Two Paths to Sustainable Farming: Gender, Care-work, and Bible Belt	l Finding Common Ground in the
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Abstract

According to the 2012 United States Agricultural Census, women are a growing demographic in sustainable agriculture and a shrinking one in conventional agriculture. Relative to the number of female farmers, women are farming sustainably at a higher rate than men. Through in-depth interviews with sustainable farmers in Kansas and Missouri, this research examines explicit motivations and illustrates how habitus has influences women's agricultural trajectory and changes the community and the developing local food systems they participate in. I find that women may seek out sustainable farming as an extension of care-work for their family, community, and/or environment. Though first-time farmers and those from farming families express opposing ideological motivations, in many ways they function in collaboration with each other to educate, share best practices, and build awareness and demand for locally grown sustainable food.

Key Words: Sustainable Agriculture, Gender, Habitus, Care-work, Religious Stewardship, Secular Environmentalism

Table of Contents

Title Page	i
Acceptance Page	ii
Abstract	iii
Table of Contents	iv
Two Paths to Sustainability: Gender, Care-work, and	
Finding Common Ground in the Bible Belt	1-43

Two Paths to Sustainable Farming: Gender, Care-work, and Finding Common Ground in the Bible Belt

"When we farm, it's always how can we – it's not like how can we maximize yield, or how can we – you know, just improve *our* situation financially. It's just how can we make the food healthier, the soil healthier, and all the elements of our farm healthier – how can we do that?" – Belen

"It's powerful on so many levels to be able to – feed ourselves, to be able to feed our children, to be able to feed our neighbors." – Marlie

WOMEN GROWING IN SUSTAINABLE AGRICULTURE

The farming population is shrinking (USDA 2014a). Small farms are being aged out, bought out, or shut out of business by large-scale industrial farms; communities are dying as the rural population becomes increasingly isolated (Bell 2004). Industrialized conventional farming practices have degraded soil health, water systems, and countless ecological systems (Christoff and Eckersley 2013). Agriculture faces crisis on multiple fronts, not least of which are adapting our food system to climactic changes, transitioning farmers away from damaging conventional practices, and replacing the shrinking, largely elderly farming population.

Female farmers followed these trends, with their numbers declining overall from 2007 to 2012 (USDA 2014b). But women engaged in Sustainable Agriculture (SA) represented one of few areas of growth. Women Primary Operating Farmers (POF)make up less than 14 percent of all primary operators, a number that has stagnated during the last decade. The number of women POFs in SA has been increasing (Hoppe and Korb 2013), and now they make up 20 percent of those who engage in SA (2014c). What is driving the increase of women into sustainable agriculture?

What Is Sustainable Agriculture?

The nature of sustainable agriculture is relevant to understanding women's changing role in farming. The implementation of SA is an important strategy for rehabilitating agricultural lands from ecological degradation and adapting agriculture to the changing environment (Jackson, Barry, Colman 1984; Janke 2008; Christoff and Eckersley 2013). Sustainable practices reduce consumption of fossil fuels, pollution and the emission of greenhouse gases in the production and marketing of food; reduce the use of synthetic agricultural chemicals and genetically-engineered seed; promote ecological diversity and health; and aim to develop local food economies that support the farmer adequately and engage the community (Wells and Gradwell 2001; Trauger 2004; Bell 2004). Small-scale sustainable farms typically minimize mechanization, increase ecological diversity, and are most likely to participate in local food markets and economies rather than conventional commodity markets. The 2012 US Agricultural census indicates that these are the kinds of farms that women are most likely to run (USDA 2014b).

In comparison, conventional agriculture focuses on high-volume production, deals in commodity markets, and has an end goal of profit at the expense of social and environmental health (Christoff and Eckersley 2013; Janke 2008; Bell 2004). Hinrichs and Walsh (2003:137) note that as farms vertically integrate into the industrial corporate food system, they lose autonomy and are less likely to be able to implement sustainable practices. In order to yield the magnitude of product that the corporatized market desires, farmers must cater to the production expectations of the industry; take on debt to invest in complex and expensive machinery; use more chemical fertilizers, insecticides, and

pesticides to increase yields; and focus on monoculture growth. All of this, while damaging the land and surrounding ecology, is done in order to produce the most product possible to increase profits.

In their study of "civic farmers," Furman, Roncoli, Nelson, and Hoogenboom (2013:71), found that sustainable agriculture is more flexible and able to adapt to coming climate changes than conventional agriculture.³ They also argue that sustainable agriculture is important because it promotes adaptable responses to environmental stresses and change while promoting ecological, social, and profit equity. According to the Sustainable Agriculture Research and Education program (SARE 2012), a holistic farm approach to sustainability is recommended, but even practical partial implementation toward a sustainable end is encouraged (Bell 2004).

The ideal whole-farm approach combines the noted practices into one integrated management system. The 2014 Holistic Management report (HMI 2014) finds that when farmers have been educated on and have implemented these practices, they report between 50 and 80 percent reduction in soil erosion, up to 40 percent reduction of greenhouse gas emissions, and visibly healthier wildlife habitats that surround a farm. Eighty percent of farmers trained in a whole farm approach reported increased profit, and 91 percent reported improved time management and subsequently improved quality of life. This means that access to education in sustainable practices with a whole farm approach is very important for farmer success. Yet institutionalized systems of education for sustainable agriculture are still developing, and often are time- and cost-prohibitive. Many farmers in SA rely on a system of local support from other sustainable farmers to share knowledge (Janke 2008; Stock 2007; Bell 2004). Furman et al. (2013:75) revealed

that more than 60% of farmers in SA are first-time farmers with no formal agricultural training. Research shows that many of these new sustainable farmers are women.

RESEARCH ON GENDER and AGRICULTURE

Gender in agriculture has been the focus of a number of international studies. Song and Vernooy (2010) examined the influx of female farmers in rural China as farm profitability dropped, and argued that as it became less attractive for Chinese men to farm, agricultural careers became more acceptable for female farmers. In a study of Australian farm families, Farmar-Bowers (2010) explored the decision-making processes farm families go through in implementing sustainable practices, and discovered that women are integral decision-makers in implementing sustainable development. They noted that most female interviewees claimed to be the driving force behind both transitioning farms from conventional to sustainable and first-time sustainable farm ventures. Pedersen and Kjaergard (2004) studied the gendered discourses of both smallscale and large-scale organic farming in Denmark, and discovered that as organic farming became more imbedded in the large-scale industrial food systems, women were at risk of marginalization just as they were in non-organic, large-scale farms. Hall and Morgyorody (2007) identified links between environmental ideology and gender equality in their study of Canadian organic farmers.

U.S.-based research on the dynamics of gender in in local food systems tends to focus on Community Supported Agriculture (CSA) participation; most CSAs are situated on the east or west coast or in northern states. Meares (1997) examined gender roles on six farms in Minnesota that had implemented sustainable practices. None of the primary operating farmers was female, although Meares did find that the farmers' wives not only

were working off-farm, performing the domestic labor and helping significantly on the farm, but also were the one who engaged in community/consumer outreach. Wells and Gradwell's (2001) study of CSA operators in Iowa, many of whom were women, and demonstrated that farmers characterized their faming practice as an ethic of care. They claim that the CSA model of farming is specifically grounded in an ethic of caring, and see it as a field that holds the potential to transcend gender stereotypes.

Trauger (2004, 2010) analyzed data collected from 2000 to 2006 about women primary operating farmers in Pennsylvania, most of whom were CSA participants. She examined ways in which her respondents negotiated success in sustainable agriculture. She showed that the average female-owned farm has all the characteristics to best implement SA and that SA provides a space of empowerment for women farmers. Jarosz (2011) interviewed eleven female CSA operators in the state of Washington using Foucault's notion of the ethics of self-care, and documented the development of a feminist political ecology in CSAs.

Beach (2013) asked male farmers about their wives' roles on Kansas farms. While this research provided valuable insight into evolving gender roles on the rural Kansas farms, it left the women's voices out of the equation, and women were not primary operating farmers in this study. Ball (2014) studied Kansas women farmers from an economic standpoint, and found that the increase in women POFs could be accounted for by an increased demand for niche products, shrinking overall farm sizes, and a growing social acceptance of female farmers.

Research on gender and environmental consciousness suggests that women are quite likely to think about family, food, and the environment in ways that are

complementary. For instance, researchers have confirmed that women's family food decisions are linked to their attitudes of environmental responsibility; this connection is expressed in their choices to purchase and consume organic, clean, or responsibly grown food (Delind 2006; Hall & Mogyorody 2007; Duggan 2013). Women have been found to be more environmentally conscious than men, and they are more likely to act in food advocacy roles (Bellows et al. 2010), which may be two reasons why more women participate in sustainable agriculture and environmental leadership. Meares' (1997) study of heterosexual couples transitioning from conventional to sustainable practices found that the farmers' wives were more likely to be the face of their farm's community outreach, to take on the second shift, and to view their labor on the farm as non-income producing. This is consistent with a large body of research on gender and work roles (Chodorow 1978; Smith 1987; Hochschild and Machung 1989; DeVault 1991).

the practices and function of the farm and on farmers' ideological perspective especially due to the locational embeddedness of generational ties to the rural Bible Belt. Bourdieu (1992:53) defines habitus as "systems of durable, transposable dispositions, structured

The existing structure of a farm in the family is likely to have a profound effect on

Habitus and Gender Socialization

(1992:53) defines habitus as "systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures, that is, as principles which generate and organize practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at or an express mastery of the operations necessary in order to attain them." Being raised in a culture of Christianity and farming shapes the habitus of an individual and the knowledge and practice that

individual brings to the field of farming. First-time farmers, likely from more urban

backgrounds and possibly with varied religious and cultural exposure, carry a very different habitus into their farming practice. Habitus is formed by the social constructs and social structures in which one exists, and the way one views the world and negotiates one's place in it. The social constructs of masculinity and femininity are of particular interest to this research, due to the curious increase of women into sustainable agriculture. Bourdieu's (1990:78) analysis suggests that one's socialization, as a deeply ingrained part of one's habitus, is carried into every interaction, and habitus is part of what determines our everyday decisions, our world perspective, and how we interact and change our physical and social surroundings. The gendered orientation to care-work that religiously raised women are likely to bring to the field of SA can be used as one lens to analyze the motivations and experiences of some SA farmers.

There also is a secular environmental ethos that motivates many women sustainable farmers tied to women's roles in the family as caregivers and food decision-makers. In *Feeding the Family: The Social Organization of Caring as Gendered Work*, DeVault (1991:19) argues that the definition of work should include the unpaid labor that most women perform within the family structure. DeVault specifically researches the care-work involved with food preferences, preparation, and procurement for family consumption. Although DeVault is discussing women's purchase and preparation of food, not women farmers, her concept of food care-work is another way to understand the influx of female farmers in sustainable agriculture. As DeVault (1991:234) notes, "The gendered relations of feeding and eating seem to convey the message that giving service is part of being a woman, and receiving it fundamentally part of being a man." She is building on the prior feminist scholarship of Nancy Chodorow's (1978) analytic focus of

men being absent from care-work and Dorothy Smith's (1987) focus on normal, daily, unpaid activities within the family. DeVault's perspective suggests that the effects of social organization along gendered lines and within food traditions has a powerful and pervasive influence upon the ongoing organization of family life. Bourdieu's concept of habitus is another way to understand DeVault's analysis. The gendered socialization of care-work that is central to the habitus of many women can reinforce traditional forms of familial organization. DeVault (1991:239) asserts that this perpetuation also makes it seem as if caring is a natural female trait. This is because one's habitus tends to be understood by the self and society as one's natural state (Bourdieu 1990). As a result, generations of women have been oriented to unpaid and low paid care-work.

Some have posed that SA lends itself to an ethic of care for the environment (Stock 2007; Jaroz 2011). Kern's (2015) concept of environmental care-work as an extension of the general concept of gendered care-work and illustrates how careers in the green jobs economy (which tend to be pursued more by men) compare to environmental activist/volunteer work (which tend to be favored by women). Masculine green economy jobs are valued, viewed as skilled labor, and paid competitive wages; the feminized service work and activist environmental care-work is largely unpaid or low paid (Kern 2015). In SA, we might expect that women, oriented to low or unpaid environmental service, are willing to risk lower profitability in order to care for the ecological health. The fact that both women and men seem willing to perpetuate in this division of labor and rewards is consistent with the notion of a shared gendered habitus that naturalizes this social order.

STUDYING SUSTAINABLE FARMING AS ENVIRONMENTAL CARE-WORK

My father is a fourth-generation farmer on his land, who worked off-farm until retirement and tended the farm as his second ongoing full-time job. The food he produces feeds our extended family and church community, and it keeps my father tied to his heritage. I have a long-term interest in farming and food production, and the location of our farm ties me personally to the people and communities I am studying. This traditionally conservative area has the potential to reveal different lived experiences, and therefore different motivations, from those presented in studies conducted elsewhere in the country.

I obtained IRB approval in April of 2015 to conduct this research, conducted 26 in-depth interviews with 20 female and six male POFs who self-identify themselves as sustainable farmers in Kansas and Missouri. Three of the six male respondents were spouses of three female participants with whom they equally shared the position of primary operator. I asked participants to talk about their life experiences as they related to farming, (beginning with their childhood social location), their family dynamic, and their first exposures to farming. I also asked about how and why they farm, their access to education, grants, and capital, and their community engagement. My goal was to understand what is actually motivating these individuals to become sustainable farmers, and if women are motivated and acting differently from their male counterparts.

I located interviewees through farmers' markets, the Kansas Rural Center,

Cultivate KC, and word of mouth in a snowball sampling which resulted in interviews

with women and men across a spectrum of sustainability. Some were producing

\$100,000+ in income while others were intentionally producing no income, instead operating on a trade/barter or charity system to distribute their produce.

A few were largely conventional farmers, but using some sustainable practices, while others were farming completely off-grid. Their reported reasons for farming were not that varied. For analytical purposes, I placed interviewees into two categories: those who come from farming families, and those who began farming for the first time as adults. This comparison yields interesting results, including differences in average age, farm size, ideological motivations, type of sustainable farming, and the kind of debt philosophy and/or practice the farmer deems acceptable.

In-depth interviews allowed the interviewees to construct their life narratives in relation to farming and to give thick descriptions of their life experiences. I was able to examine motivations and experiences of the farmers while considering a fuller picture of the social factors that influence them to farm as they do. Though the sample size is too small to make broad generalizations about all women in SA, the results illustrate Bourdieu's concept of habitus, the effects of gendered socialization of caring on individual choices, and the effects of one's habitus on one's chosen field.

Environmental responsibility as a motivation was framed by two emergent ideologies reported by interviewees: (1) religious stewardship, and (2) secular environmentalism. In this research, religious stewardship of the land describes an ideology, couched in a belief in Christian Biblical teachings and a belief in a responsibility of care for 'creation' that drives their concern for the environmental outcomes of their farm. Respondents framed their secular environmental concerns independently of institutionalized spiritual belief, often referring to Nature as their

religion. Animal welfare, which all respondents who practiced animal husbandry mentioned, also was framed along the religious stewardship/secular environmentalism ideological lines.

Christian Stewardship of the Land and Secular Environmentalism

Leaders within the Christian church have expressed skepticism when it comes to environmentalism and climate change (Guth, Green, Kelstedt, and Smidt 1995:366).

Those further right on the theological spectrum sometimes view the protection of the environment as idolatry, while self-identified environmental activists have shown much lower church involvement. Beisner (2010), in the declaration "The Competing World Views of Environmentalism and Christianity," asserts that environmentalists are hostile to humanity and therefore environmentalism is wholly incompatible with the Biblical mandate that man has dominion over the earth. In contrast, Guth et al. (1995:378) predicted the emergence of an "Evangelical Environmental Ethic" that is slower to accept the dangers of large-scale climate change, but can accept the more localized problems of environmental degradation.

Since the mid-1990s, there has been a reported "greening of Christianity," promoting the idea that care of the environment is congruent with Christian values (Clements, McCright, and Xiao 2014; Garreau 2010). Clements et al. (2014:94) examined Christian environmental concern and behaviors compared to nonreligious respondents, and found that while religiosity did increase the likelihood of proenvironmental behaviors, it did not have a positive relationship with increased environmental concern. Three-fourths of American citizens report at least some affiliation with Christianity (Clements et al. 2014:86), which has the potential for shifting

this likelihood to act in a pro-environmental way into broader pro-environmental attitudes in society.

Self-described Evangelical Environmentalists, or the Creation-Care movement, may accept climate change as real and believe that there is a Christian moral imperative to mitigate it in the interest of the poor, who are more adversely affected (Evangelical Climate Initiative 2006). They maintain a distinct identity apart from secular environmentalists, stressing their worship of the Creator through the care of his creation, and not what they view as the nature-worship of new age and/or environmental movements (Prelli and Winters 2009). Evangelical Environmentalist approaches to climate change mitigations have been intentionally market-based, looking to innovate growth into sustainability (Evangelical Climate Initiative 2006).

Bell's (2004:158-159) study of sustainable farmers in Iowa found that they were more likely to attribute their farm practices to their Christian faith than were their conventional neighbors. The majority of Bell's interviewees were long-time farmers who have transitioned to sustainable agriculture. Stock (2007:93) found some organic farmers' Christian belief helped shape their identities as farmers and stewards of the land. This faith-guided farming is consistent with the way sample's interviewees coming from farming families spoke about their environmental ideology.

None of this study's religious stewardship respondents self-identified as "Evangelical Environmentalists" or as a part of the "Creation Care" movement, but they framed their environmental concern for their farming outcomes in ways that seemed consistent with this ideology. They also understood themselves to be different from their secular counterparts, and were more likely to participate in conventional systems and to

carry revolving farm debt than the farmers who espoused secular environmentalism, which indicates a ready embrace of conventional business models designed around commodity markets. In the next section, I discuss my basic findings and explore the motivational differences among women and men farmers representing these two perspectives.

INTERVIEW OUTCOMES

My sample is comprised of 26 farmers on 23 farms in Kansas and Missouri. Every interviewee had at least one child and a partner/spouse. Three of the men I spoke with were co-operators of their farms with their wives, and I interviewed them as a couple. Eleven of the 20 women I interviewed were first-time farmers and nine were from farming families; of the six men, three were first-time farmers and three were from farming families Twenty-two respondents identified as white or Caucasian; two identified as White/Native American; one as Native American; and one as Hispanic/Black. Figure 1 provides demographic background on the interviewees. They ranged in age from 31 to 75, with an average female age of 45 and an average male age of 61. Their education ranged from high school graduate to doctoral degree: three had a high school diploma; seven had some college/associate's degree; ten had a bachelor's degree; four had a master's degree or had completed master's work; and two had completed a PhD. Only three of the interviewees were formally educated in agriculture/horticulture. Eighteen farms were rural, and seven farms were urban. Farms ranged from half an acre to 1,100acre operations: nine of the 23 farms were 25 acres or smaller; eleven were between 50 and 165 acres; and five were between 260 acres and 1,100 acres in size. Figure 1 compares the age, education level, and farm size of both the first-time farmers in the

sample and those from farming families.

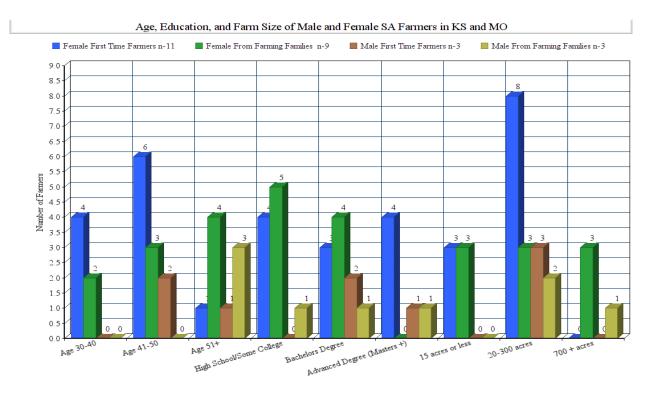


Figure 1. Age, Education, and Farm Size of Male and Female First-time SA Farmers and those from a Farming Family in KS and MO

Figure 1 illustrates that most of the first-time women sustainable farmers in the sample are under 50; nearly half of those from farming families are above the age of 50. Male respondents were older, but two of the three first-time farmers were the youngest male interviewees. Education is relatively evenly distributed between the groups, except the Advanced Degree category, which boasted four first-time farmers and zero from farming families. The majority of first-time farmers in the sample live on small to medium-sized rural farms while those from farming families seem to have an even distribution across the delineated farm sizes.

Figure 2 describes the economics and type of farming on these 23 farms

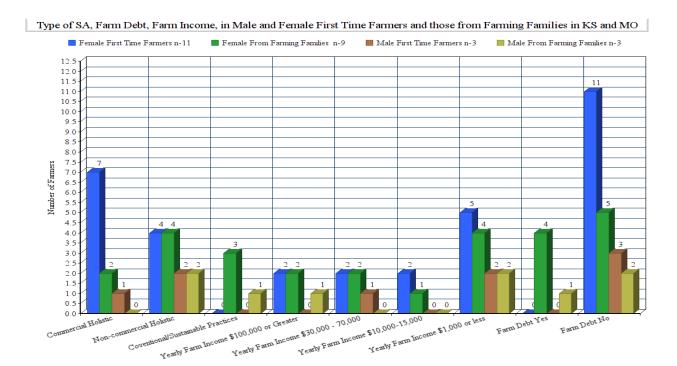


Figure 2. Type of SA, Farm Debt, and Farm Income in First-Time Farmers and those from Farming

Families in KS and MO

Figure 2 shows a breakdown of first-time farmers and those from a farming family in farm type, farm income, and farm debt. Ten interviewees operated holistically sustainable, non-income-producing farms. Eleven operated commercial holistic sustainable farms. Four operated commercial conventional farms implementing sustainable practices. All of the POF engaged in direct-to-consumer sales or community exchanges (in the case of those not selling but giving or trading), with the exception of three respondents (two female and one male) who only sold to the conventional commodity markets. The interviewees came from mostly poor or middle class backgrounds, and annual income generated from farming ranged from zero to \$130,000. Twenty of the farmers operated debt free, with only four carrying revolving farm debt – significantly, those four are also the farms that operate conventionally with some sustainable practices.

Figure 2 illustrates that first-time female farmers were most likely to be holistically producing commercial food and least likely to be farm conventionally, triangulating findings in previous research. Income seems relatively evenly distributed across the groups. Noteworthy in this sample is the absence of debt in the first-time farming sample, and the split between debt and no debt in the group from farming families. This suggests that first-time sustainable farmers, not shackled with the debt load characteristic of conventional agriculture, might have economic advantage over existing farms transitioning to sustainability.

Figure 3 displays interviewees' responses to questions about why they got into food production and why they farm the way they do. Throughout the interviews participants expressed seven major motivating factors: (1) Feeding the Family, (2) Environmental Responsibility, (3) Feeding the Community, (4) Animal Welfare, (5) Profit Niche, (6) Time/Cost-Saving, and (7) Feeding the World. The figure illustrates the breakdown of expressed motivations from male and female first-time SA farmers and

those who were from a farming family.

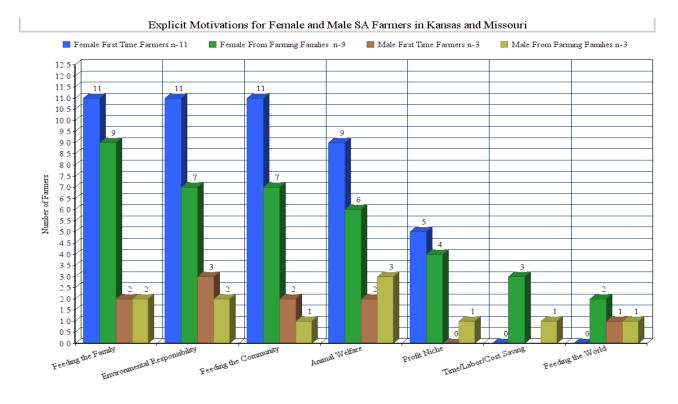


Figure 3. Explicit Motivations for Female and Male SA Farmers in Kansas and Missouri

All female farmers and all but two of the male farmers reported that they farmed to provide food they approved of (usually this meant food free of pesticide, herbicide, antibiotics, or extra hormones) for their families. The two male farmers who did not talk about food for their families were very different from one another. One was a conventional cattle farmer who came from a farming family and had transitioned to grass fed beef. The other was a highly educated man who began farming as an adult in response to his educational pursuits.

All but three interviewees expressed motivations of environmental responsibility as the reason they farm. Both those from farming families and first-time farmers spoke about the duty they felt to nourish the land, but the two groups couched that responsibility

in different ways. Male and female interviewees from farming families tied it to religious upbringing, while first-time farmers reported that they were not guided by a religious ethic. The three interviewees who did not express a motivation of environmental responsibility were three of the four farmers who operated conventional farms that only employed a few sustainable practices.

Providing food for the community was the third most reported motivation for sustainably farming. Among female interviewees, all but two provided food for their community in some way; half of the men referenced this as a driver of their actions. Three of the five that did not express a motivation to provide food for their community. They were three of the four who instead expressed a motivation to feed the world. These same three reported employing sustainable practices for the time, labor, and money it saved them. Their farming practices and expressed motivations seem to be outliers to the rest of the group.

Figure 4 provides a breakdown of the two contrasting environmental ideological frameworks (religious stewardship and secular environmentalism), community outreach, and reported discrimination between male and female first-time farmers and those from

farming families.

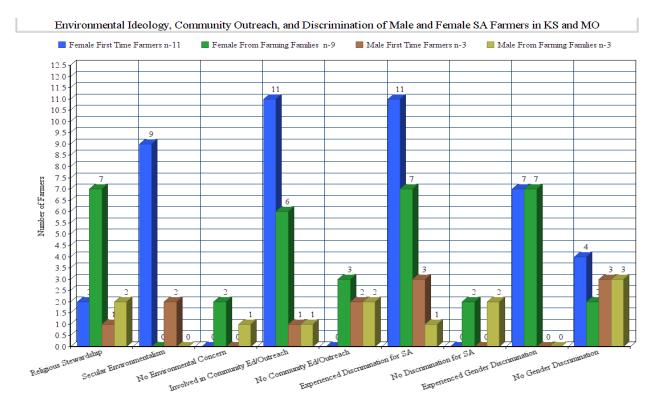


Figure 4. Environmental Ideology, Community Outreach, and Gender Discrimination of and Male SA

Farmers in Kansas and Missouri

The figure shows an ideological split between women who are farming for the first time and those who are from a farming family. All but three first-time farmers expressed secular environmental concern, while all interviewees from farming families that expressed environmental concern as a motivator framed it as religious stewardship of the land.

Nineteen of the 26 interviewees became community food/farm educators over the course of their farming experience, along with performing the community outreach needed to build and strengthen local food economies. Women from both groups were involved in community education/outreach, but all first-time female farmers reported

such actions. Two of the male interviewees did report some form of community education/outreach, one first-time farmer and one from a farming family.

Most of the female interviewees talked about their experiences as women farmers over the course of the interview. There was very little gender discrimination reported within sustainable food circles, but 14 of the female participants reported interactions with conventional farmers and agents from conventional institutions where the woman's legitimacy as a farmer and/or her ability to do the work was questioned. None of the male interviewees reported gender discrimination. Twenty-two of the twenty-six participants reported being othered by conventionally farming neighbors, and the four who reported no othering (2 female and 2 male) were from farming families.

MOTIVATIONS ASSOCIATED WITH SUSTAINABLE FARMING

I asked participants at the end of the interview to define what sustainable agriculture means to them. Definitions were varied and mostly reflected the participant's ideological stances and motivations. As illustrated in Figure 3, the top three motivations reported from all the farmers: (1) Food for the Family, (2) Environmental Responsibility, and (3) Food for the Community. All women interviewed stated that they were motivated to produce acceptable food for their family, and four of the six men interviewed mentioned providing food for their families as motivation. Each of these expressed motivations can be understood through the lens of care-work for the family and the local community and environment. The motivation of environmental responsibility uncovered an ideological split between first-time farmers and those from farming families.

Food for the Family

With the exception of two males, interviewees listed providing a specific quality of food for their family as a major reason they ventured into sustainable food production. For instance, Marlie, a small-framed woman with ruddy cheeks and dirt under her nails, manages a non-profit urban farmer training facility in a major city in Missouri. She also has an urban garden at her home, and prior to working for the non-profit, she was the manager of an urban farm in the same city. She is a single parent of one daughter who helps her at the non-profit over summers. Marlie grew up in a rural area with farming neighbors, but her parents were not farmers. Marlie became a farmer for the first time as an adult. Here she talks about her reasons for choosing to grow sustainable food as a profession:

Marlie demonstrates an orientation to the care-work of sourcing food that she sees as safe for her child and for herself. This motivation shaped her early career trajectory to produce 'safe' food, and to educate those around her about her passion.

Francine runs a non-income producing rural farm in southwest Missouri with her husband Randall. Both work off-farm, though Francine is retired and only works part-time as a property manager for rentals in a nearby town. Randall helps with the farm, but Francine is the one who initiated their start in family farming. She grew up in a poor farming family, and learned from a young age how to live off the land when there was no money to buy food. This philosophy has carried into her adult life:

About three years before I retired my business in 2011, we got milking goats, and we have pretty much everything out here, just to ensure that our food was not filled with growth hormones, and antibiotics, and stuff that they fatten up animals, and that we shouldn't be eating....I buy all my seeds non-GMO from a heritage farm, and they're quite expensive, so I re-harvest all my seeds. I don't buy seeds every year. I harvest what I've already gathered, and it works really, really good... It's very gratifying to know where your food comes from, so it's – it's definitely worth it to me. It's not worth it to everyone. It's a grand idea until the alarm goes off at 4:00 in the morning.

Francine repeated throughout the interview that she was not interested in making money from the food she produces; she is interested in providing food that she approves of for her family and subsequently for her community. Growing up in a subsistence farming family shaped Francine's habitus, which gives her the motivation and knowledge to grow her own food and to be as self-sustaining as possible.

Whether selling their produce commercially or distributing food to their family and community for alternative compensation, providing food for their loved ones was an expressed motivation of every female participant. The two male respondents that did not list providing food for their family as a motivation were very different from one another, though they both spoke about feeding the world. The other four male respondents, however, reported producing food for their family was the major motivator.

Food for the Community

Providing food for the community was the third most commonly mentioned motivation for farming sustainably. Just like providing food for the family, providing food for the community is rooted in the work of caring. Instead of pursuing sustainable agriculture to benefit the private sphere of the family, it is an extension of care-work into the public sphere of the interviewee's local community.

Dawn, a beginning farmer in southwest Missouri, bought her farm as a retirement plan a few years ago. Her husband works off-farm, and in the last two years, she has quit her off-farm job to focus entirely on turning the farm into an income-producing business by selling at a local farmer's market.

I just started getting more interested in that when I started growing because I just realized, going through the products that are available to me, I realized other people could use those products also. And I thought – and not to mention, I love it when people can come out to the farm and they can pick something and eat it right off my plants. It makes me feel good to be able to go to the market and not worry about what's on my food, because I would, if it were something that was harmful for somebody to eat.

Dawn shows an orientation toward caring, even when selling to the public. As a producer, Dawn worries about the food her consumers are eating and feels driven to provide the type of food she wants for her own family to her local community. She continues:

I thought, "Y'know, we should share this with other people." First we just had a few people who would come by and want to buy stuff, and then we started going to smaller markets and – and just the stuff that we were producing was nicer than we ever thought it would be. And it was different. We like unique things that you can't find at the grocery store, and so I just wanted other people to be able to see – I'm a people person, I like to share stuff, and I like to talk to people and so – just letting people know what their options were besides what they could find at Wal-Mart or Foodfor-Less was just – fun. That's where we started.

Dawn is one of many interviewees who expressed a preference for social interaction with the community. This again illustrates a certain habitus not only to care for the family and community through access to acceptable food, but also to build and maintain relationships within the community.

Margie, a small-framed woman with short blonde hair and an accent that exhibits her locational habitus, is a commercial holistic sustainable farmer in southeast Kansas. She prides herself on providing higher quality of food than can be found in a grocery for her consumers, "Each batch, or each little bit, we're constantly tasting to make sure it's the quality and the texture, the flavor that we want going out from here. So, same thing applies when we start new varieties. And if I won't feed it to my family, I wouldn't sell it. That's where I'm at." Margie seems to be expressing a desire to provide the same quality of food she would feed her family to her community.

Belen, married with a school-aged child, is a very successful urban farmer and the youngest interviewee at 31. Her hair, dreaded and wrapped in a colorful scarf, hints at a lifestyle that departs from convention. Belen described the act of selling food to the local public as empowering: "It turned out I was really *good* at growing food, you know, and I really liked selling food, I really liked going to market, and it really, like, empowered me to feed people. So it sort of spiraled from there." Belen's enjoyment in providing food for her community illustrates that women are conditioned to look for fulfillment in the caring of others (Chodorow 1978; DeVault 1991). Although her self-described 'punk rock' rebellion, a rejection of her traditional family expectations in her youth may not have reflected the kind of gendered socialization that her upper middle-class parents expected, she performs care-work that extends to her local community.

Environmental Responsibility

Environmental responsibility was the second most commonly expressed motivation from the sample. One male and two female interviewees did not report environmental responsibility as a motivator for their sustainable practice; all three run

conventional farms with sustainable practices, and all three are from farming families.

These same three talked about feeding the world when they talked about food as a motivator.

When we compare first-time farmers and those from farming families, we see a very clear split in respondents' environmental ideology. All but three first-time farmers identified with an ideology of secular environmentalism, while every respondent who came from a farming family framed it as religious stewardship. The religious stewards were more likely to carry debt. They were more likely to be transitioning from conventional to sustainable farming, rather than approaching sustainability holistically, than those who espoused secular environmentalism.

Religious Stewardship

Heather married into an existing conventional farm in southern Missouri 19 years ago. Her husband grew up as a cattleman and operated conventionally according the guidelines and suggestions of the conventional beef industry. It was Heather's initiative and religious belief that prompted her husband to change the way he was raising cattle, and it was her idea to diversify what is produced on the farm, which now boasts beef cattle, a dairy, hogs, goats, chickens, and high tunnels for vegetable production. Heather talks about her reasoning below:

God made things to work in a natural environment, and man is the one who has always been messing that up from the beginning. You can't make nature better. You just can't with manmade chemicals and fertilizers and things... This is kind of crude, but I call it raping the land, you know, in conventional agriculture these days, with all the chemicals that we've put on it. It just – it is, it's raping of the land. In Bible times, you would have been stoned, probably, or you know, there were definitely set rules, and not that we all go by those rules, but there's so much to how God laid out things should work, I believe.

Heather's emphasis on the welfare of animals and on letting divinely created natural systems solve problems prompted her husband to stop giving hormones and preventative antibiotics to their cattle, and to move to a completely grass-fed herd 17 years ago. As a result of this relatively early transition from conventional farming, Heather and her husband run a very well-established, diversified, successful, and now holistically sustainable farm. Heather again bases their business philosophy in her belief system: "I grew up in a Christian home. I'm a Christian, we're a Christian family. And we do our darndest to run a Christian business, absolutely." They employ seasonal labor when they can find it, and they employ Heather's adult daughter full-time to manage the high tunnel vegetables and help with the home and business delivery service that Heather has created as an outlet for their products. Religious stewardship and Heather's orientation to caring changed the way her husband practiced animal husbandry and guided the environmental responsibility she felt for the land.

Sandra, a tall, tan woman with dark brown hair and an easy smile, grew up on her family dairy farm in northern Kansas, very close to the dairy she now owns and operates with her husband. She has adult sons who are returning to take up the family business within the next year, and she is doing her best to ramp up the business to accommodate their added employment.

Sandra describes her ideological motivation below:

The commitments of, you know, the land, and the animals, and your own family – I mean, yeah, it strays back to, you know, your backbone. Religion to me is kind of – it makes you think instead of just doing, you know. My mother was Lutheran and my dad was Methodist, so – I mean, all hodgepodge. But they were all – We all had the religion background. You've gotta appreciate the

land because you're gonna leave it someday, and somebody else is gonna take it, so you wanna keep it in better shape than it was when you were living on it.

Sandra's religious stewardship illustrates a typical habitus resulting from the sample location. Those who grew up on a farm or married into an existing farm are likely to have grown up in the Bible Belt, a region that produces and reproduces a normative affiliation with Christianity, especially in rural areas where social gatherings often are organized through local churches. This could explain the division of ideology between those from farming families and first-time farmers who may have moved to the region in adulthood, or may have grown up in an urban setting.

Secular Environmentalism

Most of those who framed their environmental motivation as unconnected to religion farmed sustainably because they were concerned for the health of the environment. For example, Jill and Paul are first-time farmers in southwestern Missouri in their late forties. Jill has a northern drawl, an inviting smile, kind eyes, and a very apparent love of animals, as evidenced by the many dogs, cats, and one goat that occupied the house during our interview. They moved to their current location from Colorado with the intention of becoming sustainable farmers. Neither of them has an agricultural background. In the interview, she describes her orientation as, "We're just a couple of old hippies."

Both Jill and her partner had professional careers that they left in order to become commercial growers. Eight years later, they are quite successful. They recently brought on their adult son to apprentice on the farm, and have some volunteer labor from the CSA Jill started. Jill also sells at two different farmers' markets and directly from the farm. Jill describes her farm and her environmental concern here:

It's a closed-loop, you know, really. To me, what we strive for is having as many inputs from the farm used on the farm, and reused. Taking care – or – you know, nurturing the land, and the livestock, and the soil – you know, the soil, it's all about the soil! – so that it grows, you know, nutritious, healthy food and livestock. Balance, really. Sustainability is balance.

Jill desire to grow food, and protect the land sounds similar to how religious stewards speak about their own environmental conviction, but she emphatically states, "We don't have any religious affiliation, just the church of nature." Jill and her husband, as first-time farmers from another region of the country, have a different environmental orientation than their locally embedded religious stewardship counterparts.

Dawn is a first-time farmer concerned about the food she feeds her family and community, and she is actively farming in ways that promote ecological health and espouse an ideology of environmental concern. She spoke about her interest in promoting ecological health, "I'm really, really interested in responsible farming; y'know save the bees, save the butterflies, save all your pollinators. Do the less – the least amount of harm to the environment that you can, no matter what kind of farming techniques you use. That's really what my passion is." Dawn does talk about attending church, but dismisses it from influencing her farming practices.

Page, a tall, athletic, strawberry-blonde woman in her early thirties, is also a first-time farmer, located in rural northeastern Kansas. She and her husband co-purchased her farm with her parents, and they all moved onto the farm together. All four work off-farm, commuting to a nearby city, but Paige is considered the primary operator of their farm since she has the most flexible schedule of the four adults. She also cares for her toddler son. Page would like to sell her products to the community someday, but for now, she is

happy to be rehabbing her little patch of land and raising food for her family and friends to eat. Page talks about her environmental motivations here:

I think it's better for the earth itself. I mean, even if we can only help this one little patch. I can see the way it looked when we bought it and then it's already looking better, just by giving it a little bit of help, but not scorching it with chemicals. And I have children, and I don't want to breathe that stuff in either, and I don't want my family handling it. We have enough friends and family and read about enough people that have cancer and other bad, chronic illnesses from being around that sort of stuff, and it's better for the animals.

Page said both she and her husband had wished to live in the country. Her investigation into local food and environmental degradation from conventional farming prompted the couple and Page's parents to venture into SA together.. She makes no connection to religious belief, and when asked directly if she participates in any religion, she simply answers, "No," with a laugh. Page, Dawn, and Jill express something that all the female secular environmentalists alluded to: the smallness of their actions. Phrases like "helping this one little patch," or "I know my impact is small, but I'm doing what I can," were evident throughout their interviews. This may be due to a better understanding of the scope of environmental degradation or because they do not feel connected with a larger movement like organized religion.

Bernard, an older, highly educated man who has written academically, published a book on the pro-environmental potential of sustainable farming, and taught at several different universities, frames his concern for the environment in terms of mitigating environmental change:

I'm not affiliated with any religion. Nature is my religion. Ecology. Intact ecosystems. I think that – I think that if – if industrial agriculture is allowed to continue to deplete the land, the – those habitability zones are gonna be much smaller, and the number of people that starve is gonna be

much larger. So the more we restore soils and the more we learn how to grow food that replenishes and restores the soil rather than depletes it, the better off we collectively are gonna be. Bernard's education in ecology and the larger sociological impacts of environmental degradation is evident. He is the only interviewee who speaks about his environmentalism in terms of addressing global environmental change; this is likely because his academic research has focused on the social and environmental impacts of industrialized agriculture, and this guides his actions and thinking as part of his habitus. Regardless of the size of perceived impact, farming sustainably seems to be a form of activism for those with an ideology of secular environmentalism.

Community Outreach/Education

Meares (1997) found that the gendered division of labor defined community outreach as work that the farmers' wives performed. The emotional labor and time that go into building community relationships with local food providers is necessary for the success of the sustainable food movement, but not directly valued or paid. DeVault (1991) identifies food as major focal point of organization in most societies, and the gendered care-work of food as what creates and perpetuates food traditions within a family and culture. One of the emergent themes in the analysis was the number of female interviewees who became community educators and farm educators, or founded farmers markets, CSAs, food initiatives, partnerships with local schools, or non-profit organizations for food distribution within their communities.

All five female interviewees who ran non-income producing farms grew food and raised livestock to supply quality food for their family, extended family, and their social networks, (e.g., church members), essentially performing care-work for their communities. The female interviewees who ran holistically sustainable commercial farms

did something more: they became the architects and advocates for their local food economies by performing the emotional labor of community relationship building. Every interviewee who became an educator created and fostered relationships between community, environment, and the food they all consume.

The most dramatic difference between the male and female respondents, aside from the expected absence of gender discrimination from the men, is their level of participation in community outreach and education about food and farming. Only one man in the sample became a very successful farm and food educator, with the credentialed authority of a university. With the exception of one other who qualified his work at the farmer's market with, "I do it, but only when my wife can't," the male interviewees said they did not participate in community outreach directly related to their farm or local food. When I asked in what, if any community outreach/education involvement he has participated, Paul, a first-time commercial holistic sustainable farmer in his late forties, who farms with his wife, described it below:

None. [laughter from his wife, Jill, in the background] I really don't. [The Farm] takes all my time, pretty much, and when I'm not doing that, I'm too tired to go do something else. I like to relax, y'know, when you're working 12-14 hours a day, seven days a week...I don't like – constraints of, y'know – We've got a meeting on Tuesday night at 7:00, but I might have a goat having a baby or something, so I don't like – I don't like it. I let Jill do all that.

Just as Meares' (1997) found, the men in this sample were happy to let their wives take on the extra work of the community relationship building.

This research reveals that female POFs are not handing their community outreach over to their partner or spouse to complete. In essence, they are performing the labor of the farm, the domestic labor of the house, and the added labor of community/food

relationship building; some are also working off-farm. The power of gendered socialization, orienting women to the work of caring, seems to be both motivating women into sustainable agriculture and contributing to the success of the sustainable food movement.

The women in the sample, oriented toward volunteer care-work, have not shied from taking on this additional demand of their time and energy. They have embraced it enthusiastically. Tara, a writer and urban farmer who has turned her yard into a community space that invites neighbors and visitors to pick and eat what they want, loves the fact that she gets to teach others about her love of growing food:

I'm interested in the idea of closing the gap between how do you plant – you plant a seed, you know, then what do you do? How do you take care of it? How do you make it grow, when do you pinch it off, when do you harvest it? Okay, now that you've harvested it, what do you do with it? People don't always learn by reading an article on the Internet; they learn by doing. They learn hands-on. So my job is to take it from this kind of theoretical idea to 'Here, now we're gonna do it.' And when you're doing it step by step by yourself, you get excited. So I'm constantly talking about permaculture and organic gardening, and you know, and grow this, and cook that, and make this.

Tara's urban farm is non-income producing. Instead, she uses her farm to bring her community into a closer relationship with their food. Her house and double-lot yard, in an economically depressed neighborhood, serves as a food hub for immigrant and impoverished neighbors. She has used her public garden not only as a teaching tool, but also as a way to decrease crime and increase camaraderie in her community. Neighbors knowing each other and watching out for one another keeps neighborhoods safer, and Tara is proud of the fact that her efforts have brought the community together.

Five female interviewees served on sustainable action committee boards, four founded farmers' markets in their communities, three founded the first CSA in their area, ten put on food or farm practice workshops, five spoke in their professional capacity at conferences, and five held continuing education classes related to their farming activities. Five hosted farm internships. Each woman created community outreach and educational opportunities that either started or supported their local food system. This suggests women are performing the emotional labor of educating the community about food, farming, and the environment, which produces a positive result for sustainable food movements.

Finding Common Ground

Several of the women who reported becoming farm and food educators in their community also brought up being exposed to, and interacting with, women who framed their environmental responsibility in contrast to their own. Prelli and Winters (2009) showed that many Christians view environmentalists as new age or nature-worshipping. Lara, an urban farmer in her late forties, advocates for edible landscapes in the city. Coming from a very strong religious stewardship environmental perspective, she describes one such potentially uncomfortable interaction:

I participated in this herbal course, and there was this woman coming at it from a very secular viewpoint, and my daughter and I were very much coming at it from a God is the Creator viewpoint. It was fascinating and it was cool, because she really knew the science behind the plants and the medicinal properties of herbs, but as a Christian, I saw the connections she was making as valuable and helpful, but that those connections come from God

...But I appreciate her friendship and knowledge. Most people that are interested in taking care of the environment don't believe in a creator, but we see it differently. I see these two diverse groups coming together in a very healthy way... We had never been exposed to that way of thinking until that experience.

Instead of feeling out of place, Lara describes her interaction with secular environmental advocates as inspiring a surprising friendship that resulted from their shared goals: the common ground between the contrasting environmental ideologies.

Niki, a rural commercial grower in mid-Missouri, is the only USDA certified organic farmer among my interviewees. She owns a small farm, and she and her partner Alicia have a toddler. Niki comes from a secular environmentalist ideological framework. She describes the evolving attitudes of her community (largely made up of fundamentalist denominations of Christianity) toward herself and her farming practice:

A woman said to me a few years ago, the fact that I'm a lesbian – there's, in our general area, there's a lot of Mennonites and Amish and some are on the board of the Missouri Organic Association. And they expressed concern to her at some point about being unsure about working with me and, you know, about a year into me being on the board, she said to me, she said, "You know, they've really – their minds have really been changed. And they really like you, and they really appreciate you, and they know that you're a really good farmer."

Niki credits her community outreach, hard work, and farming success for the friendships and acceptance she has gained from the community. SA has helped her to find common ground on more than just competing environmental ideologies; she built unlikely friendships and respect with extremely fundamentalist religious neighbors and peers that moved past barriers of religious intolerance.

Othering from Conventional Actors

The majority of interviewees reported being othered and devalued by conventional farmers and systems for the way they farm. From skeptical neighbors to the loan officer at local bank, the interviewees often expressed feeling something similar to

Heather: "They think we're freaks, they think we're goofy. It's just – It's a different – It's a different ballgame." Male and female respondents both used words like "freak," "weirdo," "hippy-dippy," "extreme," and "looney." Twenty-one interviewees reported being put down by other farmers for their sustainable practices. Three reported being denied capital loans since they were seen as "hobby" farmers and not business operators. Two reported no othering for their farming practices, but they also had very little interaction with conventional farmers or commodity markets.

The prevalence of othering coming from conventional systems and actors toward the sustainable farmers in this research allows us identify important differences between the markets that conventional and sustainable farmers participate in. My conventional group did little to no direct-to-consumer sales or contact; they sold their product to vendors, agents, etc., while the commercial holistic operations dealt, for the most part, exclusively in direct-to-consumer sales. These are alternative ways for the farmer who operates outside of the corporate food system to generate revenue. Some interviewees were cognitively aware of this as a rejection of the dominant corporate market, of prices out of their control, and of being subject to market forces. Margie acknowledges just such an understanding here:

Around here there's a lot – you know, beans, wheat, corn guys. And they give me a hard time. A lot of 'em think I'm not a real farmer. And I said "Sure, I am not a real farmer. One, you know, I plant what I want, when I want, how I want. You, they tell you how to plant it, and then when you harvest it, they tell you how much you're gonna get for it, and I take mine to market and I decide my own price." So – you know, I said, "Nobody tells me how much my tomatoes are worth that day. I get to set it." I said, "So, you know, if that's not a real farmer, I'm all right with it."

Margie finds her way of farming empowering because she has control. She does not need to be labeled as legitimate by her conventional peers because she has more autonomy, and she is also likely to out-produce them in pounds of edible food and net income.

CONCLUSION

These interviews suggest that both males and females in SA are likely farming with an ethic of care for their families and their environment, but that women POFs are also likely to take on the commitment of community relationship care-work. The female interviewees' habitus, seemingly a natural part of their life as wives and mothers, reflects their social location and upbringing as women who take on the added responsibility of care and service work in the home, on the farm, and in the community.

Habitus developed in varied social locations and regions can manifest differently, as is evident in the ideological split between first-time farmers and those from farming families in this research. Though the interviewees framed the environmental responsibility that motivated them into SA in different ways, the majority of them followed very similar business and farm practices: free of revolving business debt, with a resistance to governmental interference, a desire to work outside of the conventional market, and with no interest in subsidy, crop insurance, or taking out capital loans. Those from farm families were most likely to hold an ideology of religious stewardship. The potential for pro-environmental action from existing farms transitioning to sustainability through an ideology of religious stewardship could have a significant impact, just as Evangelical Environmentalism has the potential to change the larger social acceptance of climate change (Clements et al 2014).

Those who are first-farmers were likely to view their expressed environmental responsibility to the farm as secular environmentalism. These growers starting new farming endeavors may have an advantage over those transitioning from conventional agriculture, because they are not bound to the rigid practices, existing investment in conventional implements, and they are most likely to be operating sustainably holistic commercial farms. This means that first-time commercial farmers in SA are likely having a bigger impact on the environmental rehabilitation of their farm and on food systems. Within this sample, first-time farmers were also more likely to operate free of debt and likely to be higher educated.

While profit opportunity did motivate some interviewees, some did not talk about profit as a motivator, and some repeatedly denied that making a profit was even a goal. This suggests that although profit certainly is important for commercial farm success, it is not likely to be what is prompting the influx of women into sustainable agriculture. Profit, instead, seems like a positive outcome for those commercial growers who farm sustainably for reasons grounded in caring for the family, the environment, and the community.

Most farmers expressed feeling othered by their conventional neighbors. The experiences of othering reported by female participants sometimes was framed as gender discrimination and was almost exclusively experienced in conventional farm settings.

These reports of being othered by conventional farmers and agents suggest that many sustainable farmers are being marginalized and devalued in relation to conventional systems, and women may be likely to experience othering on two fronts.

It would be helpful if the USDA census tracked the number of commercial holistic and non-commercial holistic sustainable farms in the US, so researchers could more accurately measure the impact of the sustainable farm footprint. Future research should explore in-depth the nuances of the two environmental ideologies that emerged in this research, the effect being a first-time farmer has on long-term success rate of the commercial holistic farm model, and the almost unanimous reports of being othered for their farming practices.

Women's participation in sustainable agriculture is motivated in part by upbringing and a desire to care for their family, but they are also having an important impact on their local food systems. They produce and reproduce community food networks, and create new farmers by sharing their practices, teaching community classes, founding and participating in local food economies, and offering farm internships. They have advanced the sustainable food movement at large by producing new consumers through increased awareness. Through this outreach, the women in this sample also make valuable social connections with farmers and community members despite differing ideological perspectives, suggesting that the sharing of practices creates a space where opposing ideologies can find common ground.

Appendix

Interview Guide:

- 1. Tell me a little bit about yourself. Where did you grow up? What did your parents do for a living? Siblings?
- 2. Please tell me about your first exposure to farming. How about sustainable agriculture?
- 3. Tell me about your life before you became a primary operating farmer.

What other occupations have you been involved in?

4. How did you come to be a farm operator/owner?

How long have you been farming?

How long have you been in charge?

What, if any, kind of labor support do you use on the farm?

5. Why do you practice sustainable agriculture?

How did you learn to farm?

Tell me about how you are farming.

What sustainable practices do you use?

6. Have you previously engaged in conventional farming?

Are you a first-time farmer? Have you grown up with these techniques, or have you had to learn new practices?

7. Tell me about your life now that you are operating your own farm.

Are you in a partnership, (couple or professional)?

Do you work off-farm?

Do you have children/dependents?

Can you approximate the income generated from the farm?

- 8. Do you have farm debt?
- 9. Do you receive any kind of assistance or subsidy from local, state, or national governments? Do you feel you have access to such support?
- 10. Have you sought out loan or grant opportunities for capital investment in the farm?
- 11. What kind of access, if any, do you have to education for sustainable agriculture?
- 12. What, if any, professional and/or support organizations in regard to your farm do you engage with?
- 13. Do you have any religious and/or political affiliations that influence your farming practices or your community engagement?
- 14. Do you engage in any leadership roles or community engagement off-farm that are related to farming? How about non-farm related community engagement?
- 15. Where do you see yourself in 5 years? In 10 years? In 20?
- 16. How do you define Sustainable Agriculture?
- 17. Is there anything you would like to add?

Demographic Survey (Face Sheet):

Age
Ethnicity
Location: County State
Approximate population of your local community
Length of Farm Experience (both working and ownership)
Farm Size (in acres)
Highest Level of Education
Please list the crops and/or animals raised on your farm:

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l of sustainable practices implemented is to stop further damage of arable land and environment, reduce food system emissions by participating in local food economies, and to increase food security at the community level and the economic security of the farmer. *Practices* is an important term, because SA is always developing new best practices through the organic process of grassroots/local community knowledge building. Primary Operating Farmer (POF) is the term the Census uses to define who either owns or is the primary decision maker for a farm.

¹ Sustainable Agriculture is an umbrella term that describes the implementation practices that work toward specific goals of social, environmental, and economical equity. The goa

² SA Practices include: Mixed farming (both animal and plant producing); Crop diversity (compared to the mono-crop mindset of industrial farming); An emphasis on natural diversity and ecological health;

Land and water conservation practices such as no-till planting, crop rotation, cover cropping, rotational grazing; Limited use of synthetic chemicals for crop and animal control; Reducing greenhouse gas emissions by promoting local food economies, by employing alternative energy sources, by using less heavy machinery in farm and by actively putting carbon back into the soil; Animal welfare, a rejection of the factory farm approach of Confined Animal Feeding Operations (CAFOs); Participation in direct sales to consumers through farmers' markets, roadside stands, Community Supported Agriculture (CSA) to promote both farm economic viability and community engagement (SARE 2012; HMI 2014; Furman et al 2013).

³ 'Civic farmers' is a term which describes holistically sustainable farmers who participate in local food systems (Furman et. al 2013).

⁴ I chose to use the term "religious stewardship," rather than the already coined 'evangelical environmentalism,' because I believe the concept of religious stewardship to be transferrable to more than the various denominations of Christianity; it is inclusive of any religious belief that is compatible with improved environmental care of 'creation.' Non-religious environmentalism has become most prevalent in the absence of religious belief, and posits that nature should be protected as an entity equally important to human development and equally deserving of preservation (Garreau 2010).