

WOMEN IN AGRICULTURE

Closing the Gender Gap

Ruth Meinzen-Dick and Agnes Quisumbing



HE ROLE OF GENDER IN AGRICULTURE GAINED GROWING ATTENtion among researchers, aid donors, and policymakers in 2012. As
new knowledge on the role of gender in agricultural productivity
emerges, agricultural programs can use this knowledge to improve outcomes.
But more knowledge and better outcomes will depend on a stronger evidence
base on gender in agriculture, programs that do more to address the particular
needs of women as well as men, and more vigorous engagement with women's
groups as full partners in agricultural development.

SO FAR: GROWING ATTENTION TO GENDER IN AGRICULTURE

Two recent flagship reports—the Food and Agriculture Organization's (FAO's) State of Food and Agriculture 2010–2011 and the World Bank's World Development Report 2012—turn their attention to gender issues in agriculture. Emphasizing women's contributions to agriculture in developing countries, The State of Food and Agriculture 2010–2011 highlights the need to close the gender gap in access to agricultural resources, education, extension, financial services, and labor markets; to invest in labor-saving and productivity-enhancing technologies and infrastructure to free women's time for more productive activities; and to facilitate women's participation in flexible, efficient, and fair rural labor markets.¹

The World Development Report 2012 stresses that gender equality can lead to productivity gains, that women's increased control of household resources can improve outcomes for the next generation, and that empowering women as economic, social, and political actors can result in more representative decisionmaking.² The report also identifies areas where policy can help close the gender gap: addressing excess deaths of girls and women; improving girls' education; equalizing access to economic opportunities and reducing productivity

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gaps between women and men; giving women a stronger voice in households and societies; and limiting the transmission of gender inequality across generations.

Attention to gender in agriculture is not new, but in the past it has often been limited to a few specialized programs targeting women or "mainstreaming" efforts that embed attention to gender within programs, with too little follow-through. That seems to be changing. A number of key development agencies and donors are drawing on gender analysis in their programming, targeting by gender, and building in accountability. For example, FAO's 2012 gender strategy commits to allocating 30 percent of operational budgets to interventions targeted to women and to disaggregating data in all FAO statistical databases by sex. The Bill & Melinda Gates Foundation's policy on gender-responsive agricultural programming is summarized as "Know Her, Design for Her, Be Accountable to Her."

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Similarly, the new gender strategy of the US Agency for International Development was accompanied by the creation of the Women's Empowerment in Agriculture Index, which will be used to measure progress toward inclusive agricultural growth in all 19 countries where the agency's Feed the Future program is in place. Building on the momentum in the development community, and drawing upon two decades of gender research in CGIAR, the Consortium Board issued a gender strategy in November 2011, which integrates gender analysis in all Consortium research programs. All of these initiatives not only address gender

equality and the specialized needs of women in agriculture, but also create accountability for delivering on these commitments.

Development programming is now moving from gender-blind programs that ignore gender differences, to gender-aware programs that recognize the different needs of men and women, and even to gender-transformative projects that seek to promote more gender-equitable relationships. As part of the Gender, Agriculture, and Assets Project supported by the Bill & Melinda Gates Foundation, IFPRI researchers are studying how projects that pay more attention to gender differences in rights, resources, and responsibilities are better able to achieve their development objectives. For example, in the first phase of a recent dairy development project in Mozambique, dairy cows were distributed to households, but training and control of dairy income were directed to men. Preliminary study results suggest that because dairy farming requires substantial inputs of women's labor, the program's focus on men created tension within households. Project designers and implementers took notice when a woman deliberately starved a cow distributed by the project because she believed the project rewarded men but failed to recognize her input. The project was eventually modified to allow two household members—typically a man and a woman—to attend training on dairy management. The recently funded second phase of the project deliberately paid greater attention to gender issues.

Other projects have taken a more gender-transformative approach. In two states of India, where women traditionally do not inherit land, Landesa (known in India as the Rural Development Institute) is allocating small plots of land to landless households and attempting to change the rules of the game for future generations. First, plots allocated to dual-headed households are titled jointly in the names of the husband and wife, and femaleheaded households and daughter-only households are given priority for land allocation. Moreover, all sons and daughters are listed as co-inheritors in the land title—an innovation for rural India, where girls are disadvantaged in terms of land ownership. Working with the Ministry of Women and Child

Getting Gender Roles Right: A Success Story in Mozambique

JEMIMAH NJUKI AND ELIZABETH WAITHANJI

Ithough many smallholder farmers are Awomen, women are rarely consulted during the design phase of farm-focused development interventions. When programs do not take into consideration the needs and concerns of 100 percent of their beneficiaries, they often run into problems. For example, in 2006, after years of civil conflict had taken its toll in Mozambigue, the Smallholder Dairy Development Program funded by the US Department of Agriculture and implemented by Land O'Lakes sought to rebuild the country's dairy industry to meet market demand, raise incomes, and increase crop yields by using working animals. The intervention saw mixed results in its early years, and the positive outcomes were not always benefiting all members of a household. So, in an effort to engage both men and women, the program started requiring two household members to be trained in dairy production instead of just one.

This did not always lead to the inclusion of women, however, because often

a man and his son would be trained in exchange for the cows. Soon farmers began returning some cows and others died. Why? Because the women in those households refused to feed them. Since they did not co-own the cows or have any control over the resulting income, the women farmers saw no reason to add to their own workload.

Enter the Gender, Agriculture, and Assets Project (GAAP). Led by IFPRI and the International Livestock Research Institute, GAAP works with agricultural development practitioners to analyze gender roles and account for gender differences within interventions and impacts. The GAAP team collected data and facilitated focus-group discussions on gender roles in dairy production, cattle ownership, labor, marketing, and income management. Together with a Mozambique program team, they developed interventions to address the gender gaps and designed a monitoring and evaluation system. Ultimately, a new

game plan emerged: (1) register the cows given to each household in the name of at least one male and one female adult, (2) organize and train groups of farmers on gender relations and promote women's leadership, (3) register both male and female adults in the marketing cooperative, and (4) include women in the cooperative management committee. The results? More women own livestock. More women are involved in making decisions about managing that livestock. And more women market milk and make use of income from its sale.

These valuable lessons about gender integration have led to wider discussions between Land O'Lakes International Development's managers about the role of gender in their programming, and the results have significantly influenced the second phase of funding for the program, which began in 2012.

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Development, the project is creating girls' and boys' groups that incorporate a land rights curriculum and is holding community conversations, including both men and women, on girls' inheritance rights.

Initiated in 2002 and now in its third phase, the Targeting the Ultra Poor program of BRAC transfers livestock to women in ultra-poor households, providing livelihood assistance and training in income-generating activities. Since 2007, CARE–Bangladesh's Strengthening the Dairy Value Chain project has included activities to empower women

and challenge barriers to women's participation in the dairy value chain. The project has helped women overcome barriers to mobility by moving milk collection points to villages, increasing the number of local input supply points, and training a cadre of female livestock health workers. Preliminary study results suggest that through group savings schemes, many women have been able to save enough money to buy a dairy cow. IFPRI researchers are working with project designers and implementers to assess the impact of these projects

Indexing Women's Empowerment

EMILY HOGUE AND CAREN GROWN

"Something that can be measured can be changed."

-Hillary Rodham Clinton, Former US Secretary of State

great deal of international development goals can be tangibly measured—in crop yields or new jobs or reductions in child mortality, for example—while others prove much harder to quantify. Women's empowerment, for example. How do you define it, measure it, collect those measurements, and analyze them? The US Agency for International Development (USAID) recently had the opportunity to answer these questions as it developed the Women's Empowerment in Agriculture Index (WEAI) with partners from IFPRI and the Oxford Poverty and Human Development Initiative. The tool was developed for the US government's Feed the Future initiative to reduce poverty and food insecurity.

The index is a significant innovation in its field that measures multiple indicators

of empowerment, and generates "scores" that can be compared over time. It is the first tool of its kind. Piloted in 2011 and launched in February 2012, the US government is using the index to track change in women's empowerment that occurs as a direct or indirect result of Feed the Future interventions in targeted geographic zones within the initiative's 19 focus countries.

Data for the WEAI will be collected every two years in all 19 countries, and baselines were collected in 2011 and 2012. USAID and partners will conduct data analyses to understand the relationships among empowerment, livelihoods, and food security, as well as relationships among the various components of the index. Feed the Future will also use the WEAI for impact evaluations of distinct projects to examine the effectiveness of different approaches and how they impact women and men. Through IFPRI, Feed the Future has selected and began funding four dissertation grants for research that

will build evidence on women's empowerment through diverse methodologies and substantive areas. All of this analysis will help project leaders refine the WEAI for improved practicality and broad utility.

Many development partners have expressed interest in using the index for their programs, and USAID and IFPRI are working to develop tools and guidance to replicate it beyond the 19 focus countries. What started as a fairly modest effort to develop a monitoring tool for Feed the Future has greatly exceeded expectations and provided the development community with a robust and accessible instrument to tackle one of the most complicated development challenges. While just a first step toward improving learning and programming in this critical area, the creation of the index signifies the commitment of the US government to prioritizing women's empowerment as an essential development outcome it will measure and strive to achieve.

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on the gender asset gap and broader development objectives.

Gender-sensitive development projects have also learned to use local resources and institutions. A local adaptation of the homestead food production program implemented by Helen Keller International in Burkina Faso from 2009 to 2012 involved training grandmothers as sources of nutrition advice, given the important role of older women in the local culture. In Uganda, the initial effort to propagate orange sweet potato vines developed by HarvestPlus from 2007 to 2009 relied on social

networks and farmers' groups, and extension messages on the health benefits of consuming orangefleshed sweet potatoes were deliberately targeted to women.

Although donor priorities are a clear signal of attention to gender issues, this is far from being a donor-driven process: projects that pay attention to gender differences on the ground are also projects that are more likely to succeed.

WHAT NOW? MORE IS NEEDED

Political will and project interventions to address the needs of women in agriculture and contribute to gender equality are increasing. However, additional efforts are needed to lock in these gains so that attention to gender becomes an integral part of agricultural and rural development—not merely a development trend that passes. More needs to be done to build the evidence base on gender in agriculture, strengthen women's assets, and engage with women's groups as real partners in development.

Build the Evidence Base

The evidence marshaled by The State of Food and Agriculture 2010–2011 and World Development Report 2012 has helped build the political will to address gender in agriculture. But examination of the statistical appendixes in The State of Food and Agriculture shows that this evidence is still fragmentary, especially in agriculture. National-level agricultural statistics too often fail to report whether farmers and agricultural laborers are men or women. Even most agricultural surveys treat households as single units rather than disaggregating data by sex. What passes for gender analysis is limited to comparisons of "male-headed" and "female-headed" households, ignoring the majority of women who live in households with males and likely understating gender differences in productivity.³ Figures on the extent of women's ownership of and access to land and other assets often conflict because of different ways of collecting information. Moreover, the conventional wisdom on gender is often based on data that are drawn from extremely small samples or are already outdated.

Fortunately, there are now methods that can be applied to measure the gender gap in assets. One such method was used in a recent study based on statistically representative datasets in Ecuador, Ghana, and Karnataka State, India.⁴ The Wikigender initiative of the Organisation for Economic Co-operation and Development's Development Centre (www.wikigender.org) and the World Bank's Gender Data Portal (http://datatopics

.worldbank.org/gender) represent important steps toward building a systematic evidence base and provide resources for policymakers and program designers on a range of gender issues. This kind of evidence is needed to identify the scope of the challenges that women face in agriculture and how these challenges vary across regions, time, and socioeconomic status.

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Women's empowerment and gender inequality are typically measured at an aggregate country level, using available data such as education rates or percentage of women in parliament. These indicators are important, but they are not directly related to agriculture. In contrast, the Women's Empowerment in Agriculture Index collects new information by interviewing men and women themselves about their participation in decisionmaking about agriculture, control over productive resources, control of income, leadership, and time allocation. This information is used to construct indicators of five domains of empowerment for women, as well as gender parity between men and women in the same household (Figure 1).5 While this index can be used to track progress over time, it also has a more immediate use as a diagnostic tool. It can identify the key areas in which women (and men) lack empowerment so that programs can focus on those areas. It also draws attention to how agricultural programs can strengthen women's empowerment, such as by contributing to women's leadership through group-based approaches, or weaken it, such as by creating an excessive workload. One could argue, for example, that the dairy program in Mozambique described earlier would not have involved only men if program designers

had thought through how it would affect the five domains of empowerment.

Better evidence on what works to empower women is needed to help guide development practice, to screen out ineffective programs, and to strengthen the case for channeling resources to effective ones. Rigorous quantitative studies are important, but they should be complemented by qualitative studies that can both identify key questions for quantification and help explore the dynamics of how programs work (as is being done in the Gender, Agriculture, and Assets Project cited earlier). Including women and men directly in monitoring and evaluation enhances both understanding and accountability, as implied in the "be accountable to her" pillar of the Bill & Melinda Gates Foundation's gender in agriculture strategy.

Moreover, gender relations do not change overnight. Long-term studies are needed to assess whether gender-transformative approaches are having effects that may not be apparent in the short term. An IFPRI study of the impact of vegetable and fish pond technologies in Bangladesh illustrates the value of longer-term impact assessments. Although early adopters of fish pond technologies had greater gains in income and food consumption than later adopters, the vegetable technologies were disseminated throughout the villages by women's groups and led to greater positive effects on the nutritional status of women and children, as well as greater gains in women's assets—impacts that would not show up in the short term.

Strengthen Women's Assets

Redressing the gender gap in assets is key to improving agricultural productivity. Policies and programs that strengthen women's assets are likely to have long-term effects because they not only increase women's ability to adopt improved technologies or engage in more remunerative livelihood strategies, but also contribute to women's empowerment in the household and the community. Key assets in this regard include tangible ones such as land, water, tools, and technologies, as well as less tangible—but no less important—ones such as financial, human, and social capital.

LAND. Joint titling and reform of inheritance laws are two major policy reforms being employed to strengthen women's property rights. For example, land is being jointly certified in the names of both husbands and wives in Ethiopia, and reforms to the Hindu Succession Act in India are allowing daughters to inherit land. However, legislative reforms alone are not enough to affect the lives of rural women because customary land rights and inheritance practices often remain strong. Full implementation of any legislative reform is crucial. Legal literacy programs are needed to make both communities and the implementing agencies aware of the reforms and the rights that women can claim. In Ethiopia, for example, putting women on the local land administration committees has helped to increase women's awareness of their rights and the likelihood that they will register their land. Enlisting male elders to support women's land rights can play a critical role in establishing social legitimacy for reforms.

WATER. Reliable access to clean water is especially important to women, who are often responsible for obtaining water for domestic use and for plants and animals under their care. Although domestic water supplies and irrigation systems are often developed separately, some studies suggest that creating multiuse water systems helps women meet their domestic as well as productive water needs.8 Homestead-scale systems such as wells and water harvesting require substantial private investment; community-scale systems can transport water from longer distances and may offer technical efficiency gains. However, community-level systems require effective organizations. Women's participation in decisionmaking in community water systems is crucial to ensure that their particular needs and priorities are addressed.

TOOLS AND TECHNOLOGIES. A genderaware approach to closing the gender asset gap in agriculture requires ensuring that women have access to and control over the tools and technologies that men already have. It is thus important to know whether women are less likely to have the tools because of cost or cultural factors: is a woman unable to afford farm equipment or communications technology, or is it socially unacceptable for her to have or use it? A gender-transformative approach requires asking whether technologies are designed to meet women's needs and whether women are involved in the innovation systems, both as clients and as providers of innovations. For example, women and men often have different trait preferences for crop or livestock varieties; participatory plant or animal breeding

programs that involve women can take these differences into account. Ergonomically designed equipment for women can reduce strain and make their labor more productive. Many agricultural research and development programs focus on the period from planting to harvest and neglect postharvest processing, which is more likely to be women's domain. Improvements in processing can reduce food losses, increase incomes, improve nutritional

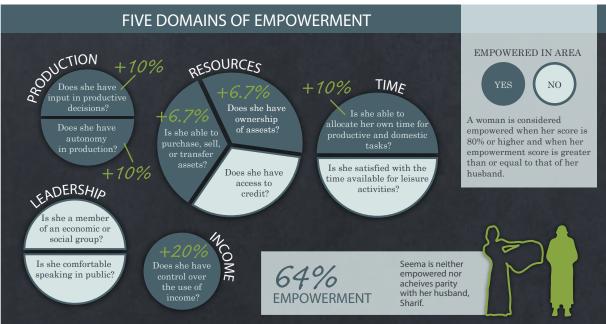
FIGURE 1

WOMEN'S EMPOWERMENT IN AGRICULTURE

-empowerment-agriculture-index, accessed November 25, 2012.

The Women's Empowerment in Agriculture Index measures women's empowerment by assessing five domains. It also compares women's scores in these five areas with those of other men in their household to measure gender parity









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content, and save labor—all of which are of special concern to women.

FINANCIAL CAPITAL. Microfinance programs have often successfully made savings and credit available to poor women, but women should not be locked into microfinance alone; a ladder of finance is also required. In addition, women need more than credit: ways of making and receiving payments, such as through mobile phones, allow women to participate in markets for inputs and produce. These mechanisms can be particularly important in societies that restrict women's mobility, because women there must rely on male family members or friends to take their produce to market.

HUMAN CAPITAL. Much attention is rightly given to increasing girls' enrollment and retention in school. Later in life, however, women also need greater access to agricultural extension and advisory services; women have consistently lower access to extension than men. More genderequitable extension systems would not only recognize women as farmers, but also address their needs for information, technology, and market access. They should employ female extension agents or alternative delivery mechanisms such as group-based approaches and experiential techniques that are specifically designed to be gender equitable, depending on what is most effective.

SOCIAL CAPITAL. Both governments and nongovernmental development organizations have embraced group-based approaches as a way to reduce the cost of delivering services to many individuals and make program outreach more cost-effective. Participation in groups can also be empowering. For women, the opportunity to get out of the house and meet with other women, create solidarity, and build confidence to speak in public can increase their bargaining power within their households as well as with outsiders. Informal

social networks and kinship ties can also be important sources of information, influence, and assistance. But, as with other assets, men often have stronger social capital than women have. Ensuring that the formal rules and informal practices of groups do not discriminate against women can help redress this gap. For example, membership rules should allow multiple household members to participate instead of just the head of household; meetings should be scheduled where and when women can attend and should be conducted so that women feel they can be heard.

Engage in Real Partnerships

Ultimately, translating political will into genderequitable agricultural development requires forging partnerships with women's organizations so that they have voice and agency. Instead of having to anticipate women's needs, programs should make it possible for women to identify their own needs, place demands on service providers, and increase accountability of programs. This approach should be adopted not only by government and nongovernmental organizations, but also by private input and information suppliers, land administration services, and marketing agents.

This is not to suggest ignoring men: indeed, enlisting men's support and ensuring that their needs and concerns are also addressed are crucial for the advancement of both men and women. Effective partnerships have the potential to transform how women are perceived. Instead of being seen as victims of inequitable conditions or beneficiaries of programs, women can be seen as key actors in implementing programs and achieving sustainable development, food security, and poverty reduction.

CONCLUSIONS

Attention to gender in agriculture is not new, but it has not always been acted upon. The accumulating evidence shows that empowering women is not only important in its own right, but also often highly conducive to improving agricultural productivity, food security, and nutrition. Gender-

blind programs too often fail in these objectives and may even make matters worse by encumbering women with additional uncompensated duties or depriving them of control of resources in a manner detrimental to their welfare.

The renewed commitment to gender-responsive and gender-transformative agriculture now needs to be translated into more systematic policy actions, including integrating gender in agricultural strategies and programs. Research and development of agricultural technologies and interventions should begin with an understanding of how men's and women's interests as producers and consumers

dovetail and diverge and should work to address the needs of women as well as men. Paying specific attention to closing the gender gap in assets is also expected to have long-run effects in empowering women and improving productivity and food security. Delivering on this potential will require systematic collection of sex-disaggregated data to improve our understanding of what works and a commitment to making actors at all levels, from government agencies to project staff, accountable for results.