



Investing in Women as Drivers of Agricultural Growth

Jacqueline Ashby, Maria Hartl, Yianna Lambrou, Gunnar Larson, Annina Lubbock, Eija Pehu, and Catherine Ragasa

*Agriculture for Development, the 2008 World Development Report, showed that agriculture is a critical source of livelihoods for women in many developing countries, and a key pathway out of poverty.¹ It also portrayed women in many rural societies as especially constrained by a lack of access to inputs, productive resources, and services. They also often lack incentives to invest given the greater vulnerability and proportionately greater exposure to risk that result from having fewer assets, and the very real likelihood that once their niche in the value chain becomes commercially profitable it will be expropriated by men. The **Gender in Agriculture Sourcebook** uses empirical evidence to inform policy formulation and program design.² It provides decision makers and practitioners with practical guidance, not only on how to avoid the pitfalls of gender neutral planning, but on how to capitalize on the extraordinary productive and poverty reducing potential of the woman farmer.*

Women play a critical role in agricultural production in developing countries. Particularly in low income countries in which agriculture accounts for an average 32 percent of the growth in gross domestic product (GDP), and in which an average 70 percent of the countries' poor live and work in rural areas, women make up a substantial majority of the agricultural workforce and produce most of the food that is consumed locally. Agricultural production in these countries—which include almost all of the countries in Sub-Saharan Africa—is an engine of economic growth, and provides the basis for most rural livelihoods. The large proportion of agricultural production that is attributable to women makes them important agents of economic development. The vast majority of food production that is attributable to women makes them the *principal* agents of food security and household welfare in rural areas.

The productivity and economic empowerment of women is therefore a logical priority of agriculture programs and policies that seek to promote agricultural development. The priority is warranted both in terms of the importance of women's agricultural production as a source of economic growth, and as a source of rural livelihoods and poverty reduction. For development practitioners versed in gender analysis and its applications to policy making and program design, none of this is new. Yet recent analyses presented in the *Gender in Agriculture Sourcebook* suggest that gender issues are explicitly incorporated into less



We can no longer afford the opportunity costs imposed by gender disparities in agricultural development. Neither can she.

than 10 percent of official development assistance (ODA) that is directed toward agriculture. Putting this into perspective, the 2008 World Development Report *Agriculture for Development* revealed that agricultural programs and projects accounted for only 4 percent of ODA, and 4 percent of public spending in Sub-Saharan Africa, where agriculture is a major source of economic growth.

THE PRICE IS HIGH

The *Sourcebook* also suggests just how high the costs of neglecting gender issues have been in terms of missed opportunities to raise agricultural productivity and income. These are opportunity costs that least developed countries can scarcely afford.

- In Ghana, if women and men had equal land rights and tenure security, women's use of fertilizer and profits per hectare would nearly double
- In Honduras, Nepal, the Philippines, Rwanda, South Africa, and Zambia studies find that involving women in the design and field testing of new technologies such as crop varieties, small machinery, and farm tools speeds the adoption of innovations, increasing productivity and incomes
- In Cote d'Ivoire the improvements in child health and nutrition brought about by a US\$10 increase in women's income would require a \$110 increase in men's income
- In Burkina Faso, Kenya, and Tanzania, providing women entrepreneurs with the same inputs and education as men could increase business income by between 10 and 20 percent
- In Burkina Faso, Kenya, Tanzania, and Zambia, allocating land, labor, capital (and fertilizer) equally could increase production by between 10 and 20 percent

THE CHANGING CONTEXT

While the ongoing global food price crisis has refocused international attention on the importance of investing in agriculture, food and nutrition security will not be achieved while gender disparities persist. These disparities seriously undermine the potential of women as drivers of agricultural growth, and disable them in their roles as the preeminent agents of household food security and welfare. The omission of gender variables in agricultural policies and interventions can represent more than opportunity costs—it can actively hurt women. In many rural contexts women very often toil under the burden of fulfilling multiple tasks as producers, gatherers of water and fuelwood, and caregivers of children and the sick and elderly. Labor scarcity often becomes endemic in areas where there have been high levels of male outmigration to the cities, or where much of the current productive generation is impacted by HIV and AIDS. Particularly in areas with high rates of AIDS, the mounting labor requirements often fall to women who are aging. Neglecting gender analysis in these situations entails the risk of add-

ing to the labor requirements of already overburdened women, and undermining them in the effectiveness of the vital roles they already play. Women's lack of assets leaves them more vulnerable to rising food prices, and to the effects of climate change and forest loss, which can have dramatic consequences for the amount of time they must spend gathering fuelwood and water.

Demand for agricultural commodities is changing rapidly, generating new opportunities for both men and women producers. Increasing demand for higher value products and advances in agricultural technology are changing what is produced, how it is produced, and by whom. The failure of past breakthroughs and innovations to benefit men and women proportionately has left many development practitioners with a profound sense of opportunities missed, and a resolve that the opportunities implicit in technologies and market trends today be capitalized upon to redress that legacy. These opportunities may well represent new entry points from which to address gender disparities and to empower women. However, for these entry points to be exploited, careful gender analysis is required to give us as complete a picture as possible of the practical realities that women face.

CHALLENGES AND OPPORTUNITIES

Unequal property rights are a particularly significant priority for gender analysis because they present men and women with different incentives to invest in inputs and to sustainably manage the natural resources on which agricultural production relies. They also entail different exposure to risk. Property rights and tenure security carry great practical significance for people's expectations of which investments and activities are likely to generate returns. For women, the question is often compounded by the very real possibility that an activity that becomes commercially profitable will, as a result, be expropriated by male members of her household. Which investments and activities are likely to generate returns, and which returns are women confident will not be expropriated from them? Weak property rights lead to sub-optimal decisions and missed opportunities to increase productivity. They also represent serious, even prohibitive constraints on women's capacity to participate in collective action. Membership in water user associations, producer credit organizations, and community-based natural resource management groups often requires secure land rights, effectively excluding women. Land titling itself however,

which is often a component of irrigation and natural resource management programs, must be sensitive to the practical constraints women have in exercising their rights. In Bolivia and Nicaragua for instance, providing land titles to household heads rather than to both spouses, effectively deprived women of their customary access to land.

The appropriateness of innovations and technologies can be a crucial consideration, for women have different needs, capacities, and skills than men and agricultural sub-sectors require different technologies. To raise productivity by introducing improved crop varieties the varieties of course must be adopted. It is important to note that productivity is not the only criterion that producers have in mind when they decide whether or not to adopt a new variety. The inherent risk of adopting an unfamiliar crop is likely to deter many prospective farmers, and women's greater vulnerability to the consequences of crop failure often serves to make them more risk averse. Women's preferences for multiple traits such as flavor and texture, ease of processing, and yield stability can be determining factors as well, making it particularly important to consult with them to understand the different reasons for the production decisions they make.

Unequal income between men and women is another vital consideration, and practitioners who seek to promote adoption of new technologies among women must account for how much they can realistically afford. Many labor saving and productivity increasing technologies prove to be particularly problematic owing to women's more limited ability to afford them and capacity to operate them. In Africa, a donkey-drawn intercrop cultivator could halve weeding time per acre, but women lack the cash to purchase new equipment and men will not invest cash when women's manual labor is available to them at no cost. A wheelbarrow can reduce time spent on water transport by 60 percent, but its weight and bulk makes it physically difficult for most African women to use. In Nigeria, a mechanized grater reduces the time required to grate *ghari* from one day to 15 minutes but women cannot afford to own graters and have therefore lost control over profits from grating. In West Africa an improved smoking oven reduced the time women needed for fish processing by 60 percent but since

profitability improved, men are taking over fish smoking from women. Donkey carts distributed to men in South Africa were used to collect and sell wood closest to the homestead leaving women to travel even further to get domestic fuelwood. Consulting women to solicit their views on a new technology can effectively reduce the chances that such outcomes will come to pass. Consulting women in the actual design of a new technology can effectively make the development of the technology more demand driven and dramatically improve the chances that they will adopt it.

Other constraints apply as well. Women's mobility and availability must be taken into account. Products like fertilizer must be packaged in units that women are capable of transporting, particularly women in remote areas. Products like pest control regimens need to be tailored to accommodate women's time constraints. The lower levels of female literacy in many rural societies need to be accounted for by outreach or extension services that seek to disseminate information in written form.

Women are often principally responsible for managing small livestock and providing animal health care. Extension programs have to account for this in the design of livestock insurance, vaccination, and restocking programs. Animal diseases

cause the loss of about 30 percent of livestock production in developing countries, and women who lack access to credit or information are typically more exposed to risk than male livestock managers. Like other agricultural sub-sectors characterized by particular gender divisions of labor, livestock is one in which the failure to capture the indigenous technical knowledge that women have accumulated over generations represents a clear and present danger that this knowledge will eventually be lost.

New market opportunities along changing or emerging value chains can break down traditional gender divisions of labor. Yet for women to capitalize on these opportunities, many will require access to business development services. Ownership of an agroenterprise can enable a woman to move out of traditional subsistence-oriented roles and into a profitable market niche producing or selling commercial agricultural products. Commercialization however comes with its own risks to women, who often

Rural poverty is deeply rooted in the imbalance between what women do and what they have.

The International Fund for Agricultural Development³

lose control of their enterprises to men when the enterprise becomes profitable. The importance of accounting for this risk was illustrated by the commercialization of buffalo milk in Nepal. Women there were traditionally the primary caretakers of buffalo, and as buffalo milk was commercialized, women's work increased (many girls dropped out of school to do so) with no corresponding increase in their personal income.

Rural women's access to financial services is heavily dependent on micro-finance. Women generally receive smaller loans than men, even for the same activities and are vastly underrepresented in programs that finance larger loans. Lacking access to larger loans, their businesses often collapse because they are forced to purchase inferior equipment or materials. Research also suggests that microfinance can burden women with debt repayment while male relatives use the credit and withdraw their contributions to household budgets.

GENDER-RESPONSIVE ACTIONS PAY OFF

Improvements in rural women's access to and control over resources and markets lead to increased household productivity and sustained benefits for the wider economy. While experience suggests that no "one-size-fits-all" gender strategy will be appropriate throughout rural societies in the developing world, a number of principles and approaches appear to be generally applicable to the design of agriculture policies, programs, and projects.

Design interventions that explicitly target women. Gender-responsive interventions that successfully impact overall productivity, income and natural resource management target development assistance specifically at women. In sectors and areas where women are disadvantaged by gender norms, explicit targeting would be necessary to catalyze a change process for ending gender discrimination and securing women's access to key resources.

The full and equal participation of women and men in, and their full enjoyment of the benefits from agricultural and rural development are essential for eradicating food insecurity and rural poverty and enhancing agricultural and rural development.

The United Nations Food and Agriculture Organization⁴

- Gender mainstreaming was associated with a 50 percent increase in women's employment and equal wages after the Rural Roads and Markets Project in Bangladesh reserved 30 percent of jobs, management positions and commerce for women, stimulating successful women's contracting societies, trader associations and micro-enterprises.

Do not exclude men. Gender-responsive actions do not mean that only women are targeted. It is more effective to design programs so they reach both men and women, taking their gender-differentiated roles and opportunities into account. Evidence suggests that getting men's support is critical to, and often necessary for the success of gender-responsive projects. Having a staff gender policy in a service organization often leads to improvements in rural

women's access and sustained impact on productivity and incomes.

- In Bangladesh, CARE implemented a gender-mainstreaming policy, hiring women as 30-50 percent of technical assistance teams and targeting both men and women to improve rice-fish production. Productivity increased by up to 40 percent and incomes by 50 percent as gender disparities in education, labor allocation, food provision and family decision-making decreased.

Promote collective action among women. The formation of women's groups to improve rights and access to services is a well-established means of social and economic empowerment in which members increase productivity and incomes collectively. Village women can organize sizeable networks and federations of networks capable of effectively demanding improved services and asserting land and water use rights. Capacity building is generally required to ensure that women remain active members and assume important positions in leadership and decision making. When organized on a large scale, groups magnify women's political influence and create scope for their active participation in electoral politics. Major development impacts have been achieved by group organization that focuses on benefits important to women.

- In Andhra Pradesh, India, the organization of over eight million women into self help groups around community procurement centers enabled dispersed commodities to be aggregated and sold, with a cumulative turnover in four years of over \$120 million that created jobs for over 10,000 villagers in supply chain management. The income gain on some commodities exceeded 200 percent. Women became active managers and traders in rural markets and hugely increased their economic and socio-political leverage in households and communities.

Cultivate women's profit orientation. Traditional gender divisions of labor often consign women farmers to subsistence production for her household's own consumption. Policies and interventions that accept this as a given and assume that commercial production is the province of men will miss many opportunities to tap into the tremendous productive potential of women. They will also pay a heavy price in terms of their diminished impacts on rural poverty and food insecurity. Policies predicated on the naive assumption that the benefits of economic growth accrue evenly to men and women ignore the gender-specific constraints and opportunities that have now been documented for generations. Experience shows that considering these constraints and opportunities along the entire value chain increases the likelihood that inefficiencies that derive from differential power relationships between men and women will be tackled. Doing so should be considered a matter of due diligence, and the fact that it is not widely considered as such in the development community is dismaying given the length of time that advocates have been appealing for "gender mainstreaming" and the empirical strength of their arguments. Nowhere is redressing this neglect more important than in the agriculture sector.

- In the Asian Development Bank this approach has increased women's employment and income from live-stock rearing and marketing. In many African countries, commercial banks that developed new products and services targeting women entrepreneurs significantly increased the number of women-owned businesses. Business incubators have proved effective in bringing

very poor women entrepreneurs into markets when they customize training, legal advice, loans, insurance, and market intelligence to women's needs.

Protect women's rights and control over economic gains.

Special policies and provisions are often required to ensure that women retain control over important income generating assets - control which can be jeopardized when commercialization makes them more profitable and men may seek to take over control of the assets. Regulations that defend women's control over loans against the demands of other family members can make rural finance a more effective instrument for poverty reduction. Prospective threats to women's access to and control over productive assets, including their own labor and the income it generates, need be carefully assessed and accounted for in the design and planning of interventions.



Where women are the majority of smallholder farmers, failure to release their full potential in agriculture is a contributing factor to low growth and food insecurity.

Agriculture for Development, the 2008 World Development Report

- In rural finance, regulations that protect women's control over loans against the demands of other family members have been associated with more effective poverty reduction. Programs in India, Brazil, Cambodia, Nepal, The Gambia, Honduras and Nicaragua show that as the number of women holding land title increased, their control over shares of farm, business and labor market earnings improved. Studies in Africa, India, Nepal, Ecuador, Bangladesh, Yemen, Nicaragua, Bolivia, Zimbabwe, Pakistan and the Gambia among others, show that multiple use water rights designed to benefit women increased their efficiency and income generation.

Take necessary measures to ensure women's voice and representation. In many mixed gender organizations, quotas may be used to increase the representation of women and to ensure their participation in management decisions. These organizations include user groups, rural producer organizations, service provider organizations, governing boards and policy-making bodies.

- The Gemidiriya Community Development and Livelihood Improvement project applies gender principals to all of its components. 30 percent of the managerial positions in village organizations are reserved for women, and achieving gender participation and empowerment targets are preconditions that trigger beneficiaries' advancement into subsequent phases of the project cycle. As a result, women have broad representation in all decision making bodies within the village organizations; and women's involvement has positive benefits to the project's outcomes.

Recruit and train women as service providers. Increasing the employment of women as frontline staff in the delivery of extension, business development, and veterinary and environmental conservation services is one of the most effective ways to improve the gender balance in service delivery.

- Gender policy that establishes and trains both women and men to work in teams as front-line staff supporting women producers has proven effective in India's ATMA program and Venezuela's CIARA Foundation. Replicating the success of such initiatives requires redressing the gender imbalance in all fields and types of agricultural education and training in tandem with targeted recruitment and affirmative action to increase the number of students, instructors, extension agents, researchers and managers informed by gender analysis.

Involve rural women in the design of innovative products and services. Using participatory approaches to involve women in the design of products that are intended for their use and in the planning of services that are intended to reach them can inform technology development and

the targeting of services, making them more demand-driven and relevant to prospective adopters and clients. Women's participation in the design of water, transportation, energy, and farm technology ensures that women's needs are met and that their constraints are addressed. This approach is especially effective for the introduction of labor-saving technologies that reduce women's drudgery. Involving women in participatory plant breeding so that their preferences and needs were taken into account has produced better performing varieties and improved their adoption rates. Rural finance, extension and ICT prod-

ucts and services have all reached women more effectively when gender-based constraints were taken into account in their design.

- Bioenergy offers opportunities for enhancing gender equity when it takes the form of small-scale production and technology that improves women's work and health. Successful projects in Nepal, Costa Rica, Zambia, Mali and Tanzania have targeted women as producers of alternative fuels. Policies are needed that support decentralized production and local use of alternative fuels

Each year, the average rural women transporting water, fuel or produce will carry more than 80 tons more than a 1km distance, while men carry about 10 tons for a 1 km distance.... Meeting minimal household needs for fuel wood may take up to the equivalent of 300 workdays a year.

Women Feed the World, FAO SD Dimensions⁵

as a commercially viable, market oriented industry. The MARENASS project in Peru illustrates the importance of combining multiple gender-responsive practices for making agricultural innovation relevant and accessible to poor rural women. Responsibility for planning, financial resources, the design of technologies adapted for local conditions, the supply of inputs, technical assistance, and farmer-to-farmer training was assigned to participating community-based groups. Women participated actively. The project resulted in widespread and sustained innovation.

Strengthen investment in research and sound impact assessment. Research-based knowledge can inform policy processes. Country gender assessments and technical assistance and analytical and advisory work that deliver information that has practical significance for policy making and the conduct of operational work are important. Organizations like the FAO, IFAD, and the World Bank have considerable comparable advantage in undertaking this type of work. Yet they have little reason for undertaking that work unless there is demand for it from client countries and reason to believe that recommendations will be translated into improved policies.

- In Vietnam, using the Downsizing Options Simulation Exercise tool analysis, a study found that displaced women employees benefit more from lump-sum compensation than from standard severance packages. Based on this finding, the Vietnamese government modified its assistance package during its state-owned enterprise-downsizing program to include substantial lump-sum components. In Uganda, a Gender Coalition has been created to support the implementation of the International Finance Corporation and World Bank-supported Gender and Growth Assessment (GGA) recommendations. Following lobbying from the coalition, GGA recommendations have been incorporated into four labor reform bills covering employment, occupational safety and health, labor disputes, and labor unions, which were passed in 2006.

CONCLUDING REMARKS

More than 100 authors contributed to the *Gender in Agriculture Sourcebook*. The 16 part resource documents over 15 years of empirical evidence about the potential of good practices and the potential consequences of bad ones. Development policy and planning must be informed by experience. Perhaps the broadest lesson to be drawn from

the accounts given in the *Sourcebook* relates to the extent to which we can rely on markets to improve the status of women and capitalize on their potential as producers. It is important to dispel any notion that markets alone will naturally generate social change that benefits women, or that the risks and opportunities present within markets are in any way gender neutral. Rather, the ability of rural women to participate in markets as rational economic actors is very often negotiated within a context of cultural norms and expectations. In that context social convention and propriety may impinge heavily in a woman's freedom to explore the economic opportunities that emerge as markets expand and change. Yet experience shows that gender norms are not immutable and that they are indeed subject to negotiation—particularly as economies change and some traditional roles no longer provide workable sources of livelihoods. In such situations, new roles by definition have to be defined. Seventeen years ago a World Bank study team investigating gender issues in India asserted that “market forces have great potential to influence gender ideology and to increase the perceived value of women.”⁶ While this understanding is therefore clearly not new, it warrants an important qualification: none of that potential is fulfilled automatically. Experience has demonstrated that the potential of women as economic agents must be purposefully cultivated, and that certain preconditions must be actively satisfied for this potential to be realized.

Women who are confident in their ability to assert their rights are better placed to successfully negotiate new roles—and having assumed those roles, are more likely to find the incentive to invest their time and assets in productive, income generating activities. Women who have marketable skills, and access to resources and services that relate to their livelihoods are better placed to respond to economic opportunity, and are more likely to command a sufficient proportion of household income to give them leverage in their households' economic decisions. Women who are reached by communications that inform them about changing demand in distant markets are better placed to make rational investment decisions, including decisions about how to employ their own labor.

Agricultural growth and increased income among women are two areas of economic development that have demonstrated exceptionally high impacts on poverty. For this reason, policies and programs that seek to raise the productivity and income of women farmers have the po-

tential to bring about a convergence of especially potent anti-poverty forces in low income agriculture-based economies. In these countries using agriculture as the basis for economic growth requires a “productivity revolution in smallholder farming,” the sector of the rural economy in which the economic roles of women is most prominent.¹ In economies in transition where agriculture accounts for a declining share of the GDP, labor markets impose changing requirements on workers and the skills that will enable them to earn a living. In such contexts, preparing women to occupy certain niches along the value chain and to find gainful employment will be an important way to ensure that they share in the gains of economic growth. Many women in these countries will require help in moving out of agriculture and into the nonfarm economy. Those who remain in agriculture will benefit from technical assistance and resources that enable them to shift to the production of higher value agricultural products. Doing so will go far

in redressing the rapidly rising rural-urban income disparities that are sources of social friction and political instability throughout so much of Asia and Northern Africa. In the largely urbanized developing economies in Latin America and Europe and Central Asia enabling women farmers to serve as direct suppliers to modern food markets will be a vital factor in eliminating the troublesome poverty that persists in rural areas. In all three “worlds of agriculture” described by the 2008 World Development Report women’s roles differ from men, and understanding their potential and how to tap into it is a vital imperative for sound planning and informed policy formulation.

Policy makers, planners, and development practitioners who operate in rural societies in developing countries are urged to use the *Gender in Agriculture Sourcebook* as a reference and resource for reaching women in the contexts of their livelihoods.

¹ *Agriculture for Development*. The 2008 World Development Report. The World Bank. Washington, DC. 2007.

² The *Gender in Agriculture Sourcebook* is a collaborative production of the Agriculture and Rural Development Department of the World Bank, the UN Food and Agriculture Organization (FAO), and the International Fund for Agricultural Development (IFAD). See www.worldbank.org/genderinag

³ IFAD Gender web site at <http://www.ifad.org/gender/>

⁴ The FAO Gender Action Plan 2002-2007

⁵ *Women Feed the World*. Presentation in FAO Gender SD at http://www.fao.org/sd/pe1_en.htm

⁶ *Gender and Poverty in India*. A World Bank Country Study, Washington, DC. 1991