Women Leaders in Agriculture: Data-Driven Recommendations for Action and Perspectives on Furthering the Conversation

Abstract
The presence of women in positions of power in the agriculture industry is lacking. This article highlights findings generated from the 2016 Southern Region Women's Agricultural Leadership Summit attended by women from 13 southern states. The research revealed that women working in Extension should (a) formally connect with leadership mentors, (b) envision themselves in leadership roles, and (c) support one another as they work to lead in the agriculture industry. To further the conversation, we provide recommendations that are inherent in the data and intended to assist early-career women professionals as well as middle managers and administrators who desire to advance women's leadership development in Extension.

Keywords: women, women's leadership, women in agriculture, agricultural leadership, trends in agriculture

The role of women in agriculture is expanding, and this circumstance is of relevance to Extension professionals across program areas. The number of female-owned farms nearly tripled during a recent 25-year span, from 121,600 in 1982 to 306,000 in 2007, and today, 30% of all farmers in the United States are women (Hoppe & Korb, 2013). Moreover, female-run farms are responsible for $4.9 billion of the $12.9 billion in agricultural product sales nationally (Hoppe & Korb, 2013). Despite this snapshot of success, the incidence of women in leadership positions in agriculture is significantly less than that of their male counterparts. Because of the importance of this issue to Extension, University of Georgia (UGA) Cooperative Extension and the U.S. Department of Agriculture (USDA) held a Southern Region Women's Agricultural Leadership Summit to further the conversation about women in agricultural leadership positions.

Although women's involvement in agricultural work is documented, women are underrepresented at all levels of agricultural leadership, including in applicable areas of education and business. Recent statistics bear out this discrepancy. In 2008, women faculty held 35% of positions in the biological, agricultural, and environmental life
sciences and related fields at 4-year universities (National Science Foundation, National Center for Science and Engineering Statistics, 2012), and in 2012, for the first time in history, women outpaced men in the total number of bachelor's degrees awarded in agriculture, surpassing them by a margin of 23% and earning a total of 15,476 degrees (National Center for Education Statistics, 2013). Yet in 2013 women accounted for less than 10% of deans and vice presidents of agriculture at land-grant institutions (Griffeth, 2013). Moreover, although women in business management occupations are holding steady at 38%, the percentage of women in agribusiness management positions is lower, with only 23% of agricultural management occupations held by women (U.S. Bureau of Labor Statistics, 2015). Extension can be involved in addressing this underrepresentation of women in leadership by assisting in educating women both internally and externally on how to break through leadership barriers.

**Benefits of Women in Agricultural Leadership Positions**

Overall, when women serve in leadership roles within organizations, financial performance improves, employee talent is better leveraged, the marketplace is reflected more adequately, and innovation and group performance increase (Catalyst Information Center, 2013). As the field of agriculture becomes more dynamic and challenging, diverse leadership groups having creativity, empathy, and collaborative qualities are vital. Women's strengths align with these needed skill sets. A study on the collective intelligence of groups showed that groups in which one person dominated were collectively less intelligent and that the key to establishing dynamics for collective intelligence was a high level of "social sensitivity," a trait predominantly exhibited by women (Woolley, Chabris, Pentland, Hashmi, & Malone, 2010). In short, more women in agricultural leadership positions are needed for the impact they can have not just nationally but also globally in strengthening the safety, security, and sustainability of our food system.

**A Need to Explore the How of Leadership Development for Women in Agriculture**

The first-of-its-kind Women in Agriculture Survey by American Farm Bureau (2015) measured women's attitudes about and engagement in the industry. Overall, nine out of every 10 respondents felt that more representation by women in agricultural leadership roles was needed. Although respondents generally felt that women were qualified to take on leadership roles, a third of those surveyed indicated feeling that they had not had the opportunity to lead. Additionally, most of the women said they would not like to run for elected office and had little experience with the process. Survey respondents also identified skills needed for women in agricultural leadership roles, citing effective communication and goal setting and attainment as being most important.

The conversation about women's leadership development is not novel. However, there is limited research on how to support women, specifically those who hold or hope to hold agricultural leadership roles. More practical methods for increasing women's presence and leadership potential are needed. With its involvement in agriculture, community and economic development, youth development, and other applicable realms, Extension could serve as an informant of leadership development for women working in agriculture. To help fill the gap in understanding how to develop women leaders in agriculture, we used the 2016 Southern Region Women's Agricultural Leadership Summit as an opportunity to collect relevant data. Herein, we discuss components of the summit, our research process, and resulting findings and recommendations that can be used by Extension professionals at any level to continue exploring this crucial topic.

**2016 Southern Region Women’s Agricultural Leadership Summit**
Hosted by UGA's Women's Leadership Initiative and College of Agricultural and Environmental Sciences (CAES), with sponsorship from the UGA President's Venture Fund, the 2016 Southern Region Women's Agricultural Leadership Summit convened agricultural leaders from 13 southeastern states and the USDA representing all sectors of the industry. During the 1-day summit, women had a "seat at the table" to talk candidly about current agricultural leadership challenges and the importance of women's roles in forging solutions for an ideal future.

Each state's delegation comprised primarily women, although the summit did include two male delegates. Delegates represented varying facets of the agriculture industry: production, research, business, sales, policy, and government. Student organizations, employees from the university community, and several state agricultural organizations received invitations to join registered delegates at a morning panel dialogue and an afternoon reporting session; including these stakeholders enhanced the conversations at the summit.

The events of the day included the FarmHer Digital Photography exhibition and an opening session with remarks by UGA president Jere W. Morehead. UGA CAES associate dean for Extension Laura Perry Johnson introduced USDA deputy secretary Krysta Harden, who moderated a panel dialogue among four experienced Southern Region women leaders in agriculture: Caula Beyl, dean of the University of Tennessee College of Agricultural Sciences and Natural Resources; Cindy Ayers-Elliott, chief executive officer of Foot Print Farms; Caroline Bakker Hofland, chief executive officer of CBH International; and Camille Young, vice president of Cornerstone Government Affairs. These women, diverse in ethnicity and personal backgrounds, held leadership positions in academia, production, business, and government. During the panel dialogue, the women discussed their own leadership philosophies and how they had journeyed to their existing roles.

Lunch was a closed session for registered summit delegates. UGA senior vice president of academic affairs and provost Pamela Whitten delivered remarks, and keynote speaker Deputy Secretary Harden shared her personal story and vision for women's leadership in the context of agricultural work.

The afternoon consisted of a delegate session in which small focus groups discussed women leaders in agriculture. A summary of findings from the roundtables followed. At the summit's conclusion, delegates completed an exit survey.

Research Design

In addition to creating a space for Extension professionals to network and converse about important topics facing the field, the summit provided a research opportunity related to asking, and possibly answering, some fundamental questions regarding women in agricultural leadership roles. Accordingly, we undertook a study, approved by the UGA Institutional Review Board, to capitalize on that opportunity. The research participants were all female and included the four panel members and 62 delegates representing the 13 states of Extension's Southern Region. We based the research design on an inductive model in which data are collected and analyzed and theory is created as a result of the findings (Charmaz, 2006). We included qualitative and quantitative data collection to provide depth to the data. This approach resulted in three data sets: narrative transcriptions from the panel dialogue, the summary report from the focus group sessions, and responses to the exit survey.

Panel Dialogue

Questions posed during the panel discussion led to narrative responses from women who have been successful in their agricultural leadership endeavors. The questions focused on the following categories: avenues for leadership
growth, formulas for success, changes in leadership style over time, and critical agricultural issues for women. Two additional questions came from the gallery and were about female leadership in a male-dominated family agriculture business and teaching young people about agricultural careers.

Focus Groups

The J.W. Fanning Institute for Leadership Development (Fanning Institute), a unit of UGA's Office of the Vice President for Public Service and Outreach, coordinated a working meeting for invited delegates titled "Agriculture: Issues and Opportunities for Women's Leadership Development." Focus groups of delegates considered the experiences of women in agricultural leadership roles and reacted to the information shared during the panel dialogue.

The Fanning Institute staff facilitated a continue-stop-start activity that involved a series of questions that build on a shared vision or goal. The questions give groups a way to consider existing successes, challenges, and opportunities. Fanning Institute staff hosted the focus group conversations using questions around what should be continued, stopped, and started to support women's leadership in agriculture.

Participants answered four key questions on the basis of their knowledge of and perspectives on the field:

1. What do we need to continue doing to support increased opportunities for women in agricultural leadership?

2. What do we need to stop doing that might be causing barriers for women in agricultural leadership?

3. What do we need to start doing to support increased opportunities for women in agricultural leadership?

4. Is there anything else you would like to add to today's discussion on women in agricultural leadership?

Exit Survey

All summit delegates and program participants were invited to complete an exit survey, for which we obtained a 25% response rate. Questions were administered through Qualtrics survey software and provided opportunities for participants to rate satisfaction levels with the event and give additional feedback.

Data Analysis

We analyzed the transcripts from the expert panel dialogue and used initial coding to determine primary themes. Additionally, we coded the responses of the focus group members using the constant comparative method (Creswell, 2014). Along with the transcripts from the expert panel dialogue, the focus group report and exit survey responses went through a round of initial coding as well. Findings emerged from a review of analytic memo writing paired with data sets (Charmaz, 2006). Through a second round of focus group report coding, involving a vast number of themes from all three data sets, we determined the properties and dimensions of the core knowledge findings (Saldana, 2013). We coupled this core knowledge found from the data analysis with current research on women's leadership as a field of study to inform overall theme development and subsequent recommendations.

Key Findings
Summary of Data Analysis

Remarks from the expert panelists undergirded the themes of women’s supporting one another, preparing to lead from a young age, and using intellect and education articulately to earn respect from counterparts and colleagues. Addressing aspects of all these themes—support, preparation, and education—one participant stated, "We need to continue to remove the barriers, allowing girls into organizations at a young age. [If we] continue to remove those barriers, starting early, we can encourage leadership beginning in high school."

Focus group participants identified strategies relating to needs, issues, and opportunities for growth in women’s leadership development in the context of agricultural work. Asserting a common idea, one participant said, "Find someone that believes in you, a trusted relationship, where they are teaching you good leadership skills."

Findings from the exit survey revealed that participants were likely to want to replicate the type of conversation that had occurred at the summit within their spheres of influence in their respective states.

Overall, the following themes emerged as key findings from the qualitative data:

1. Women should formally connect with leadership mentors whom they consider role models to strengthen their knowledge bases, work personas, and professional networks.

2. Women should envision themselves in both traditional roles and nontraditional roles, such as executives, board members, and elected officials.

3. Women should support one another as they work to lead in the agriculture industry.

Recommendations in the Results

In addition to summing to the themes identified above, details within our qualitative data included specific key recommendations. These findings can guide the professional development of women in Extension and provide guidance on how to operationalize for both internal and external audiences the knowledge we have about the importance of women’s leadership development. The recommendations are applicable for women of any career stage or positional level; however, it is beneficial and imperative for early-career women professionals in particular to be proactive in their career journeys and for those in leadership roles, both men and women, to use influence and positional power to assist such women in forging their paths.

Recommendations for Women in Extension Careers

- Develop your leadership skills through participation in adult leadership programs, board service, and professional associations. If you lack formal opportunities for growth, find ways to foster personal leadership by reading books and other literature designed to help you develop professionally.

- Find a seat at an influential leadership table where important decisions are made and offer your input, advice, and recommendations. For example, seek a leadership position on a commodity board or within a local Farm Bureau chapter. Recognize that leadership roles do not always have to be at the state, regional, or national level; choose from numerous local organizations inside and outside of agriculture, such as a Kiwanis Club.
Become highly competent in your area of expertise by learning as much as you can about your craft. Turn mistakes into educational moments, and glean wisdom from both positive and constructive feedback.

- Believe you can have both leadership in the workplace and a satisfying family environment. It is important to realize that although managing work and family can be challenging, you can do so with the help of your support network and through practicing self-forgiveness when you fall short of perfection.

- Find an intentional way to support other women in the workplace, in professional associations, or in youth organizations through mentorship or sponsorship. Send a congratulations email when someone has been recognized for a job well done, or make plans to have lunch with someone you respect and admire but do not know well. Small efforts, as well as large ones, can go a long way toward providing support.

- Build meaningful relationships with individuals, both men and women, who are successful in their leadership roles, and learn from their experiences.

**Recommendations for Middle Managers and Administrators in Extension**

- Invest your time in formal leadership development opportunities for women of all ages to help them hone their skill sets. Even if resources are lacking, women can be supported in useful ways. Time, talents, and funding can be invested in existing opportunities through youth development organizations, LEAD21, and the Food Systems Leadership Institute, to name a few options. Investment also can come in the form of familiarizing yourself with literature and people who provide information on the value of women in leadership roles.

- Understand the importance of diverse boards of directors to gaining broader perspectives in decision making for your organization.

- Seek out and promote highly qualified women to serve in leadership roles in your organization. Read literature that presents practical implications for how to support women before and after they are promoted.

- Offer support for women who are managing work–life interaction in different life stages (e.g., working while serving as caretakers for young children or aging parents).

- Create an environment conducive to women's sharing their ideas, thoughts, and experiences by being open to input and asking for direct feedback. Examples of ways you can create such a space include making feedback sessions part of regularly scheduled meetings or placing a feedback box in your office area so that team members can offer anonymous feedback.

- Recognize the efforts of women who are doing outstanding work within your organization by offering work-based rewards, praise, and support.

**Conclusion: Furthering the Conversation to Support Women**

Many ideas were generated as a result of summit conversations, and our research findings confirm that women benefit from being supported, building competencies, seeking formal and informal ways to advance, and creating
communities of trust with one another (Buck, n.d.; Mayer, 2001; Moore & Jones, 2001). Regarding the summit’s impact, one delegate shared the following thought: "It reinforced my beliefs and empowered me to continue working hard to provide opportunities for other females around me to thrive." When women thrive, they help diversify agriculture's leadership base, thereby improving the industry’s ability to handle global challenges, not only today but in the years to come. Senior women and all those serving in manager or administrative positions can intentionally invest in the next generation to ensure that young women are made aware of opportunities to lead in the field of agriculture. Leadership is a lifelong process; making strides in this area will pay dividends now and generationally as girls look to women leaders as role models and set their sights on having impactful careers in the field.

Our research resulted in data-based themes and recommendations, with the upshot being that there is room for growth in developing women leaders in agriculture. Thus the question stands: How do agriculture professionals transition the field’s present status to a status wherein the recommended strategies are not only implemented but embraced? As mentioned in Mayer (2001), Kanter "examin[ed] the organizational environment for understanding how women function in an organization [and] concluded that career success depends on such matters as organizational conditions and access to challenges to increase skills and rewards" ("Recognizing Opportunities," para. 1). How is our industry creating ripe organizational conditions for women to succeed? Is agriculture poised to tackle other underaddressed issues surrounding this topic, such as needs of minority women and transition issues experienced by both women and men when women assume roles of leadership (Buck, n.d.; Moore & Jones, 2001)? In a historically male-dominated field, are women in agriculture equipped and supported enough to assume leadership positions?

Answering these questions requires ongoing discussions full of breadth and depth. However, one thing is certain: Extension itself can be a conduit for the education of its female employee base and other women who are or strive to be leaders in agricultural work. Providing specialized leadership development for women early in their Extension careers enhances the success of the agricultural enterprise by diversifying the leadership base responsible for producing enough food to feed our growing population at home and abroad. If women are not supported and promoted, the grand opportunity to invest in women's leadership, national agricultural security, and global health will be gravely missed. Preparing women to lead by providing a platform for research and supportive dialogue helps establish diversity in agricultural leadership so that the industry can be internally strong enough to adapt to increasing external demands.

**References**


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