ABSTRACT

SAVAGE, ANN ELIZABETH. Sowing seeds of success: A systemic evaluation of women in agritourism. (Under the direction of Dr. Carla Barbieri).

The public's burgeoning interest in local foods as well as farmers' interest to increase their incomes is currently driving the development of agritourism, broadly defined as any educational or recreational activities offered on working farms. In many farm families, women are the initiators, drivers and managers of these agritourism operations. Yet, scarce information exist regarding the factors influencing the success of women in agritourism, which merits further investigation as women tend to have a complex definition of success and operate in milieu of a unique set of challenges and opportunities. Therefore, this study combined the agritourism system and the feminist approaches to gain a holistic understanding of women's success in agritourism as well as identifying the farmer (values), farm household (family, business), and societal (challenges, agricultural trends) factors impacting their success.

A combination of mailed and web-based surveys were launched in spring 2017 and yielded 180 usable responses (59.1% response rate). The survey collected information on the extent of women's functional success (i.e., as a woman, as an entrepreneur, as a farmer), the importance of life-dimensions to women's success (19 items), farmer values (12 items), farmer's challenges (7 items), perceived challenges of female farmers (14 items), trends facilitating success (10 items), characteristics of farm and agritourism business, and socio-demographics. Data were analyzed using descriptive statistics, exploratory factor analysis, and simultaneous multiple linear regressions ($p < .05$) to identify associations between women's success (dependent variables) and their values, farm household attributes, and society challenges and opportunities (independent variables). On average, respondents averaged 49 years old, worked full-time on-farm (56%), and were first generation farmers (61%).

Results indicated most participants felt at least moderately successful as a farmer (85.4%), entrepreneur (82.5%), and overall as a woman (94.9%). Factor analysis yielded five life-dimensions important to women's success. *Self-fulfillment* (e.g., pursuing happiness) and *business continuance* (e.g., building long-lasting relationships with customers) were the most important, closely followed by *family connectedness* (e.g., family supporting my farming career), *personal aspirations* (e.g., educating the public about farming) and *civic recognition* (e.g., being an example for other women farmers). Several farmer (civic-minded and productivist values), farm household (e.g., farm settlement in their community), and societal (e.g., changing social fabric) factors were found to positively influence the importance of life-dimensions to women's success. Conversely, farm business elements (e.g., seasonality) and gendered challenges associated with the patriarchal nature of agriculture were found to be limiting factors.

Results enhance the cross-disciplinary understanding of agritourism incorporating a systemic approach intersecting agriculture, gender, rural entrepreneurship, and tourism studies. Specifically, this study contributes to the scholarship of agritourism by moving the literature beyond the focus of women's motivations and agritourism goals to reveal the nuances of women's success. Specifically, the use of feminist and agritourism system approaches provided a lens for identifying gendered factors affecting women's success that manifest within each layer of farmer, farm household, and society. Study results also bring insights to maximize the growth of agritourism by identifying the factors increasing the chances of success among women farmers. For example, practitioners (e.g., extension agents, developers) can stimulate the involvement of young women in agritourism by capitalizing on their entrepreneurial mindset.

Sowing Seeds of Success: A Systemic Evaluation of Women in Agritourism.

by
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DEDICATION

The timeliness of this study was only fully understood, as the research was already in progress, following a year marked by women's marches, a remake of Wonder Woman and Merriam-Webster labelling *feminism* the word of the year. Within this context, this study brings to light a set of women farmers, who like Wonder Woman, are breaking boundaries of gendered norms to "save the world" by providing for their family and contributing to their communities. Everyday Americans eat, get dressed, and drive or ride to work; all supported by our farmers. Let us continue to work with them, to investigate what they need so we can fight with them. And let's do so especially for the ones who are hidden and voiceless but have worked tirelessly throughout our history.

BIOGRAPHY

Ann Elizabeth Savage grew up in Louisiana, where she received her Bachelors in Geology from Louisiana State University (LSU). Upon graduating, she knew that she wanted to exposure to new and different places and experiences so she moved to work in Jackson Hole, Wyoming observing the tourism industry up close and volunteering on farms in the off-seasons. She then moved to Guyana, South America with WorldTeach, a program placing teachers in developing nations around the world. In Guyana, she taught math and agricultural sciences to high school students and began an interest in sustainable community development.

Upon returning to the U.S., Ann began working for the Louisiana State University Agricultural Center as an Extension Associate. She primarily worked for the Sustainable Agriculture and Research Education (SARE) Program, planning trainings and development opportunities for Louisiana farmers. She also focused much of her efforts on local food systems development through the Louisiana Harvest of the Month Program, a farm to school program aiming to get fresh, local products into Louisiana schools across the state. It was during her time at LSU that Ann realized the potential of tourism could play in both community and local food systems development.

This interest brought Ann to NC State's Department of Parks, Recreation and Tourism Management (PRTM) in the fall of 2016. During her time in the program, she served as both a Research and Teaching Assistant as well as working on several research projects, including various forms of rural tourism, recreation ecology, tourism workforce development, and partnerships and collaboration. She is interested in social science research regarding tourism and its potential for sustainable community development especially in the areas of local agricultural promotion, human-environment interaction, and creative economies.

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CHAPTER I

INTRODUCTION

Agriculture has been an integral part of the United States (US) evolution. Beyond the traditional provision of food, agriculture is also important for providing Americans with clothing (fibers), transportation (ethanol) and a central driver of the economy (industrial revolution). As has been the case throughout this evolution, the United States Department of Agriculture (USDA) reports that the largest proportion of farms in the US are family farms (97%), holding the greatest proportion of the country's agricultural assets with many of these farms on the brink of economic survival (Hoppe & Banker, 2014). North Carolina (NC) presents a similar disconcerting scenario where a structural change is taking place in agriculture as evidenced by a decrease in number of family farms between 2007 and 2012 (USDA, National Agricultural Statistics Service, 2014).

In response to their economic downfall, family farms are seeking to advance their household incomes through diversification schemes. Defined as the reallocation of farm resources (land, labor, or capital) into new activities to increase farm income (Ilbery, 1991), diversification usually takes the form of off-farm employment and on-farm entrepreneurial development (Meert, Van Huylenbroeck, Vernimmen, Bourgeois, & Hecke, 2005). Factors farmers account for diversifying include, among others, to respond to market opportunities and capture customers more directly (Barbieri & Mahoney, 2009; Barbieri, Mahoney, & Butler, 2008). On-farm entrepreneurial development is a second strategy commonly adopted by small family farms to make ends meet. By reallocating the farm resources to create different enterprises on premise, farms are not only increasing their incomes, but also the value (e.g.,

assets) of their business (Barbieri et al., 2008). On-farm entrepreneurial diversification occurs in different forms, either through farming itself (e.g., growing different crops during different seasons) or by developing entirely new activities (e.g., value-added, time-shares). Among the latter, the offering of education and recreation to visitors (e.g., school tours, corn mazes, wineries), usually referred as agritourism, has gained prominence in the US (Carpio, Wohlgenant, Micheal, & Boonsaeng, 2008; Gil Arroyo, Barbieri, & Rozier Rich, 2013; Nickerson, Black, & McCool 2001). In NC, the number of agritourism operations has doubled between the 2007 and 2012 census of agriculture (USDA, National Agricultural Statistics Service 2014).

The increase of agritourism operations emerges from demand and supply forces occurring in parallel. From the demand side, the public's increased interest to (re)connect with local food systems, especially among urban dwellers, is encouraging travel to real working farms (Kline, Barbieri, & LaPan, 2016; Santeramo & Barbieri, 2017; Schilling, Sullivan, & Komar, 2012). From the supply side, farmers are venturing into agritourism mainly due to economic motivations (Barbieri, 2010; McGehee & Kim, 2004; Nickerson et al., 2001; Ollenburg & Buckley, 2007), which has been reported to increase profits and market share of farm products (Barbieri, 2013; Tew & Barbieri, 2012). As for the farm family, agritourism also serves as an employment opportunity for members of the family, which ultimately increases their ability to pass the farmland to the next generation (Barbieri, 2013; McGehee, Kim & Jennings, 2007). Furthermore, agritourism also delivers a suite of non-economic benefits to farmers, such as companionship with guests (Anthopoulou, 2010; Bock, 2002; McGehee & Kim, 2004) and even fulfilling personal hobbies, desired lifestyles, and sense of belonging (Barbieri, 2010; Tew & Barbieri, 2012; McGehee et al., 2007; Nickerson et al., 2001; Valdivia & Barbieri, 2014). In

many cases, those benefits reach surrounding communities by stimulating local economies (Schilling et al., 2012) and preserving rural heritage (LaPan & Barbieri, 2014; Yang, 2012).

Women have a vital role in the innovation of farming, as they are constantly looking for ways to re-purpose existing resources into new sources of income and farm survival (Anthopoulou, 2010; Brandth & Haugen, 2010; Gasson & Winter, 1992; McGehee et al., 2007; Wright & Annes, 2016). Accordingly, women have been prominently reported as the drivers of agritourism, not only as the initiators, but also as managers who constantly seek innovations to keep visitors' interests (Anthopolou, 2010; Wright & Annes, 2016). Despite women's driving force, evidence indicates that their efforts are not fully rewarded. A study conducted across the US showed that women in agritourism make an average of $35,000 gross income less than their male counterparts (Barbieri & Mshenga, 2008). Although not directly investigated, potential reasons behind the gap in agritourism economic returns between genders, could possibly be explained by women's limited networks (Bock, 2004; Che, Veeck, & Veeck, 2005), their expected domestic roles as household caregivers (Anthopoulou, 2010; Gasson & Winter, 1992; Halim, 2016), and the continuation of masculine hegemony in rural areas and agricultural policies (Bock, 2014; Halim, 2016; Little & Jones, 2000). Such an economic gap could also be attributed to gendered differences in motives, where women are more interested in providing employment for family members and giving back to the community than men (McGehee et al., 2007).

While there has been an expansion of literature about women in agriculture and agritourism in recent years, there is still plenty to do to understand and increase success of these women by understanding their challenges and societal influences so as to achieve gender equity in agriculture. As the former United Nations Secretary-General Ban Ki-moon stated on

International Women's Day, "the world can never realize 100% of its goals if 50% of people cannot realize their full potential" (United Nations, 2015). Advancing research in the limitations hindering women's success can move them closer to realizing their potential. Existing information related to women's achievements in agriculture is mostly contextualized in the global south and Europe while scant studies exist on this topic in the US agricultural landscape (Wright & Annes, 2016). This lack of information does not indicate gender equality in the US agriculture, but rather emphasizes the need to investigate how US women in agriculture can maximize their contribution to the sustainability of family farms that are core to the economic heritage of the US.

Study Aim and Objectives

This study contributes to the understanding of the success of women in agritourism by evaluating their perceived success in the three main functions (i.e., functional success) they hold: as a woman, as entrepreneur, and as a farmer; and by assessing the importance of various aspects of their individual pursuits (e.g., educating the public about local foods) that contribute to their sense of success (life-dimensional success). Hence, within the context of this study, successes are understood as both, the extent of perceived success women have as women, entrepreneurs and farmers (i.e., functional success) as well as the importance they place on different aspects of their life to their sense of success ("life-dimensional" success). Given that agritourism is a complex system affected by personal, family and societal factors, this study also identifies several factors affecting both aspects of women's success (functional; life-dimensional). Based on the literature reviewed, the following factors were examined: farmer values (farmer level); family dynamics

and farm business characteristics (farm household level), and societal challenges and trends (society level).

Specifically, this study pursues three research objectives, which were formulated based on the literature reviewed (see Chapter 2 for details) as follows. In addition to their traditional roles as women in the farm (e.g., cooking meals for the family), women's extent of perceived success can be affected by current functions they are holding in farming and business occupations traditionally assigned to men (Horner, 1972). Therefore, to capture the perceived success in all women's functions as well as the importance of individuals' pursuits on their success, the study's first research objective is: ***(RO-1):*** *To identify the breadth and level of success that women in agritourism encounter.* Different pursuits shape women's overall sense of success (Buttner & Moore, 1997; Sachs, Barbercheck, Brasier, Kiernan, & Terman, 2016; Walker & Brown, 2004), which have been not yet been explored in the context of agritourism beyond motivations for entrepreneurial development (McGehee et al., 2007). Therefore, the study's second research objective is: ***(RO-2):*** *To reduce the life-dimensions indicators of women's success to fewer dimensions.*

The Agritourism System Approach sustains that comprehensive assessments of agritourism (success, failures) need to take into consideration a suite of factors related to the farmer, the farm household (family and business), and society (Barbieri, 2017). Within the farmer layer, farmer values are critical to examine because they influence farmers' attitudes, behaviors and decisions (Burton, 2004; Burton & Wilson, 2006) as they are reflections of their social symbolic associations with their farmland (Gasson, 1972). Within the farm household layer, characteristics of the family dynamics and the farm business are important in gendered studies of women farmers because their farming responsibilities tend to exert pressure on their

household caregiving roles (Sachs et al., 2016). At the societal layer, evidence indicates that trends in agriculture (e.g., public interest to reconnect with local farmers, limited access to loans) may affect the success of women farmers and agritourism operations (Halim, 2016; Sachs et al., 2016; Wright & Annes, 2016). Therefore, the last research objective is: ***(RO-3):*** *To identify farmer values, farm household (family dynamics, farm business) characteristics, and societal elements (trends, challenges) associated with women's success.*

Need for the Study

The extant literature calls for gaging the opportunity for entrepreneurial agriculture to be a forum for women's success (Markatoni & Van Hoven, 2012; McGehee et al., 2007; Wright & Annes, 2016). Challenges related to gender roles and the hegemonic masculinity of entrepreneurial agriculture have been prominently studied (Anthopoulou, 2010; Bock, 2004, 2014; Brandth, 2002a; Carter, 2017; Gasson & Winter, 1992; Little & Jones, 2000), although to a lesser extent in the context of agritourism (Halim, 2016; Wright & Annes 2014). Regarding the latter, findings are inconclusive either because results have mostly identified basic differences between genders (Barbieri & Mshenga, 2008; McGehee et al., 2007) or are not generalizable due to the characteristics of the study sample (Halim, 2016; Wright & Annes 2014). Furthermore, existing information is not readily available on the set of factors impacting women's success. Specifically, this within-gender quantitative assessment will move forward current knowledge by identifying the attributes of the farmer (farm values), farm household (family dynamics, farm business), and society (trends, challenges) that exert an influence on women's success.

The timeliness of this study is emphasized by the increased interest in local foods and a desire to reconnect with local farmers among the public in recent years which is stimulating new

opportunities for farmers to diversify their offerings (Kline et al., 2015). Preliminary results from the first Local Food Marketing Practice Survey highlight that 167,000 farms nationally have produced and sold local products generating $8.7 billion in revenue in 2015 (USDA, Economic Resource Service [ERS], 2016). Agritourism activities are an intersection of this public interest and farmer's opportunity to increase their revenues, as they became the gateway to facilitate the farmer-customer reconnection. The growth in the demand of local food systems, including agritourism, is shifting the characteristics of the US agricultural landscape by showing an increase of women as primary decision makers of family farms, especially related to direct sales in local markets and agritourism (USDA, 2016).

This study will advance the existing, yet sparse, knowledge of women in entrepreneurial agriculture and more specifically in agritourism in the US in two key ways. In terms of content, this study will move beyond describing the reality of women in agritourism in terms of motivations and benefits, which has much monopolized the academic attention (DeLind & Ferguson, 1999; Kline et al., 2016; Nickerson et al., 2001; Ollenburg & Buckley, 2007; Schilling et al., 2012; Trauger, 2004), to identify the factors that may be hindering or abetting women's success. This study will also expand the geographic representation of this topic in the country, as most studies have been conducted in Northeastern (Brasier, Sachs, Kiernan, Trauger, & Barbercheck, 2014) and Midwestern (Carter, 2017; Che et al., 2005) states. Investigating women in agritourism in the Southern US is much needed because evidence indicates that southern women have more conservative views than their Midwestern counterparts, which may influence their farm roles (Barlett, Lobao, & Meyer, 1999). Finally, this study responds to the USDA's recent call to increase efforts to understand those farms and farm operators different from

mainstream agricultural production as a way to improve the economic wellbeing of family farm households and maximize the utility of farm policy (Hoppe & Banker, 2014).

Study Definitions

For the purpose of this study, the following key terms are as defined below:

Agripreneurial Success: Outcomes that women are hoping to achieve for self-fulfillment and social contributions (Buttner & Moore, 1997; Greene, Hart, Gatewood, Brush, & Carter, 2003).

Agricultural Trends: Refers to societal changes in agriculture that are serving as a forum for women's success (Halim, 2016; Wright & Annes, 2016), thus can manifest as challenges or opportunities for success.

Agritourism: Any farming-related activities carried out on a working farm or other agricultural settings for entertainment of education purposes (Gil Arroyo et al., 2013). For the purpose of this research, these activities can take place at any time of the year, for any amount of time.

Agritourism Challenges: Factors related to agritourism farms that hinder individual's ability to achieve success. For example, elements associated with the limited understanding and inconsistency of agritourism, thus may include policy gaps, lack of development programs, and consumer's misinformation among others (Halim, 2016).

Family Farms: Farms where most of the business is owned by the operator and individuals related to the operator, including relatives who do not live in the operator's household (Hoppe & Banker, 2014).

Farmer Values: A conception of the desirable, referring to any aspect of a situation, object or event that has a preferential implication of being good or bad, right or wrong; thus, these values dictate farmers' practices and behaviors to fulfill or recognize their success (Burton, 2004; Gasson, 1973; Wilson, 2008). Often times, farmers don't incorporate these values into their practices or behaviors, but still associate them with the ideal of being a "good farmer", such as having high yields, maintaining organic matter, or avoiding tillage (Burton, 2004; McGuire, Morton, Arbuckle, & Cast, 2015; Wilson, Fesenmaier, Fesenmaier, & Van Es, 2008).

Feminist Approach: Examination of women's social and cultural phenomena on the public and private spheres of their lives (Aitchison, 2000), especially within micro-level analysis, provides a lens to articulate and account for differences of women that can be overlooked in research otherwise (Ahl, 2006; Bem, 1993; Mirchandani, 1999; Rickson, 1997) especially those differences that can be attributed to patriarchal norms and behaviors (Snyder-Hall, 2010) .

Functional Success: Evaluation of individual's achievement in a particular role (Eccles, 1987).

Gendered Challenges: Factors related to individuals' gender that hinder their ability to achieve success (Kissing, 2013).

Life-dimensional Success: Within the limits of this study, this construct consists of the aspects that contribute to women's perceptions of success, which comprise elements for self-fulfillment and social aspirations that go beyond economic gains, the latter more generally referred to in the entrepreneurial literature (Buttner & Moore, 1997; Greene et al., 2003).

CHAPTER II

LITERATURE REVIEW

Women in the farm household have continued to lead the development of agritourism as a form of on-farm entrepreneurial diversification in the face of structural changes in agriculture. This chapter aims to understand this context within a feminist approach, which allows examining the success of women in agritourism as self-fulfillment and social contribution. Finally, a systemic approach is presented to frame the factors influencing the success of women in on-farm entrepreneurial activities, and more specifically in agritourism.

Philosophical Framework: A Feminist Approach to Women in Agritourism

Feminist approaches are suitable to examine women's social and cultural phenomena on the public and private spheres of their lives (Aitchison, 2000), especially within micro-level examinations. This is particularly important in rural and agricultural contexts as women have long been relegated to the private sphere while men have ruled the public sphere (Alston, 2000). Thus, feminist approaches allow for the understanding of agricultural women despite the patriarchal culture that dictates norms restraining women's behaviors and beliefs (Ahl, 2006; Snyder-Hall, 2010). A central aspect of feminist approaches relate to the ethics of care that are incorporated into young girls' cultural socialization (Bem, 1993). As such, the intensity with which the ethics of care follow women for the rest of their lives depends on culture, making their involvement in business ventures range from culturally accepted to inappropriate (Mirchandai, 1993). Along these lines, feminist methodological approaches are important to redirect the

discourse in research when re-emerging questions are inherently excluding some circumstances of those being studied (e.g., gender) as they are perceived to be less relevant (Ahl, 2006).

Adopting a feminist approach is particularly important when examining aspects of entrepreneurship and agriculture where cultural standards of power and masculine ideologies strongly influence gendered roles and the discourse surrounding these activities. In the entrepreneurship literature, several authors have discussed at length the shortcomings of studies on women in business (Greene et al., 2003; Stead, 2015). Some criticisms point out to the constant comparison between women and men for the mere description of superficial differences because they do not allow to dive deeper into more profound differences within women and men (Mirchandani, 1999). Others condemn the entrepreneurial literature for inherently following prevailing masculine ideologies, in which the methods, questions of inquiry, conceptual frameworks, and explanation of findings tend to overlook factors that may be disadvantageous for females and 'others' due to their macro level analysis (Ahl, 2006). Furthermore, the more recent shift in the literature that utilizes feminism to frame individual phenomena tends to overlook the social and cultural construction of gender that varies across space and time (Ahl, 2006; Mirchandani, 1999) which is important to include in agritourism-related studies as this activity represents a shift from traditional farming and it is strongly influenced by societal factors.

The lack of visibility of women in agriculture is a common problem in both the academic literature and mainstream media. Indeed, despite their active role in farming, women are not always fully recognized because they are often not the primary owners of the farm nor are they paid workers (Rickson, 1997). The invisible contribution and discourse of women in agriculture is exacerbated by the farm equipment that is built to fit masculine bodies and farming tasks that

require strong muscle power (Brandth, 1995; Brandth, 2006), as well as the overall disconnect between feminism and rurality as women are usually recognized as wage-laborers of urban economies in advanced capitalist countries (Brandth, 2002a; Whatmore, 1991). Thus, Brandth (2002a) calls to increase the use of feminist approaches in agricultural studies, specifically to compensate for a sector where masculine purviews and practices prevail.

In brief, the use of feminist approaches enhances the researchers' ability of not objectifying women as a homogenous "other", but rather to articulate and account for differences among women that can be overlooked otherwise (Ahl, 2006; Bem, 1993; Mirchandani, 1999; Rickson, 1997). As such, feminist approaches are especially needed in the entrepreneurial and agricultural realms where women's contributions are often overlooked and misunderstood (Brandth, 2002a; Midgley, 2006; Walker & Brown, 2004; Whatmore, 1991). Considered as a form of entrepreneurial farming (Barbieri et al., 2008), the literature on agritourism framed within feminism is extremely limited. As such, this feminist-framed study that builds upon the existing entrepreneurial and agricultural feminist literatures will help to strive for gender equity in agritourism-related policy that will foster a more prosperous and equitable rural development (Little & Jones, 2000; Rickson, 1997).

Defining Women's Success

Success is a complex construct that can be evaluated in different ways. One way to do so is based on the extent to which individuals perceive achievement in a defined role they hold, such as caregiver or as farmer, which in this study is labeled as "*Functional Success*". The extent of functional success a woman perceives (e.g., fulfillment as an entrepreneur) can be affected by the dissonance of fulfilling roles or occupations traditionally considered masculine and their

feminine identity (Horner, 1972). Past experiences, values, family attributes and cultural norms shape the extent of perceived success (Eccles, 1987, 1994). Thus, understanding these elements on women's success as farmers and entrepreneurs confronts the dominant representations of women in the practice of agriculture and business and allows re-definition of these roles in the current agricultural context (Sachs et al., 2016; Wright & Annes, 2016), characterized with a stronger participation of women.

Research in business success has long focused on measuring the profitability and growth of businesses, where men are commonly found to be more successful than women because other indicators are overseen (Aldrich, 1989). However, women-owned firms appeared to have similar survival rates to men-owned ones, suggesting that perhaps profit and growth may not be the most accurate indicators of success (Kalleberg & Leicht, 1991). This has prompted abundant research on understanding gender differences on the motivations driving business development (Carter, Gartner, Shaver, & Gatewood, 2003; Chiappe & Flores, 1998; Greene et al., 2003; Tigges & Green, 1994) and women's prioritization of personal growth and social contributions at the expense of financial goals (Buttner & Moore, 1997). The literature has also called for a more thorough investigation of the extent to which women perceive their success, particularly in the context of patriarchal industries, and how their success transforms patriarchal societies (Snyder-Hall, 2010).

Women's success is also defined through perceived achievement of a set of internal (e.g., personal satisfaction, sense of independence) and external (e.g., profits, growth) goals driving the start, run and survival of their business (Buttner & Moore, 1997; Walker & Brown, 2004). However, most of the business and agritourism literature has examined the accomplishment of external factors, which are closely aligned with men's definitions of success (Biogeness, 1978;

Carter et al., 2003; Tigges & Green, 1994). Related to agritourism, some studies have found that although this type of farm enterprise pursuits a set of farmers' internal (personal pursuits, family connections) and external (market opportunities, farm profitability) goals, external ones are the most important (Nickerson et al., 2001; Ollenberg & Buckley, 2007; Tew & Barbieri, 2012). However, most of these studies have failed to provide information on gender differentiation. Halim (2016) is an exception, and concluded agripreneurial women tend to emphasize internal factors in terms of personal satisfaction (e.g., pursuing happiness) and social contribution (e.g., broad community impact).

Success among Women in Agriculture

In the context of agriculture, success incorporates two broad categories -social contributions and personal achievements- which include several elements of women's community, personal, family and business aspirations in agriculture. Social contributions relate to those attributes central to the businesses responsibility toward the community and involving the public as well as the family (Walker & Brown, 2004). While social contribution appears to be of low importance in determining the success for women in traditional business (Buttner & Moore, 1997), it seems very important for women in agricultural business (Gasson, 1973). Per Anthopolou (2010), women in agriculture utilize the opportunity for personal connections and education of customers as well as promotion of cultural traditions and heritage through their entrepreneurial endeavors. Additionally, although less investigated, evidence indicates that the economic contribution of women in rural and agricultural endeavors extends beyond their own farmland and they also assist in the development and regeneration of their community highlighting their possible community contribution (Midgley, 2006).

Social contribution also appears to be important to women's success in agritourism. More often, women emphasize the opportunity that agritourism brings to educate visitors on issues related to food and farming (McGehee et al., 2007; Wright & Annes, 2016). However, Halim (2016) found that the success of women in agritourism also comes as their opportunity to mentor young employees, who will be better prepared for the future. Although some studies have highlighted the role of women on the farm providing their daughters with the knowledge and skills required for working in agriculture and agritourism, this role is often overlooked either by the emphasis placed on women as the family caregiver or men's role in farm perpetuation (Haugen & Brandth, 1994; Wright & Annes, 2016).

Measuring personal achievement as an indicator of success includes recognition or approval from family and community (Carter et al., 2003). Dealing with the hegemonic gendered ideology of both entrepreneurship (Ahl, 2006; Stead, 2015) and agriculture (Brandth, 2002a; Brandth & Haugen, 2011; Little & Jones, 2000) women in agritourism are often striving for similar recognition to their male counterparts (Halim, 2016) and seeking respect from other farmers and from the wider community (Driga, Lafuente, & Vaillant, 2014). Settling respectful relationships with farmers and within their communities are also invaluable for creating linkages and networks that are necessary for enabling entrepreneurial success (Sullivan, Halbrendt, Wang, & Scannell, 1997) and more specifically for agritourism success (Che et al., 2005). These linkages and networks also help women show to the farming and wider communities the importance of their role in agriculture (Wright & Annes, 2016).

Self-fulfillment, generally understood as the personal realization of individual's deepest desires and capacities, is consistently noted as the highest indicator of women's success (Buttner & Moore, 1997; Gatewood et al., 1995; Greene et al., 2003). Within agriculture, women's self-

fulfillment has been described as an overall feeling of satisfaction, reward and enjoyment from their work (Halim, 2016; Markatoni & van Hoven, 2012; Wright & Annes, 2016), or more specifically in terms of autonomy, work-life balance, and further development of the self (Walker & Brown, 2004). Sense of autonomy among agricultural women has been documented as the chance to exercise creativity, utilize problem solving skills, and think on their feet (Anthopolou, 2010; Wright & Annes, 2014). Related to women in agritourism, especially among those pursuing this path as a second or after-retirement profession, independence comes as an opportunity to remain physically active (Halim, 2016).

Work-life balance is also indicative of self-fulfillment among entrepreneurial women, especially in terms of flexible work hours (Justo, Cruz, Castro, & Coduras, 2006). However, its importance is controversial among women in agritourism. While some found that work-life balance is critical to the perceived success of women in agritourism (Markatoni & van Hoven, 2012; Walker & Brown, 2004), Halim (2016) described it an idyllic hope impossible to achieve. Personal growth, especially in terms of continued education, is critical to women's pursuit of business success (Buttner & Moore, 1997) as it is also able to provide autonomy (Walker & Brown, 2004). Women in agritourism, specifically denote their desire to continue personal growth to become experts in some aspect of farming and agritourism (Halim, 2016).

Many of the survival strategies women in agriculture utilized during the depression era (e.g., maximization of farm resources, creativity for repurposing) are recognized in the current literature of agriculture (Bock, 2004; Chiappe & Flora, 1998; Wright & Annes, 2016) and agritourism (Anthopolou, 2010; Halim, 2016; McGehee & Kim, 2004). For example, making dresses out of chicken feed sacks and using the drying fire for tobacco leaves to cook and iron were quite common strategies women devised during hard economic times (Jones, 2003). Such

women's creativity for repurposing and maximizing the use of farm resources are also noted as key drivers for agritourism development (Anthopolou, 2010; Halim, 2016), to program innovative activities for visitors (Johnson, Schnakenberg, & Perdue, 2016; Rissing, 2013), and to create economic opportunities while their domestic roles are being fulfilled (Oberhauser, 1995).

Influences on Success of Women in Agritourism: A Systemic Approach

Systemic approaches within agricultural settings are useful to provide a holistic assessment of the well-being of farmers and their families (Dogliotti et al., 2014; Drinkwater, 2016; Okey, 1996). In discussing farmers shift from industrial agriculture, Ikerd (1993) states the need to "treat the farm like an organism consisting of many complex, interrelated sub organisms, all of which have distinct biological limits" (p. 152). The systemic assessment of farms also recognizes the interrelatedness of a mix of environmental, social and economic factors exercising pressure on the farm business and farmer's lifestyle. Evidence indicates that any imbalance of these three factors, especially when profitability is over-stated, have contributed to the dismantling of the family farm (Ikerd, 1993) and distancing the understanding between what consumers eat and farmers produce (Dogliotti et al., 2014; Ikerd, 1993; Okey, 1996). Systemic approaches have been invaluable to ensure that each aspect of agriculture (e.g., labor, land) are evaluated when farms shift to entrepreneurial diversification as to thrive for sustainable and long term outcomes (Giampietro, 1997).

Building on agricultural systemic approaches, agritourism can be seen as the intersection between agro-ecology and human dimensions. Capturing such an intersection, Barbieri (2017) developed the Agritourism System's Approach (Figure 1) takes the farmer as the nucleus of the system, overlapped by the farm family household (including both the farm family and farm

business) and the society layers (including challenges and trends). All of these factors play into the roles and decisions that agritourism operators must make and elements that promote and limit their success. Thus, in this thesis the Agritourism System's Approach is used as a lens to gain a holistic understanding of the elements affecting women in agritourism's success.

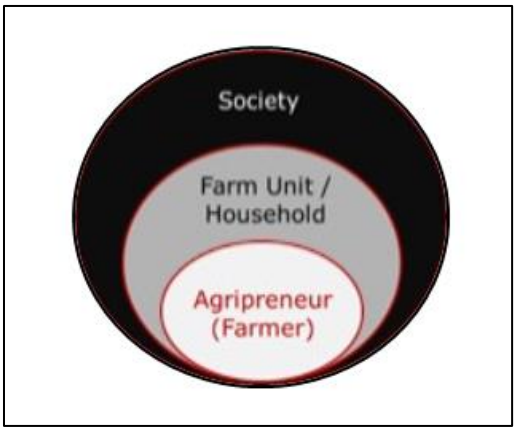

Figure 1. The Agritourism System's Approach (Barbieri, 2017)

The Farmer Layer

The historical influence of agriculture throughout the US, especially in rural communities, has been an important frame of the symbolic values and self-identity that shape the day-to-day composition of these communities (Burton, 2004). As the current context of agriculture is changing due to globalization (e.g., high- mechanization, technology adoption) and political forces (e.g., selected subsidies), the composition, size and number of farms are also changing resulting in the flux of rural symbolic values and self-identities. Thus, research efforts have been devoted to gain a deeper understating of the evolving famer's identities and roles and how these influence farmers' decision making and behaviors (Burton & Wilson, 2006; Ferrell, 2012). However, farmers' identities and roles are composed of multiple dimensions (e.g., producer, steward) that can sometimes conflict with one another, forcing farmers to prioritize

them (Burton & Wilson, 2006). For example, while economic gains are critical to agriculture, they are just one aspect farmers consider when determining land management practices and priorities (Burton, 2004; Gasson, 1973).

Limited research is available on women's identities on the interaction of their numerous farm roles with these identities. Women's identity on the farm are oftentimes tied to her role in the farm household as mother, wife or nurturer, making her family caregiver role as primary and farmer as secondary, in contrast to the men's primary identity as farmer (Anthopolou, 2010; Brandth, 2002b; Bock, 2004; Gasson & Winter, 1992). As a result, researchers consistently call for a better understanding of how the multiple roles and identities of women in the farm household are negotiated within the dynamics of the farm family (Brasier et al., 2014; Whatmore, 1991). In this sense, Brasier et al. (2014) stated that the multiple roles women could fill both on the farm and in the farm family (e.g., bookkeeping, off-farm work, on-farm entrepreneurial activities, spouse), distinguishing a hierarchical arrangement of women's roles influencing their different identities (e.g., farm partner, primary operator) and decision-making.

Labor division, especially in terms of off-farm employment, are also connected to decision making on the farm. Husband and wife are more likely to mutually make decisions for the farm business when they both hold off-farm jobs; however, the husband is more likely to make daily decisions by himself when only the wife works off-farm (Gasson & Winter, 1992) this is despite that oftentimes her off-farm job supports the economic viability of the family farm (Bock, 2004). Although the health of the farm household, both family and business, is focal to the woman's personal decisions (Anthopolou, 2010; Gasson & Winter, 1992), she can assume a farm partner identity, thus being excluded from the decision-making of the farm business, (Brasier et al., 2014). First generation farmers may share the duties between spouses and others

in the farm family more equally (Ball, 2014), but may instead face dissenting views from the community (Halim, 2016). In a review of the farm and family business literature, Suess-Reyes and Fuetsh (2016) found that intergenerational authority and adaptability of families on farms were two areas of the farm business in need of more robust research.

The Farm Household Layer

Specifically related to the business aspect of the farm household, challenges related to heavy workloads, low income, and labor issues are fairly consistent among family farms around the world (Dogliotti et al., 2014). However, operation characteristics (e.g., size, diversified entrepreneurial portfolios) can affect the extent of these challenges on the farm business (Barbieri et al**.**, 2008). Family farms operating agritourism can increase their challenges due to the presence of visitors and the nature of the activities they offer. For example, agritourism-related regulations (e.g., liability, tax credit, county-level zoning restrictions) exist in over half of the states in the US (The National Agricultural Law Center, n.d.). However, farmers have difficulties remaining abreast of the regulations affecting them because of their volatility over time and their different enforcing agencies (Colton & Bissex, 2005; Halim, 2016).

Business tasks in agritourism operations can get even more complicated because of the synergies that occur among different on-farm diversified enterprises (Barbieri & Mahoney, 2008; Schilling, Attavanich, & Jin, 2014), that require reallocation of resources within the farm business as needed. Tax regulations are particularly difficult to follow because many agritourism activities are not technically classified as farming, thus they have to be filed separately (Van der Hoeven, 2010). While on-farm diversification can overcome farming risks (e.g., loss of production due to whether), the process of developing new agritourism activities and market

outreach could add a significant level of risk in the establishment phase (Colton & Bissex, 2005). In addition, while the proximity to urban areas is desired to attract customers, it can reduce the availability of labor for agritourism operations (Kline & Milburn, 2010), which is already scarce due to the seasonality of work and limited training opportunities (Halim, 2016). These aforementioned administrative burdens that agritourism brings to the farm household represent an increased time dedicated to record keeping, which is often placed on the woman in the family (Whatmore, 1991).

The Society Layer

Societal influences on success includes gendered and agritourism challenges as well as, trends facilitating the success of women in agritourism. The farming community brings a distinct group of challenges that often perpetuate the patriarchal nature of agriculture and gendered expectations in family farming specifically (Brandth, 2002b; Little & Jones, 2000; Wright & Annes, 2014). For example, when women inheriting a farm change the prevailing family production practices or managerial styles, they often encounter resistance from those in the farming community who were familiar with the former male operator; women's resistance to oblige could result in her ostracism (Carter, 2017). Labor divisions and decision-making can also be dictated by how the family land is acquired (Brandth, 2012). Inheriting family farmland perpetuates certain traditions and patriarchal practices within the family farm (Burton, 2004; Whatmore, 1991). Conversely, families that did not inherit farmland may have roles that are more flexible and more inclusive decision-making tendencies (Gasson & Winter, 1992). Sharing of knowledge is another aspect of land succession affecting management practices due to the

fathers passing more information to their sons (Wang, 2010); thus, when women inherit the family farm, they do so often with limited knowledge (Carter, 2017; Wang, 2010).

Within the family, divisions of labor can be a challenge for women in agriculture and agritourism as they are often responsible for the domestic chores of the family (Anthopolou, 2010; Bock, 2004; Dogliotti et al., 2014; Gasson & Winter, 1992) while being adaptable and ready to work on the farm as necessary (Whatmore, 1991). Women in agritourism are particularly affected by the farm household division of labor as the nature of agritourism tends to add to their farm household responsibilities (Anthopolou, 2010; Bock, 2004; Halim, 2016). The gender division of farm labor usually entails men doing more manual outdoor labor while women take more domestic or nurturing tasks such as cooking, cleaning, and caring for animals (Gasson & Winter, 1992). This is further exacerbated by farm equipment and tools designed to suit masculine builds, which overall reinforces the stereotypic masculine image of farms which keeps women in the 'backstage' or the private labor (Alston, 200; Andersson & Lundqvist, 2014; Ball, 2014; Brandth, 1995). Evidence indicates agritourism can encourage the movement of women from these hidden roles and allow them to acquire more prominent roles on the farm, in the family and in the community (Halim, 2016; Wright & Annes, 2014).

Networks are critical for agritourism success (Aldrich, 1989; Che et al., 2005; Li, 2017; Wilson et al., 2001); yet, lack of or weak networks are a main limitation for women in agriculture and agritourism. Central to networks importance is their ability to reach markets and customers (Tigges & Green, 1994); thus, they are vital for agritourism which is very dependent on direct marketing (Li, 2017). However, this direct marketing can present these women in agritourism with encounters where customers are also perpetuating the masculine ideologies of

agriculture with expectations of only the men as farmers and women as homemakers assisting the farmer (Keating & Little, 1994; Wright & Annes, 2016).

Women in agricultural businesses -including agritourism- deal with the complications associated with small businesses as they typically undertake this path to control growth (e.g., number of visitors) and maintain the quality of their products while juggling their other responsibilities (Anthopolou, 2010; Bock, 2004; Greene et al., 2003; Halim, 2016; Losocco & Robinson, 1991). Entrepreneurial women in rural areas also exhibit less confidence in their business knowledge than both, men in rural areas and women in urban areas (Gupta & York, 2008; Sullivan et al., 1997). Compounding the aforementioned limitations in agritourism is the lack of support –and even respect- women have from institutions, other farmers, industry representatives, and even customers that prefer to deal with the man on the farm (Brandth, 2002b; Carter, 2017; Greene et al., 2003; Halim, 2016). Another challenge that broadly affects farmers in agritourism, both women and men, is the dissenting view that agritourism is not real agriculture and could even be symbolic of failure in farming (Brandth & Haugen, 2011; Halim, 2016). This challenge ties back to the personal layer in terms of whether farmers' values (e.g., being a 'good farmer') and identities (e.g., steward of the land) conflict with other members of the farming community (McGuire et al., 2015).

Several trends currently taking place in agriculture are also influencing the success of women in agritourism on a societal level. Women have always participated in many farming tasks; yet, their presence as primary operators has become more prominent in recent years, tripling in numbers since 1978 (Hoppe & Korb, 2013). As women's roles in agriculture increases, it is important to remember the hidden roles they have held throughout history. For example, Kirby (1986) largely credits women in the Southern US with the economic survival of

farm families in rural areas during the depression era, yet their survival strategies and importance are usually masked within the gendered agricultural context (i.e., women's family role). However, the increased prominence of women in agriculture is promoting their strategies for progressing out of their hidden place and aiding their move toward more agency (Sachs, 1996). Additionally, it provides more opportunity for women to participate in gender specific alternative networks alternative networks (e.g., Annie's projects, conservation-themed livestock associations) raising awareness of how to change prevailing farm management and maximize success.

Increased interest in local and sustainably produced food has paralleled the growth of women's presence in agriculture (Hoppe & Korb, 2013). The parallel growth of women in agriculture and sustainable agriculture has been associated with different factors, such as the historic role of women in the production of food for subsistence and trade in local markets (Sachs, 1996) and their comfort with sustainable practices that involve less machinery and smaller-scale production (Ball, 2014; Hoppe & Korb, 2013). Ikerd (2017) noted that the leadership women have attained in associations related to sustainable agriculture (e.g., Georgia Organics), agritourism (e.g., North Carolina Agritourism Networking Association) and community-based food systems (e.g., National Farm to School Network, National Young Farmers Coalition) highlights the importance women assign to these aspects of agricultural production. Yet, the impact of women's leadership in sustainable agriculture and community based food system organizations has not reached local, state and national governments that continue developing and enforcing masculine policies that inherently challenge women's success (Alston, 2002; Bock, 2014; Little & Jones, 2002). This context of women's increased agricultural prominence within masculine-driven policies calls for the (re)evaluation of women's

situation through feminist lenses to uncover the attributes defining their success and how agricultural trends and gendered and agritourism challenges are affecting their abilities to attain this success.

CHAPTER III

RESEARCH METHODS

This study was designed to evaluate the elements defining the success of women in agriculture and agritourism, as well as to identify the factors affecting their success. With that aim, this study was designed as descriptive and relational in nature. Data were collected from women in agriculture and agritourism in NC through a combination of mail and web-based survey instruments. Survey procedures (i.e., questionnaire development, survey administration) were approved by the Internal Review Board on November 22nd, 2016. The next paragraphs describe the methods used in this study, specifically related to its population and sampling procedures, survey procedures, and statistical analysis.

Study Population and Sampling Procedures

The study population consisted of women working on farms in agriculture or agritourism in North Carolina. As such, participation in this study was delimited to individuals who met three specific qualifications: being a women, working on a farm in any capacity (e.g., owner, manager) either involved in agritourism or not, and having a physical address in NC. Given that a list of women farmers in NC is not readily available, snowball sampling was used to identify study participants. This nonprobability sampling technique starts with identifying an initial group of people fitting the study criteria, who along their participation are asked to share the survey instrument with more possible participants or suggest contacts to the research team (Babbie, 2013). The study's initial list was constructed following a systematic internet search for NC agritourism farms using key words (e.g., corn mazes, u-pick). Initial contacts were also gathered

from specialized listings (e.g., NC County Visitor Bureaus). The initial sample frame included 243 farms, which could include both male and female contact information. Then, study participants were asked to refer the survey to other female farmers they may know either by forwarding the survey link directly to them or by providing their contact information to the research team.

To increase participation, selected agriculture and agritourism organizations (i.e., Blue Ridge Women in Agriculture, Carolina Farm Stewardship Alliance, NC Agritourism Networking Association) were contacted and asked to distribute the survey to their members as studies with similar contexts have suggested (Barbieri, 2006; Barbieri & Mahoney, 2009; Barbieri et al., 2008; Tew & Barbieri, 2012). Aiming to capture unaffiliated farms or those without an internet presence, NC State Extension agents working with agritourism or with female farmers were asked to promote the survey and encourage participation among their constituents.

Survey Instrument

A survey instrument was developed based on the literature to address the study objectives. The instrument draft was pre-tested among peers in the College of Natural Resources (NC State University) to check for face validity (readability and clarity). After addressing comments received, the final questionnaire included 33 questions organized in seven topics: farmer values, trends facilitating agritourism success, indicators of success, challenges as a female farmer and as an agritourism provider, farm characteristics, family farm and famer demographic information (Appendix A). It was estimated that the survey would take no longer than 15 minutes to be completed. A filter question was included to verify the participant was a woman in agriculture.

Farmer values were queried using a four point Likert scale (1 = not at all valuable; 4 = extremely valuable) through 12 indicators adapted from McGuire et al. (2015) which represent four identity dimensions: naturalist (three items; e.g., maintain habitat for wildlife), conservationist (three items; e.g., minimize nutrient runoff), productivist (three items; e.g., have the highest yields per acre), and civic-minded (three items; e.g., be a leader in your community). Opportunities for agritourism success were assessed in terms of usefulness of eight strategies (e.g., keeping up with policies/regulations, developing a support network of female farmers) and the breadth with which ten observed trends in NC (e.g., demand of local farm products, women's leadership in agritourism) facilitate success on a series of four-point unidirectional scales.

Perceived success was queried through two types of indicators. General assessments of functional success (i.e., extent of success tied to an individual's role as a farmer, entrepreneur, as a women overall) were queried using a series of five-point Likert scale ranging from "not at all successful" (1) to "extremely successful" (5). Then, the level of importance (5-point Likert scale; 1 = very unimportant; 5 = very important) of 19 life-dimensions indicators contributing to women's success acquired throughout the literature were included (Buttner & Moore, 1997; Halim, 2016; Walker & Brown, 2004). More specifically, these life-dimensions indicators represent aspects of women's personal achievement (e.g., similar recognition as male farmers, pursuing happiness) and social contribution (e.g., mentoring young employees; setting an example for other women farmers).

The extent to which a suite of challenges are perceived to affect the success of overall agritourism and specifically female farmers were queried in a series of four-point unidirectional scales ranging from "not at all" (1) to "very much" (4). Seven challenges affecting the overall agritourism business (e.g., agritourism is not perceived as "real" agriculture) were developed

from literature on farm entrepreneurial diversification and agritourism (e.g., Barbieri et al., 2008; Colton & Bissex, 2005; Halim, 2016). Respondents were also asked to rate the extent to which nine challenges (e.g., finding reliable staff, reaching markets) affect agritourism farms as compared to non-agritourism farms. Gendered challenges were constructed to capture those affecting women's functional success and importance of life-dimensions to their success (e.g., Brandth; 2002b, Bock, 2004; Brasier et al., 2014; Carter, 2017; Halim, 2016; Li, 2017; Little & Jones, 2000; Sullivan et al., 1997; Whatmore, 1991). Respondents were asked to rate the extent to which 14 challenges (e.g., access to grants, demand of childcare) affect women's success as compared to men's.

The survey also collected information on farm household characteristics in terms of general economic indicators (e.g., acreage farmed, number of employees, gross sales) and agritourism involvement (e.g., types of activities offered, number of years in operation, estimated number of visitors). Indicators of the family dynamics (e.g., women's role on the farm, number of generations in farming, settlement level in the community) and respondents' socio-demographic information (e.g., family life cycle, employment status, level of education, household income) were also collected.

Survey Administration

Data were collected using printed and electronic questionnaires in parallel to entice participation as it accounts for participants' response preferences, streamline time efficiency for data input, and reduce expenses (Dillman, Smyth, & Christian, 2009). The printed version was mailed through the United States Postal Service, while the online version was hosted through Qualtrics, a web-based survey software licensed to NC State University. Although both types of

questionnaires had identical content and word choices, their formats were slightly adjusted for respondents' convenience. The printed questionnaire was formatted in a 6-page stapled packet printed on yellow paper. The online questionnaire was organized in 24 screens as to reduce scrolling up and down. The online version included logic-branching patterns to skip sections that were not applicable to respondents. For example, if the respondent was not currently offering agritourism, she did not access all questions related to agritourism operations (e.g., types of activities offered).

Table 1. Date and number of communications sent to study participants

Types of Communication	Date Sent	Number Sent		
		All	Invalid[1]	Valid[2]
Electronic Communications				
Invitation e-mail	February 1, 2017	192	4	188
Reminder 1	February 9, 2017	157	7	150
Reminder 2	February 14, 2017	144	8	136
Reminder 3	March 23, 2017	92	5	87
Thank you note	April 19, 2017	154	0	154
Printed Communications				
Invitation letter	February 20, 2017	142	7	135
Postcard reminder	March 8, 2017	118	3	115
Reminder letter (with survey)	April 6, 2017	99	2	97

[1] Denotes communications that were not delivered (e.g., wrong email addresses; incorrect US Postal addresses).
[2] Total number minus invalid communications.

Prospective participants were invited to participate using online and mailed communications upon availability of appropriate contact information. Those who had both online and mail address information were contacted via email first. Invitation letters and emails described the purpose of the study, statement of confidentiality and privacy procedures, and instructions for the survey. Electronic invitations included a link to the survey while mailed invitations included a copy of the questionnaire. To encourage participation an incentive of a

chance to win one of five $50 gift cards was used. The e-mailed invitation was sent first, followed by the mailed invitation 20 days later. Data collection spanned three months (February 1 – April 30). Within that timeframe, a total of three e-mail reminders, a postcard and a second round of surveys were sent to non-respondents. Table 1 summarizes the type and time of all survey communications.

Response Rate and Data Preparation

A total of 193 surveys were collected. From those, 13 were removed for not fitting the study criteria (e.g., male respondents), incompleteness or duplicate participation (in which case only the first response was retained). This yielded 180 valid responses, from which 140 respondents were from the initial sampling list, representing a 59.3% response rate, calculated as a proportion of the number of completed respondents to the number of eligible respondents (Vaske, 2008); 40 responses were obtained from the snowball referrals. Survey respondents were closely divided between printed (n = 75) and online (n = 65) procedures (Table 2).

Table 2. Number of respondents and response rates by sample type

Sample	Invitees (*n*)	Respondents (*n*)	Response Rate[1]
Initial Sample			
Mailed	135	75	55.5%
E-mailed	188	65	34.6%
Total	236	140	59.3%
Total			
Referrals	--	40	--
Grand total	236	193	59.3%

[1] Response rate calculated as Valid Responses / Valid Sample (140/237). Calculations do not include the 42 questionnaires completed from the snowball effect.

Electronically collected data were stored by Qualtrics in a comma separated values format (.csv) compatible with Microsoft Excel. Data collected from returned mailed surveys were input directly to the online survey system. After data collection was completed, they were exported to Statistical Package for the Social Sciences (SPSS) version 24. Then, data were cleaned before statistical analysis. Although not expected (Dillman et al., 2009), a statistical comparison of key variables (i.e., education, household income, generations on the farm, number of received visitors in 2016) between mailed and email respondents were conducted using Levene's Test for Equality Variance. This analysis indicated that equal variance in the aforementioned variables could be assumed across both online and mail data sets. Potential non-response bias was evaluated by comparing the first and last waves of respondents in regards to the same key variables using Levene's Test for Equality Variance. Once again, the findings indicated that equal variance could be assumed across data from early and late responses which provided assurance of no non-response bias in the overall data set (Armstrong & Overton 1977).

Statistical Analysis

Statistical tests included descriptive statistics, exploratory factor analysis, reliability tests, paired *t*-test, Wilcoxon signed-rank test, and regression analysis. Descriptive statistics were used to profile the socio-demographic characteristics of respondents, their perceived success, importance of life-dimensions to success, and those factors affecting this success (e.g., farmer values, farm household characteristics, agriculture trends, challenges). Cronbach's alpha was computed to confirm the reliability of the four types of farmers' values (conservationist, productivist, civic minded, naturalist) given their extended use in the literature. Based on the number of items in some dimensions and the small sample size, a minimum 0.60 was adopted as

a threshold for acceptable internal reliability (Leech, Barrett, & Morgan, 2005), Yet, some lower alphas were accepted due to the exploratory nature of this study and the importance of content validity (Vaske, 2008). Cronbach's alpha was also used to confirm internal reliability of theoretical dimensions of functional success, challenges related to gender (caregiver role, patriarchal agricultural system) and agriculture (managerial, structural, agricultural). Then, exploratory factor analysis with varimax rotation was used to reduce the life-dimensions items contributing to women's success, agritourism challenges and agriculture trends to fewer dimensions to understand the dimensional structure of the constructs as well as facilitate further analysis. Eigenvalues over one and loadings over 0.5 were used as thresholds in the factor analysis; a pairwise method was used to handle missing values due to the limited number of respondents (Field, 2013).

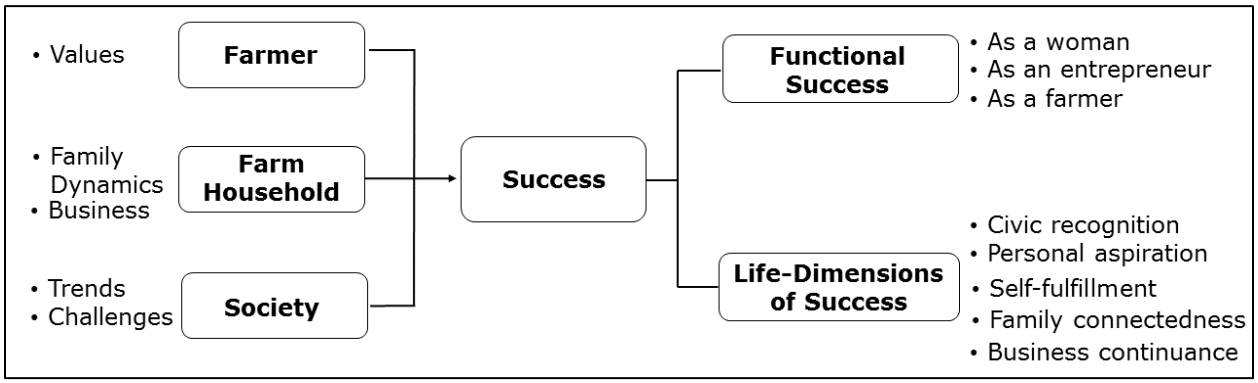

Figure 2. Study Model

Non-pairwise comparisons (Wilcoxon Rank and *t*- tests) were also run ($p < 0.05$) in which Bonferroni correction was applied to account for Type I statistical errors that can occur when running multiple comparisons (Vaske, 2008). Wilcoxon Rank tests were used to determine the farmer type (e.g., African America, First generation) most disadvantaged. Paired *t*-tests were used to contrast between the participants' perceptions of challenges faced by male farmers and

female farmers, as well as between participants' perceptions of challenges faced by agritourism and non-agritourism farms. A series of multiple linear regressions ($p < 0.05$) were used to identify the extent to which farmer values and indicators of the farm household in terms of family dynamics and farm business (independent variables) predicted functional success and importance of life-dimensions of success (dependent variables) as summarized in Figure 2. Specific independent variables included four farmer's values dimensions (productivist, conservationist, naturalist, civic-minded), two descriptors of family dynamics (perceived settlement in the community, generations on the farm) and two descriptors of the farm business (number of agritourism activities offered, months of operation per year).

Additional multiple linear regressions were used to find associations between societal influences agricultural trends, gendered challenges, agritourism challenges (independent variables) and functional success and importance of life-dimensions to their success (dependent variables). Specifically, independent variables included two descriptors of current trends (public awareness, changing social fabric of agriculture), two gendered challenge dimensions (women's caregiver role, patriarchal agricultural system) and two challenge dimensions of agritourism challenges (agritourism uncertainty, managing farm quality). Table 3 summarizes the statistical analysis and variables included per study objective.

Table 3. Statistical analysis and variables tested by study objectives

Statistical Analyses	Variables Tested
(RO-1) To identify the breadth and level of success that women in agritourism encounter.	
a) Descriptive Statistics: frequency, mean, standard deviation	- Extent of women's success as a farmer, entrepreneur, and as a woman overall) - Importance of 19 indicators of life-dimension to respondents sense of success
(RO-2) To reduce the life-dimensions indicators of women's success to fewer dimensions.	
a) Exploratory Factor Analysis	- Importance of 19 indicators of life-dimension to respondents sense of success
(RO-3) To identify farmer values, farm household (family dynamics, farm business) characteristics, and societal elements (trends, challenges) associated with women's success.	
a) Exploratory Factor Analysis	- 7 challenges affecting agritourism success - 10 trends facilitating success of women in agritourism
b) Reliability Tests (Cronbach's alpha)	- 14 challenges affecting women farmers - 12 farmers' values
c) Multiple Linear Regressions	- Models 1, 2 & 3 (Farm Household & Functional Success) DVs: Success as woman, farmer, and entrepreneur IVs: Farmer (values factors); Family Dynamics (likelihood of passing farm on; settlement level in community); Farm Business (seasonality; number of agritourism activities offered). - Models 4, 5 & 6 (Society & Functional Success) DVs: Success as woman, farmer, and entrepreneur IVs: Trends in agriculture (2 factors); agritourism challenges (2 factors); gender challenges (2 factors). - Models 7, 8, 9, 10 & 11 (Farm Household & Importance of Life-dimensions to Success) DVs: Five factors of life-dimensions contributing to success IVs: Farmer (values factors); Family Dynamics (likelihood of passing farm on; settlement level in community); Farm Business (seasonality; number of agritourism activities). - Models 12, 13, 14, 15 & 16 (Society & Importance of Life-dimensions to Success) DVs: Five factors of life-dimensions contributing to success IVs: Trends in agriculture (2 factors); agritourism challenges (2 factors); gender challenges (2 factors).

CHAPTER IV

RESULTS

Chapter IV describes the findings of the Women in Agritourism Study. It first profiles respondents based on their demographics, farm family, and farm business (agriculture and agritourism) attributes. Then, this chapter identifies the breadth and level of success, challenges and trends women in agritourism encounter by determining the underlying structures of these constructs. Finally, this chapter identifies the farm household attributes (farmer values, family dynamics, farm business) and societal aspects (challenges, trends) associated with women's functional (women, entrepreneur, farmer) and life-dimensional (civic recognition, personal aspirations, self-fulfillment, family connectedness, business continuance) success.

Demographic Profile of Respondents

The typical respondent was a middle-aged (*M* = 49 years old) highly educated woman working full-time on the farm (Table 4). A relatively large proportion of respondents (38.2%) were young women (less than 45 years old) while most (52.6%) were between 45 and 64 years old; only 9.2% were of retirement age (65 years old). Over two-thirds (67.8%) of respondents reported at least a four-year college degree and 31.7% held a post-graduate degree. About one third (34.9%) of the responding women indicated a household income of less than $50,000, and 39.2% reported at least $75,000. The vast majority (91.0%) of respondents lived with their spouse or significant other. Less than half (42.9%) lived with at least one child with seven-to-15 years old being the most common child age group reported (21.2%); 10.3% reported living with at least one adult child at home.

Table 4. Socio-demographic profile of respondents

Socio-demographic Indicators	Number	Percent
Age *(n = 152)*		
Less than 35 years old	25	16.5%
35 - 44 years old	33	21.7%
45 - 54 years old	38	25.0%
55 - 64 years old	42	27.6%
65 years old or older	14	9.2%
Mean (in years)		***(48.8)***
Level of Education *(n = 165)*		
High school graduate or less	3	1.9%
Some college	22	13.3%
Technical degree (2-year degree)	18	10.9%
Four-year college degree	65	39.4%
Post graduate studies	57	34.5%
Household Income *(n = 158)*		
Less than $25,000	9	5.7%
$25,000 - 34,999	20	12.7%
$35,000 - 49,999	26	16.5%
$50,000 - 74,999	41	25.9%
$75,000 - 149,999	39	24.7%
$150,000 or more	23	14.5%
Household Composition (n = 156) [a]		
Spouse or significant other	142	91.0%
Children in the household (all ages)	67	42.9%
Children 6 years or younger	15	9.6%
Children 7 - 15 years old	33	21.2%
Children 16 - 20 years old	21	13.5%
Children 21 years or older	16	10.3%
Type of Employment (n = 168) [a]		
Full-time farming	103	61.3%
Part-time farming	42	25.0%
Full-time off-farm job	34	20.2%
Part-time off-farm job	23	13.7%
Homemaker	23	13.7%
Retired	17	10.1%
Other	6	2.4%
Farm Pluriactivity (n = 159) [b]		
Full-time farming only	89	56.0%
Part-time farming only	13	8.2%
Full-time off-farm job only	12	7.5%
Part-time off-farm job only	2	1.3%
Farm and off-farm job	43	27.0%

[a] Adds to more than 100% because participants could check more than one response.
[b] Only includes those who reported either working on or off the farm in any capacity.

The vast majority (86.5%) of responding women work on the farm either full- or part-time and 23.2% held off-farm jobs; a small proportion indicated retirement (10.1%) or

homemaking (9.2%) as employment. Over half (56.0%) of respondents indicated full-time farming as their only job while 27.0% were pluriactive as they held both, off-farm and on-farm employment. Although as expected, most pluriactive were part-time farmers (*n* = 30), fourteen respondents worked off-farm while also working as full time farmers.

Table 5. Respondents' connectedness with farming

Indicators of Farm Relationship	**Number**	**Percent**
Respondents' Role on Farm (*n* = 178) [a]		
Owner or co-owner	154	62.6%
Farm manager or employee	53	29.8%
Other	5	2.8%
Farmland Tenure (*n* = 167)		
Full ownership	114	68.3%
Partial ownership	35	21.0%
Do not own the farm	18	10.7%
On Farm Residence (*n* = 161)		
Living on the farm	133	82.6%
Living off the farm	28	17.4%
Generations on the Farm (*n* = 168)		
First generation	102	60.7%
2 generations	12	7.1%
3 generations	21	12.5%
4 generations or more	29	17.3%
Do not know	4	2.4%
Likelihood of Farm Succession (*n* = 168)		
Very likely	53	31.5%
Likely	27	16.1%
Undecided	24	14.3%
Unlikely	23	13.7%
Very unlikely	28	16.7%
Do not know	13	7.7%
Family's Settlement in their Community (*n* = 167)		
Very much settled	102	61.0%
Somewhat settled	41	24.6%
Very little settled	8	4.8%
Not at all settled	7	4.2%
Do not know	9	5.4%

[a] Adds to more than 100% because participants could check more than one response.

Respondents showed strong connections to farming in different ways. The majority either owned or co-owned their farm (62.6%) and had full ownership of the farmland (68.3%); a higher

proportion (82.6%) were living on the farm at the time of the study (Table 5). Although most respondents (60.7%) were first generation farmers, 44.4% reported that they would very likely or likely to pass the farm on to the next generation. The majority of responding women felt their farm family was very much settled in their community (61.1%); however, about 10% of respondents perceived they were not settled at all (4.2%) or very little settled (4.8%) in their community.

Agricultural Profile of Respondents

Respondents had a diversity of working agricultural facilities in terms of type and extent of production (Table 6). The average size of farms in terms of farmland was 84.5 acres although it was widely distributed across the spectrum, ranging from small parcels of less than 10 acres (17.5%) to large units of at least 100 acres (25.2%); over one third (35.6%) had medium-sized farmlands, between 25 to 99 acres. As expected, the amount of actual farmed acreage in 2016 was smaller (M = 55.8 acres), with a relative large number of respondents farming less than 10 acres (42.0%). Consistent with their low-acreage farmed, 58.5% of respondents indicated making less than $50,000 in gross farm sales in 2016 and 26.4% making at least $100,000. Agricultural production for commercial sales was prevalent among responding farms at 85.0%. In terms of production, results highlighted the diversity of crops and animals that respondents were growing or raising, with the most common being specialty crops (63.8%) and large livestock such as cattle and hogs (47.9%), followed by poultry and small animals (30.7%) and eggs (24.5%).

Table 6. Agricultural profile of respondents

Farm Indicators	Number	Percent
Farmland Acreage (*n* = 166)		
Less than 10 acres	29	17.5%
10 - 24 acres	36	21.7%
25 - 49 acres	30	18.1%
50 - 99 acres	29	17.5%
100 - 199 acres	25	15.0%
200 acres or more	17	10.2%
Mean (in acres)		***(84.5)***
Acreage Farmed in 2016 (*n* = 162)		
Less than 3 acres	24	14.8%
3 - 9 acres	44	27.2%
10 - 29 acres	42	25.9%
30 - 99 acres	30	18.5%
100 - 249 acres	14	8.7%
250 acres or more	8	4.9%
Mean (in acres)		***(55.8)***
Farm Gross Income in 2016 (*n* = 159)		
Less than $1,000	10	6.3%
$1,000 - 9,999	32	20.1%
$10,000 - 49,999	51	32.1%
$50,000 - 99,999	24	15.1%
$100,000 - 249,999	21	13.2%
$250,000 - 499,999	13	8.2%
500,000 or more	8	5.0%
Agricultural Commercial Production (*n* = 153)		
Do raise/produce for commercial sale	130	85.0%
Do not raise/produce for commercial sale	23	15.0%
Types of Agricultural Production (*n* = 163) [a]		
Specialty crops	104	63.8%
Livestock	78	47.9%
Poultry and small animals	50	30.7%
Eggs	40	24.5%
Honey	20	12.3%
Commodity crops	18	11.0%
Non-traditional animals	13	8.0%
Dairy	9	5.5%
Value added products	9	5.5%
Fish or shellfish	4	2.5%
Other	35	21.5%

[a] Adds to more than 100% because participants could check more than one response.

On average, respondents reported a total of three full-time (*M* = 3.0) and six part-time (*M* = 6.4) farm employees (Table 7). The average number of part-time seasonal employees was higher (*M* = 5.3) than full-time (*M* = 1.5) and part-time (*M* = 1.1) year round and full-time

seasonal employees (M = 1.5). A large proportion of respondents operated their farms without hiring any year-round (43.7% full-time; 65.6% part-time) or seasonal employees (78.1% full-time; 54.4% part-time). Despite farmers' proclivity to have no employees, a relatively large proportion reported hiring one to two full-time (41.3%) or part-time (23.1%) workers. Most likely due to their agritourism activities, the proportion of part-time seasonal work (15.6%) was larger than the other year-round and seasonal employment types (6.3% full-time, seasonal; 2.5% part-time, year-round; 3.0% full-time, year-round).

Table 7. Number of farm employees by type of employment

Number of employees (n = 160)	**Year-Round**		**Seasonal**		**Total**	
	Full-Time	**Part-Time**	**Full-Time**	**Part-Time**	**Full-Time**	**Part-Time**
0 (none) employees	43.7%	65.6%	78.1%	54.4%	37.5%	33.3%
1 – 2 employees	41.3%	23.1%	10.0%	23.8%	38.2%	34.0%
3 – 5 employees	12.0%	8.8%	5.6%	6.3%	14.4%	11.3%
6 or more employees	3.0%	2.5%	6.3%	15.6%	10.0%	21.1%
Mean (in number)	***(1.5)***	***(1.1)***	***(1.5)***	***(5.3)***	***(3.0)***	***(6.4)***

Agritourism Profile

The majority (63.8%) of respondents were currently offering agritourism activities; 17.6% were not involved nor planning to be involved in agritourism (Table 8). The survey captured a mélange of agritourism operations regarding maturity, seasonality, number of visitors and economic relevance. In terms of years involved in this industry, 42.1% were emerging agritourism farms with less than five years of receiving visitors while 31.6% have been doing so for at least ten years (M = 9.0 years). As for seasonality, 20.0% offer agritourism for less than four months per year while 34.5% do so year round (M = 7.9 months per year).

Table 8. Agritourism profile of participating farmers

Agritourism Indicators	Number	Percent
Agritourism Involvement (*n* = 170)		
Currently involved	117	68.8%
Not involved but planning to	23	13.6%
Not involved nor planning to	30	17.6%
Years Offering Agritourism (*n* = 114) [a]		
Less than 2 years	12	10.5%
2 - 4 years	36	31.6%
5 - 9 years	30	26.3%
10 - 19 years	22	19.3%
20 years or more	14	12.3%
Mean (in years)		***(9.0)***
Agritourism Seasonality - Months per Year (*n* = 110) [a]		
Less than 4 months	22	20.0%
4 - 6 months	19	17.3%
7 - 11 months	31	28.2%
12 months (year round)	38	34.5%
Mean (in months)		***(7.9)***
Number of Visitors in 2016 (*n* = 95) [a]		
Under 150 visitors	25	26.3%
150 - 499 visitors	23	24.2%
500 - 999 visitors	9	9.5%
1,000 - 4,999 visitors	20	21.1%
5,000 or more visitors	18	18.9%
Mean (in number of visitors)		***(3,550)***
Visitor Expectations for 2017 (*n* = 88) [a]		
Increase number of visitors	68	77.2%
Stay about the same	18	20.5%
Decrease number of visitors	2	2.3%
Proportion of Farm Revenues from Agritourism (*n* = 114) [a]		
All	11	9.6%
Most	27	23.5%
Some	47	40.8%
Very little	24	20.9%
None	6	5.2%

[a] Only respondents offering agritourism are reported (*n* = 117; 68.8%).
[b] Calculated after subtracting expected visitors for 2017 from received visitors 2016.

Agritourism variability was likewise diverse in terms of number of visitors; while 26.3% hosted less than 150 visitors on their farm in 2016, 40.0% indicated hosting at least 1,000 visitors (*M* = 3,550 visitors). The vast majority (77.2%) of respondents are expecting to increase the number of visitors on their agritourism operations for the next year (2017). Consistent with the number of visitors reported, 33.1% reported that all or most of their farm revenues come from

their agritourism activities while only 5.2% indicated not receiving revenues from agritourism. Responding women were offering a variety of farm recreation and hospitality, agricultural education, and outdoor recreation activities (Table 9). Overall, the most commonly offered activities were educational activities, such as classes, workshops, and school tours (81.4%), followed by festivals or events (53.9%) and farm based recreational activities (45.2%). Activities within the outdoor recreation category were less popular; yet 31.3% indicated offering nature-observation activities.

Table 9. Agritourism activities offered by respondents

Agritourism Activities (*n* = 115) [a]	**Number**	**Percent** [b]
Farm Recreation and Hospitality		
Festivals or events	62	53.9%
Farm-based recreational activities	52	45.2%
Meals	33	28.7%
Overnight stays	18	15.7%
Non-farm recreational activity	9	7.8%
Agricultural Education		
Educational activities	92	81.4%
Farm hands-on activities	51	44.3%
Observation of agricultural processes	26	22.6%
Outdoor Recreation		
Nature observation activities	36	31.3%
Physically active activities	15	13.0%
Wildlife extractive activities	11	9.6%
Summer Camps	6	5.3%
Other		
Other activities	6	5.3%

[a] Only respondents offering agritourism responded (*n* = 117; 68.8%).
[b] Adds to more than 100% because participants could check more than one response.

Results indicated a strong involvement of family members, especially women, on the agritourism operations (Table 10). The vast proportion of responding women were involved with some aspect of agritourism activities on their farms (86.8%); 77.7% were the decision makers of agritourism matters and another 21.0% indicated being the agritourism manager or employee.

When asked about family members involved in agritourism, 79.8% of respondents indicated their spouses, followed by their daughters or daughters-in-law (33.3%) and sons or sons-in-law (27.2%). Half (50.0%) of the agritourism operations had family members from both genders involved in the offering of this activity, while 31.2% were run exclusively by women in the farm family (e.g., mothers, mothers-in-law, sisters, sisters-in-law).

Table 10. Indicators of family participation in agritourism

Agritourism Family Participation [a]	**Number**	**Percent**
Women's Involvement in Agritourism (*n* = 117) [b]		
Overall involvement	99	86.8%
Decision maker	87	77.7%
Manager or employee	40	21.0%
Family Members Involved in Agritourism (*n* = 114) [b]		
Spouse or partner	91	79.8%
Daughter or daughter-in-law	38	33.3%
Son or son-in-law	31	27.2%
Mother or mother-in-law	16	14.0%
Father or father-in-law	15	13.2%
Sister or sister-in-law	7	6.1%
Brother or brother-in-laws	3	2.6%
Other family member	9	7.9%
Family Members by Gender (*n* = 64) [c]		
Females only	20	31.2%
Males only	12	18.8%
Females and males	32	50.0%

[a] Only respondents offering agritourism are reported (*n* = 117; 68.8%).
[b] Adds to more than 100% because participants could check more than one response.
[c] Excludes spouse/partner as their gender was not queried.

Farmer's Values

The most valuable practices among participants were being active in the community (M = 4.31), maintaining organic matter (M = 4.26), and minimizing soil erosion (M = 4.24), which represent indicators of different value dimensions (Table 11). Reliability tests showed a strong internal consistency of the overall farmers' values scale (α = 0.812), while moderate to strong

alphas within each of the four dimensions: civic minded (α = 0.810), conservationist (α = 0.790), naturalist (α = 0.642), and productivist (α = 0.637).

Table 11. Farmer's values among responding women

Values by Dimensions (n = 177)	**Not at all valuable**	**Slightly valuable**	**Moderately valuable**	**Very valuable**	**Extremely valuable**	***M*** [a]	***S. D.***
***Conservationist* (α = 0.790)**							
Maintain organic matter	4.6%	2.9%	13.1%	20.6%	58.8%	4.26	1.088
Minimize soil erosion	2.4%	3.4%	13.8%	28.7%	51.7%	4.24	0.973
Minimize nutrient runoff	4.7%	9.9%	14.0%	28.7%	42.7%	3.95	1.180
Composite Mean						***4.15***	***0.908***
***Civic-minded* (α = 0.810)**							
Be active in your community	0%	5.1%	10.9%	32.0%	52.0%	4.31	0.862
Be a leader in your community	6.3%	7.5%	23.6%	28.2%	34.4%	3.77	1.185
Participate in farm-related organizations	1.7%	13.6%	23.2%	36.1%	25.4%	3.70	1.048
Composite Mean						***3.92***	***0.884***
***Naturalist* (α = 0.642)**							
Maintain habitat for wildlife	1.1%	4.6%	20.6%	32.6%	41.1%	4.08	0.950
Use cover crops between harvest and planting	7.6%	9.2%	15.0%	31.8%	36.4%	3.80	1.237
Avoid fall tillage	17.3%	17.3%	25.5%	24.4%	15.5%	3.04	1.317
Composite Mean						***3.64***	***0.896***
***Productivist* (α = 0.637)**							
Have the highest yields per acre	8.5%	6.8%	28.2%	30.5%	26.0%	3.59	1.189
Use the latest technology	5.8%	21.1%	33.3%	22.8%	17.0%	3.24	1.141
Have the most up-to-date equipment	11.5%	33.9%	35.1%	13.8%	5.7%	2.68	1.036
Composite Mean						***3.19***	***0.865***

[a] Measured on a 5-point scale, ranging from "1 = Not at all valuable" to "5 = Extremely valuable".

Taken by dimensions, results indicate that conservationist values (M = 4.15, SD = 0.908) were the most predominant, with most respondents indicating that maintaining organic matter (79.4%) and minimizing soil erosion (80.4%) were at least very valuable to them as farmers. Civic-minded values were also highly regarded by responding women (M = 3.92, SD = 0.884) with 84% of respondents indicating that being active in their community was at least very valuable to them. The naturalist (M = 3.64, SD = 0.896) and productivist (M = 3.19, SD = 0.865) dimensions were less regarded as the previous ones; yet most respondents indicated at least very

valuable consideration for maintaining habitats for wildlife (73.7%), using cover crops between harvest (68.2%), and having the highest yields per acre (56.5%).

Respondents' Success

(RO-1) To identify breadth and level of functional success.

Women felt at least moderately successful in their roles as women, farmers, and entrepreneurs (Table 12). Most respondents (72.9%) felt that they were very or extremely successful as a woman (M = 3.94). However, they indicated feeling less successful as an entrepreneur (M = 3.34) and as a farmer (M = 3.31). Less than half (43.5%) of women indicated feeling very or extremely successful as an entrepreneur and an even smaller proportion (38.8%) felt that way in their role as woman farmer.

Table 12. Indicators of functional success among responding women

Functional Success (n = 178)	**Not at all successful**	**Slightly successful**	**Moderately successful**	**Very successful**	**Extremely successful**	***M*** [a]	***S. D.***
Overall as a woman	0%	5.1%	22.0%	46.3%	26.6%	3.94	0.831
As an entrepreneurial woman	2.2%	15.3%	39.0%	33.3%	10.2%	3.34	0.934
As a woman farmer	2.8%	11.8%	46.6%	28.7%	10.1%	3.31	0.909

[a] Measured on a 5-point scale, ranging from "1 = Not at all successful" to "5 = Extremely successful".

Women reported different elements of their own lives as important for their sense of success (Table 13). More specifically, pursuing happiness (M = 4.70), remaining mentally creative (M = 4.70) and building long lasting relationships with customers (M = 4.69) were the most important indicators to women's sense of success. The majority of participants also felt that good work-life balance (66.9%; M = 4.60), educating the public about farming (59.9%; M = 4.53), active life-styles (58.4%; M = 4.4.53), flexible work hours (56.7%; M = 4.49) and having a supportive family (54.5%; M = 4.42) were all very important to women's success. Women felt

that receiving similar recognition as male farmers (*M* = 3.80), gaining respect from other farmers (*M* = 3.53), and being an "agritourism" expert (*M* = 3.41) were of least importance of all the indicators for their success yet still important.

Table 13. Level of importance of elements of women's lives on their sense of success

Life Indicators (*n* = 178)	**Very unimportant**	**Unimportant**	**Neither**	**Important**	**Very important**	***M*** [a]	***S.D.***
Pursuing happiness	0.0%	0.0%	1.2%	27.5%	71.3%	4.70	0.483
Remaining mentally creative	0.0%	0.0%	1.2%	27.8%	71.0%	4.70	0.484
Building long-lasting relationships with customers	0.6%	0.0%	1.1%	27.0%	71.3%	4.69	0.554
Having a good work-life balance	0.0%	1.7%	3.9%	27.5%	66.9%	4.60	0.650
Educating public about farming	0.0%	1.7%	4.0%	34.5%	59.8%	4.53	0.658
Having an active lifestyle	0.0%	1.2%	2.8%	37.6%	58.4%	4.53	0.612
Having flexibility in work hours	0.0%	2.3%	2.8%	38.2%	56.7%	4.49	0.666
Having a family supporting my farming career	0.6%	2.2%	6.7%	36.0%	54.5%	4.42	0.764
Giving back to community	0.6%	0.6%	4.6%	49.1%	45.1%	4.38	0.657
Earning a good income from the farm	1.1%	1.7%	5.1%	42.9%	49.2%	4.37	0.759
Setting an example for other women farmers	1.7%	1.7%	10.1%	42.7%	43.8%	4.25	0.836
Being part of the local farming community	0.0%	1.1%	9.6%	53.1%	36.2%	4.24	0.688
Mentoring young employees	1.7%	2.3%	16.4%	46.8%	32.8%	4.07	0.857
Being an expert in some aspect of farming	0.6%	4.5%	11.4%	59.1%	24.4%	4.02	0.771
Gaining respect from other farmers	0.5%	5.1%	19.2%	52.0%	23.2%	3.92	0.822
Passing the farm to the next generation	5.1%	8.6%	22.9%	22.9%	40.5%	3.85	1.194
Receiving similar recognition as male farmers	4.0%	9.0%	23.7%	29.9%	33.4%	3.80	1.120
Being recognized by my community	2.3%	9.6%	31.6%	40.7%	15.8%	3.58	0.945
Being an "agritourism" expert	8.5%	9.6%	28.2%	40.1%	13.6%	3.41	1.105

[a] Measured on a 5-point scale, ranging from "1 = Very unimportant" to "5 = Very important".

(RO-2) To reduce the life-dimensions indicators of women's success to fewer dimensions.

Factor analysis of the life indicators important to women's sense of success resulted in a significant model of five factors: *Civic recognition*, *personal aspirations*, *self-fulfillment*, *family connectedness*, and *business continuance* (total variance = 58.9%; $\alpha = 0.823$; KMO = 0.835; $p < 0.001$; Table 14). Mentoring young employees and giving back to the community did not load in any factor, thus both indicators were removed from further analysis.

The first factor was named *civic recognition* as it captured women's involvement in different communities, such as the farming community and women farmers, as well as their broader community (variance = 29.6%; $\alpha = 0.782$; eigenvalue = 5.619; $M = 3.96$). The second factor, *personal aspirations*, included elements related to individual's ambition such as being physically active and becoming an expert either in some aspect of farming or in agritourism (variance = 9.5%; $\alpha = 0.575$; eigenvalue = 1.802; $M = 4.12$). *Self-fulfillment* describes the overall feeling of satisfaction and enjoyment that women value in different aspects of their lives, such as happiness and having good work-life balance and a flexible work schedule (variance = 7.7%; $\alpha = 0.712$; eigenvalue = 1.456; $M = 4.62$). Two items loaded in the *family connectedness* factor which together denote the importance of family's support and long-term involvement in the farm (variance = 6.5%; $\alpha = 0.573$; eigenvalue = 1.233; $M = 4.13$). The final factor, *business continuance*, captured two items that contribute to the viability of the business in terms of customers and farm income (variance = 7.7%; $\alpha = 0.439$; eigenvalue = 1.022; $M = 4.53$).

Table 14. Rotated factor matrix of the importance of life-dimensions to women's success

Success by Factors (n = 178) [a]	**Mean** [b]	**Factor Loadings**	**Explained Variance**	**Eigenvalue**
***Civic Recognition* (α = 0.782)**	***3.96***		***29.6%***	***5.619***
Setting an example for other women farmers	4.25	0.695		
Being part of the local farming community	4.24	0.560		
Gaining respect from other farmers	3.92	0.796		
Receiving similar recognition as male farmers	3.80	0.662		
Being recognized by my community	3.58	0.687		
***Personal Aspirations* (α = 0.575)**	***4.12***		***9.5%***	***1.802***
Educating the public about farming	4.53	0.647		
Having an active lifestyle	4.53	0.532		
Being an expert in some aspect of farming	4.02	0.560		
Being an "agritourism" expert	3.41	0.616		
***Self-fulfillment* (α = 0.712)**	***4.62***		***7.7%***	***1.456***
Pursuing happiness	4.70	0.625		
Remaining mentally creative	4.70	0.543		
Having a good work-life balance	4.60	0.832		
Having flexibility in work hours	4.49	0.767		
***Family Connectedness* (α = 0.573)**	***4.13***		***6.5%***	***1.233***
Family supporting my farming career	4.42	0.624		
Passing the farm to the next generation	3.85	0.816		
***Business Continuance* (α = 0.439)**	***4.53***		***5.4%***	***1.022***
Building long-lasting relationships with customers	4.69	0.655		
Earning a good income from the farm	4.37	0.689		

[a] Principal component analysis with varimax rotation and pairwise deletion method; loadings > 0.50; total variance explained: 58.9%; KMO > 0.835.

[b] Measured on a 5-point scale, ranging from "1 = Very unimportant" to "5 = Very important".

Challenges Affecting Farmers' Success

Respondents reported a variety of challenges affecting their success (Table 15). In order, the most prominent of these challenges were keeping the number of visitors to a desirable level (M = 3.37) and the uncertainty of regulations (M = 3.17). The changing mission of agritourism associations (M = 2.56) and agritourism not being perceived as "real" agriculture (M = 2.55) did not appear as hindering respondent's success. Factor analysis of the challenges affecting women's success in agritourism resulted in two factors: *uncertainty of agritourism* and *managing farm quality* (total variance = 68.4%; α = 0.824; KMO = 0.773; p < 0.001; Table 16). *Uncertainty of agritourism* captured the inconsistencies of agritourism information shared,

understanding of revenues accrued from agritourism activities, associations support, and the perceptions of agritourism as not real agriculture (variance = 49.1%; α = 0.831; eigenvalue = 3.434; *M* = 2.88). The second factor, *managing farm quality*, included two challenges related to famer's abilities to control the number of visitors to a level that could sustain their agricultural excellence (variance = 19.3%; α = 0.812; eigenvalue = 1.352; *M* = 3.30).

Table 15. Extent challenges are perceived as affecting the success of women in agritourism

Respondents' Perceived Challenges (*n* = 171) [b]	**Not at all**	**Very little**	**Some**	**Very much**	***Mean*** [a]	***S.D.***
Managing the number of visitors at a desirable level	3.6%	9.6%	33.5%	53.3%	3.37	0.802
Keeping the quality of farm products with the growth of farm visitors	7.2%	8.4%	38.9%	45.5%	3.23	0.883
Being uncertain about regulations related to agritourism	3.0%	12.6%	49.1%	35.3%	3.17	0.758
Minimal revenues agritourism generates	7.7%	13.0%	41.4%	37.9%	3.09	0.901
Limiting information on agritourism knowhow	5.4%	21.0%	43.1%	30.5%	2.99	0.857
Changing mission of agritourism associations	12.9%	33.5%	38.4%	15.2%	2.56	0.901
Agritourism is not perceived as "real" agriculture	16.8%	31.5%	31.5%	20.2%	2.55	0.996

[a] Measured on a 4-point scale, ranging from "1 = Not at all" to "4 =Very much".

Table 16. Rotated factor matrix of the challenges affecting the success of women in agritourism

Respondents' Perceived Challenges (*n* = 171) [a]	**Mean** [b]	**Factor Loadings**	**Explained Variance**	**Eigenvalue**
Uncertainty of Agritourism (α = 0.831)	***2.88***		***49.1***	***3.434***
Being uncertain about regulations related to agritourism	3.17	0.638		
Minimal revenues agritourism generates	3.09	0.610		
Limiting information on agritourism knowhow	2.99	0.791		
Changing mission of agritourism associations	2.56	0.859		
Agritourism is not perceived as "real" agriculture	2.55	0.805		
Managing Farm Quality (α = 0.812)	***3.30***		***19.3***	***1.352***
Managing the number of visitors at a desirable level	3.37	0.886		
Keeping the quality of farm products with the growth of farm visitors	3.23	0.904		

[a] Principal component analysis with varimax rotation and pairwise deletion method; loadings > 0.50; total variance explained: 68.4%; KMO > 0.773.

[b] Measured on a 4-point scale, ranging from "1 = Not at all" to "4 =Very much".

Responding women perceived that not all farmers in their communities experience challenges at a similar extent (Table 17). In order, they perceived that Latinos/as (M = 2.37) and first generation farmers (M = 2.34) were the most challenged, closely followed by African American farmers (M = 2.28) and transplants (M = 2.22); female farmers (M = 1.98) and White Caucasian were perceived to be less disadvantaged (M = 1.38). Wilcoxon signed-rank tests, after Bonferroni correction, showed that Latino/a, first generation, African American and transplants farmers were perceived as the most disadvantaged farmers with no significant rank differences between them (rank 1). Female farmers were ranked second, being perceived as less disadvantaged than first generation (z = 4.950; $p < 0.001$), Latino/a (z = 4.642; $p < 0.001$), African American (z = 3.799; $p < 0.001$), and transplant (z = 3.062; p = 0.002) farmers, while more disadvantaged than white (Caucasian) farmers (z = -7.752; p = 0.001). White (Caucasian) farmers were perceived as the least disadvantaged, being ranked significantly less than first generation (z = 8.997; $p < 0.001$), Latino/a farmers (z = 8.113; $p < 0.001$), African American (z = 8.185; $p < 0.001$), transplant (z = 8.348; $p < 0.001$), and female (z = 7.752; $p < 0.001$) farmers.

Table 17. Perceived disadvantages of different farmers in respondents' community

Farmers (n = 160)	**Not at all disadvantaged**	**Moderately disadvantaged**	**Very disadvantaged**	**Extremely disadvantaged**	***M*** [a]	***S.D.***	**Rank**
Latino/a	21.8%	37.1%	23.2%	17.9%	2.37	1.017	1 [b]
First generation	15.7%	48.5%	22.0%	13.8%	2.34	0.906	1 [b]
African American	23.0%	41.5%	20.4%	15.1%	2.28	0.985	1 [b]
Transplants	19.1%	47.8%	25.5%	7.6%	2.22	0.842	1 [b]
Female	28.1%	50.6%	16.3%	5.0 %	1.98	0.805	2 [c]
White (Caucasian)	65.6%	31.2%	2.6%	0.6%	1.38	0.572	3 [d]

[a] Measured on a 4-point scale, ranging from "1 = Not at all disadvantaged" to "4 =Extremely disadvantaged".

[b] Wilcoxon signed rank test (after Bonferroni correction) indicated that Latino/a, first generation, African American, and transplant farmers were the most disadvantaged, with no significant differences in the rank among them.

[c] Wilcoxon signed rank test (after Bonferroni correction) indicated that female farmers were less disadvantaged that Latino/a, first generation, African American, and transplant farmers but more disadvantaged than white farmers.

[d] Wilcoxon signed rank test (after Bonferroni correction) indicated that white Caucasian farmers were the least disadvantaged farmers as compared to their counterparts.

Respondents perceived that female and male farmers experience challenges related to their *caregiver role* (α_{female} = 0.875, α_{male} = 0.786) and the *patriarchal agricultural system* (α_{female} = 0.789, α_{male} = 0.772) differently (Table 18). Women were perceived to be more challenged by their *caregiver role* (*M* = 3.24) than by the *patriarchal agricultural system (M* = 3.02), with the more pressing challenges being the balancing of farm and household tasks (*M* = 3.60), managing off-farm and on-farm work (*M* = 3.52), and expectations as caregivers (*M* = 3.57). The least pressing challenges for women were knowledge sharing from parents (*M* = 3.57). Conversely, men were perceived to be more challenged by the *patriarchal agricultural system* (*M* = 2.54) than the *caregiver role* (*M* = 2.31), specifically, managing off-farm and on-farm work (*M* = 2.99), access to grants (*M* = 2.82), and the ability to inherit farmland (*M* = 2.80) were their most critical challenges. Respondents perceived that female (*M* = 2.58) and male farmers (*M* = 1.69) were least challenged by the number of farmers of the same gender, followed by knowledge sharing from parents among females (*M* = 2.74) and demand for childcare (*M* = 1.98) among male farmers.

Pairwise comparisons indicate that female farmers are perceived to face challenges at a stronger extent than male farmers because of their *caregiver role* (M_{female} = 3.24, M_{male} = 2.31, t = 14.952, $p < 0.001$) and the *patriarchal agricultural system* (M_{female} = 3.02, M_{male} = 2.54, t = 10.390, $p < 0.001$). Similar significant differences were also found in all individual challenges, except on how knowledge is shared from parents (M_{female} = 2.74, M_{male} = 2.57, p = 0.010). More pronounced differences within the *caregiver role* were found in relation to expectations as a caregiver (M_{female} = 3.47, M_{male} = 2.07, t = 15.399, $p < 0.001$), demands of childcare (M_{female} = 3. 31, M_{male} = 1.98, t = 14.200, $p < 0.001$) and balancing farm and household tasks (M_{female} = 3. 60, M_{male} = 2.38, t = 13.1863, $p < 0.001$). The physical demands of farm-work (M_{female} = 3.31, M_{male}

= 2.52, t = 10.207, $p < 0.001$) showed the most pronounced difference in the *patriarchal agricultural system*.

Table 18. A comparison of perceived importance of challenges affecting the success of female and male farmers

Types of Challenges (n = 148) [a]	**Importance mean** [b] **Female**	**Male**	***t*-value**	***df***	***p*-value** [c]
Caregiver Role (α_{female} = 0.875, α_{male} = 0.786)					
Balancing farm & household tasks	3.60	2.38	13.186	145	$p < 0.001$
Expectations as a caregiver	3.47	2.07	15.399	147	$p < 0.001$
Cooperation from spouse/partner	3.44	2.73	8.209	147	$p < 0.001$
Demand of child care	3.31	1.98	14.200	143	$p < 0.001$
Falling short on caring for the family	3.27	2.29	11.482	145	$p < 0.001$
Falling short on others' expectations	2.85	2.34	6.238	143	$p < 0.001$
Composite Mean	***3.24***	***2.31***	14.952	149	$p < 0.001$
Patriarchal Agricultural System (α_{female} = 0.789, α_{male} = 0.772)					
Managing off-farm & on-farm work	3.52	2.99	6.888	144	$p < 0.001$
Physical demand of farm-work	3.31	2.52	10.207	147	$p < 0.001$
Access to grants	3.11	2.82	4.409	147	$p < 0.001$
Ability to inherit farmland	3.11	2.80	4.559	141	$p < 0.001$
Availability of farmers' networks	3.07	2.68	5.600	146	$p < 0.001$
Lack of respect towards farmers	2.91	2.23	7.967	142	$p < 0.001$
Knowledge sharing from parents	2.74	2.57	2.618	140	$p = 0.010$
Number of farmers of the same gender	2.58	1.69	8.098	142	$p < 0.001$
Composite Mean	***3.02***	***2.54***	10.390	148	$p < 0.001$

[a] Overall reliability for female farmers α_{female} = 0.887, male farmers, α_{male} = 0.858.
[b] Ranked by female's means; measured on a 4-point scale, ranging from "1 = Not at all" to "4 =Very much".
[c] Critical value after Bonferroni correction is 0.008 for Caregiver Role (0.05 / 6) and 0.006 for Patriarchal Agricultural System (0.05 / 8).

Respondents perceived that agritourism and non-agritourism farms also experience a set of *managerial* (α_{agt} = 0.678, α_{non} = 0.669), *structural* (α_{agt} = 0.641, α_{non} = 0.650), and *agricultural* (α_{agt} = 0.716, α_{non} = 0.712) challenges, which were perceived to be more pressing for agritourism operations (Table 19). *Managerial* challenges were more demanding than structural and agricultural challenges for both types of farms, although to a higher extent for agritourism farms (M_{agt} = 3.54, M_{non} = 3.29, $p < 0.001$), namely finding reliable staff (M_{agt} =

3.69, M_{non} = 3.53, p = 0.002), administrative work (M_{agt} = 3.54, M_{non} = 3.25, p < 0.001), and controlling business growth (M_{agt} = 3.44, M_{non} = 3.13, p < 0.001).

Table 19. A comparison of perceived challenges affecting the success of agritourism and non-agritourism farms

Types of Challenges (n = 148) [a]	**Importance mean** [b]		***t*-value**	***df***	***p*-value** [c]
	Agritourism	**Non-agritourism**			
Managerial (α_{agt} = 0.678; α_{non} = 0.669)					
Finding reliable staff	3.69	3.53	3.083	141	p = 0.002
Administrative work	3.54	3.25	4.885	139	p < 0.001
Controlling business growth	3.44	3.13	5.204	139	p < 0.001
Composite Mean	***3.54***	***3.29***	6.508	141	p < 0.001
Structural (α_{agt} = 0.641; α_{non} = 0.650)					
Managing liability	3.72	3.05	10.149	140	p < 0.001
Reaching markets	3.62	3.45	2.496	136	p = 0.014
Receiving institutional support	3.09	2.88	2.998	137	p = 0.003
Composite Mean	***3.49***	***3.12***	7.171	140	p < 0.001
Agricultural (α_{agt} = 0.716; α_{non} = 0.712)					
Dealing with business seasonality	3.66	3.33	5.227	139	p < 0.001
Managing risks	3.51	3.41	1.547	137	p = 0.124
Managing tasks by farmers themselves	3.40	3.23	2.782	139	p = 0.006
Composite Mean	***3.43***	***3.29***	4.379	149	p < 0.001

[a] Overall reliability for agritourism farms (α_{agt} = 0.857), non-agritourism farms, (α_{non} = 0.860), and between both female and male farmers ($\alpha_{overall}$ = 0.892) indicated strong internal consistency.
[b] Ranked by agritourism's means; measured on a 4-point scale, ranging from "1 = Not at all" to "4 =Very much".
[c] Critical value after Bonferroni correction: p = 0.017 (0.05/3).

Structural challenges were the second most crucial for agritourism farms while the least for non-agritourism farms. Yet, once more, agritourism farms were perceived to be significantly more affected than non-agritourism farms for the entire dimension (M_{agt} = 3.45, M_{non} = 3.10, p < 0.001) and all their comprising indicators: managing liability (M_{agt} = 3.72, M_{non} = 3.05, p < 0.001), receiving institutional support (M_{agt} = 3.09, M_{non} = 2.88, p = 0.003), and reaching markets (M_{agt} = 3.62, M_{non} = 3.45, p = 0.014). *Agricultural* challenges were the least eminent for agritourism farms while among the most pressing for non-agritourism farms. Again, pairwise comparisons showed that agricultural challenges are overall more onerous for agritourism farms

(M_{agt} = 3.39, M_{non} = 3.23, $p < 0.001$), especially related to dealing with business seasonality (M_{agt} = 3.39, M_{non} = 3.23, $p < 0.001$) and managing tasks by farmers alone (M_{agt} = 3.40, M_{non} = 3.23, p = 0.006). However, results indicated that managing risks were equally difficult for both operation types (M_{agt} = 3.51, M_{non} = 3.41, p = 0.124).

Agricultural Trends Facilitating Women's Success in Agritourism

Overall, respondents indicated agricultural trends of public awareness (M = 3.56) and changing social fabric (M = 3.49) were facilitating their success at least somewhat (Table 20). The most impactful trends were the demand of local farm products (M = 3.73), access to social media (M = 3.71), public interest in local agriculture (M = 3.66) and entrepreneurial mindset of young farmers (M = 3.56).

Table 20. Rotated factor matrix of trends in agriculture facilitating success

Agricultural Trends (n = 170) [a]	**Mean** [b]	**Factor Loadings**	**Explained Variance**	**Eigenvalue**
Public Awareness (α = 0.790)			***43.4***	***4.344***
Demand of local farm products	3.73	0.825		
Access to social media	3.71	0.524		
Public interest in local agriculture	3.66	0.730		
Farmers seeking direct markets	3.47	0.589		
Support from public agencies	3.41	0.631		
Support from associations	3.37	0.504		
Composite Mean	***3.56***			
Changing Social Fabric (α = 0.790)			***12.3***	***1.231***
Entrepreneurial mindset of young farmers	3.56	0.618		
Women's leadership in agritourism	3.51	0.911		
Women's involvement in farming	3.51	0.804		
Farmer-to-farmer partnerships	3.39	0.546		
Composite Mean	***3.49***			

[a] Principal component analysis with varimax rotation and pairwise deletion method; loadings > 0.50; total variance explained: 55.7%; KMO > 0.794.

[b] Measured on a 4-point scale, ranging from "1 = Not at all" to "4 =Very much".

When factor analyzed, societal trends facilitating success of women in agriculture resulted in two factors: *public awareness* and *changing social fabric* (total variance = 55.7%; α = 0.852; KMO = 0.794). *Public awareness* (variance = 43.4%; α = 0.790; eigenvalue = 4.344; *M* = 3.56) comprised six items, being the demand of local farm products (*M* = 3.73), access to social media (*M* = 3.71) and public interest in local food and farms (*M* = 3.66) the ones perceived as most impactful. The second factor, *changing social fabric* (variance = 12.3%; α = 0.790; eigenvalue = 1.231; *M* = 3.49) revealed the impact of changes taking place in agriculture such as young farmers entrepreneurial mindset (*M* = 3.56), women's leadership in agritourism (*M* = 3.51) and involvement in farming (*M* = 3.51).

Farmer, Family and Society Attributes Associated with Women's Success

(RO-3): To identify farmer values, farm household (family dynamics, farm business) characteristics, and societal elements (trends, challenges) associated with women's success.

Simultaneous multiple linear regressions regressing farmer values, and farm household (i.e., family dynamics, farm business elements) on women's functional success resulted in two significant models (Table 21). The model predicting perceived extent of success as a woman farmer (R^2 = .166, p = .048) and model predicting perceived extent of success as a woman entrepreneur (R^2 = .336, p < .001) were significant, but not the model predicting perceived extent of overall success as a woman (R^2 = .095, p = .380). When controlling for other variables, positive associations were found for civic minded-values with success of women entrepreneurs (β = .385, p < .001), for productivist values with success of women entrepreneurs (β = .421, p <

.001) and overall as women (β = .223, p = .054) and for the settlement level of the community with success of women farmers (β = .209, p = .075).

Table 21. Farmer and family attributes associated with women's functional success

Independent Variables	Functional Success (standardized β and significance)		
	Women Farmer	Women Entrepreneur	Women Overall
Farmer Values			
Conservationist	.180	-.158	.105
Civic-minded	.105	.385 ***	.038
Naturalist	.054	.031	.028
Productivist	.152	.421 ***	.223 *
Family Dynamics			
Likelihood of passing farm on	.077	.080	-.067
Settlement level in community	.209*	.099	.051
Farm Business Elements			
Seasonality	-.017	.143	.060
Agritourism activities offered	-.129	.010	.024
Model Statistics			
R	.408	.579	.308
R^2	.166	.336	.095
p-value	.048	< .001	.380

* $p < .100$ *** $p < .001$

Simultaneous multiple linear regressions revealed significant models between societal indicators (i.e., agriculture trends, gendered challenges, agritourism challenges) and participants' extent of perceived functional success as women farmers (R^2 = .122, p = .010), women entrepreneurs (R^2 = .128, p = .007), and overall as women (R^2 = .099, p = .034; Table 22). When the results are examined in detail, they reveal that participants' perceived extent of success as farmers is only significantly challenged by the patriarchal nature of the agricultural system (β = -.260, p = .026). Their perceived extent of success as entrepreneurs however, are negatively affected by that patriarchal nature of the agricultural system (β = .176, p = .098), but positively affected by the changing social fabric (β = .176, p = .098). Lastly, the findings reveal that

participants' perceived extent of success as women overall is significantly propelled by the changing social fabric within agriculture (β = .262, p = .016).

Table 22. Society attributes associated with women's functional success

Independent Variables	Functional Success (standardized β and significance)		
	Women Farmer	Women Entrepreneur	Women Overall
Trends in Agriculture			
Public awareness	.159	.068	.061
Changing social fabric	.092	.176 *	.262 **
Agritourism Challenges			
Agritourism uncertainty	-.110	-.124	-.101
Managing farm quality	-.019	.142	.149
Gendered Challenges			
Women's caregiver role	.002	-.024	-.012
Patriarchal agricultural system	-.260 **	-.272 **	-.105
Model Statistics			
R	.350	.358	.315
R^2	.122	.128	.099
p-value	.010	.007	.034

* $p < .100$ ** $p < .050$

Simultaneous multiple linear regressions (Table 23) indicate that farmer values, family dynamics and farm business attributes are associated with four elements of women's life-dimensional success, namely civic recognition (R^2 = .324, $p < .001$), personal aspirations (R^2 = .286, $p < .001$), family connectedness (R^2 = .413, $p < .001$), and business continuance (R^2 = .317, $p < .001$). However, the regression model predicting self-fulfillment was not significant (R^2 = .142, p = .100). When controlling for other variables civic recognition was significantly predicted and positively affected by civic-minded values (β = .362, $p < .001$), productivist values (β = .207, p = .038), likelihood of passing the farm on (β = .176, p = .08), and negatively affected by the number of agritourism activities offered (β = -.243, p = .030). In turn, the participants personal aspirations were significantly predicted by civic-minded (β = .336, p = .001) and productivist values (β = .292, p = .005). Participants' family connectedness success factor was

significantly predicted by civic-minded values (β = .168, p = .058), likelihood of passing on the farm (β = .480, p < .001), and negatively affected by seasonality of the business (β = -.235, p = .024). And lastly, participants' stated focus on business continuance as a success factor was significantly predicted by civic-minded values (β = .202, p = .036), likelihood of passing on the farm (β = .271, p = .010), settlement level in the community (β = -.269, p = .011) and seasonality (β = -.266, p = .044).

Table 23. Women's farmer and family attributes associated with importance of life-dimensions to success

Independent Variables	**Life-Dimensional Success (standardized β and significance)**				
	Civic Recognition	**Personal Aspirations**	**Self-Fulfillment**	**Family Connectedness**	**Business Continuance**
Farmer Values					
Conservationist	.112	-.028	.140	-.020	.152
Civic-minded	.362 ***	.336 **	-.079	.168 *	.202 **
Naturalist	.116	.040	.179	.193	.117
Productivist	.207 **	.292 **	.123	.080	.131
Family Dynamics					
Likelihood of passing farm on	.176 *	.054	.081	.480 ***	.271 **
Settlement level in community	-.050	.145	-.067	-.018	-.269 **
Farm Business Elements					
Seasonality	.131	.185	.059	-.235 **	-.266 **
Agritourism activities offered	-.243 **	.129	.080	.033	.084
Model Statistics					
R	.569	.535	.377	.643	.563
R^2	.324	.286	.142	.413	.317
p-value	< .001	< .001	.100	< .001	< .001

* p < .100 ** p < .050 *** p < .001

Simultaneous linear regressions of societal elements and the importance of life-dimensional success yielded significant models predicting three of the life-dimensions to women's success (Table 24), namely civic recognition (R^2 = .247, p < .001), self-fulfillment (R^2 = .130, p = .006), and business continuance (R^2 = .112, p = .016). Controlling for other variables positive associations civic recognition was significantly predicted by the changing social fabric

(β = .322, *p* = .001) and agritourism uncertainty *(β* = .172, *p* = .078). Self-fulfillment was significantly predicted by agritourism uncertainty *(β* = .209, *p* = .046) and the caregiver role *(β* = .194, *p* = .082). Lastly, business continuance was significantly predicted by the changing social fabric *(β* = .285, *p* = .007) and the caregiver role *(β* = .236, *p* = .037).

Table 24. Society attributes associated with women's importance of life-dimensions to success

Independent Variables	**Life-Dimensional Success (standardized *β* and significance)**				
	Civic Recognition	**Personal Aspirations**	**Self-Fulfillment**	**Family Connectedness**	**Business Continuance**
Trends in Agriculture					
Public awareness	.054	.076	.143	.140	-.038
Changing social fabric	.322 **	-.005	.066	-.078	.285 **
Agritourism Challenges					
Agritourism uncertainty	.172 *	.151	.209**	.016	.005
Managing farm quality	-.107	.053	.035	-.112	-.101
Gendered Challenges					
Caregiver role	-.001	-.233 **	.194*	.175	.236 **
Patriarchal agricultural system	.133	.215	-.181	.064	-.070
Model Statistics					
R	.497	.282	.360	.245	.335
R^2	.247	.080	.130	.060	.112
p-value	< .001	.092	.006	.232	.016

* $p < .100$ ** $p < .050$

CHAPTER V

CONCLUSION

This chapter discusses respondents' functional and life-dimensional success and the attributes determining it in relation to the extant literature within the agritourism systems and feminist approaches. Study limitations that should be taken into consideration when moving forward in future research are explained as well. Additionally, managerial and outreach implications are highlighted to increase the opportunities of success among women farmers. This chapter concludes with a general overview of the study's objectives.

Discussion of Key Results

The application of feminist (Aitchison, 2000; Alston, 2000) and the agritourism system (Barbieri, 2017) approaches in this study enabled to identify the gendered norms and nuances that span the private and public lives of women farmers and how these infiltrate their different roles. Specifically, results elucidate on the dynamics women navigate to contribute to their own success, their farm family and business, and to the farming community and wider public.

Women as Farmers and Entrepreneurs

Results showing that participants were young and highly educated is consistent with the overall young contingent of high-skilled farmers entering agritourism (Tew & Barbieri, 2012) and the substantial number of young women entering farming (Ball, 2014; Hoppe & Korb, 2013; Sachs et al., 2016). The large proportion of young respondents involved in agritourism is also in line with the more entrepreneurial interest of women below 35 years old, especially in rural

areas, as compared to older women (Gupta & York, 2008). Yet, participants felt more successful as women than as entrepreneurs and farmers in this study, emphasizing the notable discord of women operating in historically masculine occupations (Alston, 2002; Brandth et al., 2010; Eccles 1994; Gasson & Winter, 1992; Horner, 1972; Wright & Annes, 2016).

Respondents showed a strong identification with being full-time farmers, which is a major change in the narrative of women captured in the literature (Ahl, 2006; Ball, 2014; Brandth, 2002a; Rickson, 1997; Whatmore, 1991). Furthermore, most designated themselves as the decision makers in agritourism matters on their farms, a trait that can certainly affect their perceived success as they see themselves an integral part of the business (Brasier et al., 2014; Gasson & Winter, 1992). Whilst these results are positive as women are recognizing their role as farmers and entrepreneurs, they also stress the need to continue efforts to eliminate remnants of agricultural patriarchal norms in which women farmers are portrayed as the business' administrators or secretaries (Brasier et al., 2014; Gasson, 1973; Sachs et al., 2016) or family caregivers (Anthopolou, 2010; Bock, 2004; Gasson & Winter, 1992; Halim, 2016).

Women's inclination for conservationist and civic farmer values found in this study also supports their preferences in the literature for using sustainable practices involving less mechanized production methods (Ball, 2014; Brandth 1995; Brandth 2006; Ferrell, 2012; Sachs, 1996) and their strong consideration for their community and the wider public (Flora, 2004; Jones, 2003; Johnston et al., 2016; Wright & Annes, 2016). On the one hand, study results reaffirm the existence of gendered agricultural practices in which women prioritize smaller scale production to ensure quality of products and loyalty and satisfaction of customers (Anthopolou, 2010; Halim, 2016; Sachs et al., 2016). On the other hand, these study results expand the knowledge of women's agricultural values beyond idealism (Sachs et al., 2016) and agritourism

motivations (McGehee et al., 2007) as respondents' aspirations for community welfare and agrarian productivism were found to be determinants of their success.

Women within the Farm Household

Study results showing a high presence of young and educated women, especially among first generation farmers, entering agritourism with a strong decision-making capacity contributes to the evidence that farm women are shifting identities (Brasier et al., 2014). Specifically, the large proportion of respondents who identified themselves as full-time farmers and decision makers in agritourism suggests that women are changing their role in farm household dynamics from the private (farm family caregiver) into the public (farm business operator) realm of agriculture. Yet, this study's results indicating that women's caregiver role negatively influence their personal aspirations confirms that entrepreneurial women farmers could feel an additional burden because farm tasks add to their household responsibilities (Ball, 2014). Furthermore, the positive association found between the caregiving burden with the importance of self-fulfillment and business continuance may indicate that the quest for *the* work-household tasks balance so widely stated in the business literature (Dyke & Murphy, 2006) may not be as prioritized in entrepreneurial farming. Instead, the likelihood of passing on the farm to the next generation was found in this study to be a strong predictor of women's success in the farm household in both, family (building family connectedness) and business (business continuance) aspects.

Respondents' high levels of diversified agricultural production was expected as such characteristic entices visitors' participation (Barbieri et al., 2008; Tew & Barbieri, 2012) and allows farm women to move beyond production for family sustenance (Alston, 2000; Ferrell, 2012; Hoppe & Korb, 2014). The involvement of family members (e.g., children, parents) in

agritourism activities among respondents is consistent with evidence in the literature indicating agritourism provides opportunities for family employment (Barbieri, 2013; Tew & Barbieri, 2012). Although the key role of women in agritourism has been consistently reported in the literature (Anthopolou, 2010; Johnson & Schnakenberg, 2017; Trauger et al., 2008; Wright & Annes, 2016), this study adds to this knowledge by identifying a strong participation of female family members in the agritourism offerings of family farms. Women's emphasis on business continuance concurs with their dedication to provide for the farm family by finding ways to supplement incomes and make ends meet reported in the literature (Bock, 2004; Jones, 2003; Meares, 1997; Sachs et al., 2016).

Women in Society

Study results indicating that family settlement in the community positively predicts overall women's success while is negatively associated with the importance of business continuance for their success reinforces evidence indicating that lack of community acceptance is a major challenge hindering the economic viability of women in agritourism (Halim, 2016). Yet, these results could be related to the resistance of agricultural communities to change farm practices, such as entrepreneurial diversification led by women (Carter, 2017), especially when considering that the patriarchal agricultural system was found in this study to impact women's success as a farmer and entrepreneur. As such, the dynamics of societal structures in women's success need to be further explored to elucidate ways to disrupt the masculine hegemony of farming and entrepreneurship in the construction of femininity in rural contexts (Bock, 2014; Brandth et al., 2010; Brasier et al., 2012; Little & Jones, 2000; Sachs et al., 2016). Results indicating that the more challenged women were for agritourism uncertainty (e.g., lack of limited

know how, uncertainty of regulations) the more important civic recognition and self-fulfillment were in defining their success speaks to women's flexibility, creativity and ability to define their success (Anthopolou, 2010; McGehee, 2007), which may include, for example, the importance they place in strengthening their information networks in their-community and beyond (e.g., associations).

Study Limitations and Delimitations

Caution is advised when generalizing study results and its implications beyond NC due the contextual nature of agriculture and agritourism in particular, as both activities (e.g., crops, agritourism seasonality) depend on physical (e.g., climate, soil) and cultural (e.g., consumer preferences) attributes. Special effort was place to recruit women farmers across all NC through NC Cooperative Extension as well as several state and regional farm groups (e.g., NC Agritourism Network Association, Carolina Farm Stewardship Association, Blue Ridge Women in Agriculture) on top of an intensive web-search. Yet, a closer examination of the respondents call for taking into consideration two things. First, there was a low proportion (13.9%) of respondents located in Tier 1 counties which are among the most rural across the state (NC Department of Commerce, 2017). However, this could be due to the high preponderance of conventional agriculture in those counties, thus less agritourism development (USDA: NASS, 2017). Second, he sample also shows a limited participation of multi-generational farmers and women with children in the household, which may have impacted the results related to the farm family connectedness and the caregiver role. Although the study sample could be reflecting the demographic shift of farmers, future studies should consider different sampling approaches (e.g.,

drop-off/pick-up survey distribution, face-to-face interviews) to increase participation across farmers who tend to be under-represented.

It is worth noting that the examination of women's challenges and opportunities in this study was delimited to the innermost layers -farmer, farm household, society- of the agritourism systems approach. Moving forward, future studies should also include the outermost layers defined by the economic, socio-cultural, and environmental tenets of sustainability that may exert additional pressure on farmers. For example, patriarchal agricultural systems can also create rigid masculine roles that limit adapting responses to the structural societal changes (Ferrell, 2012), which can unsettle relationships in the family (e.g., negotiating caregiving and farming tasks) and community (e.g., men diverting from prevalent agricultural practices). Finally, the feminist approach used in this study was pertinent to understand the set of challenges and opportunities women in agritourism face. Yet, future studies should consider the application of the agritourism system's approach to male and female farmers as to understand the extent to which societal forces exert similar or different challenges or opportunities between genders, and their influence in rural gender relationships.

Study Implications

Despite the aforementioned limitations and delimitations, this study contributes to the scholarship and practice of women farmers. Scholarly, this study advanced the existing knowledge on agritourism performance beyond farmers' motivations and goals (Tew & Barbieri, 2012; McGehee et al., 2007) and overall entrepreneurial performance (Walker & Brown, 2004) by dissecting how women farmers perceive success based on their distinct yet interrelating roles as farmers and entrepreneurs. Specifically, this study identified community integration, civic and

productivist farmer values, patriarchal agricultural system, and the changing social fabric of agriculture, as determinants of women's success in their different roles. Worth noting, this study's incorporation of farmer values to examine women's success moves forward the post-productivist research agenda (Burton, 2004; McGuire et al., 2015) finding that civic-related values are of particular importance to farmers perceived success.

The omnipresent effect of the patriarchal system has been consistently reported in the agriculture (Sachs et al., 2016), tourism (Getz & Carlson, 2005), and entrepreneurial literature (Buttner & Moore, 1997; Greene et al., 2003). On this regard, this study reaffirms the limitations women in agriculture face, especially in accessing grants and land. As such, it is imperative to (re)design outreach efforts to disseminate the many strategies women have used to overcome gendered challenges and succeed in the field and to increase awareness of the still existing gendered biases. It is also advisable to encourage young women farmers to undertake leadership roles within their local and state associations (e.g., NC Strawberry Association, NC Agritourism Networking Association) and in policymaking positions (e.g., town councils). Educational programs tailored to women farmers, like Annie's Project[1], can help to increase gender equality and women's leadership in agriculture when designed around problem-solving discussions and network building.

[1] Annie's Project is a national effort that offers a diversity of classes related to agriculture management (e.g., financial documentation, farmland leasing) to women farmers.

Concluding Remarks

This study set out to gain an understanding of functional success and the importance of life-dimensional items to the success of women in agriculture. The application of the agritourism systems approach (Barbieri, 2017) to women farmers contribute to existing agricultural holistic frameworks that examine the farm in its entirety and delineates how interdependent elements affect the individual famer as well as the overall farm health and survival (e.g., Dogliotti et al., 2014; Ikerd, 1993; Okey, 1996). By applying this systemic approach within a feminist lens, this study further allowed to move existing knowledge of patriarchal systems affecting women beyond negative impacts (Beach, 2013; Bock, 2014) and identified opportunities women are taking advantage of to nullify the effects of such dominant systems. Altogether, study results contribute to the current literature of women in agriculture, their roles on the farm and in the household, challenges within the current patriarchal agricultural system, and opportunities with the current agricultural trends.

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APPENDICES

APPENDIX A

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Dear women in agriculture,

North Carolina State University is conducting a study to better understand women in agritourism and farming. We are especially interested in learning about women's successes and challenges, and the strategies they use to overcome their challenges. Your participation is very important, whether you are a woman in farming or in agritourism. Results will be used to develop programs to assist women involved in agritourism to make their participation in agritourism a more rewarding experience.

NC State University has strict protocols to protect the confidentiality and privacy of participants in our studies. Your participation is voluntary; you have the right to participate, to choose not to participate, or to skip any particular question. We will not share your contact information with any individual or organization. By completing this survey, you are providing your voluntary consent to participate in this study. The survey will take about 15 - 20 minutes. If you have any questions about your rights as a participant, you may contact Deb Paxton, Regulatory Compliance Administrator, Box 7514, NC State Campus (919.515-4514). If you have any questions regarding this study, please contact any of the principal investigators by email (aesavage@ncsu.edu).

As a token of appreciation, participants will be entered into a drawing for the chance to win one of five $50.00 (fifty-dollar) gift card.

We really hope that you decide to complete this survey.
Many thanks!

Dr. Carla Barbieri, Dr. Susan Jakes, & Ann Savage
North Carolina State University

What is Agritourism? In this survey, Agritourism refers to any type of education or recreational activity offered on a working farm to visitors with or without a fee. For example, u-pick, hayrides, school tours, etc.

Instructions: This survey is only for **WOMEN** in agriculture, either involved or not in agritourism.
- If you are not a woman involved in farming but you know one who is, please share this survey with her.
- If you are not a woman farmer and do not know anyone who is, please fill out only the question below and mail this letter back to us.

Please confirm whether:

❒ I'm a woman farmer, or woman in agritourism, or a woman interested in agritourism (please continue with the survey)
❒ I'm NOT a woman in agriculture or agritourism (please return this page to us).

NC STATE UNIVERSITY

WOMEN IN AGRITOURISM

SECTION I: YOU AS A FARMER

1. Please indicate which of the following applies to you (check all that apply).

❒ Farm owner or co-owner ❒ Farm manager or employee ❒ Agritourism manager or employee
❒ Other. Please, specify:

2. Please indicate the degree to which the following are valuable for you as a farmer.

	Not at all valuable	Slightly valuable	Moderately valuable	Very valuable	Extremely valuable
Minimize nutrient runoff	❒	❒	❒	❒	❒
Avoid fall tillage	❒	❒	❒	❒	❒
Use the latest technology	❒	❒	❒	❒	❒
Maintain habitat for wildlife	❒	❒	❒	❒	❒
Be active in your community	❒	❒	❒	❒	❒
Have the most up-to-date equipment	❒	❒	❒	❒	❒
Minimize soil erosion	❒	❒	❒	❒	❒
Be a leader in the your community	❒	❒	❒	❒	❒
Use cover crops between harvest and planting	❒	❒	❒	❒	❒
Have the highest yields per acre	❒	❒	❒	❒	❒
Participate in farm-related organizations	❒	❒	❒	❒	❒
Maintain organic matter	❒	❒	❒	❒	❒

SECTION II: ABOUT YOUR SUCCESS

3. How successful do you feel as a farmer, entrepreneur, and as a woman?

	Not at all successful	Slightly successful	Moderately successful	Very successful	Extremely successful
As a woman farmer	❒	❒	❒	❒	❒
As an entrepreneurial woman	❒	❒	❒	❒	❒
Overall as a woman	❒	❒	❒	❒	❒

4. To what extent are the following life-dimensions important to <u>YOUR</u> sense of success?

	Very unimportant	Unimportant	Neither	Important	Very important
Being an expert in some aspect of farming	❒	❒	❒	❒	❒
Being an "agritourism" expert	❒	❒	❒	❒	❒
Mentoring young employees	❒	❒	❒	❒	❒
Building long-lasting relationships with customers	❒	❒	❒	❒	❒
Receiving similar recognition as male farmers	❒	❒	❒	❒	❒
Having an active lifestyle	❒	❒	❒	❒	❒
Educating the public about farming	❒	❒	❒	❒	❒
Remaining mentally creative	❒	❒	❒	❒	❒
Having flexibility in work hours	❒	❒	❒	❒	❒
Having a good work-life balance	❒	❒	❒	❒	❒
Having a family that supports my farming career	❒	❒	❒	❒	❒
Setting an example for other women farmers	❒	❒	❒	❒	❒
Earning a good income from the farm	❒	❒	❒	❒	❒
Pursuing happiness	❒	❒	❒	❒	❒
Passing the farm to the next generation within my family	❒	❒	❒	❒	❒
Being recognized in my community	❒	❒	❒	❒	❒
Giving back to my community	❒	❒	❒	❒	❒
Gaining respect from other farmers	❒	❒	❒	❒	❒
Being part of the local farming community	❒	❒	❒	❒	❒

SECTION III: OPPORTUNITIES FOR AGRITOURISM SUCCESS

Instructions: These questions are about the overall success of agritourism, whether you are or are not involved in agritourism. **Remember,** agritourism refers to any type of education or recreational activity offered on a working farm to visitors with or without a fee. For example, u-pick, hayrides, school tours, etc.

5. To what extent are the following strategies important to achieve success in agritourism?

	Not at all useful	Slightly useful	Moderately useful	Very useful	Extremely useful
Keeping up with policies/regulations	❒	❒	❒	❒	❒
Learning from older farmers in the family	❒	❒	❒	❒	❒
Seeking advice from other agritourism farmers	❒	❒	❒	❒	❒
Developing a support network of female farmers	❒	❒	❒	❒	❒
Staying connected with other agritourism farmers	❒	❒	❒	❒	❒
Keeping relationships with agritourism agencies	❒	❒	❒	❒	❒
Managing a desirable number of visitors	❒	❒	❒	❒	❒
Growing without getting in debt	❒	❒	❒	❒	❒

6. The statements below describes trends observed in North Carolina. To what extent do you believe they facilitate the success of WOMEN IN AGRITOURISM in NC?

	Not at all	Very little	Some	Very much
Public interest in local agriculture	❒	❒	❒	❒
Demand of local farm products	❒	❒	❒	❒
Women involvement in farming	❒	❒	❒	❒
Entrepreneurial mindset among new farmers	❒	❒	❒	❒
Women's leadership in agritourism	❒	❒	❒	❒
Farmer-to-farmer partnerships	❒	❒	❒	❒
Farmers seeking direct markets	❒	❒	❒	❒
Support from public agencies	❒	❒	❒	❒
Support from associations	❒	❒	❒	❒
Access to social media	❒	❒	❒	❒

SECTION IV: YOUR CHALLENGES AS A WOMAN FARMER

Instructions: Some women have identified challenges that may affect women in farming or in agritourism. Please, respond to the extent to which these challenges affect (or would affect) YOU.

7. To what extent do these challenges affect your success as a WOMAN FARMER?

	Not at all	Very little	Some	Very much
Not dividing the farm chores equitably with other family members	❒	❒	❒	❒
Not sharing the household chores fairly with my spouse/partner	❒	❒	❒	❒

8. To what extent do these challenges affect (or would affect) your success as an AGRITOURISM FARMER?

	Not at all	Very little	Some	Very much
Keeping the quality of farm products with the growth of farm visitors	❒	❒	❒	❒
Managing the number of visitors at a desirable level	❒	❒	❒	❒
Being uncertain about regulations related to agritourism	❒	❒	❒	❒
Agritourism is not perceived as "real" agriculture	❒	❒	❒	❒
Minimal revenues agritourism generates	❒	❒	❒	❒
Changing mission of agritourism associations	❒	❒	❒	❒
Limiting information on agritourism knowhow (e.g., pricing)	❒	❒	❒	❒

SECTION V: YOUR CHALLENGES IN FARMING & AGRITOURISM

Instructions: Some women have identified challenges that may affect the performance of farming or agritourism. Please, respond to the extent to which these challenges affect (or would affect) YOU.

9. In your opinion, to what extent do the following challenges affect the success of FEMALE and MALE farmer?

	Female Farmers				Male Farmers			
	Not at all (1)	(2)	(3)	Very Much (4)	Not at all (1)	(2)	(3)	Very Much (4)
Availability of farmers' networks	❒	❒	❒	❒	❒	❒	❒	❒
Knowledge sharing from parents	❒	❒	❒	❒	❒	❒	❒	❒
Ability to inherit farmland	❒	❒	❒	❒	❒	❒	❒	❒
Access to grants	❒	❒	❒	❒	❒	❒	❒	❒
Managing off-farm & on-farm work	❒	❒	❒	❒	❒	❒	❒	❒
Balancing farm & household tasks	❒	❒	❒	❒	❒	❒	❒	❒
Number of farmers of the same gender	❒	❒	❒	❒	❒	❒	❒	❒
Lack of respect towards farmers	❒	❒	❒	❒	❒	❒	❒	❒
Physical demand of farm-work	❒	❒	❒	❒	❒	❒	❒	❒
Expectations as a caregiver	❒	❒	❒	❒	❒	❒	❒	❒
Cooperation from spouse/partner	❒	❒	❒	❒	❒	❒	❒	❒
Falling short on others' expectations	❒	❒	❒	❒	❒	❒	❒	❒
Falling short on caring for the family	❒	❒	❒	❒	❒	❒	❒	❒
Demand of child care	❒	❒	❒	❒	❒	❒	❒	❒

10. To what extent do the following factors challenge AGRITOURISM and NON-AGRITOURISM farms?

	Agritourism Farms				Non-agritourism Farms			
	Not at all (1)	(2)	(3)	Very Much (4)	Not at all (1)	(2)	(3)	Very Much (4)
Finding reliable staff	❒	❒	❒	❒	❒	❒	❒	❒
Dealing with business seasonality	❒	❒	❒	❒	❒	❒	❒	❒
Managing tasks by farmers themselves	❒	❒	❒	❒	❒	❒	❒	❒
Controlling business growth	❒	❒	❒	❒	❒	❒	❒	❒
Managing liability	❒	❒	❒	❒	❒	❒	❒	❒
Receiving institutional support	❒	❒	❒	❒	❒	❒	❒	❒
Managing risks associated with agriculture	❒	❒	❒	❒	❒	❒	❒	❒
Handling administrative work	❒	❒	❒	❒	❒	❒	❒	❒
Reaching markets	❒	❒	❒	❒	❒	❒	❒	❒

11. To what extent are the following farmers disadvantaged in your community?

	Not at all disadvantaged	Moderately disadvantaged	Very disadvantaged	Extremely disadvantaged
Female farmers	❒	❒	❒	❒
African American farmers	❒	❒	❒	❒
Latino/a farmers	❒	❒	❒	❒
White (Caucasian) farmers	❒	❒	❒	❒
First generation farmers	❒	❒	❒	❒
"Transplants" (farmers who have recently moved into the community)	❒	❒	❒	❒

SECTION VI: INFORMATION ABOUT THE FARM

Instructions: Answer these questions for the farm that you own, or work at.

12. Do you own or co-own the farm you work at?
- ❒ No
- ❒ Yes, all of it
- ❒ Yes, most of it
- ❒ Yes, at least some

13. Please indicate:
- Farm Zip code: _____
- Total farm acreage: _____ acres
- Total acreage farmed (2016): _____ acres

14. Does the farm raise/produce agricultural products (e.g., crops, livestock) for commercial sale? ❒ No ❒ Yes

15. Please select all of the agricultural products grown, raised or produced:
- ❒ Commodity crops (e.g., wheat, corn)
- ❒ Specialty crops (e.g., produce, herbs)
- ❒ Fish or shellfish in captivity
- ❒ Other agricultural products (e.g., eggs, honey, milk). Specify:
- ❒ Livestock (e.g., cattle, hogs, horses, sheep, goats)
- ❒ Poultry and small animals (e.g., chicken, rabbits)
- ❒ Non-traditional animals (e.g., bison, alpacas)

16. How many people did the farm employ in 2016?
- Full-time year-round: _____ employees
- Full-time seasonal: _____ employees
- Part-time year-round: _____ employees
- Part-time seasonal: _____ employees

17. What will be the total gross sales for your farm in 2016?
- ❒ Less than $1,000
- ❒ $1,000 - $9,999
- ❒ $10,000 - $49,999
- ❒ $50,000 - $99,999
- ❒ $100,000 - $249,999
- ❒ $250,000 - $499,999
- ❒ $500,000 - $999,999
- ❒ $1,000,000 or more

SECTION VII: INVOLVEMENT IN AGRITOURISM

18. Does the farm offer or is planning to offer agritourism?
- ❒ Yes, we currently offer agritourism → *Please continue to question 19*
- ❒ No, we don't offer but we are planning to offer
- ❒ No, we don't offer nor are we planning to offer → *Skip to question 24 (Section VIII)*

19. Are you the primary decision-maker of the agritourism activities on your farm? ❒ No ❒ Yes

20. Which of the following family members are involved in agritourism on the farm? (Check all that apply).
- ❒ Myself
- ❒ My spouse/partner
- ❒ My mother
- ❒ My father
- ❒ My daughter(s)
- ❒ My son(s)
- ❒ My sister(s)
- ❒ My brother(s)
- ❒ Other family member(s). Please, specify:

21. Check ALL the agritourism activities offered on your farm:
- ❒ Farm-based recreational activities (e.g., corn-maze, hayride)
- ❒ Observation of agricultural processes (e.g., winery, cider mill)
- ❒ Non-farm recreational activities (e.g., swimming, bouncers)
- ❒ Farm hands-on activities (e.g., U-pick, cow-milking)
- ❒ Educational activities (e.g., classes, workshops, school tours)
- ❒ Nature observation activities (e.g., photography, orchard tours)
- ❒ Festivals or events (e.g., harvest festival, wedding)
- ❒ Meals (e.g., picnic, cookout, specialty dining)
- ❒ Overnight stays (e.g., B&B, cabin, camping)
- ❒ Wildlife extractive activities (e.g., fishing, hunting)
- ❒ Physically active activities (e.g., hiking, biking)
- ❒ Other. Specify:

22. Please indicate:
- Number of years offering agritourism: _____ years
- Number of months per year open for agritourism: _____ months/year
- Number of visitors received in 2016: _____ visitors
- Number of visitors expected in 2017: _____ visitors

23. What proportion of the farm revenues are generated from agritourism and farm visitors?
- ❒ None ❒ Very little ❒ Some ❒ Most ❒ All

SECTION VIII: ABOUT THE FARM FAMILY

Instructions: This section pertains to the family of the farm main operator. If you don't know the answer, please respond "I don't know."

24. How much is the farm family settled in the community?
❒ Not at all ❒ Very little ❒ Somewhat ❒ Very much ❒ I don't know

25. How many generations has the farm been in the family of the main operator?
❒ 1st generation ❒ 2 generations ❒ 3 generations ❒ 4 or more generations ❒ I don't know

26. How likely or unlikely is the farm to pass to the next generation?
❒ Very unlikely ❒ Unlikely ❒ Undecided ❒ Likely ❒ Very likely ❒ I don't know

SECTION IX: INFORMATION ABOUT YOU

27. Your age:

28. Indicate whether you live with (check all that apply):
❒ Spouse or significant other ❒ Child(ren) 6 years or less ❒ Child(ren) 7-15 years old
❒ Child(ren) 16-20 years old ❒ Child(ren) 21 years or older

29. Do you live on the farm? ❒ No ❒ Yes

30. Your highest level of formal education:
❒ High school graduate or less ❒ Some college ❒ Technical degree (2-year college)
❒ 4-year college degree ❒ Postgraduate studies (e.g., MBA, Ph.D)

31. Your current employment status (check all that apply):
❒ Full-time farming ❒ Part-time farming ❒ Retired ❒ Other
❒ Full-time off farm job ❒ Part-time off farm job ❒ Homemaker

32. Your household income (before taxes):
❒ Less than $25,000 ❒ $25,000 - $34,999 ❒ $35,000 - $49,999 ❒ $50,000 - $74,999
❒ $75,000 - $99,999 ❒ $100,000 - $149,999 ❒ $150,000 - $199,999 ❒ $200,000 or more

Thank you very much for your time and input!

If you want to be entered into a drawing for the chance to win ***one of five $50.00*** (fifty dollars) gift cards, please enter your contact information:

Name: _____

E-mail: _____

Phone Number: (____) _____ - _____

Note: Your contact information will only be used for your entry into the drawing. We will not distribute it to any individual, organization or company.

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