5. Improving Agricultural Extension for Women: The Case of Kenya

Absolute poverty is disproportionately concentrated among women, in rural areas, and in the agricultural sector. Thus, a key part of a strategy for poverty reduction must be to improve the productivity and incomes of women farmers.

The crucial importance of a solid agricultural extension program for successful rural development has been appreciated by development specialists for decades. Support for agricultural extension has played a central role in the activities of most multilateral and bilateral development agencies. Historically, agricultural extension programs played a vital development role in the United States, one of the world's great agricultural productivity success stories.

That is the good news. The bad news is that extension in developing countries has been aimed almost exclusively at training men, but women do most of the agricultural work. In sub-Saharan Africa, women generate some 70% of staple foods production. They are also active in growing and marketing cash crops, in food processing, and animal husbandry.

In part, the prominent role of women in agriculture reflects long tradition; but women's roles have expanded in recent years as men have increasingly migrated to urban areas and taken on other nonagricultural tasks. Where men and women both do agricultural work, there still tends to be a gender-based division of labor. As a result, techniques relevant to the work of men are often not relevant to the work of women. Where they are relevant, for various reasons men tend not to pass on what they have learned to their wives (what has been called "trickle across").

The role of women in agriculture has been widely publicized in development circles, but the message has not always gotten through. The first breakthrough was Ester Bosrup's 1970 book, *Women's Role in Economic Development*. Her work began a trend of important research in this area and a slowly dawning realization on the part of the profession that the issue of women in agriculture was at the very core of prospects for genuine development—and not a narrow concern of a faction of feminists, as some perceived it at first.

Moreover, the focus on training men has generally been more by default than by deliberate design. For example, training is copied from developed countries like the United States, where men do the majority of agricultural work; and in LDCs male extension agents may simply be more comfortable talking to men. But the agricultural extension program response to the problem has been all too slow. And in some countries, program design reflects explicit bias against providing
women with too much independence.

A major problem is the segregation and exclusion of women in large parts of Africa and Asia. Gender relations in rural areas are characterized by extreme inequality. In many cases this is a symptom of backwardness and an unacceptable violation of human rights. But one does not have to be an ardent cultural relativist to recognize that the development specialist usually can have little impact on culture.

In the present period, before progress on women's rights can be made, development specialists will have to learn to work around such practices. One emerging strategy is to make use of radio and television; audiotapes and, increasingly, even videotapes. Women may listen to or watch the materials in groups, in houses or at village centers. Katrin Saito reports that female farmers question extension agents in Ghana about subjects they have heard discussed on the radio.

A World Bank study showed that most male African extension agents perceived women as "wives of farmers," rather than as farmers in their own right. And almost all extension agents are themselves male. Female agents must be trained. This is only one reason why education of rural girls is a key in development (see Case 16).

Agricultural extension for women is interconnected with a number of other important rural development and women in development issues. Five key issues are:

1. Human capital. Women have far less education than men on average in most rural developing areas. The bias in agricultural extension may in some part be a bias to train the more educated spouse; but the practice has also exacerbated this relative deficiency.

2. Appropriate technology. Because women tend to be involved in different farm activities than men, they will often have different technology requirements. Most technology development has been focused on activities of men.

3. Land reform and agrarian design. On average, women farm on much smaller, more fragmented plots than men; are less likely to have secure ownership; and often cultivate less fertile soil. This distribution is likely to be inefficient as well as distributionally inequitable.

4. Credit. Women have little access, if any, to financial credit, a key input in efficient agriculture.
5. Work requirements. Many women who work as many hours per day as men in agricultural pursuits also have to perform several hours of domestic work that does not apply to men. Working days for poor women farmers in Africa have been estimated at 16 to 19 hours. The attention mothers can give to children will be limited by long agricultural hours. The implication may be that women should receive an even higher priority for technical education and technology development and access. Duncan Thomas reports evidence that fathers allocate resources disproportionately toward sons and mothers toward daughters in countries as disparate as the United States, Brazil, and Ghana. The priority of women’s agricultural productivity goes hand in hand with the priority of educating girls.

The latter point has particular relevance to the design of structural adjustment programs. As Rekha Mehra has noted, one intent of structural adjustment programs in many African countries is to encourage the shift to exportable cash crops. But these are the crops over which men tend to have control. A woman's profit share after working with these crops may be as little as one part in twenty. But she is still responsible for growing consumption crops and feeding her children. Mehra concludes that structural adjustment programs tend to place even more time requirements on women already burdened with 16 hour days and longer.

Many development specialists have called for the removal of agricultural price controls to allow the prices farmers receive to move toward world market levels. This would give more accurate price signals to farmers, and encourage a switch to more economically productive crops. But an International Food Policy Research Institute (IFPRI) study showed that after diversification to commercial crops, Kenyan women still try to grow the same amount of consumption crops. Thus, more is needed than price adjustments; reform must address structural problems faced by women that will prevent them from responding to price signals efficiently. A good example is the larger profit share taken by the husband and often not shared with his wife or wives. But as David Sahn and Lawrence Haddad have stressed, blame cannot be placed primarily on structural adjustment programs for the predicament of women farmers in Africa today; conditions for women were abysmal prior to reform.

None of these problems are limited to Africa. For example, Carmen Deere, in a review of 13 Latin American agrarian reform experiences, found that most have directly benefited only men. This was mostly because farmers were thought of as men and the reforms were designed to target only men as beneficiaries. Her review found that women only benefit in the rare instances when their
well-being is a specific objective of the reform and rural women are made an explicit part of the design of programs from the outset.

In sum, taken as a whole these points show why women farmers need the help of extension programs. It is also efficient to do this because of an application of the law of diminishing returns to training for men. The evidence suggests that the theory of "trickle across"—that trained husbands will in turn train their wives—rarely occurs in practice, at least in Africa.

At last, progress is being made. Kenya provides an example both of the necessary ingredients of progress, where at least some improvements have been made, but also of the great deal of work that remains to be accomplished. The country has at least made progress on reducing its extreme gender bias.

The Ministry of Agriculture operates a National Extension System (NES) in concert with its agricultural research efforts. Before 1983, the NES worked almost exclusively with male farmers, while a separate "home economics branch" advised women on household and cottage industry management, and domestic hygiene, but only peripherally on farming matters. Research by the Institute of Development Studies in Nairobi, and other agencies, confirmed that extension was much more likely to have reached men than women farmers. In 1983, Kenya's present training and visit (T&V) system was established with the express purpose of training women as well as men in efficient agricultural practices.

The design of the T&V system is very creative. It is based upon providing "technical messages" to selected "contact farmers," who are regularly visited on their farmsteads. Unfortunately, resources are insufficient to reach all farmers; and if the T&V system did try to reach all farmers, the quality of training would be poor. As a result, only 10% of all farmers are chosen as "contact farmers." These selected participants are expected not only to adopt advice brought to them in these "messages," but to help spread this new technical knowledge by persuading other farmers in the villages to adopt them as well. A number of "follower farmers" are expected to attend meetings with T&V officials on the contact farmer's farmstead. In this way, it is hoped that technical "diffusion" is maximized in a cost-effective manner.

Obviously, the selection process is vital. Farmers must be selected who are capable, likely to diligently follow through on new information, and to be locally respected so as to encourage emulation. In choosing "contact farmers," T&V officials meet with farmers and generally consult with local communities and their leaders.
At first, messages focus on procedures that offer the prospect of significant productivity gains, but do not require any cash expenditure, such as spacing and pruning. The messages being diffused in any one month are linked to farm activities underway in the annual crop cycle, such as planting or harvesting whichever crops are cultivated at a given point in the course of the year. Only as farmers see results from this initial advice and so come to trust the T&V "messages," are measures requiring modest cash outlays introduced, such as fertilizer use and crop spraying. In a later stage, measures requiring purchase of capital goods may be introduced.

Kenyan and World Bank studies confirm that while not all women are yet being reached by extension services, significant progress has been made. Increasing numbers of women function officially as "contact farmers." Even more serve unofficially in this role, as their husbands farm only part-time or not at all.

The messages of the T&V program, at least ideally, are supposed to be transmitted in both directions. T&V agents are supposed to gather information about how well previous advice has worked in practice, and about continued problems, in order to guide research efforts. This is in the spirit of the often-touted but seldom-fulfilled "participation in development" ideal.

Economic advancement of women farmers is also important for promoting environmentally sustainable development. In addition to their responsibility for agriculture, especially on more marginal and often ecologically fragile lands, women have a customary role in traditional societies as the guardians of natural resources, such as the water supply. This is also an important domain for agricultural extension work with women. In Kenya the T&V system is not yet strongly involved in environmental problems.

But thousands of women are taking part in the Green Belt Movement (GBM), established in 1977 by the National Council of Women. Its main objective, as reported by Wangari Maathai, is to "halt desertification by encouraging tree planting and soil and water conservation in rural communities." It also works to promote sustainable development and poverty alleviation in parallel projects. While initiated and run privately, seedlings are provided by the government at low prices, and GBM volunteers receive advice and support from government forestry officials, a type of extension service.

The GBM emphasizes grass-roots participation and self-help, and strives to educate people on the link between deforestation, erosion, poor soil quality, and subsequent low crop yields. With the help of outside funding, women are paid to work at about one thousand nurseries. Seedlings
grown at these nurseries are given to small farmers, schools and churches, which have planted an estimated 10 million surviving trees. The estimated survival rate is 70 to 80%. The GBM is now striving to disseminate its model throughout Africa.

Another shortcoming of the T&V system is that it has made too little progress in the field of women's credit, and private voluntary organizations have not been able to take up the slack. A study by Kathleen Staudt found that of eighty-four female farm managers interviewed in the Kakamega District in Western Province, only one knew about the credit program, and no female manager had received any credit. Informal indications are that this is the area that has improved least over the subsequent years.

As Christina Gladwin and Della McMillan have argued, much more must be done; for example, women should be consulted at the design stage of technology development, extension specialists should receive training on how to approach a male farmer about training his wife or wives, and governments should target funds to women's organizations and clubs.

The strategy of involving women much more in public agriculture initiatives has shown some results in environment and credit as well as agricultural productivity per se. For example, the United Nations Population Fund reports that “Women are now the principal participants in Kenya's National Soil Conservation Program. Since the mid-1980s, women have terraced more than 360,000 small farms, or 40 per cent of the country’s total. Rural collectives, run by women, are now getting bank loans and agricultural extension services tailored to their specific needs and interests.”

The Women in Development Service of the UN Food and Agriculture Organization (FAO) reports that “in Kenya, following a national information campaign targeted at women under a National Extension Project, yields of corn increased by 28 percent, beans by 80 percent and potatoes by 84 percent.” The way forward also includes a greater emphasis on more general knowledge. FAO also reports on a study in Kenya showed that farm “yields among rural women could be increased by 24 percent if all women farmers completed primary school.”

Nevertheless, the agricultural extension program in Kenya has remained weak by international standards. The World Bank audited its programs in this field in 1999, and found it severely wanting in many respects, including low cost-effectiveness. The audit called for more efficient targeting of extension services where the impact is likely to be greatest, using much improved information systems, a better focus on empowering farmer clients with a greater voice in
the focus of the services. The World Bank also called for more cost recovery, but this is likely to prove controversial. Regarding the role of women, the Bank concluded that “The progress on gender issues has been mixed. The earlier bias against women farmers has been rectified, but some bias persists in the selection of contact farmers. The proportion of female field-extension agents has remained largely unchanged since 1982.” While this is a better performance of many African and Asian countries, and than Kenya exhibited in the past, it leaves much to be desired.

Training and provision of credit and other inputs for women farmers is one of the critical areas where development professionals can have the biggest impact in fostering genuine and sustainable development, while reducing poverty and relative inequality. Real progress has been made, but there is a pressing need for systematic follow-up and expansion.
Sources


Food and Agriculture Organization (FAO), *Improving extension work with rural women*, http://www.fao.org/DOCREP/x0249e/x0249e01.htm


