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Women as Change Agents in the World's Rangelands: Synthesis and Way Forward[i]

By D. Layne Coppock, María E. Fernández-Giménez, and Jeannie Harvey

On the Ground

- We know relatively little about women and rangelands because gender has not been a major focus of rangeland research and outreach.
- "Gender gaps" and "leaky pipelines" negatively affect women who live on rangelands as well as professional women in range research, teaching, and outreach. Fixing gaps and leaks is important for gender equity and rangeland stewardship.
- Prominent barriers for women worldwide include male-dominated hierarchies, heavy workloads, and restricted access to the means of production.
- Despite barriers, rangeland women are "change agents" who improve circumstances for families, peer groups, and communities.
- Barriers can be addressed via research, education, and policy.

Keywords: ranch women, pastoral women, double and triple burdens, Women's Empowerment in Agriculture Index, collective action, community leadership.

Las mujeres como agentes de cambio en los pastizales y tierras silvestres del mundo: síntesis y perspectivas de avance

Perspectiva desde el campo:

- Sabemos relativamente poco acerca de las mujeres y su relación con los pastizales y tierras silvestres, dado que el género no ha sido un enfoque primordial de la investigación y asistencia social de los pastizales y tierras silvestres.
- Las "brechas de género" y las "tuberías con fugas" afectan negativamente a las mujeres que viven en los pastizales y tierras silvestres, así como a las mujeres profesionales que se dedican a la investigación, la enseñanza y la asistencia social en relación con las tierras de pastoreo. Reparar brechas y fugas es importante para la igualdad de género, así como para el cuidado y protección de los pastizales y tierras silvestres.
- Las jerarquías dominadas por los hombres, las agobiantes cargas de trabajo y el acceso restringido a los medios de producción se erigen como barreras importantes para las mujeres a nivel mundial.
- A pesar de las barreras, las mujeres de los pastizales y tierras silvestres son "agentes de cambio" que mejoran las circunstancias para las familias, grupos semejantes y las comunidades.
- Las barreras pueden ser superadas mediante la investigación, la educación y las políticas.

[i] We synthesize findings reported from papers based on invited presentations given at a symposium entitled *Women as Change Agents in the World's Rangelands*, held Tuesday 5 February 2013, at the 66th Annual Meeting of the Society for Range Management (SRM) in Oklahoma City, Oklahoma. The International Affairs Committee of SRM organized this symposium. General information about the symposium is posted at: http://www.rangelands.org/internationalaffairs/iac_symposia.shtml. This paper occurs at the end of a special issue of *Rangelands* that contains the aforementioned papers. Hence, this paper serves as a summary rather than an introduction. Those interested in details on methods or research perspectives should read the contributed papers.

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This special issue of *Rangelands* contains accounts of "rangeland women" in a wide array of contexts: ecological settings varying from the cold valleys of the High Andes to the warm savannas of Kenya, socioeconomic settings varying from modern US ranches to the isolated culture of Afghan pastoralism, and professional settings varying from the cattle stations of Australia to the halls of academia. In this synthesis we consolidate and comment on major themes from the 11 contributed papers and close by offering ideas for future research, education, and policy.

Before continuing, however, we must emphasize that we realize that this issue does not cover women and rangelands in every context. Our contributors have focused on women ranchers or pastoralists who make a living off the land, as well as women who serve rangelands as professional educators or scientists in academic and outreach endeavors. We have not recounted stories of women in government or other institutions who craft policy, conduct research, or administer programs. This remains an important area for future investigation.

Women as Range Managers and Livestock Producers–What Do We Really Know?

Shockingly little! Gender or women's issues have rarely been part of rangeland research. We tend to think of stereotypes as to how women ranchers (e.g., in the developed world) or pastoralists (e.g., in the developing world) have traditionally supported men in rangeland ecosystems. It is the men who typically own or control the natural resources on the rangelands; in many settings they also own the livestock, have the greatest access to Extension information, and make most "big decisions" that affect rangeland livelihoods. In contrast, we tend to see women as the traditional caretakers of rangeland men and their households—nurturing their families and providing most of the daily provisions—but as being seemingly less connected to livestock and land management. Although rangeland women occasionally accrue major assets and hence some measure of power in their communities, this appears to be rare. Women have been invisible on the range. Our motivation for publishing this special issue is to begin to consolidate existing knowledge and identify the limits of what we know about rangeland women, and to provide a starting point and direction for future research, education, and action.

The "Gender Gap"–Fact or Fantasy?

We begin with a big idea—the gender gap. Does it exist on rangelands? We concur with Radel and Coppock (*this issue*) that it does. Most of the contributed papers highlight some aspect of a skewed, gender-based pattern influencing asset ownership, resource access, and social power on rangelands. Gender gaps may also be seen as barriers that affect the professional advancement of women in range-related fields. The gender gap is defined by the Food and Agriculture Organization of the United Nations as the potential lost because of gender-related barriers that cause women to be less productive than men on the land.[1] The global agricultural domain (including range livestock production) is considered by experts to be underperforming.[1] One reason for this is because women—often half of the population—lack opportunity to own assets or gain access to production inputs and information. Women are an untapped resource. If gender gaps were closed, global agricultural productivity is predicted to dramatically improve.[1] The need to increase global agricultural productivity is important given steady growth in world food demand. And there is another good reason to help disadvantaged women in agriculture and on the range—it is simply the right thing to do.

Women Fill the Void on Rangelands When Men Depart

Because we lack firm knowledge of past gender roles and responsibilities in the world's rangelands, we also lack a baseline from which to assess change. Our impression, however, as evidenced from the contributed papers, is that change in gender roles is pervasive. When given an opportunity to manage rangelands, own livestock, mediate conflicts, or provide community leadership, women often respond positively and capably, irrespective of most cultural frameworks. We think the increasing emergence of women in leadership on rangelands may be part of a global trend, particularly when young to middle-aged male ranch hands, ranchers, or pastoralists leave the rangelands to seek more lucrative wage employment elsewhere. This is especially the case in parts of the developing world such as Latin America that are experiencing faster rates of urban economic growth (*see Valdivia et al., this issue*), but it has also been noted for Native Americans (*see Doan-Crider et al., this issue*), US mainstream agriculture (*cited by Wilmer and Mealor, this issue*), and Australians (*see Leigo, this issue*). Patterns for US ranching, however, are less clear in this regard.

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Men appear to comprise the majority of migrating pioneers from rangelands, but the reasons are diverse and complex, and ultimately stem from gender inequities (C. Radel, personal communication, July 2013). This all matters because a net out-migration of men can leave more women behind to become rangeland custodians, increasing their leadership and decision-making capacities within rangeland contexts. In mainstream agriculture the process may be more pronounced in some sectors and has been referred to as the "feminization of agriculture" (C. Radel, personal communication, July 2013). A shift where women begin to assume more responsibilities on rangelands is one reason why rangeland women are deserving of more targeted support from research, education, and policy.

Women have been largely invisible actors in managing the world's rangelands…

Why Have Women Been "Invisible" on the Range?

Women have been largely invisible actors in managing the world's rangelands and producing the goods and services that rangelands provide. This is not because women do not play important roles. Rather, governments have collected information on agricultural production—including ranching and pastoralism—at the household or operational scale, and until very recently did not count male and female household members separately, even when both men and women contributed significantly to the enterprise (*see Wilmer and Mealor, this issue*). It has also been assumed that men have been the lead in "all things agriculture or livestock," and hence men have been traditionally targeted as the focus for Extension. When men received such information or services, it was also assumed they passed this on to women (J. Harvey, unpublished data). On the research side, while recent scholarly works have examined women's participation in forestry,[1,2] natural resource management generally,[3] and agriculture,[4] very little study has focused on women's roles in rangeland and ranch management.

Approaches that are more gender-sensitive are recommended for researchers (*see Radel and Coppock, this issue; Vázquez-García, this issue*) and Extension agents (*see Leigo, this issue; Wilmer and Mealor, this issue;* also see Rota and Chakrabarti[2]). Even the Society for Range Management (SRM) has not collected gender-disaggregated membership data—although women are increasingly populating the SRM ranks. Ganguli and Launchbaugh (*this issue*) recommend that SRM improve gender tracking. The recent emergence of the Women's Empowerment in Agriculture Index (WEAI) as a tool to monitor progress for rural women in developing countries also helps address the need for gender-specific information. Even more important than monitoring is research to help us understand how and why gender gaps are created and maintained (*see Radel and Coppock, this issue*).

Are Women Really "Change Agents"?

What are women currently doing in the world's rangelands, to what extent is this different from the past, and how or why are women acting as forces for positive change? There is little doubt that ranch and pastoral women are still heavily engaged in many of their traditional caregiving and livelihood activities. But there is huge global variation in the tasks that rangeland women must routinely do to support their families. Pastoral women and girls in poor, developing countries raise the children, milk the animals, cook the meals, make camp, haul heavy containers of water, and collect firewood, among other duties. Ranch women in developed nations share many of the same domestic chores as pastoral women, but benefit from societal wealth, modern technology, legal frameworks (and mechanisms to implement laws locally and nationally), more natural resources per capita, and improved living standards that boost their quality of life. The cases in this issue show that rangeland women from both developed and developing countries act as change agents when empowered to do so.

Evidence provided in this issue indicates that rangeland women can quickly improve their own lives and those of their families when given the opportunity. Even women who are greatly isolated and socially and economically disadvantaged have launched transformative changes in their lives and communities with the help of a compelling role model and peer mentoring. The physical remoteness of rangelands often creates isolated communities that lack access to recent technology and information, though they may be strong in local knowledge and cultural traditions. Although improved telecommunications, especially cell phones, have increased connectivity between remote rangeland inhabitants and information sources, many rangeland women remain isolated by distance, poverty, illiteracy, and limited information access. Rangeland professionals can help women overcome these limitations, especially those caused by lack of information, by exposing such women to broader social networks of other women (*see Coppock et al., this issue; Liego, this issue*).

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Based on examples in this issue, women appear to possess aptitudes that qualify them as positive change agents in rangeland communities. For example, women demonstrate strong abilities to 1) manage large sums of money in community-based savings-and-credit programs (*see Coppock et al., this issue*), 2) mitigate social conflicts (*see Coppock et al., this issue; Leigo, this issue; Schloeder et al., this issue; Van Riper, this issue*), and 3) sustain collective action for group problem-solving (*see Coppock et al., this issue; Valdivia et al., this issue; Ulambayar and Fernández-Giménez, this issue*). We lack controlled studies that compare and contrast men and women in these respects, and need to be cautious about making gender-related assumptions about particular personal strengths and limitations. Evidence in cases presented here, however, leads us to speculate that rangeland women are equally capable as men in these types of situations, and indeed, may possess greater strengths or aptitudes in some areas relative to men. Rangeland women are positive change agents because when given the chance, they can shift the status quo away from poverty (via microfinance), effectively defuse community tensions (via conflict management skills), and build social capital (via their leadership styles and ability to network).

Finally, it is well known worldwide that when poor women gain access to more income they invest it back into their families—especially to improve the well-being of their children.[5] This is generally not the case for men.[5] Empowerment of women can have positive, intergenerational ripple effects within families as well as communities. Women are innovators as well as keepers of cultural traditions (*see Coppock et al., this issue; Doan-Crider et al., this issue; Ulambayar and Fernández-Giménez, this issue; Valdivia et al., this issue; Vázquez-García, this issue*).

The potential for women to act as significant change agents when provided with resources and opportunities is a major reason to close gender gaps. The achievements of the women featured in this issue are even more remarkable given that these were settings in which most women controlled fewer assets and held far less political clout than men in their communities. Imagine the impact if such women held more resources and leadership power.

"Double and Triple Burdens" and the "Leaky Pipeline": Do Rangeland Women Have the Time and Energy to Assume More Leadership Roles?

Women pastoralists and ranchers often must balance multiple roles within the two overlapping domains of being a caregiver and helping the household make a living. This can be referred to as a "double burden" (C. Radel, personal communication, July 2013). Caregiving responsibilities revolve around traditional female roles of child rearing and domestic tasks; in this domain pastoralists and ranchers are quite similar. Helping the household make a living relates to animal husbandry (i.e., herding, feeding, animal health, etc.), land stewardship (i.e., range monitoring, range improvements, grazing management, range conservation, etc.), and enterprise activities (i.e., bookkeeping, livestock marketing, income diversification, etc.). In this domain pastoral and ranch women are most similar with respect to animal husbandry and less so in terms of land management and enterprise components. Although change is happening (*see Coppock et al., this issue; Ulambayar and Fernández-Giménez, this issue*), pastoral women have traditionally been less involved than pastoral men in the stewardship of communal rangelands or marketing livestock.

Both the caregiving and livelihood domains are closely intertwined, but the types of activities associated with each domain can be distinct, often competing for a woman's time and attention, and may logistically limit her ability to actively participate in her community or pursue self-fulfillment. Because men have traditionally had roles that de-emphasize child care and other domestic duties, they have been freer to pursue other interests and are less bound by the same suite of constraints. For example, when compared to an Ethiopian pastoral man, it may be much harder for a pastoral woman already fully occupied by caregiving, hauling water, and milking cows to find the time and energy to lead a community microfinance group. An Australian cattlewoman facing routine domestic and livelihood obligations may find it harder to join a livestock industry advisory board when compared to a man. An American woman rancher may similarly find it harder to volunteer for a land-management coalition compared to a man. An American female academic may find it harder to balance domestic and caregiving duties with a seemingly ever-expanding professional workload compared to a man. These are examples of "triple burdens" whereby a woman's aspirations to contribute community service or further accelerate her professional career are constrained by domestic and livelihood obligations (C. Radel, personal communication, July 2013).

The pressure caused by double and triple burdens contributes to a leaky pipeline whereby professional women in the United States gradually drop off the career ladder relative to men (*see Ganguli and Launchbaugh, this issue*). The leaky pipeline concept seems no less relevant to women ranchers or

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pastoralists who decide to pursue community involvement, but it has received much less attention in these contexts. Extension and outreach, in particular, need to be aware of the challenges associated with possibly creating an unsustainable triple burden in the lives of ranch or pastoral women when involving them in new activities. It is noteworthy that double and triple burdens, as well as leaky pipelines, appear to be relevant concepts for the lives of many rangeland women, whether they occupy a corporate boardroom, university, ranch house, or pastoral campsite.

Observations from eastern Africa, however, indicate that pastoral women can maintain their involvement in community-based collective action over many years, so an unsustainable triple burden is not evident in these cases (*see Coppock et al., this issue*). And while the mix of caregiving, livelihood-earning, and community service roles can have a downside for individual women in any setting, there can be a powerful upside of the mix for society at large. The upside—already noted—is the synergism created by empowering women because they can simultaneously improve child welfare, expand household livelihood opportunities, and enhance community well-being.[5]

It is noteworthy that double and triple burdens, as well as leaky pipelines, appear to be relevant concepts for the lives of many rangeland women, whether they occupy a corporate boardroom, university, ranch house, or pastoral campsite.

There are probably a number of ways one might mitigate the negative effects of a double or triple burden, but most are not under the direct control of women. One way is for women to prioritize activities to reduce personal overload. This is a measure that women have some control over. A second avenue is for men to assume more domestic duties to allow their spouses to pursue other activities. While the latter pattern is becoming more common in the developed world, it seems more elusive in the developing world. However, evidence from cross-cultural global surveys suggests that attitudes concerning traditional gender roles are changing among young people in both urban and rural locales; males are more receptive to sharing domestic tasks with females and both sexes increasingly believe that females can play more diverse socioeconomic roles today compared to the past.[6]

Relatively rapid changes in gender roles have been recently observed in the rangelands of eastern Africa. When pastoral women have become successful diversifying their livelihoods and improving family welfare, buy-in from husbands occurs and men will help with child care (*see Coppock et al., this issue*). Even within the comparatively rigid Afghan pastoral culture, some men have slowly begun to acknowledge the possibility of slight "role adjustments" for women. This occurred after men had been exposed to new ideas in a project and they observed how well American male and female change agents worked together. The subtle shift in attitudes required a long period of trust-building between pastoralists and the change agents (*see Schloeder et al., this issue*).

What is the Role of Education?

It is enormous. The need to build capacity among women via formal and informal education was repeatedly mentioned in the contributed papers. Women's emerging roles as community leaders are nearly inseparable from their efforts as educators. Development interventions and Extension programs targeted for women in settings as distinct as Kenya, Afghanistan, Australia, and Wyoming found that fostering peer-to-peer networks among women is an effective mechanism for stimulating positive change (*see Coppock et al., this issue; Schloeder et al., this issue; Leigo, this issue; Wilmer and Mealor, this issue*). This highlights an important and overlooked role that women often play—social networker. Social networks are important for economic resilience.[7]

Women are often strong advocates for increased community access to formal education (*see Doan-Crider et al., this issue; Ulambayar and Fernández-Giménez, this issue*). Recent efforts to offer formal Extension programs targeted for women (*see Leigo, this issue; Wilmer and Mealor, this issue*) demonstrate the value of gender-specific outreach education to meet special needs and interests of ranch women. In some instances, however, women report mixed feelings about improved access to formal education. Native American voices, for example, reveal the conflicting emotions women feel when they advocate for more or better education in Indian Country, yet at the same time fear that once their youth are educated they will leave the land for good (*see Doan-Crider et al., this issue*).

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Ganguli and Launchbaugh (*this issue*) illustrate that the number and proportion of women students and educators in university range curricula in the United States have grown markedly in recent decades. This same trend has been witnessed across tertiary education in many other allied fields. In part, this reflects that society has responded positively to an increased exposure to professional female role models. However, the leaky pipeline still limits the numbers of women rising to leadership positions in research and academia (*see Ganguli and Launchbaugh, this issue*). There is also a pattern of women who stay in the pipeline being passed over promotion or peer recognition relative to men, despite the heightened professional profile of women over the past 20 years (*see Ganguli and Launchbaugh, this issue*).

What are The Major Barriers Faced by Rangeland Women?

What prevents women who make a living on the rangelands from rapidly closing a gender gap? From the contributed papers we have deduced three barriers that are probably often faced by rangeland women. These are 1) male-dominated decision-making hierarchies—from households to academic institutions, communities, and nations; 2) the double or triple burdens; and 3) restricted access of women to the means of production—land, water, livestock, capital, and information. Similar barriers have been proposed elsewhere.[2] Because we have already discussed the "burdens," we focus on the other two issues below.

The first challenge plays out very differently in different places. As Radel and Coppock (*this issue*) point out, it is important to look beyond simple causal explanations to examine complex interactions of gender, ethnicity, class, power, and the environment in order to better understand how and why women may be excluded from productive resources or decision-making bodies. In some cultures, such as that described by Schloeder et al. in Afghanistan (*this issue*), strong cultural norms actively discourage or prohibit women from assuming leadership positions, and women's physical safety may be threatened if they engage in some types of activities. In other cases, traditional cultures supported female leadership roles (i.e., among the Mongolians or the Aymara), but colonial forces (Chinese and Soviets in Mongolia, Spanish in the Andean zone) imposed a different and more patriarchal set of institutions and expectations for female roles, resulting in diminished power and participation opportunities for women (*see Ulambayar and Fernández-Giménez, this issue; Valdivia et al., this issue*). In still other situations, women experience conflicting cultural expectations. Native American voices in this issue reveal tensions women experience in their dual roles as advocates for formal education and the resulting professional opportunities that may take women and their families away from Indian Country, and as cultural stewards and community leaders who seek to maintain cultural continuity and community cohesion, while strengthening the capacity to adapt and innovate.

Male-dominated hierarchies are not unique to the traditional cultures and developing-world settings. Many of the rangeland academic, research, and management institutions in the United States and other developed nations are still male-led and male-dominated, despite the inroads made in hiring female professionals over the past 20 years. Such gender imbalances in the workplace and classroom have both subtle and sometimes not-so-subtle effects on women's success and satisfaction with their careers.[8]

Can women today easily own assets and access key resources and information across the world's rangelands? The answer is mostly no. In pastoral settings based on common property management, people do not "own" the land as individuals, but rather hold collective use rights. Animals, however, are privately owned. In eastern Africa, it remains unusual for pastoral women to own or trade larger, higher-value livestock such as cattle or camels, although they more commonly own sheep or goats (*see Coppock et al., this issue*). The Afghan pastoral system is largely based on sheep, and women can only own sheep via inheritance if they are from a wealthy family (*see Schloeder et al., this issue*). Aymara women in the Andes, in contrast, are able to inherit land and own sheep, but are excluded from owning expensive, cross-bred dairy cattle (*see Valdivia et al., this issue*). These patterns are all largely culturally determined—for example, there is no ultimate reason other than cultural constraints as to why a Kenyan pastoral woman can't own a large herd of cattle.

The capital and other resource requirements needed to sustain a modern ranch in the United States or a cattle station in Australia are far greater those that needed for pastoralism, and understanding how gender influences access to assets and key resources can be complex in these settings. Early in the process of settling the American West, frontier women were vastly outnumbered by men. The few married couples tended to have comparatively equitable socioeconomic relations, attributed to the need for women and men to share onerous workloads and be entrepreneurial partners in order to survive.[9]

In northern Utah today, married couples that jointly own and manage ranches heavily dominate the clientele for USDA programs (B. Lundquist, personal communication, July 2013). Women who are sole owners of ranches or farms make up less than 2% of the clientele, and they are typically widows. Access to

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credit has been based on credit worthiness, irrespective of gender or marital circumstances (B. Lundquist, personal communication, July 2013). Possible gender inequities in this Utah situation are influenced by traditional gender roles and traditional patterns of land inheritance. As recently as the 1990s, widows in Australia were often pressured by banks to sell their operations given there was no longer a man to manage it; banks viewed women in this context as a risk.[10] Currently, most state agricultural lobbying groups in Australia allow one vote per operation when soliciting input for political platforms, and it remains unusual to see female representation in such forums (S. Leigo, personal communication).

In any case, barriers for women to own assets, gain access to key resources, or participate in important decision-making vary around the world. They can result from culture, laws, or bias in public or private institutions. In developing nations laws may exist that protect women's rights, yet local customs may trump those rights because women may not know their rights and laws are not enforced.

How Can Barriers for Rangeland Women Be Overcome?

As Doan-Crider et al. (*this issue*) points out, Native American women are very experienced at overcoming or adapting to difficult situations. We believe this statement is generalizable to most rangeland women. The perseverance that many pastoral and ranching women demonstrate has been honed from facing innumerable hurdles. Women do not give up easily and they value the ground they have gained with each struggle.

Importantly, the major barriers are not unique to the developing world—they are common in developed economies as well. In different settings, however, they require different mitigating approaches. For example, to help plug the leaky pipeline for early- or mid-career professionals at US academic institutions, efforts have been made to improve recruitment and retention of women in science via mentoring, with improvements in workplace environments, and by slowing tenure and promotion clocks to accommodate childbearing needs. One example is the ADVANCE program of the US National Science Foundation (NSF).[ii]

Young professionals in a variety of nonacademic institutional settings—regardless of gender—deserve mentoring and funding, but women in heavily male-dominated situations may especially benefit from a positive support network. One group that is particularly underrepresented is young women professionals in range and allied fields in developing countries. Men still heavily dominate the ranks of graduate students and other trainees on African range projects (D. L. Coppock, unpublished data). Efforts should be made to recruit more women in this regard. Special programs are available that provide research funding and mentoring to young female scientists; one example is the AWARD program for African women scholars administered by the US Agency for International Development (USAID).[iii] Men may not always dominate the pool of trainees in international range projects, however. Mongolia is a case where women either dominate or have achieved parity as range science trainees (M. Fernández-Giménez, unpublished data).

What can be done to enhance the effectiveness of women on the rangelands as land stewards, community leaders, and livestock producers? We have already mentioned ideas including the use of peer-to-peer learning, strong female role models, targeting women for special programs in capacity building, leadership training, and education. In the United States, government programs now target women ranchers for grant opportunities and other assistance as part of underserved populations.[iv] Public recognition of women's success can catalyze more positive change. Ways to improve women's access to the means of production are vital, and this involves modifications to policy and delivery of field programs.

An example of an institutional effort to improve food security and reduce poverty via women's empowerment is provided by the Bureau for Food Security of USAID. Implementers of rural development projects supported by USAID are now expected to answer gender-specific "learning-agenda questions" after project completion.[v] Examples of learning-agenda questions include the following: 1) Have project interventions reduced gender gaps in terms of improving access of women to land, production inputs, or employment? 2) Have project interventions changed women's or men's decision-making strategies? The WEAI allows development practitioners to calculate a composite score for women's empowerment before and after implementing interventions. The WEAI can provide a more objective analysis of proj-

[ii] For more information on the NSF Advance Program, see *www.nsf.gov/crssprgm/advance/.*
[iii] For more information on the USAID AWARD program, see *www.awardfellowship.org.*
[iv] For more information on USDA programs targeted to women, see *www.outreach.usda.gov/women.htm.*
[v] For more information on the WEAI, see *www.usaid.gov/developer/WEAI.*

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ect impact on women, and it is now being used in 19 Feed the Future nations.[vi] See Radel and Coppock (*this issue*) for a concise introduction as to how the WEAI is calculated.

Way Forward

This special issue has helped highlight the changing roles and challenges for women on the world's rangelands, but it has raised more questions than it has answered. What will the range profession look like in another generation given the trend for women to make up higher proportions of students, professionals, and rangeland stewards worldwide? The answer may depend on our ability and commitment to address women's issues in the profession and across the rangelands of the world. Gender offers a new frontier for rangeland research, education, and policy.

Research

We need to do a better job of framing gender-related questions and collecting gender-disaggregated data. Some priority areas of investigation include the following: 1) How and why are gender gaps maintained on rangelands, and how can they be closed? What factors inhibit or promote women's participation in rangeland management within and across countries, cultures, and institutions? 2) What are the impacts of women's participation and leadership in rangeland decision-making, economic development, and governance? Specifically, how does empowering women affect the lives of others in pastoral and ranching communities, as well as the health of the land? 3) Are macro-forces like climate change or globalization differentially affecting women compared to men on rangelands—if so, why—and what are the consequences?

Education

We must continue to strive to improve access to formal and nonformal education for females and males on rangelands worldwide. Some priority topics include: 1) ensuring that women have similar access as men to Extension information provided to a community—and tailor program delivery for women as needed; 2) encouraging qualified women to apply when leadership opportunities present themselves—on or off the range; 3) targeting women for capacity-building and education in outreach projects, including special attention to highly isolated and disempowered women; 4) continuing to expand mentoring and funding support for young professional women in range and allied fields—especially in developing nations as well as in first-nation (e.g., Native American) communities; and 5) identifying situations where women and men can fully collaborate on mutually beneficial projects on rangelands.

Policy

Papers in this issue have drawn attention to the variety of ways that policies can directly or indirectly affect rangeland women. We see some priority policy activities for range professionals as follows: 1) identifying situations where gender-related problems could benefit from new policies; 2) identifying situations where appropriate gender-related policies exist, but lack of enforcement undermines implementation; and 3) monitoring effects of fully implemented policies to see if policy goals are being met, and whether or not there are unintended consequences—negative or positive—with respect to gender issues. Professionals involved in such awareness-raising and policy analysis can facilitate change by helping to mobilize stakeholders to take action and fix problems themselves.

There is also ample scope for improving gender-related policy education, both in classroom teaching and outreach programs. In the latter case, rural women and men can be empowered if they have a better grasp on how certain policies—or lack of policies—affect their lives. Because pastoral women in less-developed countries are often illiterate and geographically isolated, they are typically immersed in local customs and may be unaware of their rights and responsibilities according to state, district, or national laws. Women's empowerment thus includes improving their ability to seek out key people and

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[vi] For more information on Feed the Future, see *www.feedthefuture.gov.*

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institutions that can help them deal with discriminatory practices and facilitate their access to productive resources.

Concluding Remarks

To anyone who cares about the >50% of the earth's land mass that is comprised of rangelands, and the livelihoods of the human communities these lands support, understanding women's roles in these systems is critical. The lack of data, combined with evidence that the leadership and management capacities of women pastoralists and ranchers worldwide remain underappreciated and underused, suggest that attention to gender issues remains a necessary and important topic in rangeland research, development, governance, and education.

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References

1. Food and Agriculture Organization of the United Nations. 2011. Women in agriculture: closing the gender gap for development. Rome, Italy: United Nations Food and Agriculture Organization State of Food and Agriculture Report 2010–2011. 147 p.
2. Rota, A., and S. Chakrabarti. 2012. Women and pastoralism. Livestock thematic papers, tools for project design. Rome, Italy: International Fund for Agricultural Development.
3. Mai, Y. H., E. Mwangi, and M. Wan. 2011. Gender analysis in forestry research: looking back and thinking ahead. *International Forestry Review* 13(2):245–258.
4. McGowan, C. 2011. Women in agriculture. *In:* D. Pannell and F. Vanclay [eds.]. Changing land management: adoption of new practices by rural landholders. Collingswood, Australia: Commonwealth Scientific and Industrial Research Organization. p. 141-152.
5. Blumberg, R. 1995. Introduction: engendering wealth and well-being in an era of economic transformation. *In:* R. Blumberg, C. Rakowski, I. Tinker, and M. Monteón [eds.] Engendering wealth and well-being: empowerment for global change. Boulder, CO, USA: Westview Press. p. 1–14.
6. Muñoz Boudet, A. M., P. Petesch, C. Turk, and A. Thumala. 2012. On norms and agency, conversations about gender equality with women and men in 20 countries. Conference report. Washington, DC, USA: The World Bank. 157 p.
7. Putnam, R. D. 2000. Bowling alone: the collapse and revival of American community. New York, NY, USA: Simon and Schuster, Inc. 544 p.
8. Kantor, J. 2013. Harvard Business School case study: gender equity. *New York Times*: September 7. Available at: http://www.nytimes.com/2013/09/08/education/harvard-case-study-gender-equity.html?ref=jodikantor.
9. Moynihan, R., S. Armitage, and C. Dichamp [eds.]. 1998. So much to be done: women settlers on the mining and ranching frontier. Lincoln, NE, USA: University of Nebraska Press. 353 p.
10. Alston, M. 2000. Breaking through the grass ceiling. Women, power and leadership in agricultural organizations. Amsterdam, The Netherlands: Harwood Academic Publishers. 280 p.

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