified Organic. Thirty-three percent of the women were Certified Naturally Grown. An explanation for this could be because overall many minorities have found it difficult to establish themselves in conventional agriculture, so they are turning to sustainable agriculture as an alternative (Sustainable Agriculture and Food Systems, 2013). Organic practices require fewer inputs than conventional farming. The use of chemical pesticides and fertilizers are eliminated causing input costs to be lower. It is also easier to start a farm business on a smaller scale using organic practices. The women interviewed expressed their knowledge of the benefits of organic or naturally grown products and gave that as part of the reason they chose to farm using this particular method.

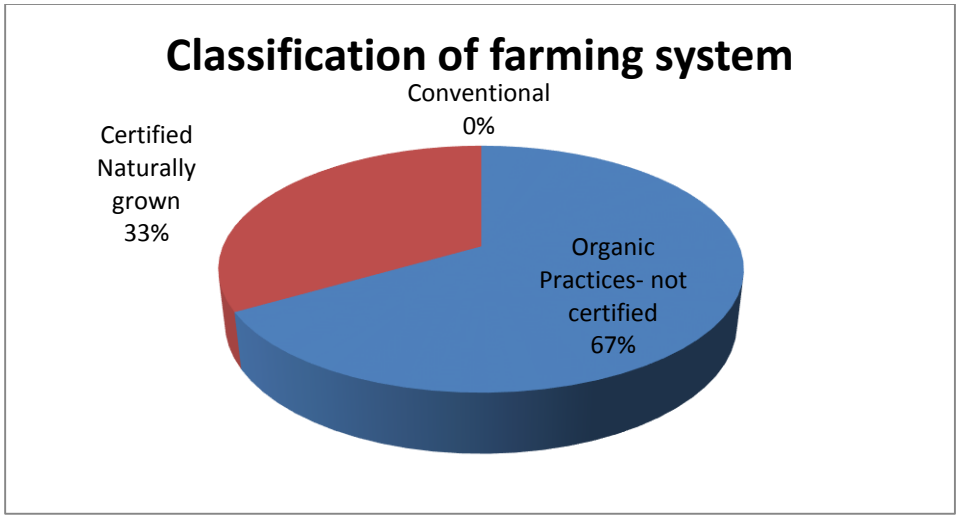

Figure 4.1: Classification of Farming System

As figure 4.2 below displays, almost all of the women also stated that they did not work with a broker and sold their products directly to their customers, allowing them to collect 100% of the profit from their sales. This is more than likely due to the small scale of the women's farm operations. Since their production level is considered on the smaller scale, they are able to participate in farmers markets and other local venues, so there is no need for any middle collaboration to deliver their products on a more national basis. In one case, the female farmer explained that she was not making a profit or substantial income from her products. She specialized in herbs. In the study conducted by the ERS, herb farmers were categorized under miscellaneous crops, and found that although they make up 17% of the female farming population, 98% of the farmers in this category have no sales (Hoppe and Korb, 2013).

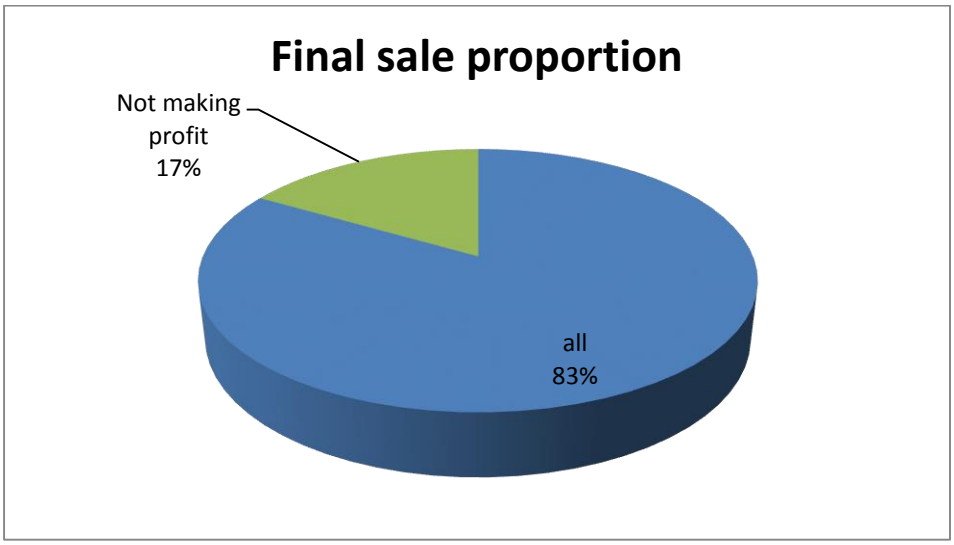

Figure 4.2: Final Sale Proportion

4.1.3 Labor Input Management

In relation to labor, almost all the women interviewed had at least one family member that was able to help them with their farm work, which is displayed in figure 4.3 below. The family members were their husbands, children, grandchildren, aunts or

uncles. In addition to having family help, some people also had the help of community members who volunteered their time for produce.

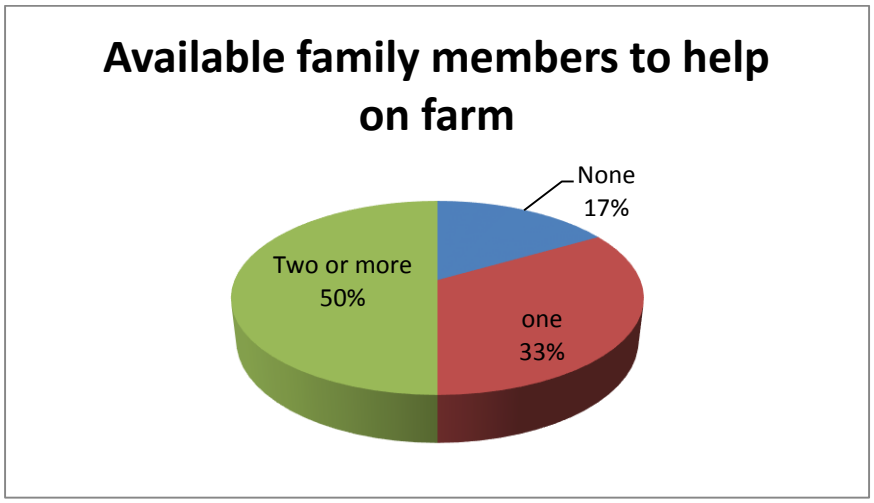

Figure 4.3: Available Family Members to Help on Farm

Figure 4.4 shows that 33% of the women interviewed stated that their family members that helped on the farm also had off farm employment. Sixty-seven percent stated that although they had help from their family members, they still needed to hire non family workers results for this is displayed in figure 4.5.

Only 17% of the women interviewed had the ability to hire non family workers, the rest of the women either were not looking for hired workers or attributed their inability to afford a hired worker for the reason of not having paid employees which is displayed in figure 4.6.

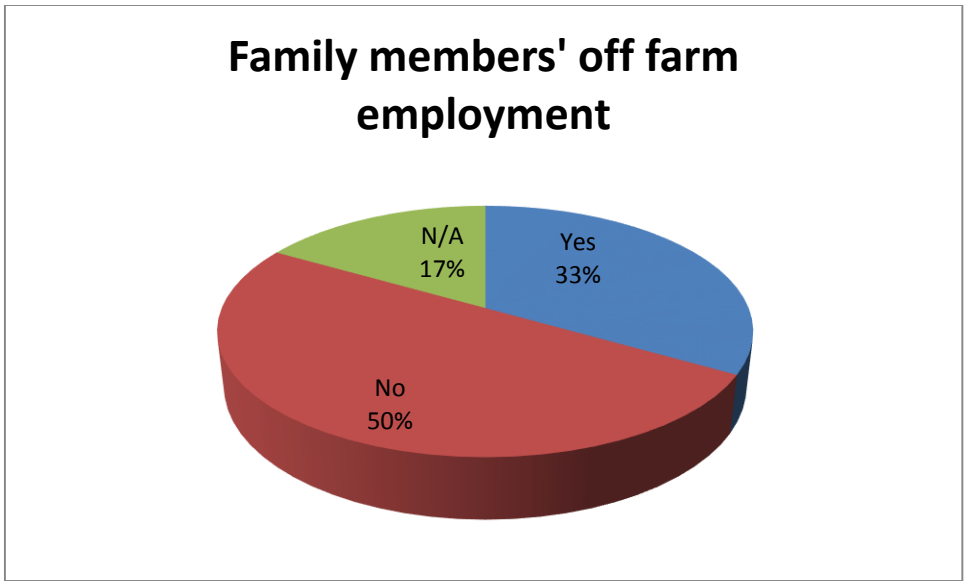

Figure 4.4: Family Members' Off Farm Employment

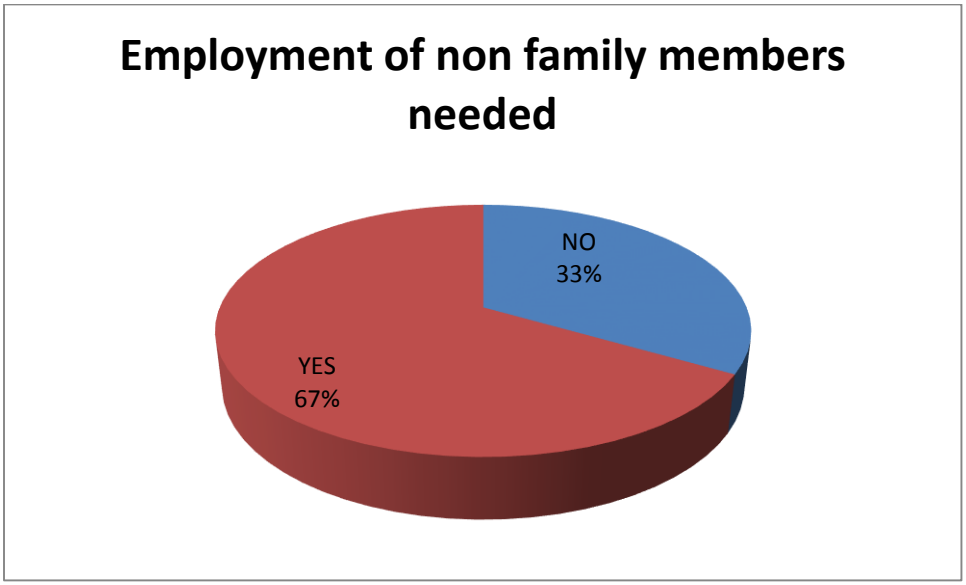

Figure 4.5: Employment of Non Family Members Needed

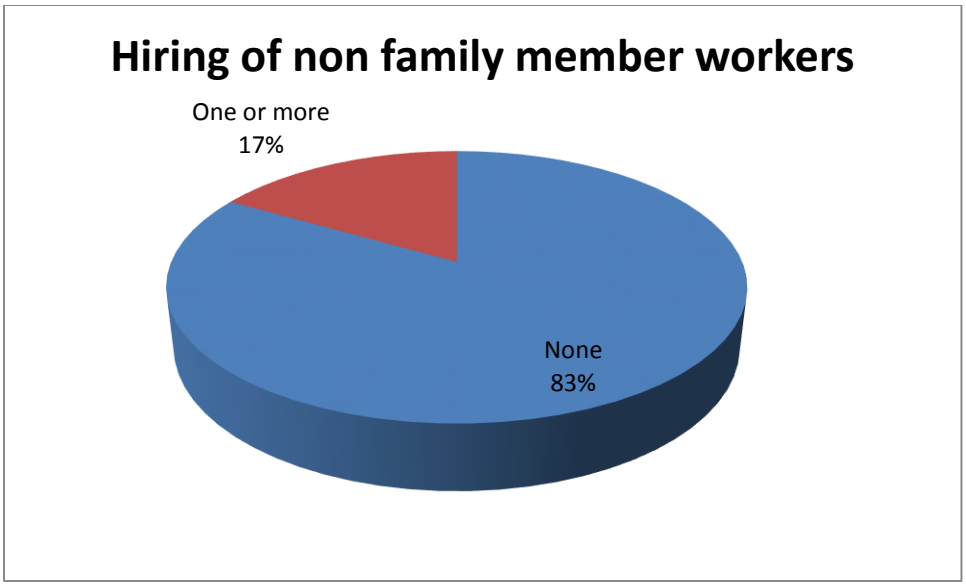

Figure 4.6: Hiring of Non-Family Member Workers

4.1.4 Financial Issues

All of the women interviewed stated that they had not experienced any economic hardship like foreclosure that forced them to give up their land. This is contrary to stereotypes that African Americans are financially unstable and are unable to handle an operation. Figure 4.7 below shows that 50% of the women interviewed stated that they applied for some form of government financial assistance like a farm loan or grant.

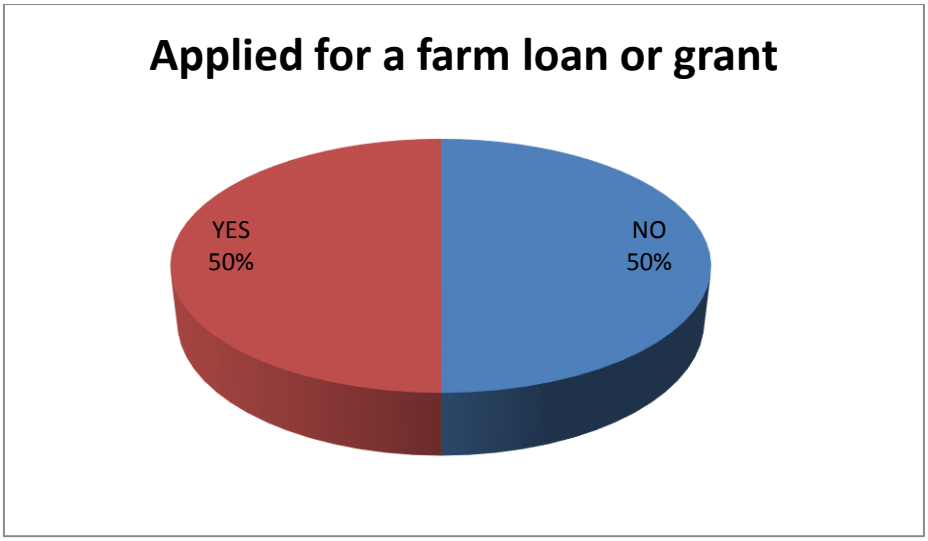

Figure 4.7: Applied for a Farm Loan or Grant

Of the 50% of the women who applied for government financial assistance, only 14% were granted the farm loan (displayed in Figure 4.8), and even then, the farm loan was denied initially and the individual had to fight to have her loan application reviewed and eventually accepted.

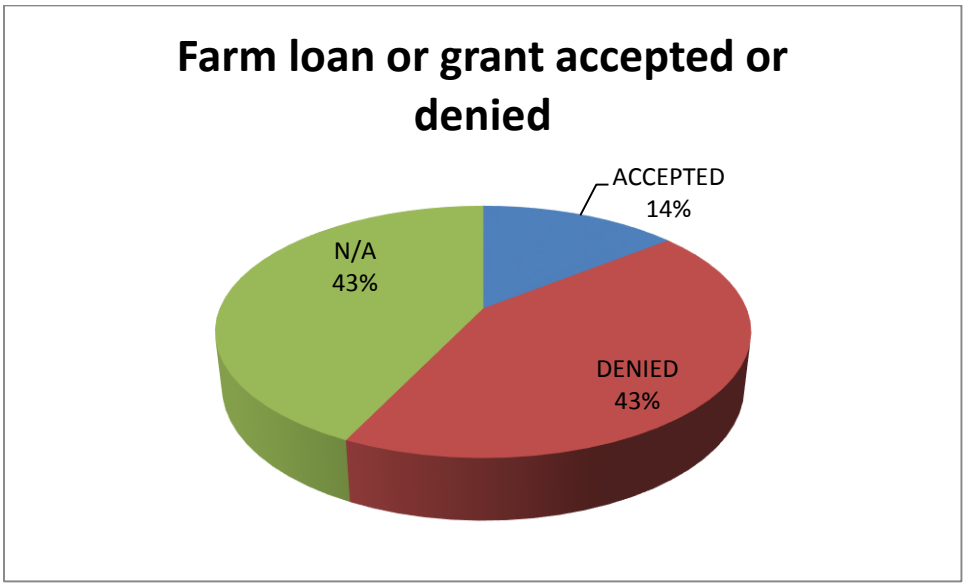

Figure 4.8: Farm Loan or Grant Accepted or Denied

All the women that applied for a farm loan or grant stated that they experienced some form of discrimination, and that information was withheld or that they were misinformed; results for these findings are displayed below in figure 4.9.

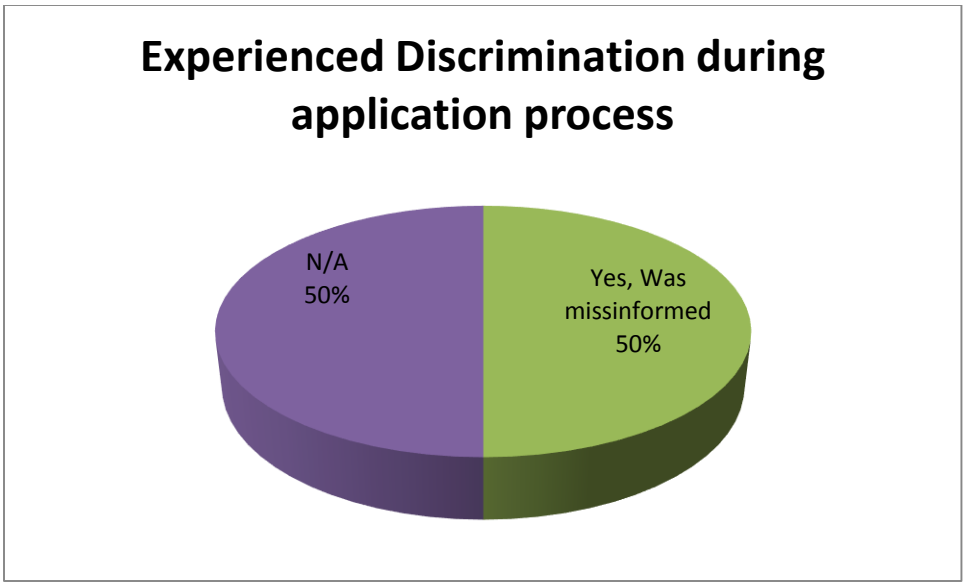

Figure 4.9: Experienced Discrimination During Application Process

These findings are contrary to that of previous studies that found that women farmers were not discriminated against. A possible reason for the polar results could be because some of these applications were not on record. One female farmer explained that while applying for a farm grant, although the agent surveyed her farm business, and even told her that she would probably be approved, her application ended up lost and eventually denied. In the study that Escalante et al. (2009) conducted, data for rejected loan applications were unavailable and other forms of rejection like face to face rejections and on the phone rejections were unaccounted for. This shows that although on paper apparent discrimination is not evident there is still an underlying presence that cannot be proven unless the people who have experienced it are located and communicated with.

4.1.5 Marketing Issues

Concerning the marketing aspect of their farm business, Figure 4.10 below shows all women interviewed used word of mouth as one of their major forms of marketing.

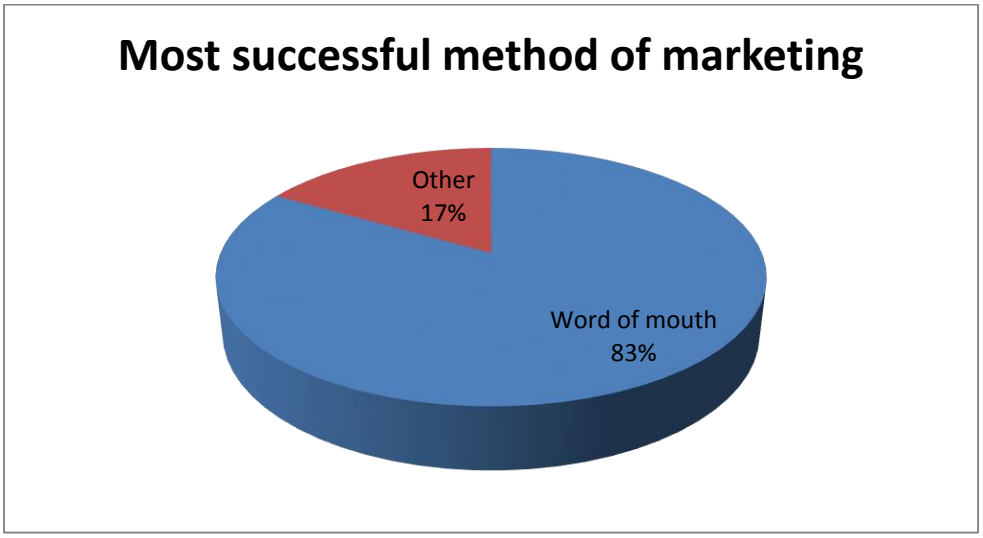

Figure 4.10: Most Successful Method of Marketing

In addition most of the women participated in farmers markets and trade shows. Some of the women had websites and also utilized social media to promote their farm business. The women interviewed stated that some of the challenges that they have faced being a farmer were lack of income to purchase the right equipment or help with the upkeep of their business, lack of resources to aid with expansion of their business, the ability to obtain land, and people not fully understanding the dynamics of farming. Some of the areas that the women mentioned that lacked support in the farming community were, access to loans or credit, availability of transportation to have access to land, assistance for underserved farmers, educational opportunities, general support, access to rented equipment, and accesses to resources.

4.1.6 Gender and Race Issues

Fifty percent of the women interviewed stated that their major challenge was not being taken seriously by the farming community, 17% stated that the physical aspect of

farming, another 17% stated not having enough capital, and 16% claimed that they had not experienced any challenges, all of which are displayed in Figure 4.11.

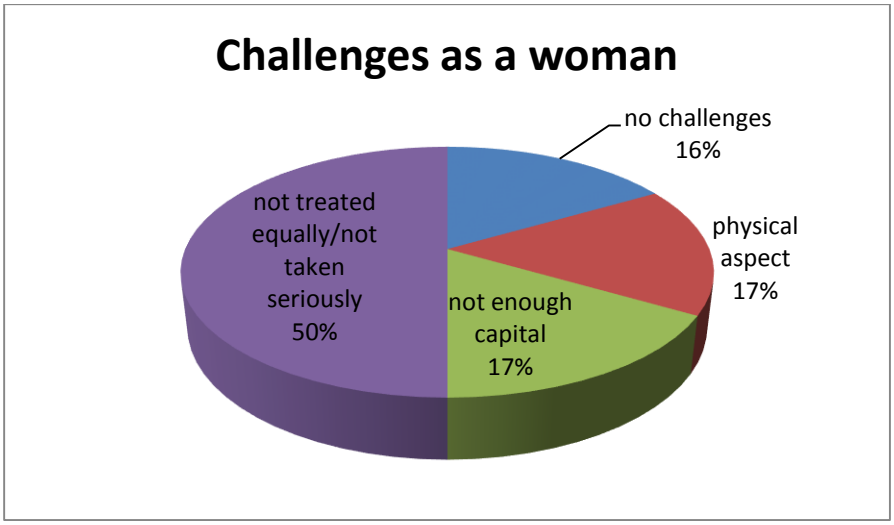

Figure 4.11: Challenges as a Woman

All women interviewed felt that it was easier for men to enter the farming industry than it was for women. Some of the women admitted that they have had it easier than most women because of their background in agriculture or their spouses' knowledge farm knowledge. Sixty-seven percent of the women expressed that they had experienced some form of sexism in the agriculture community, which is displayed in Figure 4.12. Some of the examples that they listed were being ignored or dismissed when making suggestions or comments, receiving less information than their husbands or other males, and being quoted higher prices for equipment or services. An additional 33% stated that they had not experienced sexism, but had witnessed it being done to others.

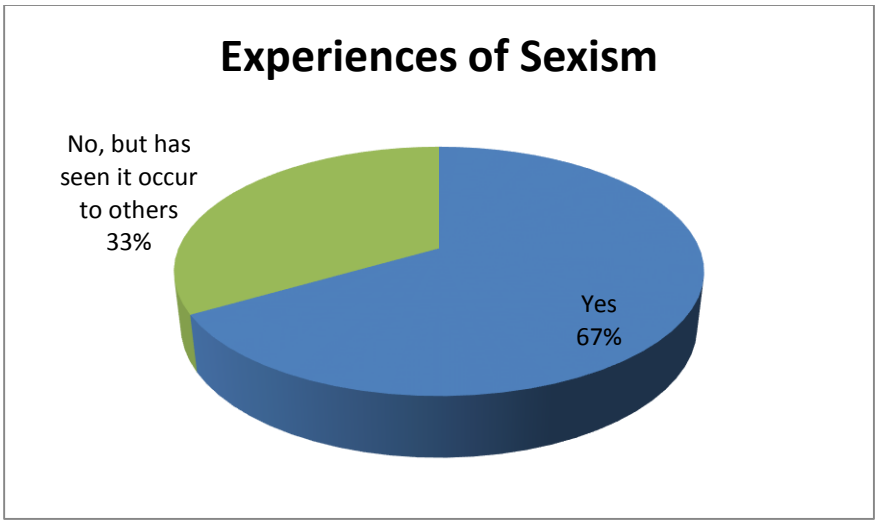

Figure 4.12: Experiences of Sexism

Figure 4.13 shows 83% of the women interviewed expressed that they had experienced some form of discrimination as a result of their race. One interviewee was singled out by a program director and given a warning for the way she was disposing of weeds even though everyone else in the same program disposed the weeds the same way. She was the only one that was reprimanded. Others have been denied opportunities even dismissed for projects without consideration.

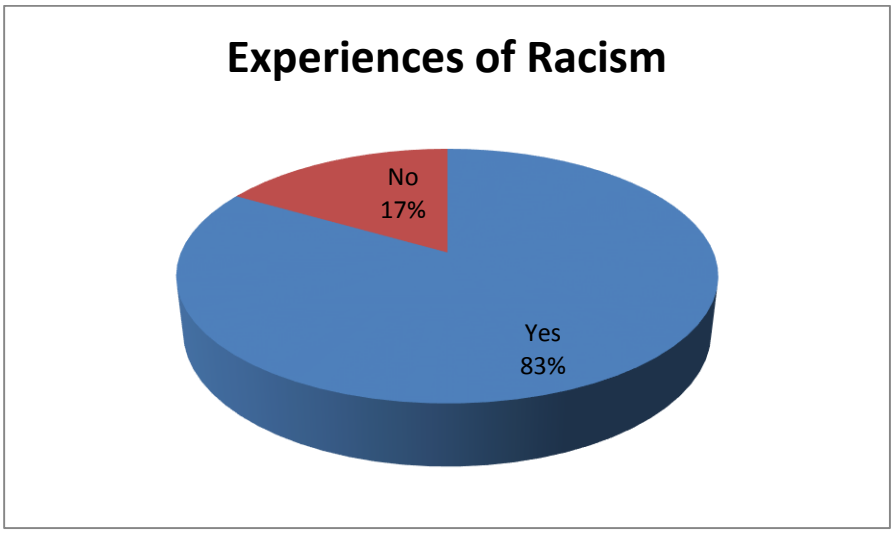

Figure 4.13: Experiences of Racism

4.2 FSA DATA ANALYSIS RESULTS

In order to better understand the profile of the various classes of borrowers in the FSA guaranteed loan transactions data, a descriptive statistical analysis was conducted for several variables of interest: payments per year, loan amount, loan maturity, effective interest rate, new borrower, and loan type. Each variable was analyzed by 7 different racial categories: African American female farmers, African American male farmers, other female farmers (which represents of all female farmers other than African American female farmers), other nonwhite female farmers (all minority female farmers excluding African American farmers), White male farmers, White male farmers, and all farmers. These categories of borrowers will allow the statistical comparisons of the means of the various variables across racial and gender groups. This analysis will supplement the econometric results with more detailed information on, for instance, the relative status of African American female farmers vis-à-vis other racial and gender groups. The regression model could only capture a general racial minority classification (non-white) and a separate gender minority classification (female) but could not define a combined gender and racial minority variable to solely capture a group of farmers such as the African American farmers, owing to small sample size issues. Since the main focus of this thesis is to discuss and analyze the experience of female African American farmers and the FSA, the descriptive statistics are an important aspect of this study.

4.2.1 Descriptive Statistics

The Farm Service Agency dataset used for this study consists of 112,204 borrower observations, which were classified into seven borrower classes: African American female farmers, containing 14 observations, African American male farmers,

comprising of 566 observations, other female farmers, containing 5,206 observations, other nonwhite female farmers, containing 555 observations, white male farmers, having 101,494 observations, white female farmers, containing 4,651 observations, and all farmers in the entire dataset, containing 112,204 observations. The proportion of the observations that are under the African American female farmer category is about 0.0125% of the total dataset. The African American male farmer category makes up 0.505% of the observed dataset. The proportion of the observations that are under the other female farmer category is about 4.65% total sample dataset. The proportion dataset that are under the nonwhite female farmer category is 0.495%. The proportion of the observations that are white male farmers is 90.60% of the total dataset. White female farmers make up 4.151% of the observed dataset.

Three of the seven borrower classes comprise a combination of race categories. The other female farmer category combines observations from American Indian, which has 192 observations and is .17% of the total dataset, Asian/Pacific Islander which has 259 observations and is .231% of the total dataset, Hispanic which has 104 observations and is .093% of the total dataset, and White female farmer borrowers. This variable excludes African American female farmers. The other Nonwhite female farmer category combines American Indian, Asian/Pacific Islander, and Hispanic female farmer borrowers, excluding African American and white female farmers. The all farmers category includes all the farmer categories that were previously listed, but also includes American Indian male farmers which has 1,561 observations and is 1.393% of the total dataset, Asian/Pacific Islander male farmers which has 1,762 observations and is 1.573%

of the dataset, and Hispanic male farmers which has 1,421 observations and is 1.268% of the dataset.

Table 4.1 provides a summary for the descriptive statistics for the Farm Service Agency borrower data set focusing on four variables. Three of these four variables (loan amount, interest rate and loan maturity) that would eventually be treated as dependent variables in the econometric analysis presented later in this chapter.

Table 4.1 Descriptive Statistics for FSA Borrower Data Set, 1999 to 2013

Variable/Category	# of obs	Mean	StDev	t-statistic
Loan Amount				
African American Female Farmers	14	$279,254.64	$141,067.80	
African American Male Farmers	566	$172,752.56	$172,693.13	**2.77389791**
Other Female Farmers	5206	$256,388.56	$239,138.07	0.60416602
Other Nonwhite Female Farmers	555	$325,636.02	$273,537.64	-1.17571876
White Male Farmers	101494	$236,974.60	$221,059.49	1.12123848
White Female Farmers	4651	$248,125.31	$233,361.43	0.82228902
All Farmers	112024	$240,309.05	$224,097.60	1.03282315
Payments Per year				
African American Female Farmers	14	1.857143	0.363137	
African American Male Farmers	566	2.047703	0.424289	**-1.93115**
Other Female Farmers	5206	2.052439	0.860789	**-1.99725**
Other Nonwhite Female Farmers	555	2.437838	1.374474	**-5.12805**
White Male Farmers	101494	1.968747	0.639225	-1.14969
White Female Farmers	4651	2.00645	0.764509	-1.52826
All Farmers	112024	1.984378	0.677601	-1.31071
Effective Interest Rate				
African American Female Farmers	14	7.9	1.566967	
African American Male Farmers	566	8.061648	1.847577	-0.37952
Other Female Farmers	5206	7.040579	1.966828	**2.047822**
Other Nonwhite Female Farmers	555	7.194714	1.935036	**1.652621**
White Male Farmers	101494	6.826198	2.01002	**2.56377**
White Female Farmers	4651	7.022186	1.969987	**2.091106**

All Farmers	112024	6.864138	2.011733	**2.473213**
Loan Maturity				
African American Female Farmers	14	14.5	10.53748	
African American Male Farmers	566	7.899293	6.767081	**2.331921**
Other Female Farmers	5206	12.05455	8.615855	0.867552
Other Nonwhite Female Farmers	555	11.55135	7.99518	1.039488
White Male Farmers	101494	10.22766	8.166101	1.516964
White Female Farmers	4651	12.1146	8.685817	0.846145
All Farmers	112024	10.29452	8.18771	1.49323

*T-statistic (African American Female Farmers vs, Other Groups)
*Two-tailed t-test critical value at 90%(least)=1.646

The average FSA loan amount received by African American female farmers is $279,254.64, shown in Table 4.1. Based on these results, African American female farmer received significantly larger loans relative to only African American male farmers, which received an average of $172,752.56 displayed in Table 4.1. Compared to the rest of the gender and racial categories aside from African American male farmers, the average loan amount that African American female farmers received is neither significantly larger nor less. In addition the amount that they received on average is not significantly different from what all borrowers received. The results for the average loan amount for African American female farmers were surprising, because on average it was the highest. The observation was individually reviewed to determine if any outliers existed that would skew the results. Of the 14 observations, one borrower had a loan less that 100,000; four borrowers had loans between 100,000 and 199,999; four borrowers had loans between 200,000 and 299,999; only one observation was between 300,000 and 399,999; and four borrowers had loans between 400,000 and 499,999. Based on this analysis, no major outliers were present.

African American female farmers had significantly smaller number of payments within a year than African American male farmers, other female farmers, and nonwhite female farmers. Compared to white male farmers, white female farmers, and the average of all farmers, their payment frequency is not significantly different.

At 7.9% African American female farmers, on average were charged significantly higher interest rates compared to other nonwhite female farmers, who were charged 7.19% and white female farmers who were charged 7.02%. Male white farmers and the overall average of all farmers had even lower interest rates with rates of 6.82% and 6.86 respectively, with white male farmers receiving the lowest interest rate. Only African American male farmers received higher interest rates than African female farmers, with an interest rate of 8.06%, but on average their interest rate was higher than all other racial and gender categories.

African American female farmers had significantly longer loan maturity terms, with an average of 14.5 years compared to African American males which had the lowest maturity terms of 7.9 years, displayed above in table 4.1. However, African American female farmer's average loan maturity is not significantly different from those given to the other gender and racial groups as well as the average FSA borrower.

In addition to the mean and standard deviations, t-statistics were also calculated to determine significant differences between the results for African American female farmers versus other groups. The results are expressed above in Table 4.1. The t-statistic was calculated in a way to make the African American female farmer data to be treated as population 1 and other specific gender and racial groups compared to be population 2, using a two tailed t-test critical value at 90% of 1.646.

When the African American female farmer category was compared to the other 6 borrower class categories, only the African American male farmer category with a t-critical value of 2.77 is higher than the t-value of 1.646 and indicates a significant difference in the loan amount received. The other female farmer, other nonwhite female farmer, white male farmer, white female farmer, and all farmer categories were not significantly different with t-critical values below the 1.646 t value.

There was an indicated significant difference in payments per year between African American female farmers versus African American male farmers, other female farmers, and other Nonwhite female farmers with t-critical values of -1.93,-1.99, and -5.13 respectively. White male, white female, and the all farmers categories, were not significantly different. The other female, other nonwhite female, white male, white female, and all farmers categories produced t-critical values of 2.04, 1.65, 2.56, 2.09, and 2.47 respectively when compared to African American female farmers, indicating a significant different in interest rate. The African American male farmer category was not significantly different.

Loan maturity was significantly only different between African American female farmer category and African American farmer category, with a t-critical value of 2.33. The other female farmer, other nonwhite female farmer, white male farmer, white female farmer, and all farmer categories were not significantly different with t critical values below the 1.646 t-value, when compared to the African American female farmer category. The t-statistic analysis was useful because it helped validated the analysis conducted from the means and standard deviations of the data.

Table 4.2 shows borrower history, for all the racial and gender categories.

Table 4.2: New Borrower History

Variable/Category	Number of Observations	New Borrower	Other
Race			
African American Female Farmers	14	5	9
African American Male Farmers	566	153	413
Other Female Farmers	5206	2528	2678
Other Nonwhite Female Farmers	555	287	268
White Male Farmers	101494	39677	61817
White Female Farmers	4651	2241	2410
All Farmers	112024	44589	67435

The borrower history, shown in table 4.2 shows that most of the applicants were not new borrowers. This was consistent in all borrower class categories except other nonwhite female farmers. For African American women in this category, a variety of loan amounts were present in both the new borrower and previous borrower categories, but more borrowers with larger loan amounts were present with previous borrowers. This observation makes sense because a prior borrower has knowledge of the borrowing process and application process and may have more confidence to ask for a larger amount.

The last table, Table 4.3 shows the different reasons for the loan, each racial and gender category applied for.

Table 4.3: Loan Type (Loan Purpose)

Race	Number of Observations	*Annual Living/ Operating Expense	Capital Improvement/ construction Cost	Equipment Livestock Chattel Purchase	Farm Loan Real Estate Purchase	Refinance Debt w/ this Lender	Refinance Debt Different Creditor	Refinance Direct Farm LN Debt	Blank
African American Female Farmers	14	6	1	0	3	1	2	0	1
African American Male Farmers	566	332	44	50	50	64	14	12	0
Other Female Farmers	5206	1369	560	471	1006	1056	619	125	0
Other Nonwhite Female Farmers	555	132	62	49	166	92	52	2	0
White Male Farmers	101494	37934	4403	9311	12934	24720	9784	2408	0
White Female Farmers	4651	1237	498	422	840	964	567	123	0
All Farmers	112024	41209	5351	10355	15140	26465	10876	2627	1

*Annual Living/Operating Expense is a combined category as listed from the FSA data set

Table 4.3 concludes that there were two major reasons applicants borrowed loans: (1) Annual living/operating expenses which accounted 41,209 observations, which is almost half of borrowing data population, and (2) to refinance debt with this lender accounting for over 20,000 applicants. This makes sense, as people are using the loans to maintain their farms and their standard of living.

4.2.2 Seemingly Unrelated Regression Results

Table 4.4 reports the results of the seemingly unrelated regression model for the different estimating equations that comprise the system of equations. These individual equations separately capture the significant determinants of FSA lending officers' loan amount decisions, effective interest rates charged on borrowers, and the maturity of the loan (in years). The models include variables representing several features of the loans packaged for different FSA borrowers whose loan applications were approved from 1999 to 2013. Among the regressors in all three estimating equations are dummy variables that capture racial (NONWHITE) and gender (FEMALE) minority status to verify the earlier trends noted in the results of the descriptive statistical analysis.

The justification for the relevance of the SUR model to this dataset has been established by the result of the Breusch-Pagan (BP) test of independence. The BP test produced a significant χ^2 statistic that suggests that the null hypothesis of independence can be rejected. Given this rejection, the BP test result suggests that the error terms of the three separate estimating equations are contemporaneously correlated. Hence, this provides justification for the application of the SUR model to the three defined estimating equations that can now collectively combined as a system of equations under an SUR framework.

Table 4.4: Regression Results of FSA loan data using the seemingly unrelated regression (SUR), during the years 1999 to 2013 (standard errors are in parenthesis)

Variable	Coefficient
A. Dependent Variable: loanamount	
Intercept	335295.7*** (2999.29)
femaledum	-23.8836 (2930.107)
singlepropdum	-134789.4*** (1809.597)
nonwhitedum	52095.76*** (2771.31)
marrieddum	32881.94*** (1549.733)
kbankdum	45743.25*** (1380.377)
foloandum	148970.1*** (1417.101)
contractinterestrate	-12943.07*** (360.1979)
fixedinterestrate	-13919.18*** (1452.923)
fsaloanforrefinancing	.3871577*** (.0278021)
interestassitancepct	4144.911*** (512.2464)
χ^2	20951.25
R^2	0.15373

Note: *,**, and *** denote significance at the 10%, 5% and 1% respectively
Note: Standard Errors are in parenthesis

Variable	Coefficients
B. Dependent Variable: effectiveinterestrate	
Intercept	6.882785*** (.0249909)
femaledum	.1606471*** (.0249909)
singlepropdum	.0888759*** (.0154371)
nonwhitedum	.4488099*** (.023596)
marrieddum	-.0358094*** (.0132206)
kbankdum	.6656134*** (.0115957)
foloandum	-.5477365*** (.0119696)
interestassistancepct	-.7817295*** (.0043148)
fixedinterestdum	-131919.18 (1452.923)
fsaloanforrefinancing	-2.51e-06*** (2.37e-07)
χ^2	35015.95
R^2	0.2389

Note: *,**, and *** denote significance at the 10%, 5% and 1% respectively
Note: Standard Errors are in parenthesis

Variable	Coefficients
C. Dependent Variable: loanmaturity	
Intercept	5.157786***
	(.0502001)
femaledum	-.3068058***
	(.060593)
singlepropdum	.7340469***
	(.0375002)
nonwhitedum	-1.406007***
	(.0375002)
marrieddum	-.5175887***
	(.0321042)
kbankdum	.9692478***
	(.0278194)
paymentsperyear	-.5175887***
	(.0189546)
foloandum	14.54718***
	(.0274354)
loanrefianancingdum	5.157786***
	(.0502001)
χ^2	302835.35
R^2	0.7300

Note: *,**, and *** denote significance at the 10%, 5% and 1% respectively
Note: Standard Errors are in parenthesis

Overall, all three estimating models have significant χ^2 statistics while their R^2 values range from 15.37% to 73.00%. These results suggest that these models have adequate explanatory power. The results for the three estimating equations are discussed separately in the following subsections.

Loan Amount Decisions

An interesting result of this equation is the insignificance of the gender minority variable (*femaledum).* This suggests that loan amount decisions are invariably made by

loan officers, regardless of the borrower's gender. The *singlepropdum* variable has a significantly negative coefficient that suggests that non-single proprietorship organizations (partnerships, corporations and the like) that may be larger and established with more sophisticated business structures would tend to receive larger loans from FSA.

The *nonwhitedum* variable produced surprising results with its significantly positive coefficient. It was expected that this variable will have a negative impact on loan amount due to the historical practices of the FSA, but a possible reason for the unexpected results is that in 1999, which was the beginning of the collection of this data, USDA settled a class action lawsuit with African American farmers, and was under much scrutiny, causing them to demonstrate more favorable practices towards minorities.

As expected, the *marrieddum* variable had a significant positive impact on loan amount, thereby suggesting that married borrowers would tend to receive larger loans relative to single borrowers. *Kbankdum* also had a significant positive impact on loan amount, which is intuitively correct. Loan transactions that originate from borrowers' loan accommodations from commercial banks would naturally be larger transactions due to two reasons: commercial banks have larger financial resources that allow them to provide larger loan exposures and borrowers that satisfy the commercial banks' relatively more stringent credit risk assessment standards would most likely be capable of assuming larger loan amounts.

The significant negative coefficient of *contracrinterstrate* was expected as interest rate could have been used by lenders as a credit rationing and screening device. This means that if a borrower is relatively riskier than the average borrower, but the FSA and the third-party lending institution would nonetheless be interested in accommodating

the borrower, they would do so by lending smaller amounts at relatively higher interest rates.

The *fixedinterestratedum* variable has a negatively significant effect on loan amount decisions. This result is also logically expected as when lenders offer fixed pricing schemes, they ensure that the future streams of income from such loan transactions will be optimal and profitable. Hence, fixed rate pricing for loans is possible and profitable for lenders if loan amounts are regulated. In other words, if a person is granted a fixed interest rate, it is possibly at a better than average rate, which could possibly cause the lender to grant a smaller loan, because this particular loan will generate a lower revenue than one with a higher or variable interest rate. The *fsaloanforrefinancing* variable produced a significantly negative coefficient that suggests that guaranteed loans designed to refinance past FSA loans would tend to be associated with smaller loan amounts. Finally, *interestassitantcepct* was expected to have a negative impact on loan information, but it actually increased loan amount by $4,144.91. The possible reason behind this is that by granting borrowers assistance with the interest rate, it allows and almost encourages them to borrow a larger amount, because they are taking advantage of the more favorable interest rate.

Loan Pricing– Effective Interest Rates

The second equation analyzed effective interest rates, which is the composite rate that includes the contractual interest rate and other loan charges or fees that the borrower is actually charged. This value is in many cases different than the contract interest rate because changes and price adjustments have been imputed. Like the first equation, all but one variable was significant at the 1% level. Among the demographic dummy variables,

the significant coefficient results indicate that lenders' decisions on loan pricing may be influenced by gender, racial, marital status and business structure attributes of the borrowers. The *femaledum, singlepropdum,* and *nonwhitedum* variables all registered significant positive coefficients that support such contention. These results clearly establish that women, non-white and operators of single proprietorships (that are simpler and perhaps smaller business structures) are charged higher interest rates than the rest of the borrowers in their gender, racial and business structure classes. Moreover, the *marrieddum* variable is significantly negative thereby suggesting that married couples usually enjoy lower interest rates relative to the rates obtained by single borrowers.

The *kbankdum* variable was expected to increase the effective interest rate, which was consistent with the results. This particular variable increased the effective interest rate by 66.6%, this makes sense because it is expected for a loan from a commercial bank to offer a higher interest rate.

The *foloandum* was expected to have a negative impact on the effective interest rate, which was consistent with the results, meaning if the borrower is seeking a farm ownership loan, the effective interest rate decreases by 54.8%. As expected the *interestrateassistancepct* variable decreased the effective interest rate by 78.1%, meaning borrowers that were granted interest rate assistance received a lower effective interest rate. The *fixedinterestdum* was expected to have a very small impact on the effective interest rate. This expectation proved true as the variable was insignificant in the model, showing that it has no little to impact on effective interest rate. The *fsaloanforrefianancing* variable was expected to decrease the effective interest rate

variable, and although it was consistent with the expectations, it decreased the variable by a very small amount.

Loan Maturity

The last equation analyzed the indicators of loan maturity decisions made by lending officers, which represents the number of years given to borrowers to fully repay their loan obligations. Similar to the interest rate equation results, the loan maturity model results indicate that among the significant regressors for loan maturity decisions are the demographic dummy variables *femaledum, singlepropdum, nonwhitedum and marrieddum* dummy variables. Their significant coefficient results indicate that longer loan maturities are usually given by loan officers to male borrowers (negative *femaledum),* single proprietorship businesses (positive *singlepropdum),* white borrowers (negative *nonwhitedum),* and single borrowers (negative *marrieddum).* Given this study's special focus on gender and racial minority groups, this result confirms the contention that women and racial minorities are usually given shorter loan terms to repay their loans, which could be a hurdle for these borrowers to deal with in trying to maintain good credit standing with their lenders.

The *kbankdum* was expected to positively influence loan maturity, and as expected it increased the loan term by .97 years. The *paymentsperyear* variable produced expected results, as it decreased loan term by .51 years. This reason for this result could be that the more frequently a loan is paid per year, the faster the loan will be paid off. As expected the *foloandum* variable increased loan maturity by 14.5 years. This makes sense because this type of loan is generally a larger loan and has a longer maturity life. The last variable, *loanrefinancingdum*, was expected to have a positive impact on loan maturity,

which was consistent with the results. This variable increased the loan maturity term by .78 years. This also makes sense because if the borrower is refinancing the loan, they are possibly refinancing for a better loan option.

CHAPTER 5

CONCLUSION

The overall goal of his study was to identify the challenges and experiences that African American female farmers face in their business operations in the state of Georgia and also in the United States. The primary purpose of the study was to: (1) bring awareness of the operating challenges of African American female farmers through a case study approach; give special focus to credit issuance given the FSA's past discrimination allegations; and (3) scrutinize loan terms of FSA loans granted during 1999-2013 for possible trends and indication of unfair practices towards African American female farmers and other minority farmers.

5.1 CASE STUDY CONCLUSION

The African American female farmer population is extremely small, and this was one of the reasons why the case study approach was employed to discover their business challenges and experiences, and also help to create a profile of this population. The results from the case study showed that most of the women interviewed were small scale farmers that identified as single proprietors. These women mostly specialized in vegetables but some also engaged in specialty farming like beekeeping and aquaponics. All of the women used either organic or naturally grown practices with their products, and sold directly to their customers. Although they had small operations, most expressed the need for outside family assistance on their farm operation, but did not have the funds to hire help. Half of the women interviewed had applied for a farm loan or grant and

only one female farmer actually was granted the loan. Even then she was initially denied and had to go through many channels to get it reconsidered and approved. All the women that applied for loans or grants through the USDA or FSA said that they were misinformed, misguided, and disregarded. All women interviewed expressed either experiencing or witnessing discrimination or sexism by other members of the farming community.

5.2 MODEL CONCLUSIONS

Based on the results from the case studies, a more direct approach was taken with the FSA data set, where loan amounts, effective interest rates, and loan maturity were analyzed against different variable factors that could potentially have an effect on a loan package, using a seemingly unrelated regression analysis. This analysis found that being a single proprietor, the contract interest rate, and fixed interested rates decreased the loan amounts. Being female also decreased loan amounts, but this particular variable was insignificant in the model. An interesting result was that identifying as nonwhite increased the loan amount. Other factors that increased loan amount was identifying as married, loans obtained through a commercial bank setting, loans that were specifically used for refinancing FSA loans, farm ownership loans, and loans that were granted with interest rate assistance. The results from the effective interest rate equation were startling. Female, nonwhite, single proprietors and commercial banks all increased effective interest rates. Being married, obtaining a farm ownership loan, interest rate assistance, and the FSA loans for refinancing, all decreased the effective interest rate. Lastly loan maturity was decreased when the borrower was a female, nonwhite, and was married. It also decreased when the payments per year increased. If the borrower was a

single proprietor, obtained the loan through a commercial bank channel, the loan was a farm ownership loan, and if the loan was used for refinancing of a FSA loan, the loan maturity increased.

5.3 CONCLUSION SUMMARY AND IMPLICATIONS

The face of American agriculture is rapidly changing. More people are turning to agrarian societies as a way of life. Some are moving to rural areas and establishing farm business operations of a variety of sizes; others are converting their urban area backyards into mini farms or specialty gardens. For those who may not have the space or access to land, they are participating in urban garden initiatives. Agriculture can be a very lucrative industry; it is an area that is needed by everyone. Many large companies and corporate farms are reaping the benefits of substantial profits and advantageous government policies. As a result of these entities' large contribution to the United States economy, it is completely understandable as to why government policies are set up in a way to give them an incentive to remain in the industry. Unfortunately, many smaller farms and operations are suffering. Minorities in general have farms that are on a smaller scale putting them at a disadvantage for funding opportunities.

Although the farming industry is still heavily dominated by white males, there is a growing population of people who do not fit this character. It is important to recognize this population and also hear their needs so that they too can thrive. For the purpose of this study, limited resource farmers, particularly, female African American farmers were interviewed to understand their business strategies, experiences and struggles. Because of the small number of this particular group, limited studies had been conducted explicitly about them. Female African American farmers not only face potential

difficulties in society because of their gender, but also may experience complications as a result of their race. In addition, many women in this category may not fit the traditional criteria of a farmer causing them to be unaccounted for. African American female farmers are more involved in alternative and sustainable agricultural practices like organic or naturally grown methods. For some this may be because of the difficulties they have experienced entering the conventional farming industry. These difficulties can be attributed to historical and structural racism in farm organizations and federal and state laws. According to the 2007 Census of Agriculture, there were over 3.3 million farm operators. Over 1 million or 30.2% were females; of the 1 million female operators 9,148 were documented as African American females making them only .247% of the total farm operators and .91% of the female farm population (2007 Census of Agriculture Women Farmers).

Some barriers that have hindered many African American females farmers from becoming successful include, access to credit and land, marketing, education of the different types of credit programs, loan qualifications, lack of information regarding what programs may be available, access to FSA service centers, and distrust of government officials. Also because many of them have small scale farm operations they may not be recognized as a farm business operation. Studies like the ones conducted by Cavelluzzo, Cavelluzzo, and Wolken (2002) and Chomsisengphet and Pennington-Cross (2006) have also shown that African Americans in general are offered extremely high interest rates, and also have the highest number of denials.

Many of these women despite their small numbers contribute a great deal to the communities that they are a part of in a number of sustainable ways. Some areas of

sustainable agriculture practiced by African American women include smaller scaled organic or naturally grown vegetable gardens, urban or Community Gardens, aquaponics, herb gardens, and bee keeping. In addition they are heavily involved in farmers markets which provide cost efficient fresh foods to the community. Farmers markets also serve financially unstable communities by accepting assistance methods like SNAP (Food Stamp system) and WIC. By their involvement in farmers' markets and selling locally, they help to keep income within the community, provide fresh local foods in areas that could potentially be affected by food deserts, and assist in the expansion of healthy food options. Many also share their knowledge of farming, gardening, healthy food alternatives, through local workshops and classes for the community. This knowledge sharing exposes community residents to alternative food options and also income-generating practices.

Insight gained from the case study, provided a more micro perception of the female African American farmer community. Some of the women interviewed had similar experiences from different government agencies and the agricultural community. Although each person's story varied, all of the women stated that there was not enough support for their particular minority group, and felt overlooked in many cases. The case study provided information on what areas to focus on in the econometric analysis.

Due to the small number of female African American farmers within the FSA dataset, for the regression analysis minorities and women were considered instead of isolating female African American farmers. A descriptive statistic looking at major loan factors was analyzed, and within this analysis, female African American farmers were explicitly compared to other minority female farmers, white female farmers, African

American male farmers, white male farmers and the whole farming population. This analysis found that female African American farmers are on average charged higher interest rates, have lower loan maturity terms, they are also granted larger loan amounts, and make slightly more payments per year than all the other racial and gender groups. These results are quite interesting, because although it shows that these women were granted loans, it seems as though they are being set up for failure. Although they are granted larger loan amounts, their interest rates are higher and their time allowance to pay is lower, meaning they will be pressed to pay off a large loan in a short period of time. This packaging system is similar to that of subprime lender that loans borrowers amounts that the borrower cannot handle at extremely high interest rates, causing the borrower to default on their loan.

These findings were also consistent with the FSA regression analysis conducted with the seemingly unrelated regression model. Under this model three loan packaging situations were analyzed and it was concluded that minorities and women are still seemingly treated underhandedly unfairly. Although they are granted loans, they may experience higher interest rates, shorter maturity terms, and in the case of women, lower granted loan amounts. The female variable was insignificant in the loan amount model results. On the front end, it does not seem like discrimination or unfair practices persist, but once the loan system was dissected, it was very clear that unfair practices still exist within the FSA. This study counters the 2004 Love vs. Johanns verdict that dismissed the female farmer's claim of discrimination from the USDA lending practices. It also shows that although the USDA settled with African American farmers and also other

minority groups in addition to being under much scrutiny, unfair practices are still present.

Like studies completed in the past, it is still difficult to explicitly show discriminatory practices within the FSA or USDA, but this study was able to show that there are discrepancies amongst certain racial and gender groups. Although it is impossible to eradicate discrimination, it can possibly be mitigated or controlled, by organizations like the FSA and USDA becoming more accountable for the actions of its employees and offices. In numerous testimonials and even within the case study conducted for this study, borrowers expressed the disorganization of the FSA offices and the purposeful actions of discouragement from employees towards minorities. It is important for these offices to become a more diverse environment, so that possible favoritisms towards a certain group can be minimized. Ultimately it is clear that the farming industry lacks resources and opportunities for smaller minority farmers. Although there are some resources available, it may not be as easily accessible or user friendly to the people it was meant to help or assist.

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APPENDICES

A. CASE STUDY INTERVIEW QUESTIONS

Interview Guide Questions for African American Female Farmers

Title of Study: Farm Business Challenges and Survival of Socially Disadvantaged Farmers: The Case of Georgia's African American Female Farmers

Basic Information

1. Primary Product/Service
2. Secondary Product(s)/Service(s)
3. Respondent's position in the farm business, age, and highest level of formal education.
4. Farm size and tenure condition (how many acres are owned, leased from other land owners, rented out to other farms or used free-of-charge).
5. Farm business structure (single proprietorship, partnership, corporation, etc.)

Background

1. We would like to know about the history of your farm business. Can you please tell us how you got into this line of business? How many years have you been farming?
2. Is this the initial size of your far? Has it expanded or reduced?
3. How would you classify your farming system right now (conventional, transitioning to organic or organic farm operations)? Is your current mode of operations the same as the one you started out with originally? What motivated any shifts in the farming mode or system?
4. Do you farm full-time? Or do you have any off-farm employment or investments? If so, how much time do you devote to your farm operations vis-à-vis the time you devote to off-farm investment/employment activities? How

much of your annual total income is derived from these (farm and off-farm) sources?

Production Decisions

1. Regarding the (commodity we are interested in), how many acres of your farm are allocated to it? Are there any variations in farming systems (organic and conventional) applied to this commodity?
2. Have you been producing this commodity since you started your farming business? Do you produce this commodity each production season or year?
3. What FINAL products (unprocessed, processed prior to sale (value-added), sold to processors for processing, used as seed or propagation stock, or used on-farm for seed or feeds) related to this commodity does your farm produce? What are the proportions of each final product form to the total sales of your farm?

Labor Input Management

1. In relation to farm work related to this commodity alone, how many members in your family are available to help you with work in the farm? How many actually work in the farm? What responsibilities do they have? How much time do they spend working in the farm? Do any of them have any off-farm employment?
2. Considering that you and (some of) your family members are working in the farm, do you still need to hire non-family workers in a typical production season or year? How many are hired full-time (and part-time) year-round and full-time (and part-time) seasonally?
3. Have you ever experienced any difficulty in finding workers to hire for work in your farm? Have there been workers available to hire all the time in your county or surrounding areas?
4. Have you ever experienced any problems with the workers you hire for work in your farm, such as skill requirements, competence and other issues?

Financial Issues

1. Have you experience any economic hardship like foreclosure that forced you to give up your land?
2. Have you ever applied for a farm loan? If so, what was your experience like?
3. Were you treated with respect or did you experience some form of discrimination?
4. Were you granted the loan for the amount that you asked for with a fair rate?

Marketing Issues

1. How do you market yourself and your products to be competitive in the rapidly changing market?
2. What challenges have you experienced when marketing your products?
3. What marketing strategies have you found to be most successful?
4. What do you think has been the toughest part/aspect of being a farmer in this modern society?
5. What do you feel the farming community is lacking regarding support?

Gender and Race Issues

1. As a woman, what challenges have you experienced in the farming industry?
2. Do you feel that it is harder for a woman to get into the farming industry in comparison to a man? Please explain your answer
3. Have you experienced any form of sexism due to your gender, in the farming and agricultural industry?
4. What do you feel that the female farming industry is lacking, regarding support?

B. CASE STUDY INTERVIEWS

CASE WRITE UP

FARMER A

(CASE No. 1)

I. BASIC INFORMATION

Farmer A is a 55-year-old African American female farmer. She, along with her 75-year-old Caucasian husband, is the owner of Farmer A Farms. They primarily grow vegetables, specializing in exotic or rare vegetables, such as Purple Cauliflower and Romanesco Broccoli. Since they began, the farm has been Certified Naturally Grown. They have never used chemicals or fertilizers on the land because she knows the negative effect they have on the environment. The main reason they chose their growing method was because the landowner specified in the lease that they were to keep the land organic. Although they cannot officially claim that their farm is USDA Certified Organic, they have strived to remain Certified Naturally Grown. In addition to their vegetables, they also raise chickens for eggs as a secondary product. Farmer A reached the eighth grade, but then dropped out of school and became pregnant at a young age. She has since obtained her GED.

Farmer A is the owner and operator of Farmer A Farms. She and her husband lease 35 acres of an 85 acre farm. Of the 35 acres, they only farm on 4 acres of the land. They also have a 72x30 high tunnel, which they keep filled to its maximum. They are in the process of constructing two other high tunnels. Their farm business is a single

proprietorship. Their farm operation was under an LLC for a year but they later realized that it was not the best option for their business.

II. BACKGROUND

Farmer A's story of how Farmer A Farms came to be began with tragedy. In 2008, Farmer A and her husband were victims of the flooding that occurred in Midwest where she is originally from. As a result of this flood, the couple lost everything they owned. That winter, after much prayer and consideration, Farmer A and her husband decided to move to Georgia to become farmers. Both she and her husband could no longer stand the cold weather due to various health problems. Farmer A had never been to Georgia, but she knew that was where she wanted to be. The couple sat down and wrote their vision and mapped out their plan. In their vision, they said that they wanted 35-40 acres of land with a pond. After defining their vision, Farmer A was on the Internet researching how to make their vision a reality. She said that something compelled her to type "Georgia Organics". When she did this, the Georgia Organics website appeared and had an advertisement that read "Now leasing 35-40 acres with a 9 ½ acre pond. This land must be kept organic". She called the land owners and told them that she was interested in leasing the property. Within a month since she began researching, Farmer A and her husband came down to see the property. On August 19, 2009, they moved down to Georgia with $48 worth of organic seeds, and a little over $1000 cash in their pockets. Their farm has been in operation for 5 years. Her husband has farmed on and off his whole life, and the couple still owns farm land in Iowa. She, on the other hand, had no farming background and confessed that "[she was] a beginning farmer," and stated, "I am learning. Being an African American woman, I have found it to be a tad bit

challenging…" Her husband's background knowledge in areas like milking cows, goats, and tending soil, has been very beneficial. Whatever information she is unable to get from her husband, she calls her USDA officer; she stated that she has a strong relationship with the NRCS in a Georgia County. Still talking about the NRCS, she expresses, "They have been astronomical, helping us with so many things, they have given us so many grants to help us get started, I just applaud them. Between Georgia Organics, and the NRCS Office, they have really helped us stay afloat". She also said that in the years that she has been in business, her operation has grown. Farmer A explained that they just recently received a grant for a fencing project and the landowner has granted them more acres to use for the fence. They are also planning to bring goats that will be raised for their meat to their farm.

Farmer A Farms is the couple's full time employment. Because her husband is now retired, the only other income that they are receiving is from his railroad retirement pension. Farmer A expresses that"… it is very challenging at times, especially when we have crop failure, because as I said, we depend on these crops to pay things like our light bill, and our phone bill, because we do live off the land. What we plant is what we eat. We survive off of our vegetables as well".

Currently, they do not have any off farm employment or investments, but Farmer A is heavily involved in volunteering. She does much work with the community's youth. She was also Chairwoman of the National Women in Agriculture Organization, but has recently resigned from her position. She has since started her own project, which is an organization that works with young women between the ages of 8 and 17. Through this organization, she teaches skills like farming, canning, cooking, and promotes the idea of

self-sustainability with the goal to empower these young girls to be great women for the next generation. Although she does to a great deal for her community, her number one priority is her farm, which she says she devotes a majority of her time to. Thirty percent of her annual income comes from the farm, while the rest comes from her husband's railroad retirement.

III. PRODUCT DECISION

Currently, of the 35 acres of land that they have, 7 acres are allocated for production. Since she started, they have been producing the same types of commodities. They grow different vegetables depending on the season, but they grow all year round. All their vegetables are sold raw and fresh, harvested straight from their farm. They travel to several farmers markets from the ones in their community to ones located in or around Atlanta. They do not sell any value added or processed products and all of their sales are done directly with the customer. They do not work with brokers and they get their seeds and supplies from local shops in their community. Farmer A says, "We harvest to sell, if there is an order we will go out and we will pick that order and sell it". Farmer A explained that the agricultural market can be extremely volatile. At one point, there could be a high demand for products, and the next instant, that demand drops. Also, during the summer, they sell at the farmers markets that serve WIC recipients. One day, they may serve up to a 1000 people, but the next day it could be less than 15 people.

IV. LABOR INPUT MANAGEMENT

The couple does not have any family members that help with the upkeep of the farm. Most of the work is divided between the couple. They have a good relationship

with the members of their church and when they have large orders to fill, many church members volunteer their time to help complete the job. In addition to the help they receive from their church, they previously had a young man living with them that provided labor; however, he has since gone to college. When he is home, he helps out on the farm, and the couple feed him and houses him free of charge. This young man is the only somewhat consistent outside labor that the couple has. If more help is needed, they rely on calling their friends and church members to work for food. However, this outside help sometimes is not enough. Farmer A stated that due to the amount of work on the farm, they would hire someone to work on the farm on a consistent basis if it were financially feasible; however, this is not the case.

V. FINANCIAL ISSUES

They have not experienced any economic hardship like foreclosure that has caused them to lose their land. They have, however, applied for a farm loan and suffered a bad experience. Farmer A recalls being discouraged after applying for a microloan. When they applied, they were told that they had to be turned down by their financial institution in order to qualify. However, although they had met this first requirement, they were then told that their credit score was not high enough to qualify for the microloan. Farmer A explained that she felt misled throughout the process but not discriminated against since the person who processed their loan was an African American woman. She stated she felt the agent was just doing her job... She was under the impression that if she did not qualify for these micro loans and she was a beginning small farmer, the agency would still work with her and help her get some of the equipment that she needed. The Farmer As were hoping the microloan would help them purchase a new tractor since their

current one was old and costly. Although Farmer A did not feel specifically discriminated against, she did state that she felt that the whole application process was unfair. She said, "They dug deeper than the banks did just to get this microloan that we didn't qualify for. So it was so discouraging and unfair. It was very time consuming, very difficult to be turned down, when all we had to do was literally go to the bank for about 15 to 20 minutes and go through this process." Throughout the application process, the Farmer As had to make several trips to Commerce, Georgia and supply a large amount of personal information, only in the end to be turned down.

VI. MARKETING ISSUES

Farmer A acknowledged main source of marketing is word of mouth. People have contacted her as a result of word of mouth interactions and asked her to do different markets in different locations. The couple participates in a large number of corporate markets, and many other markets have been trying to get them to participate. However, because their help is limited, they are unable to produce enough products to satisfy all the markets. They also have a website fully equipped with photographs and descriptions of their products allowing customers to easily choose the products they wish to order. Once the order is processed, the Farmer As go to the farm and harvest the crop specifically for the customer.

The main challenges Farmer A has faced are not having enough money to keep things running, and using all natural practices. It has been hard for her to deal with pest control without the use of chemicals, but because of the agreement that she has with the landowner, it is necessary for her to maintain natural and organic practices. A farmer's life is not easy; she expressed that "the toughest part is working from sun up to sun down.

There is always something that needs to be done when you are a farmer, and it is not as if I can have a set schedule, I can't say I am going to work from 8-5, because it doesn't work like that. One of the horses might get out of the pasture, we might have to prepare for a market till 9 or 10 at night packing or getting things harvested, to take to the market, the long hours".

According to Farmer A, the farming community lacks support, especially with beginning farmers. There are not many places beginning farmers can go to for advice or information, she stated, "… it truly is lacking places where we can go, it would be nice if we could go someplace and we could rent farm equipment at a cheap or moderate price until we can afford to get our own. Not having this equipment, it stagnates (sic) you because you can't grow".

VII. GENDER AND RACE

As a woman, the most challenging thing that Farmer A has experienced is the fact that sometimes, she is not taken seriously. She explains, "People look at my size and they look at me and they say 'you are a farmer?' and I say 'Yea I am a farmer and I am pretty darn proud of it!'". However, Farmer A does not feel that being a woman has significantly hindered her ability to enter the agricultural industry. She has experienced issues with being accepted as an African American woman by some of the organizations, and ethnic groups, but she has not let these issues hinder her. Initially, when she stared her farming business, she experienced sexism in a particular organization. However, Farmer A quickly made it known that she would not tolerate it. She now has a good relationship with this particular organization, which has subsequently provided her with a good amount of support. Because of this, she did not feel comfortable discussing in detail

these negative experiences on record. She did state, however, that "at the beginning, it was like pulling teeth, and it was very humiliating". Farmer A also attributes her negative experience with her race and interracial marriage. Fortunately, the main person that caused her so much grief in the past no longer works in that particular office. Although the office is not where it should be regarding equality and fairness, it has shown much improvement. Generally, Farmer A feels that female farmers lack strong support groups.

CASE WRITE UP

FARMER B

(Case No. 2)

I. BASIC INFORMATION

Farmer B is a 72-year-old beekeeper in Georgia. Her primary product is honey made by her bees. In addition to the honey, she also makes a skin cream from the beeswax. Farmer B has a master's degree in community education. She is owns her farm business as well as 19 acres of land. This land is leased out to hunters during deer hunting season. She currently operates her business under an LLC.

II. BACKGROUND

Farmer B was born in New York where she spent half of her childhood. As a child, she was diagnosed with asthma. This left her family with two options. One option was to take inoculations once a week for two years or, she and her family could move to an environment with a better climate. Her mother decided to move them to Georgia where she was originally from. The move to Georgia was just for a temporary period of her life, and Farmer B eventually moved back up north. The land Farmer B now owns has

been in her family since the days of slavery. Farmer B shared how the land came into her family. Two African brothers were captured and brought to Virginia where they were sold to two Caucasian brothers who had land in a Georgia County. Once they were brought to the Georgia County, they were freed and paid wages for their labor. By the time the two white brothers had died, the two African brothers had bought over 500 acres of property. Farmer B owns the last remaining acres of the original property. Farmer B involvement with bees occurred when she and five other African American women formed an investment club. The club decided to become involved in aquaponics. Through aquaponics, Farmer B attended a number of workshops and conferences. It was during a conference in Milwaukee, Wisconsin that she had her first introduction to bees. At this time she was living in Hillside, New Jersey. She encountered bees at a volunteer event with the North East Orange Organic Organization in New Jersey. It was here she met Mr. Farmer F, who was a bee keeper and master gardener. She expressed her interest in bee keeping and he suggested that she sign up for a class at Rutgers University to learn the trade. Equipped with enough knowledge, she began to raise bees and start her honey operation.

Farmer B has been involved with bees for 6 years. Throughout these six years, her business has expanded. Her first hive was in the garage of her New Jersey home, which she hid from neighbors. Since she began, Farmer B has used all natural methods. This means that she does not use any chemicals, treatments, or supplements in her hives. Since she retired, she has taken on beekeeping fulltime, and has no off farm employments or investments.

III. PRODUCT MANAGEMENT

The 19 acres of land that Farmer B owns is not cultivated, so she does not keep her bees on her land. The bees are housed on her relative's and her neighbor's lands. Since she began beekeeping, Farmer B has produced both honey and the body creams. On occasion, she makes beeswax candles for the holidays. These products are made each season. All profits go directly to her. With these profits, she invests back into the business.

IV. LABOR INPUT MANAGEMENT

At first, Farmer B envisioned cultivating about 10 to 12 acres of her land until she realized how large of an area that was. She only has her grandson to help her with her business. He moved down from the city in order to help with beekeeping. Beekeeping came naturally to him. His tasks include assisting with the harvesting and with the production of the skin cream, and accompanying his grandmother to the market to sell their products. Although beekeeping is not as intense as other fields since beekeeping is cyclical and she must wait for them to return, she is still in need of help. While her grandson only does off farm work part time, he is looking for full time employment. She stated, " indeed I do [need help], I am in the process of developing a business plan, because once I get a website and interactive in Facebook, there is no telling what could happen. I would have to say (I have) 99% repeat customers, no joke, and people are calling me from all over and they have seen the results from their relatives." However, at this time, she and her grandson are the only employees. Once she has widened her marketing strategies, she will need more labor to meet demands.

V. FINANCIAL ISSUES

Farmer B has not experienced any economic hardships that caused her to lose her land nor has she had to apply for a farm loan.

VI. MARKETING ISSUES

To market her business, Farmer B uses word of mouth methods while also participating in local farmers markets, and other events. When it comes to challenges that she has experienced while marketing her product, Farmer B states, “I don’t know how to categorize challenges, since it is all about just approaching people and trying to get them to experience my cream and have a little fun. So I don’t know about challenges.” For her, word of mouth has been the most successful form for marketing, but she intends to create a website and Facebook page. Farmer B feels that the lack of resources for expansion is the toughest part of being a farmer. She believes the farming community lacks support in the form of farmer friendly subsidies. She explains, “People get paid not to grow these things; they are making huge amounts of money. But they won’t give loans to farmers, particularly black farmers. ”

VII. GENDER AND RACE ISSUES

As a woman, the challenges Farmer B faces are that of the physical labor needed in the farming industry. She explained that her own strength has decreased within the past 5 years, and she cannot afford the tools to help her. Because of this, Farmer B feels that it is harder for a woman to get into the farming industry than a man. For example, she recounts some female African American farmers who have a large wealth of agricultural skill and knowledge. However, their male counterparts treat them “horrifically”. She

explains, “They talked to them (female African American farmers) as though they didn’t know what they are talking about and they tend to be dismissive, and they have to show their power.” In regards to personal experiences with racism and sexism, Farmer B states, “I bust through all that crap” meaning she doesn’t allow that to happen to her. She ends the interview with the general statement, “… no, I don’t have any problems. I am friends with everybody.”

CASE WRITE UP

FARMER C

(Case No. 3)

I. BASIC INFORMATION

Farmer C is a 71-year-old vegetable farmer. She produces products like tomatoes, cucumbers, peppers, corn, squash, sweet peppers, and her favorite, hot peppers. She wanted to grow herbs, but due to specifications by the landowner and program she participates in, she cannot. Farmer C obtained a bachelor’s degree in psychology with a minor in social studies, and is 15 credits shy of receiving a master’s degree. She holds 4 New Jersey certificates, and is qualified to teach social studies, psychology, special education, and Pre K through 3rd grade. After moving to Georgia, she decided to pursue a master’s degree in an agricultural field. She is the owner, producer, harvester, and seller of her farm business. She obtained a plot through a project under her counties Land Trust. The county Land Trust leases land from local owners and makes it available for underserved farmers to grow products. This land is free for Farmer C since the county

Land Trust pays the owner of the land a fee. She operates her business as a single proprietor.

II. BACKGROUND

As a child in Georgia, Farmer C developed a love for gardening, which she was unable to pursue after moving to New Jersey or the "concrete jungle" as she called it. She eventually moved to an apartment with a back yard where she started to grow vegetables, herbs, and peppers. Farmer C worked as a special education teacher in the department of corrections, working with juveniles. She made a proposal to enter the facility in an annual gardening contest. With the support of the superintendent, she and the children in the juvenile correction facility were able to transform the property and backyard. She made sure the children learned and were involved in the gardening process. Many kids enjoyed it and were positively affected by the experience. Her love for gardening grew further after her mother died since she used it as a coping mechanism. Farmer C returned to Georgia to visit a friend. While in Georgia, she felt at peace with her blood pressure decreasing. When she returned to New Jersey, the peace she felt in Georgia quickly disappeared. She knew that she needed to come back to Georgia so in September of 2012, she packed up her belongings and moved to Georgia in December. Through the advice of her friend, Farmer C became involved with the Athens Land Trust. She has been farming on this level for a year. Although she fed herself and other people in her complex in New Jersey for 5 years, she did not make much profit. In Georgia, Farmer C has grown from her small back yard garden to two 100ft plots, which she finds a bit intimidating. She uses organic methods for growing. In New Jersey, she used fertilizers and chemicals, but on her plots in Georgia she has kept them chemical free.

She has found natural alternatives for repellants. At this time, her farming is a part time venture, but she does not have any off farm employments or investments.

III. PRODUCT DECISIONS

Farmer C has two 100ft plots that are allocated to her by the program. Both are used to grow her produce. All of her produce is treated and grown the same way. She has been growing the same things since she started, but has also introduced corn and zucchini. She also pickles her peppers and makes chow chow, which is a pickled relish that combines a variety of vegetables. At this level, she does not sell these products since she does not have the right equipment for jarring and pasteurizing the jars. She sells her products directly to the customers, and all profits from what she sells go directly to her.

IV. LABOR MANAGEMENT

She does not have any family helping her on her plot. She feels that if she expanded her business she would need outside help. However, Farmer C does not see herself doing that because she would like to keep her operation manageable. She has had bad experiences with outside labor since some people who have claimed to help end backing out and leaving her to do the work alone.

V. FINANCIAL ISSUES

She has never experienced financial hardship that has caused her to lose her land, and she has never applied for a farm loan. She has attended a number of workshops about government funding opportunities and has considering applying for a loan or grant, but has not done so as of the interview. She mentions that her biggest challenge is not the financial aspect of farming but rather, getting to her land. Farmer C does not have a car,

and access to public transportation is not readily available in the area that she lives. Her plots are not within walking distance from her home so she has to rely on rides from others, or walk long distances to access available public transportation.

VI. MARKETING ISSUES

Farmer C uses farmers markets to promote her business. She states that" there is always an interest in fresh produce, so if it is something someone really wants, sometimes you might be competitive with the prices." Being at the farmers market exposes people to her product and when they need what she has, they come to her. At this point, she has not experienced any difficulties marketing her products. She has found that word of mouth is the most effective form of marketing, but recognizes the power of social media outlets like Facebook to get her name out on a larger scale Farmer C finds that the program she is involved in does not cater to the people that they are serving, although it is supposedly geared towards underserved farmers,. The program limits the days and times people in the program are allowed to tend to their plots, which oftentimes come in conflict with other time constraints such as jobs, other obligations, or inability to getting to the site.

VII. GENDER AND RACE ISSUES

Farmer C personally has not experienced any major challenges in the farming industry, especially because she is still new to the industry. Physically, farming is tolling and she hopes that she can manage to continue. She explains," I do find that sometimes if you do not keep on top of what you have to do, in terms of your weeds etc., it can be overwhelming, and tiring, and you feel a little pain". She believes that it is harder for a woman to get in the farming industry compared to a man. She states, "Women face different challenges than men, when it comes to the business, they (men) are more

accepted, and this is a field that has been predominantly male farmers. I can't even remember a farm growing up, that was run by a woman. It was always a male dominated industry." Although women farmers seek help, they are often completely ignored, saying, "It was just at the workshops that they (the women) were asking questions, and information that would have been given, would help clarify (things). But I felt that they (the male organizers) just didn't want to be bothered". When the women asked questions, the male organizers acted as though the questions were a burden even though these questions were helpful and clarified things for the participants. Within her program, Farmer C recalled a time when she was singled out by the assistant program director and was reprimanded for the way she disposed of her weeds. Farmer C was the only given this warning even though others in the program disposed of their weeds the same way. She has also had questions about certain parameters and rules of the program, all of which have been ignored. Farmer C did not want to attribute these experiences to sexism or racism, because she said that she did not know if that was the reason, or if it was an isolated issue. A problem that she has noticed within the agricultural industry is the disconnection with the way information is disseminated. However, she does feel that there is support for women in the farming industry stating, "The resources are there, as long as you meet the requirements and qualifications."

CASE WRITE UP

FARMER D

(Case No. 4)

I. BASIC INFORMATION

Farmer D is a 28-year-old farmer. Her main product is tilapia, ornamental coy, fresh herbs and vegetables. In addition to the fish, herbs, and vegetables, she also raises rabbits, ducks, chickens, quails, and sells their eggs. She received a bachelor's degree in interdisciplinary social science. Farmer D is the owner and states that "[she] kind of run[s] everything for the most part". Farmer D's farm is a little less than an acre referring to it as a "small urban farm". She is the owner of the land and her farm business is structured as an LLC.

II. BACKGROUND

Growing up, Farmer D, a native of Kansas, was exposed to an agricultural and farming environment. Her family raised goats, pigs and rabbits. From an early age, she was able to identify the importance of agriculture, saying, "I enjoyed agriculture, I grew up in it". After she graduated from college in 2008, she realized that she wanted to get back into agriculture. It was on a family vacation to The Epcot Center, in Orlando, Florida, that really inspired her to pursue farming. It was there that she saw the hydroponics system, and learned about aquaponics. After their trip, her father did research and started an aquaponics system. Farmer D decided this was something she wanted to pursue on her own. She explained, "I wanted to get into it and so that is why I moved out here to Athens, to pursue that, try to grow slowly and see what works. So that is how it happened". The land that she has now was given to her by her father. She has

been farming since childhood where she gardened and took care of the animals. Overtime, her farm operation has grown. Although her farm is not certified organic, she uses organic practices and has done so since she started her business. Farming is her primary job, but she also does a few side jobs. She said, “I don’t make enough to solely do that, but to me farming is a full time job.” She devotes about 8 hrs a day to her farm business, and around 4-5 hours on off farm operations. Although she devotes much time and energy to her farm business, about 70% of her total annual income still comes from off farm sources. She explains, “I just established my LLC and all that last May, so I am still trying to grow, pertaining to the aquaponics, and the fish. It takes the fish about 8 months to grow, I can see it definitely becoming more, but as of right now, this is where it is.”

III. PRODUCT DECISION

A quarter of her land is dedicated to her products. Since she has been in Georgia, she has been producing, meat, chicken, quail and tilapia. In Kansas, her family raised goats and pigs. On her family farm, it was solely livestock. However, in 2009, her family got rid of their family farm. Farmer D does not produce value added products due to the lack of having an appropriate commercial facility. Furthermore, the state of Georgia specifies how fish can be killed. Fish must be killed cold; meaning being placed on ice kills them. Once a customer purchases from her, she will then proceed to harvest the product or kill the fish. After expenses, she takes home about 70% as profit.

IV. LABOR INPUT MANAGEMENT

In addition to herself, she has 3 family members that help her with farm duties. Every day, her aunt goes to the farm and makes sure that the fish are safe and the pumps

are running. She also helps separate chickens, pick up eggs and oversees the operations. If the issue is too technical, her aunt will call her. For the most part, her family members spend a few hours on the farm, but two members have off farm employment. Because her operation is still small scale, there really is no need to hire non family members to help on the farm.

V. FINANCIAL ISSUES

Although she has never experienced economic hardship like foreclosure, she has had bad experiences applying for farm loans and grants. When she applied for a farm loan, she was denied. Farmer D believes that she was discriminated against. She explains that when she was in Kansas, for the most part, she was treated with respect. Since moving to Georgia, she has experienced radically different treatment. She states, "A lot of the information is not disclosed to you. If you don't know about it, then you can't ask anything." Because of her work with the USDA and the NRCS, Farmer D has new knowledge about the way the system works stating, "I have learned a lot more so that I can prepare myself, for the next time I apply I will be ready." For NRCS loans she explains that farmers have to show $1000 worth of product. According to Farmer D, many African American farmers do not keep records of what they sell, so even though they are producers, they do not have written proof. This is a major obstacle because the applicant has to wait until they do have these records in order to reapply. She states that the loans are very competitive. If a person is granted these loans, they are only provided with a certain percentage and the applicant is responsible for the rest. (Not sure what this means)

VI. MARKETING ISSUES

Farmer D uses direct marketing to market herself stating “A lot of people are unaware of aquaponics, and I am meeting with people letting them know what it is.” She has business cards that she passes out and is currently developing a web site. She also attends numerous events, which she uses to network with people. Direct marketing and trade shows have been the most successful ways for her to market her business. Ultimately, she has not experienced too many challenges other than the occasional uneasiness when people hear about her operation, referring to it as “weird” at times. She believes that there are two major challenges with being a farmer. First, she says, “It is tough to get land, without land, it is tough to get the capital to get started”. She then further explains by saying, “Our people might not necessarily have land or if they have land, they don’t want to keep it. Many people do not know the importance of land. You have to go through a million hoops to acquire it.” Within the farming community, she feels that there is a lack of arenas to educate individuals. “There needs to be more education on how to be more ecofriendly, or using organic practices even if they are not certified organic”. Farmer D gave an example of how universities can also prove to be unhelpful. She recounted her experience with a female Caucasian professor and head of the aquaponics department at a Georgia University. Farmer D provided the professor with business cards to give out to people who wanted help setting up aquaponics operations. However, Farmer D found out that the specific professor was not doing this and furthermore, people in the community were complaining about professor’s lack of support. Farmer D also asked for a letter of support from the professor. She has yet to write this letter although seven months have passed since Farmer D first made the

request. Lastly, she asked the professor for advice on any available grants, scholarships and specific avenues to look at through a university. The professor, again, proved to be unhelpful telling Farmer D to search the yellow pages, and that she could not provide her with this information. This particular university is a historically Black university and also a Land Grant Institution. However, a representative from that institution is repeatedly failing the people of that community.

VII. GENDER AND RACE

Farmer D believes one challenge a female farmer may experience is the judgment of others who do not believe a woman can get the job done. For some women, simply going in to feed stores in some rural towns would elicit unequal treatment. For Farmer D, it was not too difficult getting into the industry because of her background and experience. However, she states that for those women who are mothers, it could be a bit more challenging. Farmer D herself has experienced sexism in the agricultural industry. She called her local office for information and received one answer, but when she had her father call, he received a completely different answer. She believes there are not many resources specifically for female farmers, especially female African American farmers stating, “I feel that there should be, [resources], because we are a minority, there are not a lot of (us), especially African American, I feel that there should definitely be allocated resources”. Moving to Georgia has been a culture shock for her since she was treated differently in the Midwest. She has found that her treatment was especially different in her particular county. She states, “It is a lot of racism down there” more so by the Caucasian individuals that work for the USDA and not the extension agents, but also in stores and among the general population. She described a project that she is currently

working which she tried to propose to certain county in Georgia. She proposed to set up an aquaponics operation at a service station in the city. Since she was told the city had the resources to complete such a project, she put a proposal together. However, she was not allowed to present her proposal. Farmer D felt her project would be beneficial for that particular community, since the area is a food desert and the county had resources. Unfortunately, the county did not want to even give Farmer D a chance to present proposal. As far as loans, Farmer D points out that for many government loans, applicants must have 150% worth of collateral, stating, “They put a lien on everything that you own, you know we are already struggling, we don’t have resources, and you want to put a lien on my home. So you are indebted to them forever”. The setup of these loans, she claims, discourages people from even applying for the loans. She believes that there needs to be other means of getting resources. Although these loans are for startup farmers, they are not catering to them. She states, “We don’t have the collateral. We would probably be better off getting a conventional loan if we had the resources.”

CASE WRITE UP

FARMER E

(Case No. 5)

I. BASIC INFORMATION

Farmer E is a South Georgian herb farmer. She primarily produces herbs and culinary herbs; however, she also deals with medicinal herbs and creates herb butters, vinegars, oils, and bentonite clay used for skincare. Although she did not obtain a

university degree, she attended a number of universities in the Unites States. Furthermore, she does not have a formal educational background in agriculture. Farmer E is the sole proprietor and owner of her farm business, but she leases a quarter of an acre from South Georgia. In addition to her commercial land she has a private home garden.

II. BACKGROUND

Born and raised in the west side of Chicago, she never thought that she would ever live in Georgia, let alone rural South Georgia. A few years ago, Farmer E suffered from major health problems. Her doctor advised her to undergo a hysterectomy. However, she opposed having the operation and instead decided to a take a more natural approach to recuperating. She eliminated processed foods, non-organic foods, and restaurant foods from her diet and began educating herself on the benefits and powers of consuming natural and organic product. With this knowledge, she started healing herself naturally without any pharmaceuticals. The next time she went to the doctor, the ailments that they had diagnosed were gone. As time passed, she expanded her knowledge of organic and natural products and started learning how to prepare a variety of vegetarian dishes. The early stages of her production of herbs, fruits and vegetables were inspired by her love for Pesto. Farmer E was tired of going to the local grocery store and paying large amounts of money for organic pesto. She decided to try and make it herself. Since she did not want to keep buying the basil for the pesto, she attempted to grow basil in her kitchen, which proved to be unsuccessful at the time.

Her move to Georgia was prompted by challenges that she began to face in Chicago. She had visited the South as a child, because of her father's background. Her father's grandparents grew many kinds of fruits and vegetables on 500 acres of land. She

attributes her success as a producer to her heritage. Prior to moving to Georgia, Farmer E knew that she wanted to grow. She found an opportunity in Georgia, and moved herself and her children to Hahira, Ga. In the beginning of her stay in Georgia, the place that she was renting became unlivable. Because of this, she and her family became homeless. Things turned around, however, and she was able to move into the place she is currently residing in in 2009, Farmer E was given a rosemary plant which she planted at her residence. This rosemary plant was the beginning of her occupation as a producer. Now, she has counted over 300 plants in her green house. Currently, Farmer E grows in her house as well as on the land that she is renting. She expressed, "It is very challenging because I am doing this by myself and I am learning through trial and error. I have only been doing this for about 3 to 4 years". Throughout this time, Farmer E has ensured she remain educated by attending a number of classes and workshops at a variety of universities and institutions. She now boasts that she has 3 or 4 different varieties of basils. She is working towards marketing her products, and communicating with local restaurants and grocery stores.

In the 3 to 4 years that Farmer E has been farming, her operation has expanded. Initially she was just growing around her house but has now extended to the acre of farm she rents. Her farm is chemical free using only organic methods of growing. She does not farm full-time, however, because she has two school-aged children. Farmer E also does not have any off farm investments. Her time working on the farm has decreased lately because her son has been sick and she has been in and out of the hospital with him. Even with that, however, she continues to invest as much time into the farm as possible while also teaching her children the benefits of each plant.

As far as the total annual income that she brings in from her farm, she is unable to accurately pinpoint a number. She is still growing and trying to get herself out there, so she provides customers with samples and sells locally when she can. However, she has not kept track of what she has earned. Additionally, she is trying to get a contract with the local Piggly Wiggly to sell her herbs there.

III. PRODUCT DECISION

Less than half of Farmer E's acre is dedicated to herbs. She uses natural methods for growing without the use of chemicals. She has produced herbs from the start and continues to produce them year round. In addition to its raw form, Farmer E also creates different products with her herbs; she dries them, makes clays, butters, vinegars, oils, and also grows peppers. Since she is still in the beginning stages, she is not profiting from her business.

IV. LABOR INPUT MANAGEMENT

Farmer E has the help of her two children on her farm. They harvest, weed, plant, and water. They do not spend a lot of time on the farm since her son is sick and experiences seizures and the Georgia weather can be very taxing. When asked if she needed additional non-family help to work on her farm, Farmer E stated, "Yes ma'am, yes ma'am. I do not have the resources to pay non family members but I have offered to give produce for their help, but it is difficult because people want to see something tangible, people don't want to work for nothing. And food I guess just ain't getting it because, I guess they don't share my passion, they don't see the dream, they don't see the true benefits of obtaining your own food and growing it."

V. FINANCIAL ISSUES

Regarding Farmer E's land, she has not experienced any economic hardship like foreclosure which caused her to lose land. She has also never applied for a farm loan. She considered the idea, wanting a loan, however, she did not like the idea of having to pay it back, and did not want to default.

VI. MARKETING ISSUES

Farmer E explained that she has experienced difficulties marketing her farm business. She reiterates that she is still in the beginning stages and is still learning. She has sold at a few markets, but her main issue is that she does not know what to price her products without shortchanging herself. She confesses, "I am not market savvy and I am not familiar with the USDA website, which has the prices there daily, so I need to get myself more familiarized with the marketing and the business aspects." Farmer E also says that she has experienced negative feedback while trying to market herself, which she attributes to people's lack of knowledge of the benefits of the products that she sells. To promote her farm business, she has used the word of mouth method and has found that it has been the most effective method. She expressed that the difficult part about being a farmer is not having the financial backing to keep her business running, not having enough labor, and lastly, not having the right equipment. Farmer E refers to the "forgotten farmer" who she believes can be found all over the United States. She expresses, "…there are a lot of farmers like myself in different states as well as this one that we don't know about. The forgotten farmer is not helped, the forgotten farmer doesn't have credit to do this, the forgotten farmer doesn't have credit to do this, the

forgotten farmer doesn't have the background to do this, the forgotten farmer doesn't have the land, doesn't have this to get a loan".

VII. GENDER AND RACE ISSUES

Farmer E states that as a woman, the challenges she has faced in the farming industry are not being able to financially support herself and not being able to compete with the larger scale farmers. Furthermore, she feels that it is harder for a woman to get into the farming industry than it is for a man. Farmer E believes that in the farming industry, women are not respected because they do not fit the traditional mold of American farmer, which is usually a man. This has caused her to shy away from fully seeking help. When she has gone to the extension centers and called colleges, she has experiences being overlooked. Funding and grants that could have aided someone like her are allocated to those who may not have any use for the assistance. She states, " Oh not to be prejudice or say anything on that nature, but I know for a fact that there are farmers that are very well off, and they get these grants for their wives that are not even interested in farming and don't even have the desire, but they are able to get the grants, but because I am black, and because I am underdeveloped, I am not financially stable I may not be qualified for a grant, or I may not be able to get a grant or I may not even have the ability to write up the appropriate grant successfully and obtain that grant because I don't have that knowledge, or because I don't have that background, or because I don't have somebody behind me per se to pave the way." Or just use this instead: wives of already wealthy farmers or friends to the system. She explains that these funds are misallocated. In order to have a chance at getting assistance, one must know someone in a position of power. She expresses her frustration stating, "I should have every equal

opportunity as a male farmer, a white male farmer, a silver male farmer, it should not matter, just because I am black, and I am a woman, it should not matter. " Farmer E also states that she has experienced sexism in the industry. For example, when she goes into stores to buy supplies, people look at her "crazy" especially when she tells them that she is a farmer. She recalled an instance, "One store I went into, where they give you a line of credit as a farmer, when I came, it was closed; they are not doing it right now." The store did not want to work with her. Farmer E suspected it was because of her sex or possibly even her race. Farmer E ended the interview stating, "I can grow, grow, grow, grow, grow, but it would be a waste of my time, effort, energy, and money, if I don't have anyone to sell it to."

CASE WRITE UP

FARMER F

(Case No. 6)

I. BASIC INFORMATION

Farmer F is a 38-year-old female African American farmer. She is currently operating three different farm setups in Georgia. The main products being produced at Farm A are wintergreens and vegetables. At this location, vegetables are provided to local restaurants, grocery stores, and community-supported agriculture groups also known as CSAs. CSA is a membership service where customers pay for and are provided with seasonal produce. In fact, as the interview was being conducted, Farmer F was preparing a large order of kale that was to be taken and sold to a local grocery store in the area. Her secondary service is providing education to the community. Under her farm

operation, Farmer F and her husband, along with other employees, run a young urban farmer program where they work with boys and girls clubs and high school students. They also work with other age groups to teach participants agricultural skills and nutrition. Farmer F has a Master's Degree in Education, which has helped her to mix her love of teaching with her passion for agriculture.

Farmer F is the director of the Farm A Garden Program. She also has a personal farm, which she owns with her husband. On her personal farm, she specializes in bee-keeping and organic vegetable production. The Farm A location sits on a quarter of an acre. Farmer F's personal farm consists of 20 acres. Another community garden (Farm B) is being set up near Farm A, which sits on an acre and a half. Farm A is leased from the her local county School Board. Farmer F owns the Rue Street location. However, it is not fully paid off. Farm A is set up as a nonprofit organization. Farm B is set up to her local county Land Trust Farms, and Farmer F's personal farm is registered as a farm number, although they are a limited liability corporation.

II. BACKGROUND

Growing up in New Jersey, Farmer F had always been involved with some type of farming or gardening activity. When she was very young, she lived with what she described as a surrogate grandmother. She and her grandmother survived by utilizing their 2-acre farm where they grew what they ate. They gardened in the back yard and canned different fruits and vegetables. Her mother was also involved in gardening and farming and would take her and her siblings to pick strawberries and blueberries to make jam. Her mother grew tomatoes and would use them to make her own tomato sauce. They also grew, cucumbers, made pickles, and jarred produce like onions, and carrots. While

Farmer F was in college, she majored in Education. However, she was still very interested in agriculture and took courses in organic gardening while also working at the university farm. While completing her master's degree, she joined the Peace Corps and traveled to Jamaica where she lived for 13 years. In Jamaica, she became more involved in farming and agriculture. She explained, "… it was just a way of life. That was just what people do, not everybody, but a lot of people do to eat". In Jamaica, she got married and built a house. The organization that she worked with helped develop school gardens, working with 40 different schools. They also organized organic gardens and promoted the idea of sustainable agriculture as a viable business income generator for the schools. With her husband, she established a private organic farm on 5 acres of land, and also had a bee-keeping operation. Farmer F's husband is a trained beekeeper and taught her the necessary skills. At one point, they had over 500 colonies of bees all over the island. They also did migratory bee keeping where bees are constantly moved throughout the season to particular pollinations to obtain specific tastes for honey. While in Jamaica, the couple established an IT center for farmers, which had digital weather stations, and monitored soil temperatures. They also conducted a number of classes to help train and support farmers using this, and a number of other modern equipment. Eventually, Farmer F and her husband moved to New York where she completed her Master's degree.

While in New York, she taught at a product-based school where she taught urban agriculture and hydroponics as a biochemistry class. Under this class, she incorporated math and encouraged her students to draw technical plans. Together with her class, she built a greenhouse classroom out of Plexiglas and wood. She also set up a rooftop garden. Outside of the school, she and her husband taught urban beekeeping. After some

time, her husband said that he could not deal with the city life so the couple moved down to Georgia. There, they bought property on 20 acres of land with three acres of farmable land. In Georgia, she taught plant science to children with emotional behavioral problems and created internships for them. During the internship, the students would grow herbs to sell at the Farmers Market. Farmer F left teaching and came to the a local non-profit organization where she got involved with the Farm A Community Garden Project.

Her farm business and other farm operations have grown since she began. The current farming system that she uses is organic. Although they are not certified organic, they are Certified Naturally Grown. Farmer F actually she sits on the Certified Naturally Grown board. Technically, they are transitioning. She stated, "We are transitioning for a while because you have to prove for three years, that the place has not used any kind of chemicals, so this will be…. I guess we are still in transition because this is our second year here at the garden". Although farming is her full time employment, she has other off farm employments. She runs programs through the non-profit organization, and is looking into opening an informal education school in her county. As of right now, farming and programs dealing with farming are what she does. One hundred percent of her time is devoted to her farming operation. She attributes 95% of her total income to her farm sources.

III. PRODUCT DECISION

Currently on her personal farm, 3 acres are allocated to her products. Farmer F is expanding to the newly acquired farm. Naturally grown methods are used to grow her crops on all of her farms. She argued for the idea of naturally grown stating, "… pure organic and pure naturally grown is debatable too, what that is. Permaculture is totally

naturally organic. I try not to do conventional practices. Although I might argue adding certain fertilizers like bloodmeal and bonemeal, that kind of thing mimics conventional (practices), but some people do not agree with that. As of today, we don't add that stuff anyway".

Throughout her farming journey, the types of vegetables that she has produced have varied because of the different locations that she has lived in. Primarily, she has produced vegetables and dealt with bees. Her husband has dealt with a variety of livestock, such as pigs, goats, chickens, and cows. However, they are now working towards setting up an aquaponics system in her county, which will allow them to produce fish. Most of the products are sold in its raw form. This is because of the food industry regulations. Farmer F is unable to can items for sale because she does not have a certified kitchen. She is, however, permitted sometimes to produces jellies and jams. She also creates candles from the beeswax. Farmer F does not work with a broker or middle person. All of her items are sold directly to the customer.

IV. LABOR INPUT MANAGEMENT

On her farm, she, her husband, and their 8 -year-old son serve as the primary sources of labor. Since her son is still young and in school, he helps as much as he can. Farmer F states that often, her son sees himself as like the manager of the operation. He does inspections, and looks for insects, which she does prove to be very helpful. He likes to harvest certain things like peppers, corn, and tomatoes. He also helps her husband with the beekeeping. He has helped to build the frames and bottle the honey. Since her husband does other side jobs, he devotes about 60% of his time to the farm. Although she has the help of her family members, Farmer F admitted that it would be extremely helpful

to their operation to hire a full-time worker. Sometimes, however, they are able to hire a part time worker. They currently have one part time worker who helps with ground preparation for the farm. She has found it difficult to find workers to hire, and explains that when a good worker is found, she tries hard to keep them. Farm work is very difficult and is not the most popular position. In addition, the pay is minimal compared to the work conducted. Although it is difficult to find people, she is fortunately still able to find workers. It may prove to be more difficult if she were trying to locate 5 or more workers. As far as skilled workers, she has not had difficulty locating workers. Her biggest problem is finding someone who can be completely dedicated. Since farming is her passion and it is her land, she will go above and beyond. For an outsider, however, it is just a job, and regardless of whether the job is done, when the day is over, that person will leave, sometimes with unfinished work.

V. FINANCIAL ISSUES

Farmer F has never experienced any economic hardship like foreclosure that has forced her to give up her land. She has also never applied for a farm loan, but has applied for a farm grant through the USDA, which she did not receive. Her farm had a green house in full production and they consistently sold at the farmers market. However, the agent told them that it was not enough and that they needed more to qualify for any kind of assistance. She knew people of all races that did not have any type of production set up or were in the beginning stages of their farm operations who received assistance. Most of the people in this situation were Caucasian although Farmer F did know of some African Americans in a similar situation. Farmer F believes that assistance depends on whom the person works with and what county they are located in when it comes to the outcome of

government funding opportunities. Agents have come to her farm and actually said, “Yes, you are going to get through”, but never contact them again. She recalled a time when this happened although others were hearing back from the agency. When she called to find out the status of her application, she was told that the agent who came out to see their property said that he or she had never even heard of or seen their application. Farmer F never received a letter or phone call explaining anything about the status of her application. She also added that In the middle of many people’s application process, including her own, the agents that handled these applications left or were replaced. It was almost as if the pending applications went dead, and became forgotten, causing them to be delayed or not be processed at all.

VI. MARKETING ISSUES

The main current mode of marketing that Farmer F uses is direct marketing. She is currently working on a website. Other marketing strategies Farmer F utilizes are e-mail listservs and Facebook. She has faced challenges when it comes to the pricing of her products. She explains, “Depending on which restaurant, or the community some people do not understand the full aspect of organic farming and the importance of it or the value of it.” Many do not understand that organic and naturally grown products are more labor intensive. Studies have shown that it is a better alternative to conventional produce. Another challenge that she has experienced is the consistency of the market and the number of products she has. Other challenged include ones out of the farmer’s control such as weather. Farmer F hopes to one day hire someone to manage the digital part of marketing.

Being a farmer is tough, but being an African American female farmer is extremely tough she explains. For her, this is her way of life and this is what she enjoys, she has been fortunate to find likeminded people who are in her circle, who understand what she is going through and are also experiencing what she is experiencing. She explains that when she meets people, they may feel that this lifestyle is not normal and ask in a negative tone "Why would you want to do farming?" She explains that the worst backlash that she has gotten is from family members that do not understand her lifestyle. She has had many family members say "Oh you are crazy, because you are not going to want to make any money" or "You have this big degree, why would you want to be just a farmer, too much work, not enough money, and too much input money". She explains that she has to get through the negative thoughts from family members that think she is crazy or wasting her time. She said that many people do not see the value of the land, and people in this industry are not just in it for the money, she said "If you are doing it for the money, you are going to be sad. It is completely a lifestyle. I don't think my lifestyle is the same as a lot of people so I think it makes it difficult (to understand) what is my world of normal; apparently it is not everybody else's".

Farmer F feels that there is a lack of monetary support, resources and general support within the farming community. Although she agrees with government regulation, she believes it can be unfair sometimes. The excessive government intervention can prevent small farmers from benefiting. She states, "I think, that support, money, the ability to get a true loan without having to put 150% collateral of all of your farm land, I think that is where we are lacking". Farmer F expressed her vision of a better farming community and the difficulties of attaining this, "I think the days of like co-ops need to

come back, I think the country needs a revolution of love, there is no trust so therefore co-ops are very difficult to have. It would be really great if people came together as a community, but there is too much imperialism and capitalism in the mindsets of people, so people want to make sure that theirs is the biggest, they (have) got(ten) the tractor, they got this, and they are not trying to help anybody out, and that is really unfortunate".

VII. Gender and Race Issues

As a woman, Farmer F explained that, in her experience, people tended not to take female farmers as seriously. There was, however, support amongst female farmers. She admits that she is not as physically strong as her husband. She explained, "I can't compare myself to my husband, what he can lift and manage I cannot. That is why I don't do any animal husbandry; I am not trying to tie up a cow". She does, however, know of some women who are in the animal husbandry industry. Being a woman, she experienced getting different quotes on farm equipment than her husband. Oftentimes, she would be quoted higher for the exact same equipment. She is also given less information than her husband at times. She recalls her most recent experience with a contractor and her newly acquired Ruth Street Farm stating, "… I really had to stand my ground with what I wanted. The guy was telling me nonsense, of how to make the rows. There is a slope and he wanted to make the rows vertical. I tell him that is going to become all eroded, and he really tried to insist (the vertical rows) to me". This same contractor also told her that a pump that she knew pumped 15 gallons a minute pumped 7 gallons a minute. The contractor assumed Farmer F did not know what she was talking about merely because of her gender.

Farmer F believes that it is harder for a woman to get into the farming industry than a man. She attributes this to “the culture”. She explained, “This particular culture thinks that it is a man’s job and a woman doesn’t necessarily belong on the field”. This same difference was also apparent among races. She stated,” I think that it is maybe more acceptable for an African American woman to be on a field than it is for a Caucasian women to be on the field“. In meetings, she has experienced making suggestions or statements and being ignored. However, when a man makes the same statement or suggestion, it is “applauded as a great idea”.

Farmer F believes that it is important for women to come together. She recognizes that many women in this industry are wives and mothers, and have to balance their work and home life. However, through their joint experiences, they are much better able to set up farm table discussions.