Takeaways from 20 years of gender and rural development research at IFPRI

It’s been 20 years since the Beijing Declaration and Platform for Action launched an agenda for gender equality as a human right, a condition for social justice, and a “necessary and fundamental prerequisite for equality, development, and peace.” Beijing set its sights on removing all barriers for women’s equal participation in public and private spheres. The past twenty years have provided the opportunity for significant learning about how to do so, in a vast range of “spheres.”

In this context of looking back to look forward, we take stock of research at IFPRI that contributed knowledge on how to advance gender equality by generating evidence from action, and compelling action from the evidence produced.

Below are key takeaways from the last 20 years of IFPRI gender research, organized by theme:

- unpacking the “black box” of household decision making
- understanding the impact of resources controlled by women
- closing gender gaps in agricultural productivity
- access, control, and ownership of assets
- land rights
- legal institutions and governance
- groups and social capital
- sustainability
- shocks and climate change
- nutrition and health
- violence against women
- women’s empowerment
- decision making, revisited
- improving gender data

Most of the articles are published in peer-reviewed journals (reference list available at the end of this document), but the hyperlinks provided go to the open access versions of the publications, except where noted with an asterisk.

**Household decision making: unpacking the “black box”:**

- Men and women within households do not make decisions “as one”; they do not always pool resources or have the same preferences. Therefore, it matters who within the household is targeted for development interventions (Haddad et al. 1997); increasing women’s control of resources is associated with better education, health, and nutrition outcomes for children (Quisumbing, ed. 2003). These findings from IFPRI’s gender research are used to draw out Implications for practitioners and policymakers across a wide range of programmatic areas in Quisumbing and McClafferty (2006).
- Across societies as diverse as Bangladesh, Ethiopia, Indonesia, and South Africa, assets at marriage influence men’s and women’s bargaining power within marriage. In Bangladesh and South Africa, women’s assets increase expenditure shares on education, while in Ethiopia, men’s assets have this effect (Quisumbing and Maluccio 2003)*.
- Bargaining power affects some, but not all, aspects of individual welfare within the household (Fafchamps, Kebede, Quisumbing 2009). In Ethiopia, the relative nutritional status of spouses is associated with differences in cognitive ability, independent income and asset devolution upon divorce. Women’s empowerment benefits child nutrition and education. All in all, bargaining power may be weakly
associated with some aspects of intrahousehold welfare because surveyed households are poor and have little room for disagreement over consumption.

**Human capital and resources controlled by women:**

- An important example of evidence to action, in 1997 the Government of Mexico, drew on the findings from the intrahousehold literature that resources under women’s control are important for child welfare for the design and implementation of PROGRESA (now called Oportunidades). PROGRESA was a large, conditional cash transfer program targeting transfers to the mother within the household, conditional on children attending school and going to health clinics. A subsequent evaluation of PROGRESA showed the program increased enrollment rates in secondary education for girls and yields positive impacts on child health and nutrition, educational attainment, and lifetime earnings of the poor (Skoufias 2001).

- The findings of the evaluation of PROGRESA, in turn, influenced other countries to follow suit. In *Conditional Cash Transfers in Latin America*, Adato and Hoddinott (2010) analyze evidence from case studies of CCTs in Brazil, Honduras, Mexico, and Nicaragua, considering their costs, impacts on education, health, nutrition, and food consumption, and how CCT programs affect social and gender relations.

- Hallman (2003) finds that in Bangladesh, maternal and paternal shares of assets acquired before and during marriage have different impacts on boys’ and girls’ health. A higher share of current assets held by fathers reduces boys’ illness days, while a higher share of pre-wedding assets held by mothers’ reduces girls’ morbidity.

**Closing gender gaps in agriculture:**

- Women play important and varied roles in agriculture, but they are constrained by two important types of gender gaps: women have unequal access, relative to men, to productive resources, and there is insufficient information about the roles and resources of women and men. Closing these gender gaps would be good both for women and for agriculture (eds Quisumbing et al 2014).

- In a critical review of recent efforts to increase poor female farmers’ access to and control over productive resources, Quisumbing and Pandolfelli (2010) identify key strategies to address gender-based constraints in accessing productive resources and highlight promising approaches tested in the field.

- Peterman et al (2011) investigate the puzzle of gender differences in agricultural productivity in Nigeria and Uganda and find persistent lower productivity on female-owned plots and among female-headed households. However, results depend on aggregation of gender indicator, crop-specific samples, agro-ecological zone and biophysical characteristics, which point to need for better data to unpack productivity gaps.

- Evidence from a review of micro-level studies on gender differences in access, adoption and use of non-land agricultural inputs globally in the last 10 years indicates that among technological, natural and human resources, women are consistently disadvantaged (Peterman et al 2015).

- In Ethiopia, production models did not show significance of access to extension services in affecting farm productivity, but it is the perceived usefulness of those services that statistically explains variation in farm productivity of both female and male heads of households. Quality extension service is significant in explaining female household heads’ productivity in barley, fruits and vegetables production and in explaining male heads’ productivity in teff, maize, enset and permanent crops (Ragasa et al 2013).

- Women farmers are more receptive to women communicators. Training and leveraging key women in the community is more likely to lead other women to adopt conservation agriculture than training key men in the community to transfer their knowledge (Klondylis et al 2014).
• Addressing gender in agricultural research requires moving beyond a focus on productivity, toward a broader view of agricultural and food systems that recognizes women’s priorities and distinct role in ensuring the food security of their households (Meinzen-Dick et al 2011).
• The implementation modality of agricultural interventions also matters: agricultural interventions disseminated through women’s groups in Bangladesh did better in the long-run to build women’s assets and improve women’s and children’s nutrition than those interventions targeted to households, and by default, men, even if income gains were larger in the household-targeted interventions (Kumar and Quisumbing, 2011; Quisumbing and Kumar, 2011).

Access, control, and ownership of assets:

• Being able to access, control, and own productive assets such as land, labor, finance, and social capital enables people to create stable and productive lives. For researchers and program implementers, Meinzen-Dick et al (2011) offer a conceptual framework to understand the gendered pathways through which asset accumulation occurs, including attention to not only men’s and women’s assets but also those they share in joint control and ownership.
• Results from eight studies across seven countries in South Asia and sub-Saharan Africa as part of the Gender, Assets, and Agriculture Project (GAAP) show that it is necessary to consider the gender dynamics related to individual and household assets when designing, implementing, and evaluating agricultural development projects (Johnson et al 2015; Quisumbing et al. 2013; Quisumbing et al 2015). The GAAP technical guide provides guidance on qualitative and quantitative tools to help researchers collect data and design and monitor projects to address the gender asset gap.
• Gendered use, control, and ownership of assets affect who within the household can participate in agricultural development projects, and how household members benefit from participation. Unless assets are transferred as part of the project, having the asset often determines who can participate, such as in a dairy value chain project in Bangladesh that aimed to increase productivity of smallholder dairy farmers (Quisumbing et al 2013).
• When men own the assets, they are likely to capture the majority of the benefits—unless project designers make a deliberate effort to change the distribution of benefits. Even when women are designated recipients of assets, such as livestock transferred in the BRAC Targeting the Ultra-Poor Program in Bangladesh, intrahousehold dynamics may change. Women retained control of the transferred livestock, but increased incomes were used to purchase more assets, which were controlled by men. Even if caring for the transferred livestock reduced women’s movement outside the home and control over income, beneficiary women also report “intangible” benefits such as increased social capital and, even with limited mobility, a preference for work inside the home given a hostile environment outside the home (Das et al 2013; Roy et al 2015).
• Asset-grabbing is oft cited as a human rights violation among widows in developing countries. Using nationally-representative data from 15 countries, Peterman (2012) finds that less than half of widows report inheriting any assets, and the proportion reporting inheriting the majority of assets is lower.

Land rights:

• Do women really own less than 2% of the world’s land? While the data point to large gender gaps in ownership and control of land in Africa and Asia, critical data gaps cloud our understanding of land rights, hindering our ability to clearly articulate a policy response to these inequalities (Doss et al 2015; Kieran et al 2015).
• Rapidly growing demand for agricultural land is putting pressure on property-rights systems, particularly in Sub-Saharan Africa, where customary tenure systems have provided secure land access. In Uganda, while many households report husbands and wives as joint owners of the land, women are less likely to be listed on ownership documents, and have fewer rights (Bomuhangi, Doss and Meinzen-Dick 2011).
• **Behrman, Meinzen-Dick and Quisumbing** (2011) further examine the gender dimensions of large-scale land deals, pointing out how those with undocumented property rights, especially women, are likely to be left out of negotiations over land transactions, even when their livelihoods are affected.

• What are the benefits when simple changes are made to land registration rules to account for gender? **Santos et al (2014)** examine impacts of a joint land titling and allocation scheme implemented by the Government of West Bengal in India and find that inclusion of women as co-owners lead to improved security of tenure, agricultural investments, and women’s involvement in food and agricultural decisions.

• Using data from land titling interventions in India, **(Savath et al 2014)** use the GAAP framework to assess how gendered dimensions of asset ownership relate to household livelihood strategies. Results point to a significant link between households with more food secure livelihoods and access to land, land ownership, and share of land owned by women.

• Can gender norms surrounding land rights really change? Yes they can, suggests a study from HKI’s homestead food production program in Burkina Faso, which made community land available to women through land leases, transferred small livestock to women, and taught them how to grow nutritious vegetables on their home gardens **van den Bold et al (2015).**

**Legal Institutions and Governance:**

• Changes in community-level women’s property and inheritance rights are significantly associated with women’s economic advancement over a 13 year span in northwestern Tanzania (**Peterman 2011**)*.

• In Ethiopia, marriage reform and legal reform can go hand in hand to empower women; better rights within marriage for women improve women’s well-being and girls’ schooling (Kumar and Quisumbing, 2015; Kumar and Quisumbing, 2012)

• Yet laws and regulations are not sufficient for gender equality and resilience. Even though Ethiopia implemented a highly successful reform of land rights that was gender sensitive, gender-related gaps in knowledge about the reform limited women’s adoption of both soil conservation practices and the planting of tree crops and legumes, important practices for climate-smart agriculture (**Quisumbing & Kumar 2014**).

• Although paralegal programs have the potential to improve women’s economic status through securing their land rights in Tanzania, we find limited success in the evaluation of a short-term program. Attitudes towards gender-equal land rights shifted only in communities where paralegals did not need to travel long distances to meet their clients (**Mueller et al 2015**). Qualitative work, which informed this RCT, assessed the efficacy of Community-Based Legal Aid activities (Behrman, Billings, & Peterman 2013).

• The Tanzania Land Law will shape how voluntary paralegal programs offer their services, but the education and curriculum mandates underlying the legislation on paralegals may jeopardize the effectiveness of these voluntary programs in rural communities (Billings, Meinzen-Dick, & Mueller 2014).

• A study of **gender and governance in rural services** in India, Ghana and Ethiopia identified strategies to providing more equitable access to public agricultural extension and domestic water, especially through different accountability mechanisms and factors that influence the suitability of different governance reform strategies that aim at making service provision more gender responsive.

**Groups and social capital:**

• In Bangladesh, women benefit from groups, such as credit groups, when climatic and other shocks occur, but women participate in fewer groups, spend fewer hours in group activities and are less active in decision-making. Policymakers should seek ways to increase the active participation of women in decision-making, rather than focusing only on increasing the number of women who participate in group activities (**Rakib 2015**).

• Despite the importance of group-based approaches to providing services and empowerment, participation in groups is often not gender-equitable. Men and women have different motivations,
constraints, and capacities for participating in collective action, which has important implications for the effectiveness of groups as well as the distribution of benefits to men and women (Pandolfelli, Meinzen-Dick, and Dohrn 2007)

Sustainability:

- Are women really “keepers of the earth”? The empirical evidence is more nuanced: sustainability requires men and women to work together to protect and enrich the natural resource base (Meinzen-Dick, Kovarik, and Quisumbing 2014).
- A behavioral experiment in rural Tanzania indicates that it is not only gender that matters for whether people contribute or take more than their share of natural resources, but the combination of gender and social status, with higher-status men taking more than their share, high-status women being fair under all circumstances, and low-status men and women being less fair when water becomes scarce (Lecoutere et al 2015)*.
- A comparative study of forest management in Kenya, Uganda, Bolivia, and Mexico found that higher proportions of females in user groups perform less well than mixed groups or male dominated ones, which may be related gender biases in technology access and dissemination, a labor constraint faced by women, and a possible limitation to women’s sanctioning authority. Mixed female and male groups offer an avenue for exploiting the strengths of women and men, while tempering their individual shortcomings (Mwangi, Meinzen-Dick and Sun 2011).

Shocks and climate change:

- Rural women and men are differentially affected by climate change. As most agricultural assets are owned by men, their asset base is more directly affected by climatic shocks, but women’s more differentiated needs for water access are also adversely affected. A wide variety of factors determines final impacts of climatic shocks on men’s and women’s assets (Quisumbing, Kumar, & Behrman 2011; Rakib & Matz 2014).
- Increasing resilience to climate change requires recognition that men and women have different perceptions of climate change and shocks, different needs, priorities, and preferences for adaptation, and different adaptive capacities. If women had the same access to information on climate-smart adaptation practices they are at least as likely as men to adopt these practices (Bernier et al 2015; Twyman et al 2014).
- Women have less access to agricultural technologies that support adaptation. In Mali, irrigation allowed men to increase their value of production almost enough to offset the negative impact of climatic shocks. Women, on the other hand, had limited access to irrigation or other farm technology, such as motorized tillers that would increase productivity (Beaman & Dillon 2014; Dillon & Gill 2014).
- Considerable work is needed to ensure that agencies implementing climate change adaptation programs on the ground have the knowledge, capacity, and incentives to successfully incorporate gender considerations into their programs. A key challenge is the lack of gender experts in government climate change adaptation programs (Ragasa et al 2014).
- Women are more risk adverse when taking decisions about agriculture, which negatively affects their adaptation to climate change. However, rural women value insuring against agricultural risk, although they have less capacity to face insurance purchasing decisions. Furthermore, evidence from West Africa shows that women may prefer different financial products to protect against other sources of risk, such as health risks associated with fertility and childcare, which men do not face (Clarke and Kumar 2015; Delavallade et al 2014).
- When women have no way to cope with income shocks, some turn to transactional sex; this may be the pathway by which droughts are increasing HIV prevalence in rural Africa (Jones, Gong, & Burke 2015).
Nutrition and health

- Why does protecting against shocks matter? Shocks, such as famines, may have different long-term impacts on women and men. Exposure to nutritional adversity in early life may have larger long-term impacts on women than men. Female survivors of the Great Chinese Famine (1959-1961) had a higher incidence of disability and illiteracy than males. The better health of male survivors reflects higher male excess mortality during the famine, but the culture of son preference explains the observed gender difference in the illiteracy rate (Mu and Zhang 2011)*.

- Evaluating the impact of El Salvador’s CCT program on a range of maternal and reproductive health outcomes, de Brauw and Peterman (2011) find robust impacts on outcomes at time of birth (skilled attendance and birth in facility), while no impacts are found on healthseeking behavior pre- and post-birth (prenatal and postnatal care).

- Using longitudinal data from China, Mexico, and Tanzania, Peterman et al (2013)* examine the relationship between pregnancy and four time-use outcomes, measured as hours spent in the past week on: (1) housework, (2) caregiving, (3) agricultural work, and (4) self-employment or nonagricultural work outside the home. The assumption that women decrease labor-intensive work during pregnancy needs revisiting.

- To examine the broader links between women’s status and nutrition, the 2009 Global Hunger Index (GHI) report examined correlations between the GHI and the 2008 Global Gender Gap Index. Higher levels of hunger are associated with lower literacy rates and access to education for women, and to health and survival inequalities between men and women. Reducing gender disparities in key areas, particularly in education and health, is thus essential to reduce levels of hunger and child malnutrition (von Grebmer et al. 2009).

Violence against women:

- There is no consensus across theories and empirical evidence on how cash transfers targeted to women affect intimate partner violence (IPV). Our results show some nuance in impact: while transfers in general lead to decreases in IPV results depend on a woman's status as measured by her education and her education relative to her partner's (Hidrobo et al 2013)*.

- While cash and in-kind transfers of equal size may have similar impacts on a household’s utility and consumption, differences across modalities could emerge in who controls the transfer or the likelihood of it being commandeered by one partner, and these differences could have implications on intrahousehold dynamics. We find that transfers lead to decreases in intimate partner violence and that cash is just as effective as food and vouchers at decreasing IPV (Hidrobo, Peterman, & Heise 2015).

- Peterman et al (2011) provide new estimates and analyze determinants of sexual violence in DRC that indicate sexual violence more generalized than previously thought, and suggest that future policies and programs should focus on abuse within families and eliminate the acceptance and impunity surrounding violence nationwide.

- Although international donor organizations and research institutes have become more engaged in research on sexual violence over the past decade, there is need for higher standards, funding and incentives to improve currently flawed estimates and inform programming responses (Palermo & Peterman 2011).

- Despite emerging evidence on the impacts of cash transfers on intimate partner violence (IPV) the pathways through which reductions in violence occur, remain under-explored. Qualitative and quantitative methods show that transfers decrease day-to-day conflict and stress; improve household well-being and happiness; and increase women's decision-making, self-confidence, and movement. While these factors are likely pathways through which transfers decrease IPV, positive impacts may hinge on specific program components and circumstances that may not exist in all settings (Buller et al 2014).
**Decision making, revisited:**

- Despite wide use of women’s decision making indicators, little has been done to explore what such indicators capture and how effective they measure program impacts on empowerment. There are large variations in how women are ranked in terms of decision making depending on how indicators are constructed; indicators are not consistently associated with other proxy measures of women’s empowerment or household welfare; and mixed evidence related to the impact of programs on women’s decision making indicators (Peterman et al 2015).
- Brazil’s Bolsa Familia conditional cash transfer has significant impacts on women’s decision making – and considerable heterogeneity in effects between rural and urban households and different domains of decision-making (de Brauw et al 2014).
- The importance of joint decision making is illustrated by a study of the adoption of biofortified oranges sweet potato in Uganda: adoption was higher on plots that were jointly owned, but where the woman was the primary decisionmaker on what to grow (Gilligan et al. 2013).
- The intrahousehold literature has shown that households are not unitary, but households do face many collective action situations, with members working together to produce livelihoods and allocate goods. Doss and Meinzen-Dick (2015) draw on the literature on collective action in natural resource management to identify factors that encourage cooperation that can be applied to household cooperation as well.

**Women’s Empowerment:**

- Though women’s empowerment is considered a key pathway for alleviating poverty, dimensions of women’s empowerment are often not rigorously measured. A paper by van den Bold, Quisumbing, & Gillespie 2013) reviews definitions and indicators of women’s empowerment used in the literature, and presents evidence of impacts of three types of interventions – cash transfers, agricultural interventions, and microfinance – on women’s empowerment, nutrition, or both.
- The Women’s Empowerment in Agriculture (WEAI) is the first comprehensive and standardized survey-based index designed to measure the empowerment, agency, and inclusion of women in the agricultural sector. An overview of the WEAI methodology and development, as well as pilot findings from three countries, are given by Alkire et al. (2012).
- An analysis of Women’s Empowerment in Agriculture (WEAI) scores from thirteen USAID Feed the Future countries finds that the three greatest constraints to women’s empowerment are lack of access to credit, heavy workloads, and low levels of group membership. Women’s empowerment scores are also found to be strongly associated with household educational achievement, income, and maternal behavior (Malapit et al 2014).
- Investigating the linkages between women’s empowerment and the nutritional status of women and children in Ghana, Malapit and Quisumbing (2014) find that improved nutritional status is not necessarily correlated with being empowered in all the domains of empowerment and that different domains may have different impacts on nutrition.
- A paper using household survey data from Nepal (Malapit et al. 2013) investigates the impact of women’s empowerment in agriculture and production diversity on dietary diversity and anthropometric outcomes of mothers and children. Women’s empowerment mitigates the negative effect of low production diversity on maternal and child dietary diversity and height-for-age z-scores, indicating that women’s empowerment has greater potential to improve nutrition outcomes in households with less diverse production.
- Sraboni et al. (2013) examine the relationship between women’s empowerment in agriculture and two measures of household food security. It finds that overall WEAI score, the number of groups in which women actively participate, women’s control of assets, and a narrowing gap in empowerment between men and women within households are positively associated with calorie availability and dietary diversity.
Improving Gender Data

• IFPRI’s research over the years has made great strides to improve the quality of data on gender. Part of this has come from collecting survey data from both women and men within the household, such as through the Women’s Empowerment in Agriculture (WEAI). This has now led to the development of many databases with sex-disaggregated data, such as the nationally-representative Bangladesh Integrated Household Survey (BIHS) 2011-2012, or the longitudinal Ethiopian Rural Household Surveys (ERHS), the Bukidnon Panel Survey, and the Bangladesh Chronic Poverty and Long-term Impact Dataset.

• Doss and Kieran (2014) set out some simple and achievable steps for collecting relevant sex-disaggregated data for agricultural research, including baseline understanding, identification of constraints, opportunities, and responses to risky environments, as well as assessing impact of agricultural programs.

• Other contributions have been through integration of qualitative and quantitative methods. The Gender, Agriculture and Assets Project (GAAP) toolkit contains materials to help researchers and practitioners use mixed methods to collect and analyze gender and assets data, and Bryan et al. (2014) provide a research guide for gender-disaggregated analysis of climate change impacts and adaptation.

• However, there is still a need for better sex-disaggregated data, especially at national level. Results of interviews with African gender and health experts determined that there is a need for more gender data related to economic empowerment, knowledge of legal rights and recourse, participation in decision making, attitudes and social norms, and adolescent girls (Heckert & Fabic 2013*). Stay tuned for more contributions to address this and other critical gaps in the evidence.

Reference list of IFPRI gender research


Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark. Available at: https://cgspace.cgiar.org/bitstream/handle/10568/51391/WP83.pdf

