IN SUB-SAHARAN AFRICA, women carry prime responsibility for subsistence farming while men focus on cash crops for money. This reality, combined with evidence that women spend a larger share of their incomes than men on improving household food and nutrition, and their children’s education and welfare, poses a challenge on several fronts. Efforts to improve agriculture must be sensitive to existing gender inequalities; their success depends on enabling women to move beyond subsistence production and into higher value and market-oriented production.

Failure to recognize the different roles and constraints that men and women face is costly—it results in misguided policies and programs, foregone agricultural output and associated income flows, which result in higher levels of poverty, and more widespread malnutrition and hunger.

Despite this division in sub-Saharan Africa between women farmers who grow food largely for their family’s subsistence, and men whose crops—even food crops—are expressly intended for sale, many women do set aside some of their production for sale. But in both cases, it is overwhelmingly women who supply most of the labor involved in growing a crop. Many women work on their husband’s land with little compensation, and sacrifice some of their own production to do so. Evidence from Burkina Faso suggests that overall output of crops grown by the household could increase by six percent if some labor and manure were reallocated within the household from men’s to women’s plots.

Pathways out of poverty

The World Development Report 2008, Agriculture for Development, identified three key pathways out of poverty in...
rural areas, namely farming, waged labor, and migration. Within households, men and women have different opportunities to pursue these pathways. Social norms often dictate that most of the childrearing, cooking, and household chores are the responsibilities of women, limiting their mobility and potential to take advantage of new economic opportunities, reinforcing existing inequalities.

If women do find jobs outside the home, this work is in addition to their traditional roles at home, which means much longer workdays for women than for men. Mobility for married women is particularly limited, often eliminating the migration option.

Given their domestic responsibilities, most women opt for the farming pathway, although even here, they face obstacles based on deeply-rooted gender norms and inequalities. These impede their access to land, working capital, technology and marketing channels, while also consigning them to lower wages than men for the same agricultural work.

**Gaining access to assets:** In southern Ghana, a study found, weak tenure security of plots, often the case for women, limits soil fertility when fallowing rather than fertilizer is the only option for replenishing soil fertility. Because a large proportion of women lack access to credit which they need to buy fertilizer, this prevents them from planting pineapples, a comparatively profitable crop— but one which depends on fertilizer.

In the past, many land titling programs have reinforced men’s land rights. Over the last decade, however, many African countries have passed land laws to strengthen women’s land rights, recognize customary tenure, and make lesser (oral) forms of evidence on land rights admissible. Ethiopia, for example, issued certificates to about six million households for 18 million plots between 2003 and 2005, all of which documented inheritable land use rights, while still restricting market transfers. A survey found that over 80 percent of respondents said the certificates improved the situation of women, since husband and wife are both listed on the certificate.

**Gaining access to markets and services:** Women’s agriculture can be commercialized, by paying careful attention to underlying gender roles. Programs must be designed to ensure that women gain improved access to services such as agricultural extension and finance, as well as technology such as improved seeds, and female-specific farming tools. They must also have access to wage-paying farm labor opportunities, along with connections to modern value chains from which they are often excluded.

Enabling women to move beyond subsistence production and into higher value and market-oriented production is an important element of successful agriculture for development. Cassava, widely grown by women and traditionally viewed as a subsistence food crop, is now enjoying a renaissance with use extending beyond food. In Ghana, a project established systems linking farmers, especially women, to new markets for cassava products, such as flour, baking products, and plywood adhesives.

**Orange Flesh Sweet Potatoes in Mozambique**

An example from Mozambique illustrates the successes of gender sensitive agricultural interventions—a subsistence...
crop oriented to women and their food security goals; nutrition education together with recipe development using the new crop to reduce vitamin A deficiency in children; a market development strategy to begin the process of commercialization; and promotion of post-harvest activities to add value and promote non-farm incomes.

Responding to a demand from the government of Mozambique for drought tolerant crops to address high food insecurity including micronutrient deficiencies such as Vitamin A, the *Towards Sustainable Nutrition Improvement* project was born, involving many partners, national and local government, local and regional agricultural research institutions and NGOs. It was introduced in a drought-prone zone of the Zambezia region, where there were few government services beyond emergency food distributions in drought disaster years. The primary staple was cassava, a relatively poor source of micronutrients.

The project worked with 53 farmers’ groups, with target farmers being those from households with young children, primarily women. Seventy percent of the 1000 farmers were women. Building on the experience that 70 percent of the farmers were growing white-flesh sweet potatoes and nationally 23 percent of people consumed them, the project introduced orange flesh sweet potatoes (OFSP) bred to have higher content of vitamin A carotenoids.

The two-year project adopted a multi-faceted approach:
- Dissemination of nine different varieties of OFSP, proven in breeding trials to have higher yields than white-fleshed sweet potatoes
- Joint evaluation by farmers, consumers and agricultural extension agents of the nine varieties
- Introduction to farmers’ groups by a pair of extension agents, one for agriculture and one for nutrition, one male and one female
- Working with a rural and urban trader to establish a market to sell OFSP vines to other farmers
- Development of quality standards and market opportunities for the OFSP
- Nutrition education to all farmers participating, male and female
- Mass media communication and an advocacy campaign to introduce the new OFSP beyond the intervention farmers’ groups, highlight their advantages—“the sweet that gives health”
- Introduction of preservation methods for consumption in the off season, including drying and pit storage OFSP offered the following advantages:
  The holistic nature of the interventions ensured success. Both male and female farmers received the improved OFSP vines for planting and nutritional education. Of the nine different improved vines introduced to farmers’ groups, one varietal emerged as a strong favorite based on farmer and consumer preferences in the participatory evaluation. Women prefer medium-sized roots so one can be prepared for each household member. The preferred variety produced a high percentage of medium-sized roots, ideal for home consumption and market sales.

A risk arose with the prospect of sales of this better sweet potato, traditionally a “woman’s crop.” It was that the market opportunities it offered would be seized by men, diminishing the potential for family members to eat the vitamin A rich potatoes and the income gain for women.

The project addressed this risk by introducing quality standards to the orange-flesh sweet potato market. Local traders were offered skills training, in return for which they had to agree to purchase the sweet potatoes according to quality standards. The trader purchased only first and second-quality sweet potatoes at differential prices. Anything below this was not purchased, and so set aside for consumption by the farmers’ families.

By the end of the project, average plot sizes growing OFSP increased almost ten times to meet market demand for both production and consumption of potatoes. A comparative study found 32 percent of households involved in the project were selling OFSP, up from the 20 percent that had been selling white-fleshed sweet potatoes at the outset—this, despite the project having been introduced during a drought year. In markets, the orange sweet potatoes sold at a 33 percent premium over white-fleshed sweet potatoes. Yet even so, OFSP was the cheapest or second-cheapest source of vitamin A, costing less than one cent for a serving that meets the needs of a child under six years old.

Building on this success, new trials were launched to help rural farmers expand the market for orange sweet potatoes, as well as produce and sell other processed farm products, such as bread—which is always in demand. The project introduced OFSP-based recipes, including golden bread in which boiled and mashed OFSP replaced 38 percent of wheat flour. Golden bread almost doubled the profit margins of local bakers, as OFSP was cheaper than wheat flour. A small golden bread bun contained 25 percent of a child’s vitamin A requirement. At the end of the two-year project, children’s vitamin A intake was 8.3 times higher in households participating in the project than in those outside it. Vitamin A deficiency fell from an incidence of 60 to 36 percent among children participating in the project, reducing the risk of death due to measles by about 50 percent, due to diarrhea by about 40 percent, and child mortality by 25–35 percent.

By targeting a crop that would meet women’s food security goals, recognize the other demands on their time, and improve the nutritional status of their families, particularly children, this project delivered on multiple fronts. In addition to achieving these impressive nutritional results, it created new market opportunities for women by increasing demand for the new potatoes, thereby ensuring sustainability and increasing incomes for women farmers.

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