IDENTIFYING GENDER-SPECIFIC BARRIERS AND INTEGRATING GENDER INTO DEVELOPMENT OPERATIONS THROUGH IMPACT EVALUATION

Context

Innovation in agriculture is crucial to meet the food requirements of Africa’s growing population. Although agricultural intensification has typically been the standard approach to increase yields, there has also been a recent trend to emphasize sustainable land management (SLM) practices. SLM can offer higher yields, more efficient water use, increased resilience to climate variability, and enhanced soil fertility. However, SLM outreach tends to overlook women, despite their major role in the agricultural workforce. In many settings, married women cultivate plots separate from those of other family members. They face different challenges to productivity, such as deficiencies in inputs and weak property rights. They also have low access to extension services.

Extension is the traditional vehicle of technological diffusion, yet it often caters to men. Social stigma can decrease information supplied to women and it also decreases women’s demand for information. In societies with strict norms on gender roles and male-female social interactions, women may be more effective interlocutors to other women.

Intervention

In 2007, the government of Mozambique, with support from the World Bank, invested heavily in the agricultural extension network in five districts in the Zambezi Valley, an area with high agricultural potential. The government increased the number of extension agents per district and provided them with housing and training. In 2010 and 2012, agents received technical training on eight SLM practices (mulching, crop rotation, strip tillage, microcatchments, contour farming, row planting, improved fallowing, and intercropping).

The training lasted three days, split evenly between in-class lectures and field demonstrations. Male messengers, also known as contact farmers, served as points-of-contacts between extension agents and community members. This model assumes

Did you know?

Women are major contributors to Africa’s agricultural workforce, yet they lack basic farm inputs, secure property rights, and access to information on innovative technologies.

Improving women’s access to these factors may enhance overall productivity and food security.

RESEARCHERS
Florence Kondylis, DECIE, World Bank Group
Valerie Mueller, Development Strategy and Governance Division, International Food Policy Research Institute
Glenn Sheriff, National Center for Environmental Economics, U.S. Environmental Protection Agency
Siyao Zhu, DECIE, World Bank Group
that information flows efficiently from (1) extension agents to contact farmers, and (2) contact farmers to other farmers. The intervention was designed to test these hypotheses: in treatment communities, contact farmers were directly trained on the SLM practices, following the same training as the extension agents. The gender aspect of communication was explored, as women contact farmers also received the training in a subset of the treatment group.

Evaluation Methodology
A random subset of existing male contact farmers and new female contact farmers was selected to receive a centralized training on SLM practices, identical to that received by extension agents. The intervention was rolled out in five districts of the Zambezi Valley, and the training was delivered ahead of planting in both 2010 and 2012.

The treatment group consisted of 150 randomly assigned communities out of 200 eligible; the remaining 50 served as the experimental control group. The training intervention equipped male messengers to teach new techniques. Even if it improves information dissemination, the information may not reach females. To better understand whether this was indeed the case, a second experimental treatment randomly selected 75 communities within the first treatment group to have a second, female messenger, trained with a specific mandate to teach women SLM.

Key Findings
Results were tallied around three indicators—information dissemination, awareness of the existence of microcatchments as an SLM technique, knowledge of how microcatchments work and adoption of microcatchments.

Finding 1: The presence of a trained male messenger does not significantly increase information dissemination to female farmers.

Finding 2: The awareness and adoption indicators for male farmers, who experience 10.6 and 6.4 percentage point increase, respectively, suggest that female farmers suffer from a gender bias in information dissemination by lone, trained male messengers.

Placing women in extension positions may help other women overcome barriers to adoption posed by inequitable access to agricultural services or exposure to inapt information. Evidence suggests that female leaders may promote policies prioritized by women and cause women to become more engaged citizens. Female messengers not only may improve communication to women but also may better meet their informational needs.

Policy Lessons
Training and placing women in extension delivery positions in agriculture benefits the broader population of women in terms of technology awareness and adoption.

Diffusing agricultural information through traditional, male-dominated extension networks perpetuates gender inequities in agriculture.

Investing in female-cultivated land has the potential to enhance food security in developing countries.

Persistent and specific policy actions can place women at the center of the global development agenda, taking on more leadership roles.