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Chapter 1

Gender, Land, and Agricultural Sustainability: Working Toward Greater Intersectionality for Equity, Inclusion, and Justice

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A more inclusive agricultural system requires researchers, practitioners, and educators to reckon and engage with questions of power in relation to social and ecological diversity. Programs working to address gender equity in agriculture run the risk of replicating existing inequalities if an intersectional approach is not adopted. This chapter identifies how to move beyond focusing on gender alone as a barrier in agricultural conservation and instead work towards more transformative possibilities.

Introduction

Control of agricultural land has been a source of social inequality in the United States (US) since its founding and continues to be a source of gender and racial domination (Dunbar-Ortiz 2014; White 2018, Sachs 1983). Ongoing social and ecological injustices in agriculture continue to exclude people and exploit land, resulting in environmental degradation and contamination including climate change vulnerabilities (Farrell et al. 2021), water pollution (Helmers et al. 2007), soil loss (Cox et al. 2011), pesticide drift (Harrison 2011), and degraded

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community health (Wing and Wolf 2020). Mainstream agriculture in the US today is best characterized as a chemical-intensive, large-scale, industrial monoculture that is highly input dependent and heavily subsidized and vertically integrated (Hendrickson and James 2005). Prioritizing ecological and social diversity in US agriculture is of global consequence as these practices are exported in agricultural aid and policies, destabilizing agricultural systems well beyond US borders, the Green Revolution and associated technologies being a prime example (e.g., Stone and Glover 2017).

Even as natural resource scientists recognize the importance of both ecological and social diversity, too often environmental degradation is studied as separate from rather than co-existing with, and often co-dependent upon, systems of social exclusion. This chapter identifies how gender inequalities in agriculture help to maintain heteropatriarchal and white control of land (Leslie et al. 2019; Penniman and Washington 2018) through ongoing violence (Whyte 2018) enabled through institutionalized discrimination[4] (Carpenter 2012). As white, cisgender women conducting agricultural sustainability research in the US, we call on our colleagues to better engage questions of power as we work to address agricultural challenges.

Using examples from our own research with women's agricultural programs, we call for shifts in agricultural research and program development from "studying gender" as a variable or "including women" as a demographic category to recognizing how gender, as a system of power, works to exclude some while privileging others. Programs and the creation of alternative spaces

[4]See *Pigford vs. Glickman* (class action of African American farmers), *Keepseagle v. Veneman* (class action of Native American farmers), as well as the subsequent USDA 2010 claims process instituted after *Garcia vs. Johanns* (Hispanics sought and denied class status) and *Love vs. Johanns* (women sought and denied class status) (Carpenter 2012).

for agricultural women may preserve the status quo if we are not also working to create a more relational and equitable agricultural system (Carter et al. 2018; Leslie et al. 2019) founded in respect for the earth and one another (Whyte 2018). We apply the sociological theory of intersectionality (Collins 2006) to highlight opportunities for agricultural conservation to move beyond treating gender or race as categorical or demographic variables and instead to better implement systemic understandings of these as systems of oppression limiting conservation research design and outreach implementation and, thus, our progress toward conservation goals. In conclusion, we offer ideas for institutional and programmatic interventions and transformations for more inclusive paths forward.

Why is an Intersectional Understanding of Power Important to Creating a More Equitable Agricultural System?

In the US, white male control of land has been legitimized through federal policies, such as the enslavement of African Americans and Indigenous genocide, and legislative actions, such as the 1862 Homestead and Morrill Acts, 1887 Dawes Act, California's 1913 Alien Land Law, and the internment of Japanese Americans in the 1940s. Combined, these policies dispossessed Black[5], Indigenous, Asian American, and other non-white racial groups of both land and livelihoods while consolidating control of land among whites. For example, Black farmers have lost around 90 percent of their farmland over the past century and economists estimate that this represents billions of dollars lost in intergenerational wealth (Presser 2019). The United States Department of Agriculture (USDA) has further institutionalized racial and gender-based

[5]We follow the Associated Press' style guide in our capitalization of "Black" to describe people rather than color, capitalization of "Indigenous" to refer to original inhabitants of places, and long-standing custom to capitalize other racial and ethnic groups who share histories in the United States. We also choose to follow the Associated Press' style guide in not capitalizing "white" to describe white people in the United States, who do not collectively share a history or culture in the United States, nor a shared history of exclusion. See Daniszewski (2021) for further explanation.

discrimination in agriculture through discriminatory lending practices, as acknowledged through the largest civil rights settlement in the US (Pigford vs. Glickman) and subsequent claims processes for Black, Native, Latinx, and women farmers (Carpenter 2012). Given these historical and ongoing discriminations, it is of little surprise that today women, Black, Native, and farmers of color[6] are underrepresented in farming and farmland ownership (USDA NASS 2019).

Agricultural land control has supported and continues to support cultural, political, and ecological hegemony (Horst and Marion 2019, Leslie 2019, Penniman and Washington 2018, Sachs et al. 2016). Nationally, white landowners make up 98% of total farmland owners (USDA NASS 2019) while, women, in aggregate, own approximately 36% of all agricultural land and most of these women are white (USDA NASS 2019). Still, the USDA considers white women landowners as historically underserved because of their over-representation as operators of beginning and limited resource farms (USDA ERS 2022). Gender continues to be a barrier in agricultural conservation adoption, as patriarchal expectations of land control normalize co-owners', tenants', and conservation advisors' implicit and explicit diminishment of agricultural women's contributions, including questioning their authority, limiting access to conservation networks or information, and even engaging in threats or coercion (see Carter 2019; Eells and Soulis 2013; Petrzelka et al. 2018; Sachs et al. 2016). These means of social control are not specific only to gender, but also work to support white supremacy. For example, the 1862 land grant universities continue to profit from land theft that funded their founding (Brayboy and Tachine 2021; Lee and Ahtone 2020) and continue to receive greater federal funding than their 1890 Black land grant institutional counterparts (Thompson 1990). Maintaining racial power

[6]In the context of US white supremacy and racial relations, "people of color" is used in a contemporary context to describe those who are racialized as non-white, but may identify as mixed race, Latinx, Asian American, or other racialized identities other than Black. In the US, "Black" is used to describe those who are of African descent, no matter their country of origin.

among whites and gendered power among men has been and continues to be a fundamental condition of the dominant agricultural system. Given these realities, racial and gender equity must be addressed as fundamental conditions of work toward more diverse and resilient agricultural systems[7].

The continued maintenance of white supremacy, heterosexism, and patriarchy within the agricultural conservation movement, often by scholars' and practitioners' refusal to acknowledge or engage in analyses of these interlocking systems of power, limits conservation potential and progress. Much of the existing research on gender and sexuality in agriculture focuses disproportionately on white farmers and applies these analyses equally across all races to all farmers (Leslie et al. 2019). Such research often acknowledges but does not fully reckon with the absence of non-white farmers in the development of extant theories of social change in agriculture (e.g., see Sachs et al.'s [2016] Feminist Agrifood Theory discussion). Further, research about rural life often treats race as a demographic category rather than a system of power and source of domination (Carillo et al. 2021), e.g., focusing on the underrepresentation of one racial group without investigating or working to interrupt the means by which white supremacy may exclude farmers of other races. Recognizing the importance of systemic analyses is fundamental to understanding how and why whiteness, as a system of domination, has strategically used gender to uphold white supremacy in control of the land.

Both in practice in the field and in knowledge production across the disciplines of conservation and agriculture, scholars and practitioners have often ignored women (Eells and Soulis 2013; Petrzelka et al. 2018), rendered them invisible (Sachs 1983), or co-opted their

[7]See Farrell et al. (2020) and Whyte (2018) for further discussion of historical and ongoing examples of how land dispossession, through settler colonialism, and its related loss of bio- and social diversity, continues to contribute to ecological and social vulnerabilities, or Carlisle (2022) or Leslie et al. (2019) for discussion of the importance of ecological and social diversity for more resilient socio-ecological systems.

narratives in mainstream agriculture (Sachs 1983; Sachs et al. 2016). When gender is included in agricultural or conservation research, it is, like race, often treated as a reductive binary category rather than a system of power used to uphold white and heteropatriarchal control of land (Leslie et al. 2019). Women's agricultural organizations, too, have fallen into this trap, upholding racial status quo while protecting heteronormative narratives about agriculture (Carter 2020; Devine 2013; Fink 1986). Even as they have been marginalized, white women have benefitted from their racial privilege as a means of protecting their class privilege as landowners (Devine 2013). It has been the work of Black women, such as Fannie Lou Hamer's Freedom Farm Cooperative (White 2018) and Leah Penniman's Soul Fire Farm (Penniman and Washington 2018), as well as queer farmers, such as Hannah Breckbill's Queer Farm Convergence (Jansen 2020), who offer alternative farming models prioritizing ecological practices as resistance to extractive and exclusive agricultural systems. These ecological practices prioritize diversified crops, livestock integration, and relationality with natural systems. For example, prior to the US government's genocidal policies destroying the Buffalo upon which many Indigenous people depended, Indigenous management of the Buffalo incorporated management of healthy rangelands. Today, these practices inform new conservation efforts for sustainable grazing in the US to foster more healthy rangelands providing livestock nutritional needs, as well as healthy and diverse forages and wildlife habitat (see Carlisle 2022).

Further, dominant social norms in mainstream agriculture are such that women, if engaged or visible in agricultural conservation, are expected to cede authority to men, for example, deferring decision-making to male family members, tenants, or advisors (Carter 2019; Sachs 1983; Sachs et al. 2016). Even as new paradigms of agricultural practices emerge, e.g., organic or regenerative agriculture, these often lack critical analysis concerning the intersections

of race, sexuality, and power and so result in the replication of conditions that contribute to greater inequality (Leslie et al. 2019; Peter et al. 2000). This has tremendous consequences for conservation implementation and the future of agricultural management. A more diverse agriculture requires that conservation professionals provide better outreach to the white women landowners who own large amounts of farmland, particularly in areas of concern such as the US Corn Belt, while also making sure their outreach inspires critical thinking and fosters greater connections between land justice and conservation goals. The work of Soul Fire Farm in New York State (US), through its partnership with Northeast Farmers of Color Network and the National Black Food and Justice Alliance, provides one example of how farmers of color are creating space for both action and learning on the topic of land justice and conservation. In the Corn Belt, conservation professionals could employ a similar model in coalition with other partners inviting participants to learn more about the history of their land, as well as providing actionable steps for landowners to transform their own relationships to land and support greater equity in agriculture.

How Might Gender-Specific Programs Be an Important Part of Transforming Agriculture?

Creating networks and spaces for those often excluded in agriculture is a first step in creating community and building power among excluded groups. Agricultural women, no matter their race or gender, are already strong partners in conservation despite the extra work they must do to navigate, confront, and upend white supremacy and patriarchy in mainstream agriculture (Carter 2019; Petrzelka et al. 2018 and 2020; Dentzman et al. 2021; Penniman and Washington 2018; White 2018). Women, particularly Black, Indigenous, and women of color have been leading the practices of regenerative agriculture (Carlisle 2022). However, merely extending resources to those excluded in mainstream agriculture is not enough; there must be interventions

in the exclusionary forces if we are to be successful in increasing agricultural equity (Leslie et al. 2019). To support such transformation, institutions and agencies need to extend institutional resources to support a more socially and functionally diverse agriculture.

We draw upon our research with the Women, Food and Agriculture Network's (WFAN) Women Caring for the Land (WCL) and American Farmland Trust's (AFT) Women for the Land (WFL) programs to analyze how the creation of gender-based affinity groups and non-hierarchical networks among agricultural women contributes important steps toward meeting ecological and social equity goals in agriculture. WFAN and AFT are both national nonprofit organizations in the US; while their philosophical origins differ, both are committed to addressing the gender injustice structurally embedded in the US agricultural system and have specific programs engaging women landowners and farmers in conservation outreach and education. WFAN began piloting learning circles and peer-to-peer learning with agricultural women in Iowa with its WCL program in 2001 (Wells 2004) and has since expanded it throughout the Midwest, Kentucky, and Maine. AFT's collaborations with WFAN's WCL program inspired its own national Women for the Land program in 2019 (although programming in this vein has been delivered since 2008) and is engaged in nearly 20 states working with women in agriculture. Carter currently serves on the Board of Directors of WFAN and has collaborated with WFAN in past research projects and Roesch-McNally currently works as the Director of AFT's Women for the Land program.

Agriculture has long been dominated by men and by institutions that support their success. Recent trends suggest that women are taking on more leadership in agriculture although trends are hard to assess (Pilgeram et al. 2020). While these trends are encouraging, researchers still note that agriculture may be one of the most unequal occupations when it comes to gender

and income (Fremstad and Paul 2016). Given these inequities and the underrepresentation of women in agriculture, organizations and educational institutions have created programs to connect women more directly to resources that might support their success. Both WFAN's WCL and AFT's WFL programs (Box 2-1) engage peer-to-peer learning circles to foster network connections, dismantle hierarchies, and connect women with technical information on conservation and other relevant topics (Carter et al. 2017; Petrzelka et al. 2020). Research conducted by both WFAN and AFT finds using peer-to-peer learning in agricultural outreach can help women both increase knowledge about conservation practices and develop the relationships needed to support the implementation of these practices (Carter 2017; Eells 2008; Petrzelka et al. 2020).

The Learning Circles' peer-to-peer learning model addresses practical gender needs (Moser 1993) by bringing women together to gain valuable and needed experience, validation, and information about their land. In doing so, the programs operate from an asset model, rather than remedial model, in their approach to education. Research findings from both organizations identify Learning Circles, and the connected networks of women in agriculture they foster, as effective tools in building power among agricultural women and in inspiring action to support sustainability on their land (Carter et al. 2017; Carter 2019; Eells and Soulis 2013; Petrzelka et al. 2020; Wells 1998). Learning Circle topics have included soil health, climate resilience, and other regenerative agricultural topics that encourage women to adopt practices such as no-till, cover crops and diversified production systems. These networks have the possibility of inspiring women to adopt practices that foster both social and ecological resilience (Gosnell et al. 2020; Roesch-McNally et al. 2018).

Box 2-1 Case Studies: Gender-based Conservation Education Examples

Women, Food, and Agriculture Network developed its Women Caring for the Land[8] (WCL) program to meet the needs of women landowners who are often ignored in mainstream conservation programming. The majority of attendees are commodity agricultural landowners in the US Corn Belt. The program uses a Learning Circle methodology that applies the unique connections and knowledge women already have about their land to support greater conservation action; e.g., talking to a tenant about conservation for the first time, creating a written lease, or enrolling land in a conservation program. WCL opens doors for greater stewardship on women landowners' own terms. For example, WCL Cover Crops Champions recently used their stories to educate others through a peer-to-peer training program about how to better work with tenants and co-owners to protect the health of their land and communities by adopting cover crops as a conservation practice.

American Farmland Trust's Women for the Land[9] program has emphasized the powerful role women landowners and farmers can play in driving conservation decisions on their land and have adapted the Learning Circle model of peer-to-peer education as a way to create spaces that connect women, help them realize their potential, build personal and collective power and guide more sustainable land management. One focus of AFT's program has been to push resource professionals in the public sector to see women as a critical audience and partner with whom to engage on topics of conservation and farmland protection. Participants repeatedly emphasize the critical importance of networking as a benefit of the Learning Circle model as evidenced in this quote from a woman participant, "You're dealing with such a generous community in terms of sharing information... And then women helping women, which is something I love to see."

Why Must Gender-Specific Programming in Agriculture Be Intersectional?

Networks for agricultural women have increased at local, regional, and national scales over the past few decades (Hassanein 1999; Sachs 1983; Sachs et al. 2016), including Pennsylvania's Women and Agriculture Network (PA-WAgN), The Women's Agricultural Network based at University of Vermont, Extension's Women in Ag state-based programs, Women, Food and Agriculture Network (WFAN), and American Farmland Trust's Women for the Land program (WFL). These networks "provide on-going opportunities to build trust, share information, and build agency" (Trauger et al. 2008, 438). The efforts profiled here from WFAN

[8]For more information: https://wfan.org/women-caring-for-the-land

[9]For more information: www.farmland.org

and AFT reaffirm the benefits of gender-based networks and the engagement of peer-to-peer learning, rather than traditional "expert"-driven model, as a mode of sharing and collective power building (Sachs et al. 2016).

Such networks emphasize collective power through knowledge building and connection with others who can support participants' individual and collective success. This work of supporting a network of connections is critically important given the exclusions, some of them violent, that women continue to experience when attempting to create changes on their land or in their work in agriculture more broadly (Carter 2019; Sachs et al. 2016). Studies of landowner-tenant relations in conservation adoption in Iowa, for example, found that women landowners feel alienated when it comes to decision-making about their farms (Carolan et al. 2004) and may even experience trespass, threats, and property damage when they engage in decisions contrary to the status quo (Carter 2017). The length of time these networks stay connected, their geographic or topical scope, and their ability to influence change at the individual and collective level vary (Sachs et al. 2016). AFT's WFL program has emphasized individual or farm-level change by tracking how program engagement supports participants' farm or farmland goals, and has focused less on collective change-making or coalition building. Similarly, WFAN's WCL program assesses success by evaluating participants' conservation actions, and also offers additional programs to connect new/interested women and non-binary farmers to women and non-binary farm mentors, to develop rural women's political leadership and advocacy, and to support anti-racism and rural justice.

Participants in these peer-to-peer learning opportunities find clear value in gaining knowledge, sharing resources, and cultivating networks that aid in personal and professional growth and transformation (Carter et al. 2017; Eells 2008; Petrzelka 2020; Wells, 1998).

However, much of the scholarship on the practical engagement within these networks has tended to emphasize gender as a locus of engagement rather than approaching this work with an intersectional approach acknowledging how race, gender, sexuality, citizenship or immigration status, and gender identity work together to provide some women access to more resources while excluding other women. To some extent, these networks have functioned best when supporting white women (see Sachs et al.'s [2016] Feminist Agrifood Systems Theory discussion). Further, these programs may exclude queer women and gender non-binary individuals who may find that even these alternative spaces prioritize heteronormativity and cisgender identity (Leslie et al. 2019; Hoffelmeyer 2021; Mejía-Duwan and Hoffelmeyer, this volume). This suggests that while programing for women in agriculture developed in ways to confront gender inequities, these programs may reinforce informational inequality across race, ethnicity, and sexuality lines (Beaman and Dillon 2018). As Pilgeram (2019, 15) argues, "while sustainable farming may have opened up a space for women to farm, it's a space most available for a very particular kind of women: white, well-educated, heterosexual, and married." The same could be said for many women in agricultural networks, including both WCL and WFL.

Focusing singularly on gender in research and programmatic work without inclusion of an intersectional approach–by not being more explicit about who is included and who is, often tacitly, excluded from these spaces–allows for white women to consolidate power at the expense of Indigenous women and women of color. A lack of intersectionality hides the ways that gender, race, class, ethnicity, sexuality and nationality form mutually constitutive systems of power (Collins 2006) in ways that affect how power is shared, distributed and contested in agriculture, including sustainable agriculture. This dynamic produces a context in which

women's networks may, in some cases, uphold inequality even as they seek to contest it (Ely and Myerson 2000).

How Can a More Intersectional Approach to Programming for Women in Agriculture Contribute to Increased Sustainability?

Our research and work in programs for agricultural women makes clear that intentionally designed spaces in which women can openly discuss power and exchange experiences and information can lead to transformational changes on the land. In this way, women are taking steps toward greater leadership in conservation decision-making and improving their understanding of the power they have in stewarding their land (Carter et al. 2017). Such networks can help change gendered social relationships, though care must be taken not to silo the conversation about gender away from the mainstream; such "women-centered" spaces may enable male dominated institutions to do little to create a more inclusive environment for all people in agriculture (Shortall 2001). Just as male spaces in work environments may perpetuate a specific sort of dominant masculinity that excludes other non-dominant men and all women (Bird 1996), women-only networks in agriculture may work to concentrate resources and power-building among white women as the dominant group of women in agriculture unless a more intersectional approach is taken to assess, confront, and dismantle inequities in programming and resource allocation.

Boosting women's participation in conservation or agricultural education programs alone will not change the sexism they experience in agriculture, nor will it change the institutionalized gender-based discrimination they face when accessing loans and education programs. We must be careful not to reinforce the status quo by creating the "illusion of inclusion" rather than real change (Gaventa and Cornwall 2001, 75). Programs for agricultural women can provide space in which women can engage in both "critique and an alternative to the conventional and patriarchal

agricultural system" (Sachs et al. 2016, 141), rooted in new ways of being in relation to one another and the Earth (Carter et al. 2018; Leslie et al. 2019). The women who created WFAN in the early 1990s did so in response to both exclusions in agriculture and the recognition of the global struggle for agricultural and rural women's autonomy (Wells 1998). WFAN and AFT are both working primarily in the US where a white majority dominates land ownership and policy. This means both organizations have a responsibility as they work to engage a ready audience of white women in connecting the conservation and business of their farms to larger goals for improving public health, labor conditions, food access, and land justice. Further, this also highlights the opportunity the organizations providing these programs, be they universities, non-profits, or agencies, have to include justice in outreach, especially to white audiences.

We challenge ourselves and invite our colleagues to better apply intersectionality in our work toward more ecologically and socially sustainable agricultural systems, even—and especially—when the target community is predominantly white and male. Doing so in the practice of social equity and ecological diversity would inspire more emancipatory scholarship that engages social science to improve the quality of life and opportunities for all in a community (Tieken and Wright III 2021). Just as the agricultural women's networks discussed earlier provide space for reflection and possibilities for solidarity-building, we share some critical and reflective questions to guide our collective work toward more ecologically *and* socially diverse agriculture:

First, how is power made visible or invisible by your work?

In what ways might your research, work, organization, and/institution avoid, contribute to, benefit from, confront, question, and/or interrupt the status quo of agriculture?

Finally, how are race and gender (especially whiteness and masculinity) treated and understood in your research design, analysis, and programmatic work?

Working toward a more just agricultural system is a process. These questions can be a place from which to begin to think more critically about the research, outreach, and programs often offered with good intention, but that may fall short in providing systems change. Increasing intersectionality in agricultural research, outreach and programs provides opportunities for women and other excluded groups in agriculture to build solidarity and collective agency. This work is an invitation to our fellow researchers and practitioners to courageously ask more questions that purposefully unpack white supremacy and heteropatriarchal systems of power in agricultural systems in the US with relevance to international systems of agriculture that have adopted similar approaches to their food systems.

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