



Change in the Making: Progress Reports on CGIAR Gender Research

Issue No. 1 / **Toward gender-equitable control over productive assets and resources**



CGIAR

Science for a food-secure future



CGIAR is a global partnership that unites organizations engaged in research for a food-secure future. CGIAR research is dedicated to reducing rural poverty, increasing food security, improving human health and nutrition, and ensuring more sustainable management of natural resources. It is carried out by the 15 centers who are members of the CGIAR Consortium in close collaboration with hundreds of partner organizations, including national and regional research institutes, civil society organizations, academia, and the private sector.

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Gender equality is central to the three CGIAR strategic objectives of reducing poverty, improving food and nutrition security, and working towards sustainable, resilient agroecosystems. CGIAR's approach to addressing gender inequality in its research has two main goals. The first is to build capacity to address the gender dimensions of agricultural research and development across the Consortium, and the second is to integrate gender into individual CGIAR Research Programs.

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This report and additional content is available online at gender.cgiar.org/change-in-the-making/

Citation: Russell N; Karlsson K; Ashby J; Mascarenhas M. 2015. Change in the Making: Progress Reports on CGIAR Gender Research. Issue No. 1 Toward gender-equitable control over productive assets and resources. CGIAR Gender and Agriculture Research Network, CGIAR Consortium Office and International Center for Tropical Agriculture (CIAT). Cali, Colombia. 29 p.

Written by Nathan Russell, International Center for Tropical Agriculture (CIAT); Kristofer Karlsson and Jacqueline Ashby, CGIAR Consortium Office; Martina Mascarenhas (CIAT). Design adapted from the International Potato Center (CIP), a member of the CGIAR Consortium.

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PROGRESS REPORTS ON CGIAR GENDER RESEARCH

About the series

To provide CGIAR Fund donors and others with regular updates on important advances in research, the CGIAR Gender and Agriculture Research Network has begun a series of progress reports, called *Change in the Making*. These reports are being prepared in close consultation with gender researchers across CRPs, drawing on published findings from recent work, all of which can be accessed at gender.cgiar.org and which network members are actively sharing with one another and the wider community of experts.

This first issue of the series focuses on “gender-equitable control over productive assets and resources,” which is a key component of the “intermediate development outcome” on gender and equity that is presented in the [CGIAR Strategy and Results Framework 2016–2030](#) (CGIAR, 2015).

Subsequent issues will report on progress with the other two main parts of this development outcome – “technologies that save time and energy” and “improved capacity to participate in decision making” – or provide further updates on “assets and resources.”

This series is intended to provide readers with easy access to the body of gender research related to the CGIAR outcome on gender and equity, so they can easily drill down through the relevant studies and published research papers.



INTRODUCTION

Agriculture in the developing world faces formidable challenges, which range from increased food demand to climate change impacts, and whose scope and complexity are evolving rapidly. The opportunities to address these challenges through collaborative research are also considerable, however, and provide grounds for optimism that renewed efforts in agricultural science can succeed.

Yet, one especially debilitating limitation of farming in developing countries – the absence of gender equity – threatens to stifle the impacts of agricultural research on every level – from seed delivery and livestock value chains to the management of whole rural landscapes. According to estimates from the Food and Agriculture Organization (FAO) of the United Nations (FAO, 2011), roughly half the people engaged in smallholder farming are women and, because of unequal control over assets and resources, they produce and preserve far less than they could. Unless ways are found to change this situation, it is hard to imagine how agriculture can rise fully to the challenges that lie ahead.

From head counting to a comprehensive response

In response to this concern, CGIAR has committed itself to making a critical difference in gender equity in agriculture. This has involved, in the first instance, a rapid transition in our research from merely enumerating the women affected by science-based innovations to a more comprehensive and targeted approach for bringing positive change to women as well as men. In 2012, we started mainstreaming gender

into the new global CGIAR Research Programs (CRPs) and, by 2014–2015, CGIAR had stepped up its investment in gender research from 2% to 14% of the total budget.¹ This represents a significant effort to reverse years of underinvestment in support for women in agriculture, as called for by the [Global Donor Platform for Rural Development](#) (Farnworth, 2010).

CGIAR research aims to deliver clear and practical explanations of gender relations, which can provide researchers in all areas of our work with a sound basis for developing innovations that are more gender responsive or transformative and for putting these innovations to work through development partners. The ultimate goal is to empower poor women as well as men, so they can benefit tangibly from the adoption and sustained use of CGIAR innovations, resulting in more gender-equitable distribution of food and income.

Building a baseline

CGIAR gender research challenges assumptions that have given rise to policies and programs based on “zombie” statistics, as the [Washington Post](#) (Kessler, 2015) described them, referring to prevalent claims about gender inequality that

¹ Much of CGIAR's capacity for gender research is concentrated in two centers with policy research mandates: the International Food Policy Research Institute (IFPRI) and Center for International Forestry Research (CIFOR). This capacity is complemented by a cadre of gender researchers integrated into CRPs with a focus on crop improvement or natural resource management.

were not supported by the evidence, which is patchy and often unreliable.²

To help ensure that future programs are based on information that stands up under the fact checkers' scrutiny, CGIAR gender researchers embarked in 2013 on a broad diagnostic analysis. Its aim was to build an evidence-based understanding of how gender influences change in agriculture. To reach this objective, all CRPs are implementing an approved gender strategy. Moreover, CGIAR gender research coordinators have defined a theory of change for how empowerment of women and the poor can influence the uptake and use of agricultural innovations to which CGIAR contributes (see box below).

Representing an important contribution to wider international efforts – led by FAO and others – the results of this research constitute a baseline for our future efforts to trace the impacts of CGIAR innovations on improving gender-equitable control over productive assets and resources.

In the near term, the baseline is also a timely input for the design of a second round of CGIAR Research Programs developed in line with the above-mentioned Strategy and Results Framework. For at least the next decade, the strategy will provide the framework in which CGIAR has an impact on gender equity in agriculture. To help inform the design process, we asked network members two main questions, which have guided the preparation of this report on recent findings from CGIAR gender research:

1. *What are we learning about the ways in which men and women control resources and about options for changing the unequal benefits that result from their use?*
2. *What is the significance of this knowledge for the design of R&D programs intended to deliver gender-responsive innovation that benefits the poor?*

Women's empowerment and agricultural innovation

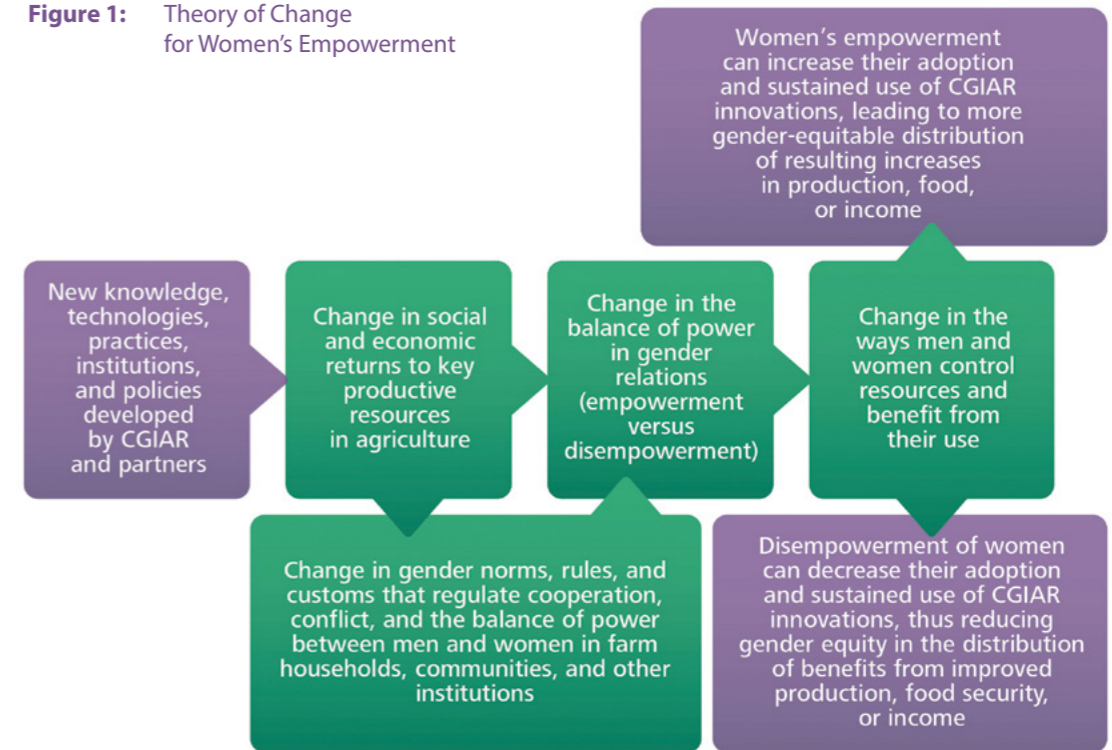
The new knowledge, technologies, practices, institutions, and policies developed through the research of CGIAR and its partners are intended to change the social and economic returns to key productive resources in agriculture (e.g., biodiversity, land, water, forests, livestock, fish, seeds, fertilizers, and machinery).³ As depicted in Figure 1, these changes, in turn, alter the balance of power in gender relations, prompting shifts in the ways men and women control resources and benefit from their use. Such shifts contribute to changes in the gender norms, rules, and customs that regulate cooperation, conflict, and the balance of power between men and women in farm households, communities, and other institutions.

Women's empowerment helps meet other objectives as well, since it can determine whether men or women want to adopt CGIAR innovations and how they share the resulting improvements in production, food security, or income. Conversely, technological and institutional innovations that do not take into account the potential influence on gender norms and the differences between men's and women's control over resources and benefits can lead to unanticipated harmful outcomes.

² This article highlights research by the CGIAR Research Program on Policies, Institutions and Markets (PIM) on gender inequalities in control of land in Africa. FAO's updated Gender and Land Rights database also draws from this work, as well as from research on gender inequalities in land rights indicators in Asia.

³ According to a report from the World Bank (O'Sullivan et al., 2014), even when women have access to the same amounts of inputs as men, this does not deliver the same returns in terms of increased agricultural productivity, because gender norms, market failures, or institutional constraints make these resources less effective for women.

Figure 1: Theory of Change for Women's Empowerment



Source: Adapted from CGIAR Gender and Agriculture Research Network (2014).

Emerging insights - A quick summary

In reviewing the substantial body of findings available from recent CGIAR research on gender, we have assembled a set of insights, which are briefly summarized below and described in more detail in the remainder of this report.

- **Agricultural innovations and the balance of power in gender relations** – Gender relations influence control over the assets and resources that are needed to derive benefits from development interventions, such as improved technologies, institutions, and policies. When these interventions reinforce the prevailing norms that limit women's control over decisions about productive assets and resources, this can have deeply restrictive effects on women's uptake of all types of agricultural innovations, and such effects are ubiquitous across technologies, crops, regions, and cultures.
- **The limits of equal access** – Given that men have received the lion's share of resources and support in agricultural development, one might assume that changing this is largely a matter of promoting women's inclusion in groups, meetings, information dissemination, training, and so forth – or even targeting women exclusively in such activities. CGIAR gender research confirms, however, that such an approach may backfire. Inclusive value chain development, for example, while helping to equalize the cash income that women and men generate, does not lead automatically to positive outcomes for gender equality. In fact, many studies have shown that, as women boost the value of their enterprises, men tend to appropriate them.



- **The benefits of enhanced cooperation for women and men** – How then can agricultural R&D programs address gender inequity? Some CGIAR studies suggest that improvements in the enterprises that women and men own and manage jointly can offer women greater benefits than improvements in the enterprises they handle separately. So, rather than focus so much on giving women an edge in the tug of war over resources, innovations should be designed to enhance cooperation between women and men for mutual benefit, based on a balance between different male and female interests.

Research and development programs must further be concerned with designing transformative policies and other interventions that alter the gender norms that restrict equal access to and ownership of assets and resources as well as women's decision-making power. There is a small but growing body of evidence that such efforts have a positive effect on the adoption of agricultural and environmental innovations.





AGRICULTURAL INNOVATIONS AND THE BALANCE OF POWER IN GENDER RELATIONS

Diagnostic studies on value chains show how a variety of innovations are changing the balance of power in gender relations. Women are not automatically empowered by value chain development, however, unless it includes specific measures to ensure gender equality in the outcomes. Without such measures, value chain development may leave women worse off than before.

Gender setbacks and gains in value chains

The Gender, Agriculture, and Assets Project (GAAP), carried out by the International Food Policy Research Institute (IFPRI) and the International Livestock Research Institute (ILRI), has generated a wealth of new evidence from Africa and Asia on the effects of gender-based decisions concerning the use, control, and ownership of assets (Johnson et al., 2015; Quisumbing et al., 2013a; 2015). Although some project studies (Quisumbing et al., 2014) reveal important progress toward increasing women's assets and promoting inclusive value chains, this work also warns that targeting women exclusively may not lead to desirable outcomes. In fact, efforts aimed at improving women's access to opportunities for income generation may have unintended and also unfavorable consequences for them.

Such was the case with a project that targeted 35,000 households in Bangladesh's dairy value chain, in which women accounted for 80% of the participating producers (Quisumbing et al., 2013b). According to gender analysis, as production was intensified, this led to an increase in dairy farmers' workload, which fell disproportionately on the shoulders of adult women. The extra time they spent on dairy activities within the household came at the expense of domestic work, for which young girls (but not boys) had to assume responsibility. Men's and boys' workloads also increased, but primarily in dairy activities that involved leaving the homestead.

Ubiquitous shifts in the balance of resource control

Other studies reinforce the point that improving women's access to resources is insufficient as long as unequal control over productive assets continues to prevail.

- **Cash and climate change** – Baseline studies conducted at four representative and contrasting sites in Kenya, Uganda, and Senegal examined gender differences related to climate change adaptation (Pérez et al., 2014). The results showed that women's adaptive capacity is constrained by their limited access to and control over cash, which reduces their ability to hire extra labor, purchase inputs, and adopt improved technology.
- **Income from indigenous poultry** – Analysis in two countries (Maina et al., 2014) of an intervention designed to improve the production of indigenous poultry (which almost all communities place in the hands of women) found that, even though women and children were rearing the chickens, men had more control over the income from sales.
- **Benefits from forest resources** – A large-scale study focusing on forest product value chains in the Congo Basin showed that, as forest products increased in value, men appropriated



more of these, particularly the most profitable ones (Ingram et al., 2014). Women, who tended to harvest products more for domestic consumption, were handicapped by the lack of customary ownership of valuable trees as well as by difficulties in accessing credit.

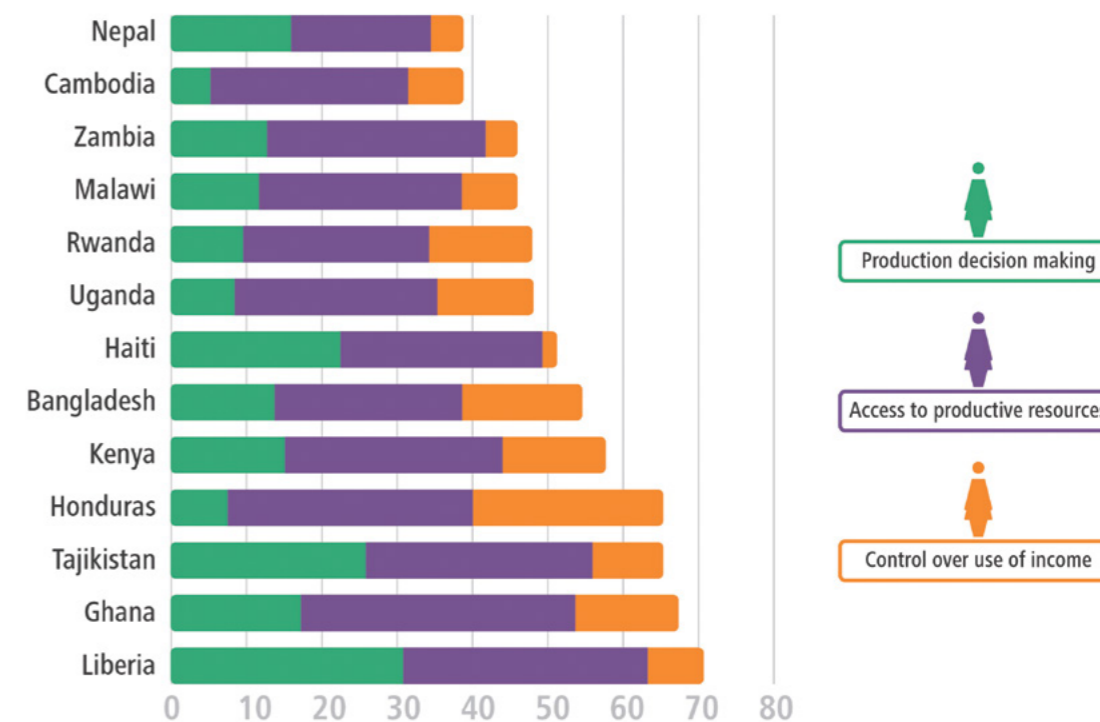
- **Dairy value chain in Kenya** – A study on efforts to improve the dairy value chain in Kenya showed that women selling milk collectively were, on average, more empowered (Njuki et al., 2014). Limited control over production decisions together with limited ownership of assets were two of the most important causes of disempowerment.
- **Gender perceptions of resource ownership** – Another study highlights that the flexibility of access to and control over livestock makes this resource more accessible to women than formally owned resources, such as land or buildings (Galiè et al., 2015). However, [accessing and controlling livestock](#) (Odongo, 2015) alone might not be sufficient to improve the food security of women and their households if gender norms regulating who can use livestock for what and how limit their ability to benefit from livestock (as when women are not able to use livestock to plow

land or transport goods, which are basic requirements for growing and marketing food).

A first-of-its-kind gender diagnosis tool

A clear message of CGIAR studies is that designing and targeting gender-responsive innovations require a concerted effort to tackle the issue of gender differences in control over resources. One useful tool for this purpose is the [Women's Empowerment in Agriculture Index \(WEAI\)](#), which researchers can use to diagnose different dimensions of women's empowerment and track progress in improving women's status over time. Developed by IFPRI and others, [this innovative tool](#) consists of two sub-indexes – one that measures how empowered women are within five domains and the other gauging gender parity in empowerment within the household (Alkire et al., 2013).

Figure 2: WEAI Country Profiles: contribution of domains to women's disempowerment

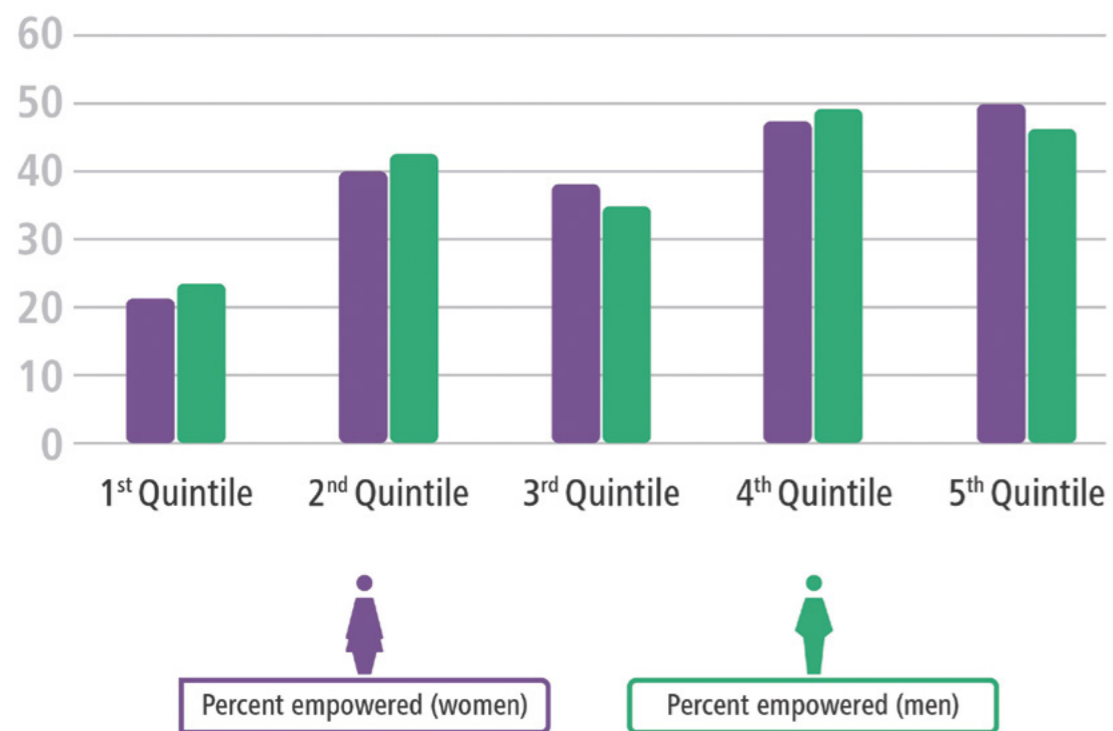


Source: Adapted from Malapit et al. (2014). Note that these domains represent three out of the five WEAI domains.

As Figure 2 shows, three different domains of women's empowerment related to improving control over productive assets and resources – decision making in production, access to productive resources, and control over use of income – when combined account for 40–70% of women's disempowerment, with the remainder attributable to time allocation and community leadership. Clearly, if CGIAR innovations are to have a major impact, strong enabling policies and institutional innovations will be required

that give rural women more control over choices about technology and the resulting income. In putting the spotlight on women's empowerment, we must not lose sight of differences among women, which can be very important for defining what equality means, and for deciding whom an intervention should target and how.

Figure 3: Proportion of men and women who are empowered: Bangladesh Pilot



Source: Adapted from Alkire et al. (2013).

The WEAI provides a way to compare women's and men's empowerment in agriculture within and across different wealth classes, as illustrated in Figure 3. A pilot study carried out in Bangladesh illustrates that, although women in the bottom wealth quintile are disempowered, so are poor men. Poor women are much less empowered than women in the top wealth quintile. Greater wealth may increase empowerment but does not necessarily guarantee it.

This example highlights the importance of research that examines gender differences in the context of other aspects of social inequality.





THE LIMITS OF EQUAL ACCESS

Even when women are aware of important innovations and have access to productive resources, this does not necessarily lead to more gender-equitable outcomes in agriculture, unless women also have the power to make decisions about the resources in question. Increased power to make decisions in the household depends on changing deep-seated rules, or norms, that govern what social behavior is acceptable and ultimately whether inequalities are resistant to change or not.

In agriculture, gender norms govern how the labor of males, females, and children is used as well as what responsibilities and rights they have with respect to different crops, animals, and natural resources. Everything we do in agricultural research has an influence on gender norms, and these profoundly affect the potential impact of agricultural research.

Gender norms and potato farming in Malawi

Many obstacles to achieving gender equality in the control of productive resources originate in gender norms that define women as being less capable, less knowledgeable, and less suited to certain activities than men. Such norms strongly influence household decisions about resource use, as shown by a recent study involving potato farmers in two villages in Malawi (Mudege et al., 2015).

Most women in these villages engage in potato production as members of male-headed households. In general, their potato yields are only half those on men's plots. Potato improvement programs aim to close this

yield gap by offering women better access to extension training and quality seed potato. Yet, when invitations for training are extended to farmer groups, most of the participants are men. Based on the belief that women are less able to benefit from training, husbands do not allow their wives to attend, thus limiting women's ability to access new opportunities and use information effectively.

Here's a sampling of other gender norms in these villages that influence how men and women control resources and how they benefit from their use:

- To inform women about training opportunities, extension agents must first inform the husbands.
- The man is seen as the most intelligent person in the household: "He can hear for both of us."
- Women are not allowed to speak in public, so they are unable to get their questions answered.
- Women are not considered capable of hosting demonstration plots, as this requires scarce water resources over which they have no control.
- Land distribution norms result in men owning twice as much of the prime potato seed production land as women.

In a related study, women potato producers further mentioned that, according to the rules in their families, men are responsible for going to the market to buy potato seed (Mudege et al., 2015). Even when women were offered access to new opportunities, local gender norms positioning men as the most knowledgeable members of the household excluded women from participating in training and seed markets outside the village. Women also missed out on opportunities to gain knowledge about marketing new potato varieties.



Women coping with climate change

Contrary to the common perception that women are less capable of adopting new knowledge, a study on climate-smart agricultural practices showed that, even though women tend to be less aware of these practices than men, they are no less likely to adopt them, once they gain access to new knowledge (Jost et al., 2015).

According to another study, however, women's participation in meetings was not so important in determining equitable access to information and empowered decision making (Larson et al., 2015). Rather, the decisive factor consisted of the norms governing power relations between men and women, which shape how knowledge is shared and who uses it. The study was carried out at forest sites in Brazil, Cameroon, and Vietnam, where projects on REDD+ (reducing emissions from deforestation and forest degradation) were underway.

Women who actively used forest resources and played a role in rulemaking were involved in project meetings and REDD+ payment mechanisms. But, the projects failed to address gender norms that limit women to just being physically present in meetings without playing an overt role in decision making. As a result, women knew less about REDD+ project interventions than men and were less prepared to take advantage of the opportunities. They were especially disadvantaged by the projects' tendency to overlook the fact that women's use of forest resources differs from that of men. Clearly, women's participation was insufficient to correct this oversight because of the gender norms governing women's voice in public spheres and dictating gendered interests in forest use.



Recognizing women rice farmers in Latin America

Improving gender equality in terms of access to the information and inputs needed for agricultural innovation depends on how development agencies define the recipients of services such as credit and extension.

In a study of rice farmers in three Latin American countries (Bolivia, Ecuador, and Peru), growers broadly subscribed to the commonly held norm in this region that women are not rice farmers (Twyman et al., 2015a). During the implementation of a survey in Peru, for example, community leaders informed enumerators that most of the women selected were not rice farmers, and male rice farmers were interviewed instead, even though women constitute about 20% of the total membership of irrigation cooperatives.

After similar situations arose in Bolivia, researchers decided to expand the proportion of women interviewed in Ecuador. They found that women are involved in many aspects of rice production as unpaid family workers and supervisors as well as hired laborers – for land preparation, weed control, various agronomic practices, and harvesting.

One woman commented at the end of the interview, "I have more activities related to rice production than I realized."

This study illustrates the importance of equal access in challenging normative definitions of who is a farmer.



THE BENEFITS OF ENHANCED COOPERATION FOR WOMEN AND MEN

Development interventions that target women in an effort to increase their income or bargaining power often assume that benefits are shared equally within the household, or that the household “as a whole” will benefit. In practice, some members of the household gain more than others, and there may be resistance to programs that attempt to challenge gender norms by, for example, increasing women’s sole ownership and control of assets.

Research, however, shows that, in societies where women traditionally do not own major productive assets, women may build up their asset base by accumulating assets jointly with men. Although a [project on Bangladesh’s dairy value chain](#), was targeted to women, the [study](#) showed that most increases in asset ownership were found in jointly owned non-agricultural productive assets, not in livestock assets that women owned exclusively. This suggests that participation in the dairy value chain project enabled households to diversify their asset portfolios, while also increasing joint ownership of those diversified assets.

At the outset of the project, men owned about half the cattle, while another 40% were jointly owned, with the remainder in the possession

of women. Even though husbands continued dominating key decisions about livestock production and marketing overall, significantly, women made more joint decisions with their husbands regarding livestock care and their own mobility. Although the project may not have done much to change gender norms in this context, even the modest impacts observed as a result of the dairy value chain projects indicate small moves toward gender equality.



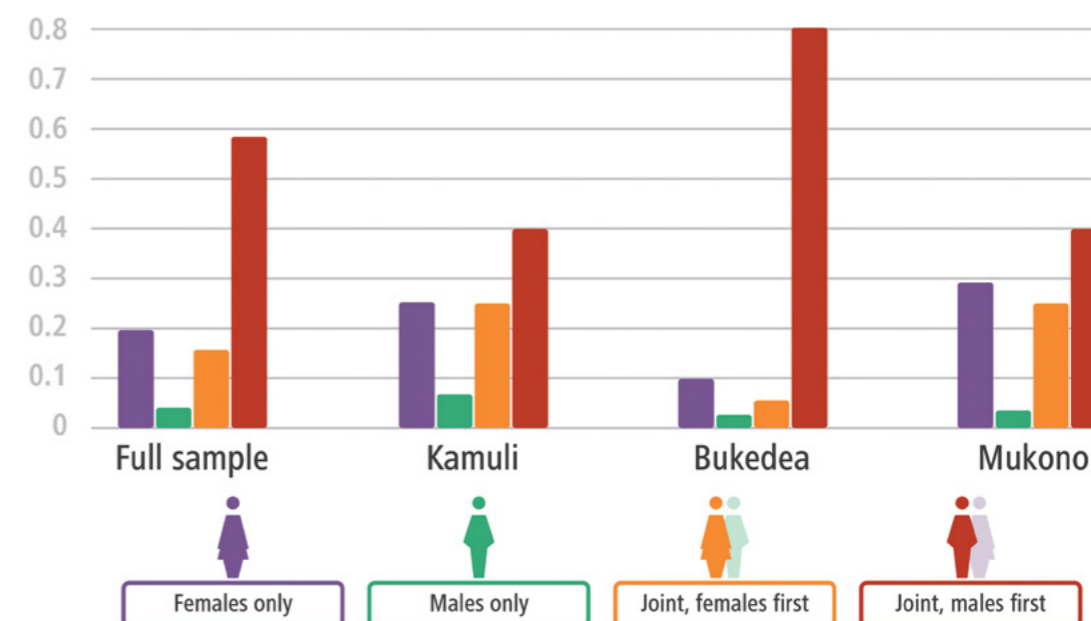
Reinforcing shared outcomes

The likelihood of cooperation between different members of the household depends on various factors, including the type of resource – that is, how divisible it is and whether joint management is needed. Since dairy cattle require intensive management, shared responsibility is common and can be leveraged to increase gender equality, as was done in Bangladesh.

Research in Tanzania also showed how joint ownership of livestock led to improved management and directly strengthened food security (Galiè et al., 2015). Men and women who co-owned resources mentioned the importance of managing them together.

Effective engagement with both genders is possible in other contexts as well. A case study in Uganda on the uptake of vitamin A-rich, orange-fleshed sweet potato found that adoption was highest in plots over which men and women had joint control and in which women took the lead in deciding which crops were grown (Gilligan et al., 2014).

Figure 4: Distribution of control over crop-choice decisions in household parcels. "Who decided what to grow on this parcel?"



Source: Adapted from Gilligan et al. (2014).

As shown in Figure 4, adoption was lowest in plots controlled exclusively by men.

The question this and other CGIAR gender research prompts us to ask is how we can devise strategies and frame interventions that reinforce collective action and thus enable households to achieve shared outcomes, with support from both men and women.



Collective action to adopt new groundnut technology

Sequential studies carried out in three villages of India's Maharashtra State illustrate the benefits of strengthening men's and women's cooperation within and between households (Bantilan and Padmaja, 2008). The studies examined the adoption of new technology for the production of groundnut, which is considered a women's crop in this region. Though the technology boosted yield by 38%, adoption was initially limited to a few large landholders. Most farmers lacked the capital to purchase seed, seed drills, and sprinklers for optimal use of water. The technology also created more work for women, while increasing men's presence in marketing activities.

The small group of early adopters was on the verge of discarding the technology when things changed. Under a government policy designed to improve the well-being of women and children in rural areas, village women's self-help groups were formed for savings and micro-credit. Local farmers associations had previously been set up to facilitate the purchase of inputs, but these were dominated by men, who were

mainly interested in the financial viability of the new groundnut technology and in gaining control over market-related activities.

Women began using the self-help groups to express their concerns about increased demand for their labor resulting from adoption of the new technology. Those who provided unpaid family labor were especially vocal, while landless or semi-landless tribal women, who supplied most of the field labor, saw technology adoption as a source of new employment. As women became more proactive, the men began inviting them to take part in meetings of the farmers association and, likewise, some women's groups invited men to attend their meetings.

Group membership strengthened women's bargaining position in both field work and household decision making about how to spend increased income from groundnut production. The different but complementary interests of men and women prompted them to cooperate, and this transformed gender relations. While the wages of women laborers increased, men and women worked together to access credit, pay long-term debts, and invest in new productive assets.



African shea nuts and the value of knowledge sharing

Cooperation between women and men may be prompted by the need to share knowledge or labor, as illustrated by a *gender study* focusing on conservation of the African shea tree in Burkina Faso (Elias, 2015).

Although men are more visible as tree managers, pruning or felling shea trees during land clearance for agriculture, women provide valuable knowledge that guides these activities, and they have acquired this knowledge by collecting shea nuts and transforming them into butter, which is women's most important source of dietary fat.

As described in a *recent blog post* (Elias, 2014), the study revealed that gender norms result in men and women having both different and overlapping knowledge about this resource. Whereas most women believe that the best shea nuts for making butter always come from the same trees, men do not consider this to be their concern and are therefore unable to identify trees producing good-quality nuts. When it comes to tree management and conservation,

however, men and women collaborate and consult with each other to achieve better informed management strategies.

Rising demand for shea butter in international markets has led to development projects that promote collective marketing. In order for these projects to foster gender equity, they need to work with both men and women, based on an understanding of the different roles they play and how this influences intra-household knowledge sharing. As the value of shea butter increases, gender norms governing who produces and sells the butter and who knows how to select the best trees will no doubt change. Already, men are showing greater interest in the shea nut trade and seeking to acquire expert knowledge about nut quality from their spouses.



Changing gender norms through transformative interventions

In cultures in which gender norms are very restrictive for women, group awareness training that includes entire families can foster cooperation and encourage men to support women's empowerment. This is especially important in situations, like that of the shea butter producers described earlier, in which men and women have different knowledge of key resources.

Participatory action research has proven effective in strengthening women's skills and their involvement in tasks that had previously been considered men's exclusive domain. Research on aquatic agricultural systems, for example, shows that women's involvement has given rise to increased recognition of their role as farmers (Cole et al., 2014).

In Bangladesh, a project targeting small-scale aquaculture technology to women came up against restrictive gender norms, which dictated that fish farming is a male responsibility (Morgan and Choudhury, 2015). In order for women to invest labor and receive training in this technology, they needed household consent. Group training helped change the perceptions of women's capabilities, but their participation in aquaculture also increased their workload and resulted in men withdrawing from agricultural work, based on the assumption that women could do all the work on their own.

The solution was to work in small groups that included different family members and involved sensitivity training on gender relations. This fostered technology adoption by strengthening women's cooperative relationships with men as well as with other women. As a result, women gained status and more of a voice in household decisions.



Role reversal in Tanzania

In a project on dairy goats and root crops in Tanzania, including resource-poor women in collective action groups proved to be important for reducing the obstacles to more gender-equal distribution of benefits (Brandes et al., 2015; Galiè and Kantor, 2015, forthcoming). Crucially, the project also undertook a deliberate strategy of gender sensitization, aimed at changing local norms and attitudes, while involving women in group leadership.

Another key measure was to require registered co-ownership of goats obtained through the project. At the outset, men were more in control of larger livestock and cash crops. Even subsistence crops that had traditionally belonged to women came under male control once they were commercialized.

Now, women have joint ownership of goats and crops, and the gap in asset ownership between men and women has narrowed. Improved technologies for goat rearing were implemented jointly by men and women, who shared more of the tasks involved. Women and children were still mostly in charge of the dairy goats, which had to be kept in household courtyards. Even though

these new goats involved more work, women were keen to adopt them. This gave women more reliable access to goat milk and increased their income, leading to improved household food and nutrition security.

Despite these successes in increasing the independence, decision making, and food security of participants, especially women, the changes were limited in scope and constrained by persistent gender-normative roles. An evaluation of the project's gender strategy revealed that, in order for more substantial and long-term changes to take place, gender analysis in all project activities must be coupled with participatory and transformative approaches that lead to women's empowerment and also influence the wider social environment.



A winning strategy for women and men

Across the developing world, agricultural innovations are changing the balance of power in gender relations within households and whole communities. The risk is that these changes will only worsen current patterns of gender inequality.

CGIAR research demonstrates that it is possible to mitigate the risk by implementing strategies designed deliberately to change the restrictive gender norms and customs that perpetuate unequal asset ownership. Promoting cooperation that enhances mutual benefits for women and men, therefore, looks like a winning strategy.

Further reading

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