

**WOMEN,
FOOD SECURITY AND
AGRICULTURE IN
A GLOBAL MARKETPLACE**

by Rekha Mehra and Mary Hill Rojas

a significant 
SHIFT



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A Significant Shift builds on ICRW's more than 20 years of research and practical application on how and why to involve women in agricultural development efforts, as farmers, farm workers, and agricultural businesswomen and entrepreneurs. Most importantly, it challenges the agricultural and international development communities to significantly shift their view to see women as key economic agents of change in rural communities who in their own right contribute to local, national and global food security, and agricultural and economic growth.

Recognizing women's involvement in commercial crop production and ensuring that they benefit from research, extension, credit, land tenure rights, market access and other elements of production, innovation and participation still requires a significant organizational shift in many agricultural services.¹

INTRODUCTION

The steep increase in global food prices—83 percent over the past three years—has added nearly 100 million people to the numbers who are chronically hungry, pushing the world total to nearly 1 billion people.² Amid a global financial crisis and further market instability, the number of poor people also is climbing, undoing significant gains made against hunger and poverty in the past decade.

These concerns have prompted renewed interest and discussion on the role of agricultural growth and development as a means to address both hunger and poverty. After two decades of decline in agriculture and international development assistance, governments and donors are recommitting attention and resources to agriculture. The New Economic Program for African Development (NEPAD), for example, urged African governments to increase spending on agriculture to 10 percent of national budgets.³

Missing from these discussions and decision points, however, is a commitment to women farmers and resources to strengthen their roles in the agricultural economy.ⁱ Four decades of research demonstrate the varied and crucial responsibilities that women hold in agriculture and the value of their contributions, both economic and social. Rural women produce half of the world's food and, in developing countries, between 60 percent and 80 percent of food crops.⁴ Women also are more likely than men to spend their income on the well-being of their families, including more nutritious foods, school

fees for children and health care.⁵ Yet agricultural investments do not reflect these facts. Women in forestry, fishing and agriculture received just 7 percent of total aid for all sectors.⁶

A key failing of past efforts to reduce hunger and increase rural incomes has been the lack of attention paid to women as farmers, producers and farm workers – both wage and non-wage. It's not too late to integrate the lessons we've learned and avoid the pitfalls of the past. To move forward, however, the world community must make a significant shift in its thinking about women, food security, agriculture and the global marketplace to see women as key economic agents of change in rural communities who in their own right contribute to local, national and global food security and economic growth.

This paper reviews current thinking and practice on increasing agricultural productivity, both subsistence and commercial agriculture, and examines what is known about women's roles in both sectors.ⁱⁱ

In sum, new directions in development assistance and agricultural investments must recognize and support women's involvement in the full agricultural value chain from production to processing to marketing. For small-scale and women farmers, the international community must support investments to improve subsistence farming, expand opportunities for commercial farming, and increase access to wider and more lucrative markets. For the millions of landless and land-poor women and men, the international community must expand opportunities for wage employment, both on- and off-farm.

ⁱ This paper takes the view that both women and men are farmers in small-scale farm households. Their roles and responsibilities, incentives and returns differ due to gender norms and other factors. Gender differences vary regionally and locally and change continuously due to economic, social and cultural factors.

ⁱⁱ Although few households today engage exclusively in subsistence farming, the distinction between subsistence and commercial farming is made deliberately in this paper because women farmers are often exclusively associated with "subsistence" or food crop farming. The point being made is that women farmers, like men farmers, engage in both subsistence and commercial farming.

PAST CLOUDS THINKING ON WOMEN, FOOD SECURITY, AGRICULTURE

Significant progress against hunger and poverty requires development planners, policy-makers and agribusinesses to make a significant shift in their thinking about women, food security and agriculture. The international development community must challenge the myths and misunderstanding around women and development and see women as key actors in economic growth.

MYTH: Women's roles and responsibilities are rooted exclusively in household work.

FACT: Women contribute substantially to agricultural production and related household income.

MYTH: Women work exclusively as subsistence farmers.

FACT: Women work as both subsistence and commercial farmers, growing both food and cash crops.

MYTH: Women, like children, are especially vulnerable in poorer households.

FACT: Women exercise substantial agency as farm producers and contributors to farm production and to household and personal income.

MYTH: Women farmers who head households are the only ones who need development support.

FACT: The majority of women who farm live in male-headed households, and they need development support too.⁷

FOOD SECURITY AND ECONOMIC GROWTH REQUIRE NEW STRATEGIES FOR AGRICULTURAL DEVELOPMENT

Food security, poverty reduction and economic development are inter-related and depend critically on improvements in agriculture.⁸ They require strategies that focus on increasing food productivity and incomes among small-scale farmers and access to income and employment for rural poor people who lack access to land.

Most poor and food insecure people live in rural areas and depend primarily on agriculture for

their livelihoods. On average, agriculture provides 64 percent of employment and represents 34 percent of gross domestic product (GDP) in the poorest countries. Although the vast majority of people affected by the rise in food prices live in the poorest countries of sub-Saharan Africa and South Asia, hunger and food insecurity are present among poor, rural and indigenous people in all developing regions.

Historically, agricultural growth has been the way out of poverty for developed countries.⁹ More recently, this has been true in China and India where agriculture-led economic growth has reduced poverty. The World Development Report (WDR) states that "GDP growth generated in agriculture ... is at least twice as effective in reducing poverty as growth generated by other sectors."¹⁰

Small-scale women farmers represent the majority of rural poor populations in developing countries. For greatest impact, agricultural development strategies must target these populations.

Improving Food Production in Subsistence Agriculture

Improving food production among poor people is vital to ensure both subsistence and ability to purchase food (and other products). A large proportion of rural households in developing countries rely primarily on their own food production. Poor roads and infrastructure, limited transport, and low incomes severely limit people's ability to buy food from outside markets. On a national scale, low foreign exchange earnings limit many developing countries' ability to import food as well.

Subsistence agriculture is the main source of food and income in many rural communities throughout the world, especially sub-Saharan Africa. In Malawi, staple crops comprise 60 percent of agricultural production; in Zambia and Kenya, it is 70 percent.¹¹ That said, more than half of rural households in sub-Saharan Africa also are net food buyers. Millions of low-income small-scale farmers in Latin America and the Caribbean also live in isolated rural areas and depend on their own production for food.

There is substantial scope to improve food production and productivity among poor and food insecure populations throughout the developing countries—a strategy that simultaneously can increase food security and reduce poverty. Yields of staple food crops in the low-income countries of Africa, for instance, are among the lowest in the world. Poor yields undermine food availability for personal consumption, especially in primarily subsistence households, as well as people’s ability to purchase food because their related earnings are low. As shown in Figure 1, low yields track poverty in sub-Saharan Africa and higher yields correlate with reductions in poverty in South Asia.

Strategies and investments to improve food production among small-scale farmers, such as increasing crop yields, are needed to ensure food security and economic growth. These strategies also must account for women who in many regions are vital to small-scale—and increasingly cash crop—agriculture. This is especially true in sub-Saharan Africa where “women play a pivotal role in ... agriculture,” being responsible for nearly all food production, 60 percent of marketing, and at least half the tasks involved in storing food and raising animals.¹² In Latin America, smallholder agriculture also increasingly is comprised of women.¹³

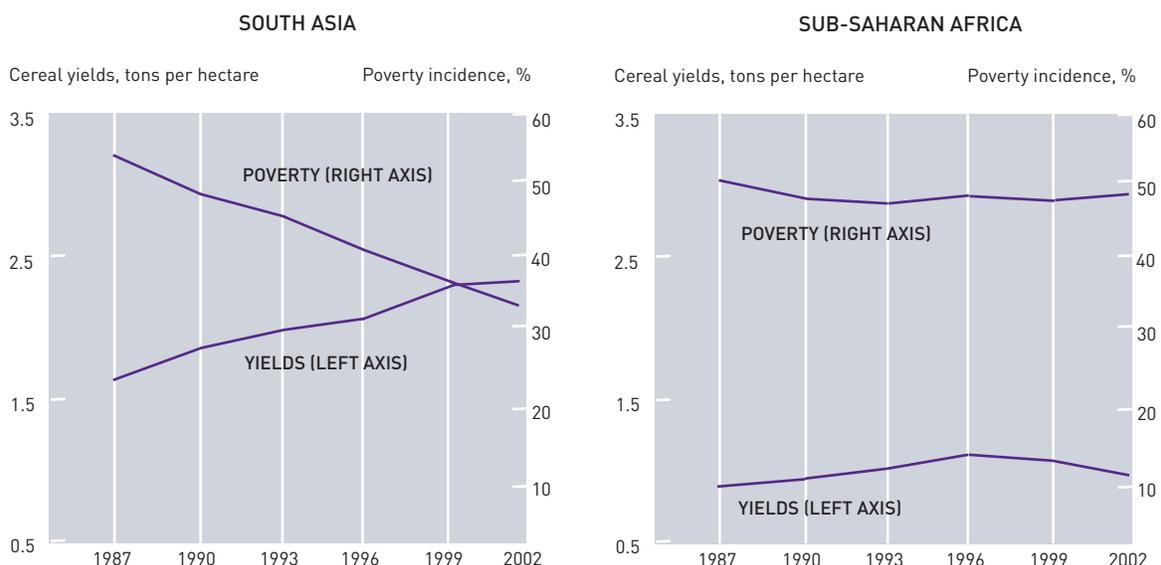
Commercial and High-value Agriculture Crucial to Long-term Economic Growth

While improvements to subsistence agriculture are crucial to ensure food security for millions of people in rural areas, investments in agriculture that raise incomes and overall economic growth are essential for longer-term food security and improved well-being. One such strategy is for rural poor people to move beyond subsistence agriculture into commercial and high-value agriculture and become more diversified producers who are competitive in wider regional and global agricultural markets.¹⁴

Commercial agriculture can include both staple crops and high-value products. High-value agriculture involves a wide range of products including vegetables, fruits, shrimp, nuts, dairy, poultry and non-food products such as cut flowers. The list continues to grow as new uses or added values are found for traditional products.

The impetus for growth in commercial and high-value agriculture comes from multiple and overlapping changes related to rising demand for food, policy reforms, and the availability of new technologies and infrastructure. These changes are occurring within domestic markets in both

Figure 1. Staple Yields and Poverty in Sub-Saharan Africa and South Asia



Source: The World Bank. (2007) World Development Report 2008: Agriculture for Development. Washington, D.C.: The International Bank for Reconstruction and Development.

developed and developing countries and in global markets. Higher incomes and changing tastes have boosted demand in the domestic urban markets of many developing countries for both “traditional crops,” such as leafy vegetables and cassava in local and regional markets in sub-Saharan Africa, and for higher value products such as meats, fruits and vegetables in Africa and other developing regions.

High-value agricultural products are mostly grown and marketed through value chains of large international and local companies, with small-scale farmers playing relatively small but growing roles.¹⁵ Such high-value products often are sold well beyond production areas to national, regional and global markets.

Trade liberalization and improvements in transportation have opened up demand for year-round produce in industrialized countries.¹⁶ Supermarkets increasingly dominate the retail food trade in both developed and developing countries. They account for 80 percent of all retail food in the United Kingdom, between 50 percent and 60 percent in South Africa, and 20 percent in urban Kenya.¹⁷ Global retailers have vast sales; the top 30 companies account for nearly one-third of

global grocery sales.¹⁸ The world’s largest retailer, Wal-Mart, also is the world’s largest grocer.

By 2000, high-value and specialized agricultural products made up two-thirds of total agricultural trade, and many developing countries benefited from increased exports.¹⁹ For instance, leguminous vegetable imports from outside Western Europe increased by 133 percent in the European Union between 1989 and 1997, the bulk of it coming from Africa.²⁰ These exports contributed significantly to higher foreign exchange earnings and rural incomes (Table 1). Cut flower exports earned \$110 million for Kenya in 2001. Of this, \$80 million returned to the rural economy as wages or other types of payments for goods produced.²¹ By 2002, horticultural exports were the second-highest contributor to Kenya’s export earnings.²² In Uganda, export earnings from cut flowers added \$22 million to the economy in 2002, and over \$2 million to the rural economy. In 1999, fresh vegetable exports earned \$1.2 million for Guatemala.²³

Volumes and returns increase with growing demand, providing greater incentives and higher incomes for agricultural producers, input suppliers, marketers, distributors and other agents along

Table 1: High-value Agriculture Export Earnings for Selected Countries

COUNTRY	PRODUCT	YEAR	EXPORT VALUE U.S.\$ (millions)
Kenya	floriculture	2001	110.00
	vegetables	2001	270.00
Uganda	floriculture	1999-2000	22.00
	vanilla	1998	0.75
Colombia	floriculture	2000	580.00
Ecuador	floriculture	1996	195.00
Zimbabwe	deciduous, tropical and citrus fruits	1990	1.75*
	sweet corn, asparagus and French beans	1990	5.5*
Chile	grapes	2000	1,122.00
	fruit and vegetables		676.00
Brazil	fruit and vegetables	1999	1691.00
South Africa	deciduous and vine fruits	1999	0.69

Source: Dolan C and Sorby K. (2003) Gender and Employment in HVA Industries. Agriculture & Rural Development Working Paper 7
 * Source: Economics of Tobacco Control in Southern Africa - <http://www.idrc.ca/uploads/user-S/11267233041SAch15.pdf> - pg. 197

value chains in domestic and global markets. A three-country study in Guatemala, Indonesia and Kenya found that participation in modern supply chains can increase farmer income by 10 percent to 100 percent.²⁴ McCulloch and Ota (2002) found smallholders in export horticulture were significantly better off than non-horticulture smallholders, even after correcting for household characteristics such as age, family size, education and land ownership. Farmers benefited directly from higher income and indirectly from credit and extension services.

Although returns in commercial and high-value agriculture can be high, small-scale farmers are typically at a disadvantage in responding to these incentives for several reasons. Buyers demand large quantities that small-scale farmers may not be equipped to deliver because they do not have access to the required resources, inputs and technologies. They may not be able to meet standards for product quality such as health, sanitation, environment, safe use of chemicals, and food and worker safety. Standards in export markets are set high by governments and by

particular industries in response to market demand.ⁱⁱⁱ Small-scale women farmers may lack information about these standards. And even those who have the information may be unable to meet standards because they require substantial investments in equipment or other resources.

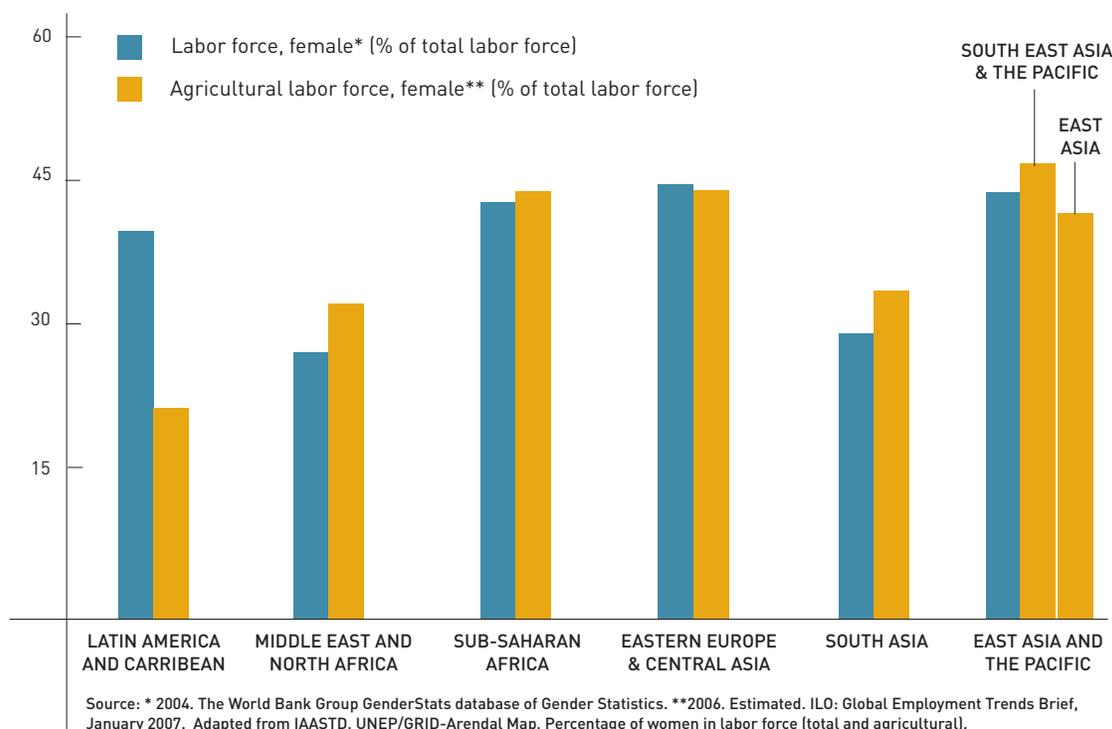
The challenge for development planners and program designers, therefore, is to tailor development interventions to enable small-scale women farmers to tap these lucrative and growing markets for food and agricultural products.

WOMEN AND AGRICULTURE: LEARNING FROM THE PAST

Most low-income women in developing countries live and work in rural areas, and agriculture is their primary source of employment (Figure 2).

They produce both food and cash crops and have multiple and diverse roles. They work on their own plots and those of others; they work as unpaid or paid workers, employers and employees, and as wage-laborers in both on- and off-farm enterprises.

Figure 2. Percentage of Women in Labor Force (Total and Agricultural)



ⁱⁱⁱ Examples of industry-set standards include GlobalGap (formerly EUREPGAP), the Kenya Flower Council and the Zambian Export Growers' Association.

40 Years of Research in Gender and Agriculture

Women's patterns of agricultural production and the value of women's work have been verified and documented since the 1970s when Ester Boserup first drew attention to women's roles in agriculture.²⁵ At the time, she also highlighted the failure of development agencies to incorporate women into development programs mainly because the prevailing thought was that women worked within the household and not in economic activities such as agriculture. Much of the research since then has been directed at showing how these flawed assumptions led to project failures.²⁶ A classic example of such a failure was that of a Bolivian llama and wool development project where women were responsible for fundamental economic activities such as llama herding and shearing, but instead were given "training in what [were] considered women's tasks - cooking, embroidery, knitting, crochet and artificial flower making."²⁷

The research spurred interest and action in the use of gender analysis as a tool for project design, and women increasingly were targeted as beneficiaries of agricultural projects.^{iv} By "including women," it was assumed development projects would be more efficient and, therefore, successful. However, "taking women into account" proved insufficient as development practitioners belatedly realized that women were not a homogeneous group; their roles and responsibilities within agriculture were as variable as those of men, and gender roles and relationships between women and men were dynamic and changeable. Truisms of that day—such as the distinctions between cash crops (male) and food crops (female)—were found to be less clear than previously thought. New economic opportunities were changing the agricultural roles of women and men, often with men moving into women's activities when they proved profitable.²⁸

Gender analysis contributed significantly toward a nuanced understanding of who does what

within agriculture for multiple cultural contexts. Understanding the gender division of labor by crop and task was crucial on many levels to shaping how development assistance should be structured and who should be targeted. It also explained differences between women and men in the adoption of new technologies and risk-taking behavior. In Zimbabwe, for example, gender analysis helped to explain differences between women and men in ranking the importance of taste when choosing to adopt high-yielding maize. Taste was more important to women than higher yields because women grew maize for consumption whereas men grew it as a cash crop.²⁹ Such analysis also suggested that women may have had a lower tolerance for risk and were slower to adopt new technologies because they typically have and control fewer productive resources.³⁰

Women's Constraints in Africa

From gender analysis, the international development community also learned that women face significant barriers in agriculture, especially inequalities in access to and control over crucial resources and inputs such as land, labor, fertilizer and formal finance (Table 2).³¹ Women also face barriers to membership in rural organizations and cooperatives, agricultural inputs and technology such as improved seedlings, training and extension, and marketing services.³² Consider these findings:

- **Land and labor:** In Uganda, women account for approximately three out of four agricultural laborers and nine out of 10 food-producing laborers, yet they own only a fraction of the land.³³ Women in Cameroon provide more than 75 percent of agricultural labor yet own just 10 percent of land.³⁴
- **Fertilizer, tools and other inputs:** A study on an irrigated rice project in the Gambia found that less than 1 percent of women owned a seeder, weeder or multipurpose cultivation instrument, compared to 27 percent, 12 percent

^{iv} Gender analysis uses gender disaggregated data to understand and document the differences between women and men's gender roles and responsibilities and the differential effects of policies and interventions. It can be used to design and implement gender-responsive interventions to address development issues. See Caroline O.N. Moser. 1993. *Gender Planning and Development: Theory, Practice and Training*. London: Routledge and www.worldbank.org/wbi/sourcebook/sba109.htm.

and 18 percent, respectively, of men.³⁵ Similar differences were found in Kenya and Zambia.³⁶ Research in Burkina Faso on men and women who grew the same crop on individual plots showed that most inputs, such as labor and fertilizer, went to the men's plots.³⁷

- **Formal finance and extension services:** A 1990 study of credit schemes in Kenya, Malawi, Sierra Leone, Zambia and Zimbabwe found that women received less than 10 percent of the credit for smallholders and only 1 percent of total credit to agriculture.³⁸ Women receive only 5 percent of extension services worldwide, and women in Africa access only 1 percent of available credit in the agricultural sector.³⁹

Unequal rights and obligations within households and societies impose restrictions on women's time use and availability, which can undermine their efficiency and productivity due to multiple responsibilities and time conflicts as well as fewer long-term human capital investments, such as education. Women have lower levels of education in all developing regions, a factor found to be significant in adopting new technology and assuming risk.⁴⁰ Gender roles also mean that many women have less influence in household decision-making, especially in making independent decisions.⁴¹

Such barriers and restrictions greatly constrain women's agricultural productivity. Research finds that these barriers account for food shortages, forgone economic growth through lower crop yields, delayed adoption of new technology and plant varieties, and environmental degradation.⁴² Data from sub-Saharan Africa demonstrate that agricultural output is reduced because of women's limited access to inputs and support services.⁴³ Women in Nigeria and the Gambia had lower yields than men due to the inferior quality of their land, and women in the Gambia experienced lower yields for the same crops due to scale diseconomies caused by the smaller size of women's plots compared with men's.⁴⁴ In Uganda, men who held powerful positions in a local political hierarchy had more secure tenure rights, and so invested more in land fertility, achieving substantially higher output.⁴⁵

Women Bolster Agricultural Productivity

Despite such constraints, substantial and growing evidence demonstrate that women farmers can produce on par with or better than men. On average, women achieve much higher values of output per hectare than men, on much smaller plots.⁴⁶ Ram and Singh's study on farming in the Mossi Plateau of Burkina Faso found female labor to be six times more productive than male labor.⁴⁷

With similar access to resources and inputs as men, women stand to achieve equal or higher yields than men.⁴⁸ Research spanning nearly four decades demonstrates this point:

- If men's average input levels were transferred to female maize farmers, yields would increase by 9 percent.⁴⁹
- By increasing women's land area and fertilizer usage to match male farmers' levels, women's yields could increase by 10.5 percent and 1.6 percent, respectively.⁵⁰
- If women in Kenya were to apply the same volume and quality of inputs as men, their gross value of yields on maize, beans and cowpea plots would increase by around 22 percent.⁵¹
- Total household output could be increased by 10 percent to 20 percent if even some of the inputs from the male-controlled plots went to the plots controlled by women.⁵²
- Where women are targeted for extension services, they produce higher yields.⁵³

These potential productivity gains can be realized by substantially improving women's access to inputs and support services such as land, labor, technology, extension services and credit.

Why Gender-informed Approaches Are Not Adopted

Despite evidence that gender-informed approaches are needed to bolster women's roles and productivity, they are not yet a mainstay of development and agricultural programs. This gap persists largely because decision makers continue to regard women as home producers or "assistants" in farm households, and not as farmers and

Table 2. Gender-based Differences in Agriculture

Land	Land title and tenure tend to be vested in men, either by legal condition or by socio-cultural norms. Land reform and resettlement have tended to reinforce this bias against tenure for women. Land shortage is common among women. Women farm smaller and more dispersed plots than men and are less likely to hold title, secure tenure, or the same rights to use, improve, or dispose of land.
Extension	Women farmers have less contact with extension services than men, especially where male-female contact is culturally restricted. Extension is often provided by men agents to men farmers on the erroneous assumption that the message will trickle “across” to women. In fact, agricultural knowledge is transferred inefficiently or not at all from husband to wife. Also, the message tends to ignore the unique workload, responsibilities, and constraints facing women farmers.
Technology	Women generally use lower levels of technology because of difficulties in access, cultural restrictions on use, or regard for women’s crops and livestock as low research priorities. (There are often also cultural constraints to women’s using animal traction [Saito et al. 1994].
Finance	Women have less access to formal financial services because of high transaction costs, limited education and mobility, social and cultural barriers, the nature of their businesses, and collateral requirements, such as land title, they can’t meet.
Time	Women face far greater time constraints than men. They may spend less time on farm work but work longer total hours on productive and household work and paid and unpaid work, due to gender-based division of labor in child care and household responsibilities.
Mobility	Women are less mobile than men, both because of their child care and household responsibilities and because of sociocultural norms that limit their mobility.
Education and training	Women are less educated in parts of Africa, Asia, and the Middle East. Illiteracy hampers their access to and ability to understand technical information. Worldwide, women have less access to education and training in agriculture.

Source: The World Bank 2008

economic agents in their own right. The development community also still lacks some key data on women’s participation and roles in agriculture to better devise and refine programs.

The international development community—as well as a growing share of the private sector—now routinely acknowledges that women are vital actors in achieving household food security. This is important progress in the fields of food security and nutrition. However, this view of women also has limited how people see women in the field of agriculture.

Implicit in the prevailing understanding of women’s role in agriculture is that they exclusively produce food and subsistence crops and that women’s production of non-food crops can and will

jeopardize food crop production and food security.⁵⁴ In this view, food crop sales may threaten household food security.

In fact, rural households both consume and sell food crops. Depending on circumstances and context, both household strategies—agriculture for consumption and food sales—can improve food security. When households sell food crops, for example, they are able to use at least some of that income to buy additional food that they may need.

Past efforts to target women in food security and agriculture also have led to an association of women as “marginalized and vulnerable,” which in turn has prompted the development community to adopt welfare approaches more often than economic development and empowerment

approaches. Ironically, the heuristic concept of female-headed households, which was used successfully to advance early data collection and reporting in the research community, now can limit these fields' reach for women. For example, current gender analysis and agricultural development assistance that target only women heads of households often overlook the vast majority of women who reside in male-headed households.⁵⁵

On the broader data gathering front, fundamental problems persist in obtaining more and better data on women's participation and roles in agriculture at all levels—household, project, national—and by crop and livestock.⁵⁶ Understanding who does what in which crop is vital to understanding agricultural development assistance needs and how best to improve agricultural productivity. Data are spotty on such crucial issues as women's ownership of land and productive assets, access to finance, participation in training and extension programs. Moreover, those data that are available tend to be overused.

Though filling many of the data gaps would require additional funding and resources, some of the data are relatively easy to obtain and require merely the political will to demand it. Even for the more difficult and expensive data needs, however, the cost of not collecting and using quality information to improve agricultural and economic development efforts will prove to be higher in the long run.

WOMEN AND AGRICULTURE: EMERGING OPPORTUNITIES

Women clearly have a central role to play in boosting agricultural productivity and economic development in rural communities. Despite the evidence demonstrating this fact, gender-informed approaches remain largely missing from agricultural development discussions, strategies and programs. This pattern is especially disconcerting because as emerging economies shift from subsistence to increasingly commercial agriculture ventures, few fully understand where women stand to lose and to gain and what the implications on world hunger and poverty may be.

Women in Commercial and High-value Agriculture

Little data exists to date on the extent of women's involvement in commercial agriculture, how much they are benefitting from it, and what may be opportunities and constraints. That said, enough data do exist to glean a broad understanding of the potential gains and challenges commercial agriculture presents for women. This section examines women who are self-employed small-scale farmers and those who are wage-earners in commercial and high-value agriculture.

Self-employed Small-scale Farms

Although little information is available about women's roles as independent small-scale farm households in commercial and high-value agriculture, the available data show that they make substantial contributions. For instance, in snow pea production in Guatemala, where 90 percent of the crop is produced by smallholders, women contributed one-third of field labor and 100 percent of processing. In Uganda, women vanilla producers cultivate their own plots as well as their husbands'.⁵⁷ In some cases, women provide more labor than men. For example, in the Dominican Republic women reported 152 hours of work on vegetable crops compared to men who provided about half that or 80 hours.⁵⁸

Studies also show that women farmers and their families in smallholder households benefit from high-value agriculture activities, especially in non-traditional exports.⁵⁹ In one survey, two-thirds of small-scale farmers in Guatemala reported improved economic circumstances from export vegetable production, and 95 percent of women viewed such production as the most lucrative option available to them.⁶⁰ These conclusions have been borne out by other studies in Kenya and the Dominican Republic.⁶¹

That said, women, like all small-scale farmers, face significant barriers to engaging in commercial agriculture. Studies show that high-value procurement chains typically exclude asset-poor farmers.⁶² Supermarket chains prefer to source from large- and medium-sized farmers except where they have

no choice or for specialty products. Because of the complex requirements of value chains such as quantity, quality, timeliness and other factors, small-scale farmers are at a competitive disadvantage in obtaining access to modern procurement chains and new markets.

Entry into modern procurements chains can require either owning or having the ability to make investments in such on-farm infrastructure as green houses, irrigation and packing sheds to deliver the quantity and quality demanded by buyers. An examination of contract farmers found that they were more likely than non-contract farmers to own land and other assets such as fumigation and crop-spraying equipment and access to irrigation.⁶³ Their household incomes tended to be somewhat higher than poverty level (but not wealthy). And their households were large in size, reflecting the commercial farming need of higher labor, including dependence on unpaid family labor. Few contract households were headed by women—just 6 percent in Guatemala and less than 1 percent in Kenya.⁶⁴

Although little information is available about the gender dimensions of small-scale contract farming, it is known that companies typically contract with men, not women. There also appears to be an implicit understanding in many of these contracts that wives and/or partners will provide the needed labor. In Kenya, for instance, Dolan (1997) found that more than 90 percent of export contracts were issued to male household members who controlled the household labor allocation and payment arrangements.⁶⁵ In such circumstances, women can have little control over how and when labor is allocated. For instance, in Kenya, one-third of women surveyed were obliged to use their own plots to grow French beans contracted to the male heads of their households. Moreover, the men controlled the income and could retract their wives' land use rights.⁶⁶ Still, in other cases women also share control of commercial income.⁶⁷

Women's success in high-value agriculture also depends on their ability to participate knowledgeably and effectively in markets.

It is important for small-scale farmers to be able to negotiate terms and prices with powerful buyers. Small-scale farmers in general, and women even more so, are at a disadvantage in these negotiations because they tend to have limited experience and lower levels of education and mobility. Even though women engage in marketing in varying degrees and in many different ways, their access to more lucrative export markets is restricted. In sub-Saharan Africa, for instance, women market traditional crops such as maize, sorghum, cassava and leafy vegetables, mainly in local markets. They also produce and market horticultural crops but not usually in export markets. If women are involved in contract farming, negotiations with the buyer are likely to be handled by men who hold the contracts.

WOMEN: MORE THAN SUBSISTENCE FARMERS

Traditional gender divisions of labor often consign women farmers to subsistence production for household consumption. Policies and interventions that accept this and assume commercial production is the province of men will miss many opportunities to tap into women's tremendous productive potential. They also will pay a heavy price in terms of their diminished impact on rural poverty and food insecurity.

Source: The World Bank 2008

Various strategies have been devised to overcome small-scale farmers' constraints in contract farming. To ensure adequate supplies and to meet market demands for quality and other standards, agribusinesses often offer development services, technologies, and training and extension services. Packages may include seeds and fertilizers and loans with which to purchase them.⁶⁸ With contracts in men's hands, it is likely that delivery of inputs, services and training also are directed at men. This is the confirmed case in public extension and training services, and likely to be the case in contract farming as well.

Alternatively, agribusinesses may opt to work through farmer groups such as cooperatives or associations because it is more efficient than having to deal with individual farmers. Small-scale women farmers also may prefer to work through groups because collective action can enhance their bargaining power with large buyers.

Women may not have access to these collective groups, however. Farmer organizations tend to be male-dominated and oriented, and few women are members and/or leaders.⁶⁹ For women to succeed as commercial farmers, development assistance and other efforts will need to support women's participation and leadership in mixed-gender farmer groups or strengthen and support women's associations to engage with agribusinesses.

Women Wage Workers in Agribusiness

For millions of landless or land-poor women who have limited access to other income-earning opportunities, employment in agribusiness is a vital source of income to ensure food and economic security. Seasonal wage employment can be a source of additional income for women who also farm their own or household land and seek employment as one component of a diversified portfolio of household livelihoods strategies that mitigate risk and strengthen food security. For very poor and landless households, wage employment may be their most important—or only—source of income.

Women wage workers dominate employment in export-oriented high-value agriculture in Africa, Asia and Latin America. They represent half or more of employees in countries such as Chile, Ecuador, Guatemala, Kenya and South Africa. Women account for 79 percent of workers in floriculture in Zimbabwe, between 60 percent and 70 percent in Colombia, and approximately 55 percent in Ecuador.⁷⁰ In Tajikistan, three-fourths of the estimated 400,000 farm workers in the cotton industry are women.⁷¹ Artichoke production and processing in Peru generates an estimated 20,500 jobs of which 51 percent are held by women.⁷² Over 60 percent of the 30,000 workers

in shrimp processing in Bangladesh are women; in Brazil, 90 percent of poultry workers are women.⁷³ Experts note that the feminization of high-value agriculture is key to the price efficiency of global value chains in fruits, vegetables and fisheries as well as traditional export commodities such as coffee, cotton and cocoa.⁷⁴

Women wage earners also greatly value their employment in high-value agriculture. Wage workers often are landless or land-poor women who have few, if any, other alternatives for earning income. In some cases, women migrate to work in these industries. Surveys show that women wage workers in high-value agriculture perceive significant improvements in their lives. For instance, women employed in the horticulture export chain in Kenya reported that they had benefitted from the work; most women reported that they sent remittances back to home villages; saved money; and made investments in land, agriculture or small businesses. The majority of women reported a sense of autonomy and “empowerment” due to their earnings.⁷⁵

Much of the work in high-value agriculture, however, is low-skilled, casual and non-permanent (Table 3). It generates relatively low and insecure wages and generally lacks benefits such as job security, career paths, social security and health care. Often, as in the Bangladesh shrimp industry, “gender disparities permeate the chain leading to occupational segmentation, wage inequality and increased job insecurity for women.”⁷⁶ Typically, women predominate among the flexible, non-permanent and casual work force. Even when a labor code such as the Ethical Trade Initiative Base Code includes sections on discrimination, it may not cover reproductive rights, maternity or paternity leave, protection for pregnant women or child care. Where maternity leave is covered, for example in the Zambian Export Growers’ Association code, the extent to which it translates to real benefits to women workers depends on whether the code relates to non-permanent workers.⁷⁷ Men, on the other hand, tend to be employed in more permanent

supervisory and administrative positions, which often are more likely to come with benefits but also are smaller in number.⁷⁸

Women also tend to be paid less than men for their work. In some cases, women are paid less than men because of the dual assumption that they have lower wage aspirations than men and that they are secondary earners in their households.⁷⁹ Fathers, husbands and sons still are seen as being the main income source for most households. In other cases, the wage differentials reflect differences in skills and educational levels.

These barriers can be difficult to overcome and can keep women locked in lower paying, lower skilled positions.

From the employers' standpoint, the need to be competitive and responsive to seasonal cycles and constantly changing standards and regulations demand flexibility and dependence on low-cost casual and contract farm workers but these demands should not weaken commitment to socially responsible practices that also can benefit company bottom lines.

Table 3. High-value Agriculture Export Earnings for Selected Countries

COUNTRY BY PRODUCT	TYPE OF EMPLOYMENT		FEMALE EMPLOYEES	FEMALE NON-PERMANENT EMPLOYMENT	FEMALE PERMANENT EMPLOYMENT	WAGES (U.S.\$)
	P	NP				
CUT FLOWERS						
Kenya	x	x	61%*	35%*	65%*	\$48/month; \$9.50/month housing allowance
Uganda	x		85%			\$1.19/day - unskilled \$2-3/day - field supervisor
Zambia	x	x	43%	34%	66%	
Zimbabwe	x	x	87%		38%	\$8-23/month; \$1-3/month production bonus; hourly overtime or flat rate
Colombia	x	x	64%			\$130/month piece rate common; overtime often not paid
Ecuador	x	x	70%			\$120/month; low wages for unskilled workers; piece rate common; overtime at 100% of normal wage
FRUITS						
Chile	x	x		52%	5%	\$4-10/day; \$135/month
Brazil	x		65%		74%	minimum wage
South Africa	x	x	41%*	69% [84%]*	26% [16%]*	\$2.60-7/day contract work
VEGETABLES						
Kenya	x	x	65%			\$9/week farm; \$14 packhouse
Zambia	x	x	70%	87%	13%	
POULTRY						
Thailand	x		80%			\$4/day with premium rate overtime

Source: Dolan, C.S. and Sorby, K. (2003) Gender and Employment in High-value Agriculture Industries. Agriculture & Rural Development Working Paper 7. The World Bank.
 *Source: Tallontire et al. (2005) Gender value chains and ethical trade in African Horticulture. Development in Practice, Volume 15, Numbers 3 & 4- pg. 565 - Study data collected between July and December 2002.
 P: permanent
 NP: non-permanent (includes temporary, seasonal, contract and casual workers)

EMPOWERING WOMEN FOR AGRICULTURAL DEVELOPMENT: RECOMMENDATIONS

Efforts to enable women to contribute more effectively to agricultural development, both in subsistence and commercial agriculture, require donors, policy-makers, development practitioners and agribusinesses to make significant shifts in policy and practice. First and foremost, the development community—and increasingly the private sector—must recognize women as farmers and agents of economic change.

Detailed recommendations for achieving these goals follow.

1. Implement gender-responsive approaches to improve productivity in subsistence farming.

Because low-income and resource-poor farmers depend primarily on their own food production for food security, development policies and programs must address the need for improving subsistence production. The immediate goal should be to increase productivity and, in the long-term, enable subsistence farmers to improve access to markets and move into commercial agriculture.

The major responsibility for improvements in subsistence farming is likely to continue with governments and public agencies. As governments and donors commit additional resources to agriculture in response to the current food crisis, they should ensure that increased investments are made in women farmers and that interventions are appropriately designed to be gender-responsive.

The specific package of policies and interventions should be tailored to local agro-ecological and market conditions and social and gender realities. Examples of gender-informed actions include:

- Consultation with women regarding seed varieties because their preferences may include factors such as nutrition and taste whereas researchers may be more focused solely on productivity;
- Field trials that include women because recent experience with farmer field schools shows

that women are more likely to adopt seeds, technologies and practices in which they are involved; and

- Extension services made available at times and places convenient to women, through social networks and information sources women are likely to access and with information adapted to their particular needs and circumstances.

There is an extensive literature on the “how to” of gender analysis and practical tools and recommendations for addressing gender differences and constraints in agriculture developed by researchers and practitioners.^{80,81} A comprehensive and up-to-date compendium of information, strategies, examples and recommendations is available in the Gender in Agriculture Sourcebook.⁸²

New technologies and solutions also should be adapted to women’s needs and fed into gender-responsive and area-specific policy packages. For instance, gender-responsive strategies to address rising prices of fertilizer and women’s lack of cash include sales of fertilizer in smaller packages or fertilizer-for-work programs.⁸³

2. Improve knowledge about women in commercial agriculture.

Additional data and information on women in commercial agriculture is needed to both inform current interventions and build knowledge to improve future practice. Detailed information is needed about gendered production and marketing of specific crops in particular locales and regions and can best be obtained through value chain analyses. Information also is needed about processes and lessons learned in practice and derived from interventions that, therefore, should incorporate gendered monitoring and evaluation (M&E) frameworks.

Engender value chain analyses: Value chain studies should routinely integrate gender analysis and obtain gender-disaggregated data. Gendered value chain analyses will help identify whether or not women have a role in production and marketing of particular crops and to what extent. Further

analysis can reveal constraints and opportunities and their causes by gender. If women are not currently fully involved at particular points in the value chain as, for example, in marketing, it can help determine the kind of support that can be offered to strengthen their roles, make them more competitive and enable them to obtain better returns. It is also critical from a gender perspective to map ongoing changes as interventions are introduced to ensure that interventions are being appropriately targeted (based on the existing gender division of labor), women are not displaced as value is added, and women are able to capture benefits.

Engender monitoring and evaluation (M&E) frameworks: Gendered M&E frameworks are needed to understand progress, fine-tune performance and determine outcomes and impacts. It is also valuable for understanding what went right or wrong and why, and applying lessons learned in future programs. The decision to integrate M&E must be made at the start of a program as successful evaluation and intervention design must inform each other. The decision to incorporate gender must also be taken up-front and included in the M&E framework. It is also important to determine up-front the gender indicators of interest and it may be both judicious and cost effective to select a limited and well-chosen set of indicators. As gender disaggregated data are seldom available at the local level it may be necessary to collect project-relevant data when establishing a baseline.

To make the best use of monitoring data, it should be shared on a regular basis with project staff, participants and key stakeholders during the project while evaluation results should be shared more widely at the end of a program. Data collection, analysis and dissemination processes involved in M&E will have knock-on effects in improved understanding about gender and agriculture and what does and does not make gendered agricultural programs work—knowledge that is invaluable for preventing hunger and ensuring food security in the future.

3. Engender policies and practices of agribusinesses

As the private sector becomes increasingly involved in agricultural development, agribusinesses need to be made aware of the gender dimensions of agriculture and of the need for gender-responsible engagement with women, both as self-employed farmers and wage-workers. Specific recommendations include:

Contract directly with women farmers:

Agribusinesses and other companies should contract directly with women farmers so that women can directly accrue payment for their own labor instead of having to negotiate through their spouses.⁸⁴ At a minimum, women and men should have joint contracts. In this case, women's share of earnings should be specified in the contract so their claim is clear and can be legally enforced.

Provide women direct access to resources and services:

It is not enough to contract directly with women. They must be offered access to the whole package of services, technologies and training, market linkages provided by companies or development assistance programs. These resources and services must be gender-relevant and responsive, informed by the best and most up-to-date knowledge and information about agricultural development. If necessary, agribusinesses will have to be made aware of the importance of adopting gender-responsive policies and trained in implementing programs that take account of and reach women.

Strengthen women's roles in mixed-gender farmer groups:

If agribusiness companies choose to work through mixed-gender farmer groups, it is critical they ensure that women can participate fully and effectively. Women must have equal access to membership and its full rights and obligations, and with full voice and influence. This will require deliberate actions to change or support group norms and rules to permit women to become members in their own right and to participate fully in group activities and assume leadership roles. It will also require targeted

support and interventions to ensure they have full access to resources, inputs and information and training. Interventions to successfully engage women will require gendered approaches. For instance, training that includes women may require adjustments in scheduling to accommodate women's multiple productive and reproductive responsibilities and, if necessary in some areas, differences in levels of education. In some cases, because of cultural and other norms, women may be excluded from mixed-gender groups and agribusinesses may have to work with women-only farmer groups.

Engage with rural women's associations: In places where strong women's groups exist or if women express a preference or readiness for entrepreneurial activity, agribusinesses should partner with them to deepen and expand their economic success. The opportunities for agribusinesses to engage directly with women farmers groups are growing. For instance, the Lumbia Women's Self-help Association (LWSHA) Multi-Purpose Cooperative in the Philippines runs a cashew processing plant that produces nuts for the domestic market including large food processing firms in Cagayan de Oro where it is based, Cebu and Manila. The cooperative has 254 women members, 90 percent of whom are directly

involved in the plant's activities from procurement of raw material to product marketing.⁸⁵ The Sociedad de Pequeños Productores Exportadoras y Compradores de Café SA (SOPPEXCCA) is a coffee growers' cooperative in Nicaragua. It has 148 women members and is led by a woman. It helps affiliated women farmers to obtain titles to land and to produce, manage and market their own coffee.⁸⁶

Improve wages, benefits and occupational mobility for women wage-workers in agribusinesses:

Advancement for women wage-earners employed in agribusinesses depends in having access to opportunities to increase their skills and earnings. For others, the ability to become and stay employed depends on policies that enable them to meet both work and family responsibilities. Although the specific mix of policies needed for improving women's employment will vary by company, location and industry type, training and skills building are vital. As shown above, women's low earnings are linked to employment in low-skilled tasks. Breaking out of gender-segregated low-skill and low-paying positions will require opportunities to be trained in higher-skilled tasks. On-the-job training may be a cost-effective solution but it will require employers to be aware of gender-related needs and to consciously adopt policies that address them.

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