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POLICY LESSONS ON AGRICULTURE

GENDER INNOVATION LAB FEDERATION EVIDENCE SERIES

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GENDER INNOVATION LAB FEDERATION

The Gender Innovation Lab (GIL) Federation is a World Bank community of practice coordinated by the Gender Group that brings together the Bank's five regional GILs: Africa (AFR), East Asia and Pacific (EAP), Latin America and the Caribbean (LAC), Middle East and North Africa (MNA), and South Asia (SAR). Together, they are conducting impact evaluations of development interventions to generate evidence and lessons on how to close gender gaps in human capital, earnings, productivity, assets, voice and agency. With over 188 impact evaluations in 66 countries completed to date, the GIL Federation is building the evidence base for governments, development organizations, and the private sector to increase uptake of effective policies that address the underlying causes of gender inequality.

Gender productivity gaps in agriculture are large around the world, even though women comprise 40–50 percent of the agricultural labor force in developing countries. Gender differences in agricultural productivity can be as high as 66 percent and can cost countries up to $105 million annually. [1,2] Women farmers tend to produce lower output per unit of land than men farmers because of gender-specific constraints, such as unequal access to farm labor, agricultural inputs, lower literacy, childcare responsibilities, limited involvement in cash crop production, and lower participation in farmers' groups. Women farmers are concentrated in the lower levels of agricultural value chains and are less likely to be active in commercial farming than men. Restrictive gender norms underlie occupational sex-segregation in agriculture, leading women to concentrate in low-value crops.

Research by the Africa GIL indicates that when women manage cash crop plots—and have access to the same inputs and resources as men—they are able to be as productive as their male counterparts.[3,4] **The GIL Federation is generating rigorous evidence around the world to understand what works, and what does not, in narrowing gender productivity gaps and helping farmers reach their potential.** This note presents evidence on three key findings based on impact evaluations.

FINDING 1. EXTENSION SERVICES CAN BE MADE MORE COST-EFFECTIVE FOR WOMEN IF THEY FOCUS ON WOMEN FARMERS' UNIQUE NEEDS

Access to extension services is significantly lower for women than men. Household responsibilities, mobility constraints, and cultural factors further hinder women's participation in training activities. Moreover, extension agents primarily work with the main household decision maker, who is usually a man, and services do not consider the differential constraints faced by women farmers. As a result, women farmers mainly receive second-hand information from their husbands, and this information may not be attuned to their needs if their agricultural practices and crop choices are different from those of men farmers.

A randomized controlled trial (RCT) by the Africa GIL in rural Uganda shows that using women's social networks can improve the efficiency of extension services.[5] The study compared a standard agricultural extension services program targeting women and men with a social network intervention that only targeted women. These were randomly allocated at the village level. The social network intervention connected the least-productive 30 percent of women farmers to some of the most productive women farmers in their own villages. The study finds that, on average, the social network intervention was less costly than the traditional program

and led to a larger increase in productivity for women farmers.

The Africa GIL conducted a quasi-experimental impact evaluation of a program in Ethiopia that focused on the differential constraints faced by women farmers.[6] The program trained staff on specific gender issues so that agents would be able to spot potential differences in how women and men farmers responded to services. The study uses a panel of households and finds that the program increased the overall area of cultivated land and helped both women and men farmers switch to more commercial, market-oriented agriculture. The impacts of the program benefited men and women equally, which differs from previous traditional extension programs that proved less impactful for women. However, given that women farmers were significantly worse at baseline, the program did not manage to close gender gaps in productivity.

In Mozambique, the Africa GIL conducted an RCT to test the effects of combining traditional agricultural extension training targeted at women farmers with psychology-based personal initiative (PI) training on developing a growth-oriented, proactive mindset.[7] One treatment arm was offered only the standard agricultural extension program, and the other treatment was also offered PI training, while the control group was not offered any intervention. Results show that women offered both extensions services and PI training were significantly more likely to run profitable off-farm businesses and increase their earnings. There is evidence that PI training enhanced the effectiveness of agricultural extension, leading to large increases in area cultivated and the adoption of fertilizers, pesticides, good farming practices, and cash crops. This led to greater overall harvest value and sales.

FINDING 2. COUPLES' TRAINING CAN FOSTER WOMEN'S PARTICIPATION IN CASH CROP PRODUCTION

Training provided jointly to couples can address behavioral barriers to cooperation that keep women away from high-value agricultural production. The Africa GIL conducted a study in Côte d'Ivoire to estimate the effect of inviting spouses to a traditional agricultural extension training for rubber producers.[8] The study randomized whether the training was offered to just husbands, to both husbands and wives, or neither (control group). Both treatment arms received subsidized high-yield seeds, while the control group did not receive any intervention. The study finds that farmers offered the couples' agricultural extension training planted 20 percent more rubber seedlings compared to when the man alone was offered the training and were able to maintain pre-program levels of agricultural production on older trees and other crops. This occurred through couples' group households increasing their labor hours and agricultural input use as a result of higher-quality agricultural planning and a reduction in gendered task division. This study shows how including women in economic planning can improve the efficiency of household farm production and promote higher levels of investment.

Another study by the Africa GIL in Uganda finds that engaging men and women together through behavior change and economic interventions can foster women's participation in cash crop production.[9] Households were randomly assigned to receive either a behavior change intervention, an economic intervention, the behavior change intervention followed by the economic intervention, or neither intervention. The behavior change intervention consisted of a couples' workshop centered on communication and cooperation between spouses, gender-sensitivity training, and women's participation in cash cropping. The economic intervention involved project staff visiting households in-person and providing a small economic incentive to encourage men to transfer contracts into their wife's name.

The study finds that engaging men and women together, through either intervention, not only empowered women, but also boosted their quality of life and that of their husbands. Combining the interventions offered no additional benefit beyond the effect of each single intervention, indicating the different interventions act more as substitutes than complements. However, the impact of the interventions occurred through different channels, with the behavior change intervention boosting empowerment through agency and the economic intervention enhancing women's access to both resources and agency. This indicates that the ultimate goal of an intervention and the different pathways to reaching it should be considered in the design of programs aiming to increase women's empowerment.[10]

FINDING 3. LEVERAGING DIGITAL TECHNOLOGIES CAN REDUCE INFORMATION BARRIERS AND ENCOURAGE WOMEN TO ACCESS NEW MARKETS

The LAC GIL conducted an RCT in Guatemala to test whether information diffusion through digital technologies can increase women's market participation in rural areas.[11] During the height of the COVID-19 pandemic, women in randomly selected treatment villages received videos and text messages on their phones via WhatsApp with information about the National School Feeding Program (SFP), which buys half of the schools' food from local family farming.

Women in control villages received a placebo video. This light-touch digital information campaign resulted in increased knowledge about SFP among the treatment group, especially for women not reached by traditional extension programs. Having more information enabled women to increase their sales as well as improve intra-household decision making about business issues.

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