

Paper Summary

The Farmers' Business Climate: Results from a Six District Study in Ghana

Peter Gaff, Regina Birner, and Felix Asante

The business climate for smallholder farmers: Why does it matter?

Promoting smallholder-based agriculture is a promising strategy for poverty reduction and economic development, as emphasized in the World Development Report 2008 on "Agriculture for Development" (World Bank, 2007). The report calls for a "smallholder-based productivity revolution" in African agriculture. The food price crisis of 2008 has underlined the need for this goal, which is now high on the political agenda in African countries, as indicated by efforts such as the Comprehensive African Agriculture Development Program (CAADP) and the Alliance for a Green Revolution in Africa. African agriculture is dominated by smallholder family farms, which are essentially—just as large-scale commercial farms—private sector enterprises. As in other sectors of the economy, the best strategy to promote their development is providing an enabling environment to them. Phrased differently, just as any other private sector enterprise, smallholder farmers need a conducive business climate. And just as in the industrial sector, assessing the business climate they are confronted with is an important diagnostic tool that helps to identify and prioritize the policy instruments that may be required to promote their development. Due to the increasing interest in "good governance" on the one hand, and private-sector led development on the other, the past decade has seen a surge in tools and indicators that measure the business climate for the private sector. Prominent examples include the "Doing Business" indicators developed by the International Finance Cooperation (IFC), the World Bank's Productivity and Investment Climate Survey (PICS), and the World Economic Forum's Competitiveness Index. These assessment tools capture mainly the business climate of enterprises in the formal industrial and agribusiness sector. The World Bank developed a Rural Investment Climate Survey (RICS), which focuses on rural non-farm

enterprises, but explicitly excludes farms. In fact, none of the available business climate surveys have focused on smallholder agricultural producers in developing countries. To fill this gap, the International Food Policy Research Institute (IFPRI) and the Institute for Statistical Social and Economic Research (ISSER) conducted a pilot study in six districts of Ghana to assess the farmers' business climate.

Conceptual framework

Box 1 represents the conceptual framework used for the assessment, which is based on a value chain perspective. Since the focus is on agricultural producers, the framework aggregates the upstream stages in the value chain into one category called "input supply," and the downstream stages into one category called "agricultural storage / marketing / processing." (IFPRI/ISSER conducted separate surveys to assess the business climate for the upstream and downstream agribusiness enterprises).

The framework defines components of the investment climate that are specific to certain stages in the agricultural value chain: These include access to quality agricultural capital inputs such as improved seeds, fertilizers, agro-chemicals and machinery; secure access to land and other natural resources, such as water for irrigation; and access to competitive markets for storing and selling agricultural outputs. Another set of components are relevant for all phases of the value chain.

For example, farmers may need agricultural advisory services and agricultural finance to both improve their production and the marketing of their products. Likewise, infrastructure such as rural

roads and communication facilities are useful in different stages of the value chain. The regulatory and policy environment also affects the farmers' business climate across the value chain.

Box 1: Conceptual Framework

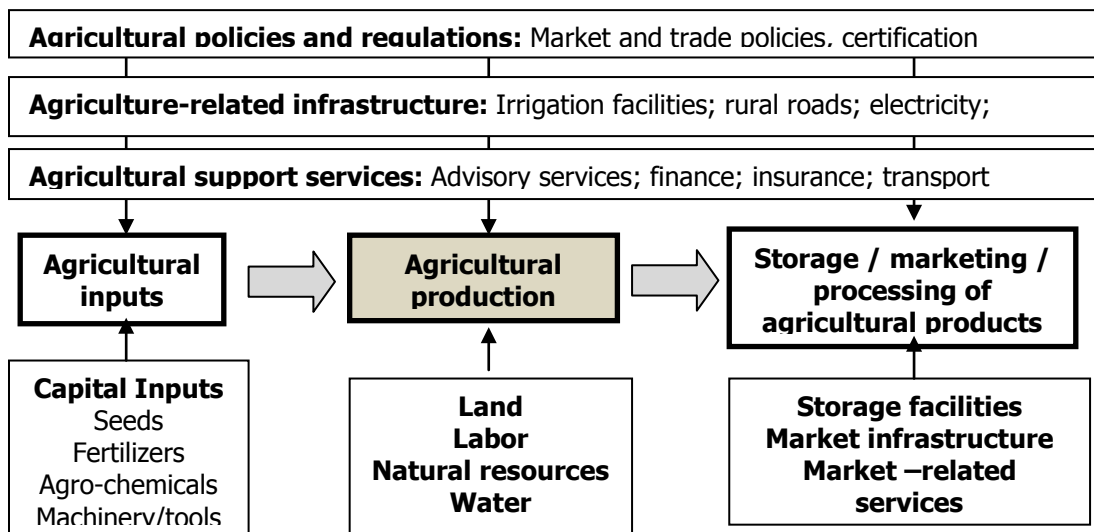


Table 1: Number of interviews

Questionnaire	Number
<i># of households by region</i>	
Forest Region	388
Transition Region	390
Savannah Region	390
<i># of individuals by category</i>	
Male HH Head	946
Female HH Head	224
Spouses	613

Data collection

Based on the conceptual framework, a questionnaire module for a farm household survey was developed, which aims to collect information from farmers regarding their access to

agricultural inputs and output marketing facilities, advisory services and agricultural finance, and other aspects of the business climate. The survey also asked the farmers to identify and rank the most important obstacles to increasing their income from crop and livestock production according to their perspective.

The survey was conducted in six districts of Ghana, two located in the Forest Zone, two in the Transition Zone, and two in the Savannah Zone. To capture the gender dimension of the farmers' business climate, the questionnaire was administered separately to male and female household heads, and to female spouses in male-headed households.

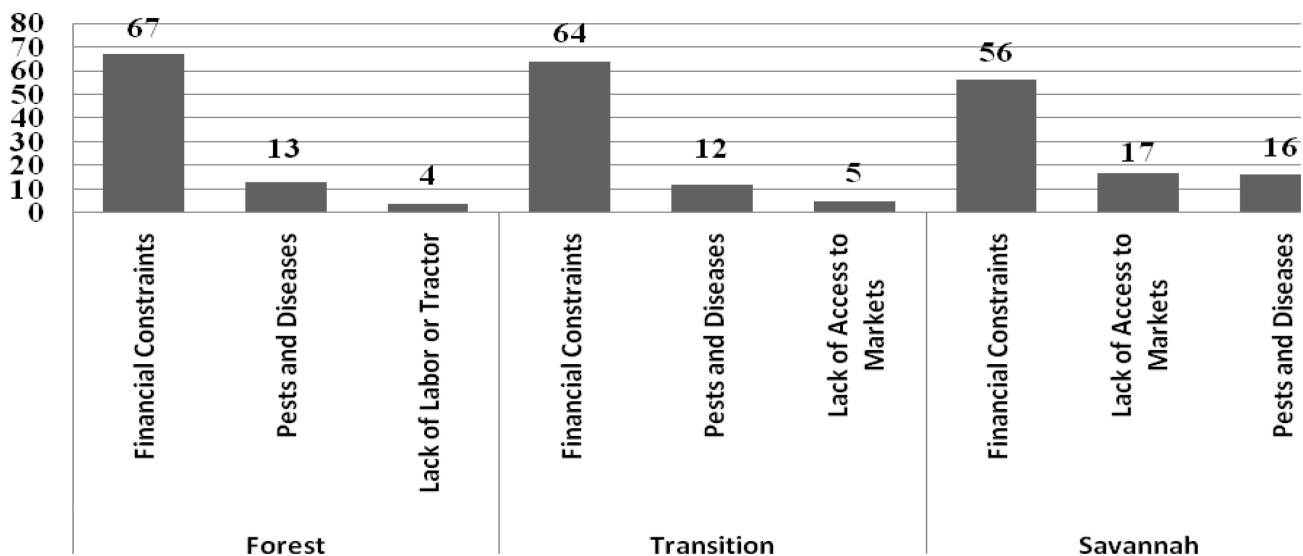
Table 1 displays the number of households that were interviewed. The business climate survey was a pilot study that was conducted as part of a larger project on decentralization and local service provision. The study was not designed to make the survey statistically representative for the respective regions, or at the national level. However, since the sample size is considerable, the findings provide relevant information on different aspects of the farmers' business climate in the surveyed districts, and they help to identify possible gender gaps in the farmers' business climate.

Main findings

The interviewed households overwhelmingly identified the lack of access to credit as the single most important constraint to improving income from crop production: Two thirds of respondents in the Forest and Transition Zones, and more than half of the respondents in the Savannah Zone identified this as their main constraint. The second most important constraint in both the Forest and the

Transition Zone were pests and diseases, followed by access to markets. Election to the position of the District Assembly member is contested, and the position is coveted. Almost all elections in our sample had more than one candidate, and the winning margins were for the most part rather small. The election turnout in all our electoral areas exceeded the district average of 50%- with the number as high as 74% in some electoral areas.

Figure 1: Main Constraints to Increasing Crop Farm Incomes as Perceived by Respondents (% of Respondents, by Agro-Ecological Zone)



Only 5% or less of the farmers in these zones considered lack of market access as a major constraint. In the Savannah Zone, lack of market access and pests and diseases had a similar weight. Very few farmers identified other constraints, such as lack of land, lack of labor, poor weather conditions, and post-harvest losses, as major problems.

While there were no main gender differences in the overall ranking of constraints, there were gender differences in access to finance (Figure 2). Among all farmers surveyed, only slightly more than 10% had received any sort of loan at all during the past two years. Female household heads were

particularly constrained, as less than 7% of them had received a loan. Female spouses, however, had slightly higher access to loans than the average, possibly because of their ability to access micro-finance.

Figure 3 displays the average distance that farmers travelled to by inputs, sell outputs, access a loan or participate in a community meeting. Except for output selling, farmers in the forest zone had to travel the largest distances. To buy inputs or access credit, farmers had to travel larger distances than for selling their outputs in all three regions.

Figure 2: Percentage of Farmers who Received a Loan in the Last Two Years

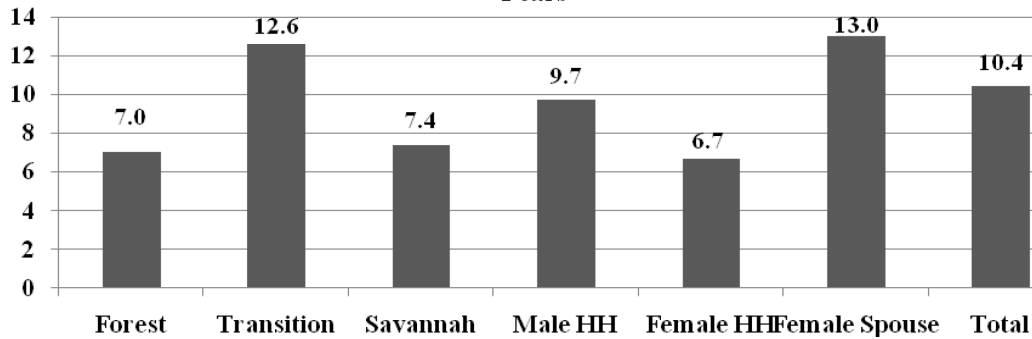


Figure 3: Average Distance Traveled (km) to Reach Selected Destinations, by Agro-Ecological Zone

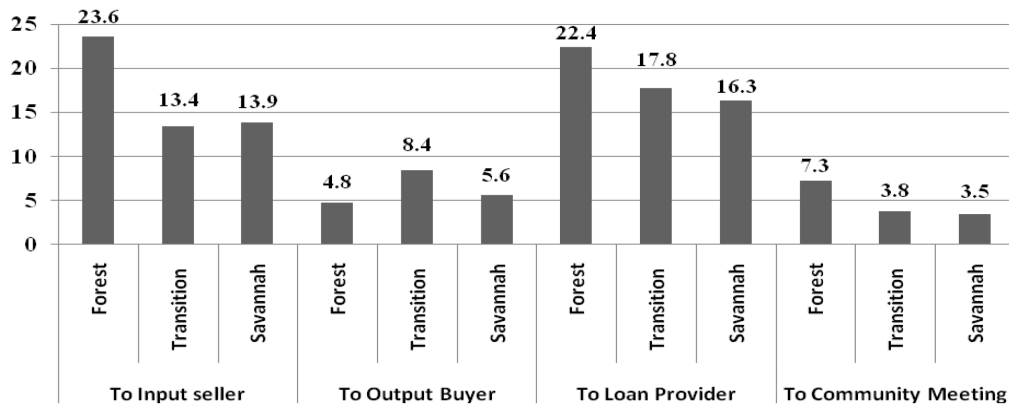


Table 2: Access to Agricultural Extension Agents and Livestock Officers

Last Year, Did an Agent Visit Your Home (% saying yes)?	Agro-Ecological Zone			Household Type		
	Forest	Transition	Savannah	Male HH Head	Female HH Head	Female Spouse
Agricultural Extension <i>n=1504</i>	8.7	10.8	10.4	11.6	0.8	1.1
Livestock Officer/Vet <i>n=1528</i>	2.1	11.7	30.8	18.2	6.2	4.3

Table 4 shows farmers access to agricultural extension services, and to livestock services. On the average, around 10% of farmers had access to visits by agricultural extension agents, which has remained a major mode of extension delivery. The gender gap regarding this service was particularly

striking. Only around 1% of the female household heads and female spouses had access to home visits. Participation in group meetings was slightly higher (13.5% for male household heads; 2.6% for female household heads; 6.1% for female spouses), but the gender gap remained. Access to

livestock services was best in the Savannah region, where livestock is most important, but there was also a considerable gender gap in accessing this service (Table 2).

While access was limited, the quality of the service provided was perceived to be very high by the respondents. More than 85% of male household heads and female spouses who received the service indicated that they were “highly satisfied” with the quality of the extension service they

received. For female household heads, the respective figure was 50%.

Together with credit constraints, limited access to extension in Ghana might contribute to a limited adoption of new technologies. Only 14.8% of the male household heads had adopting a new farming practice in the previous two years. For female household heads and female spouses, the respective figure were 7.1% and 4.6%, respectively.

Figure 4: Percentage of Farmers Using Identified Inputs on their Plots in the Previous Season

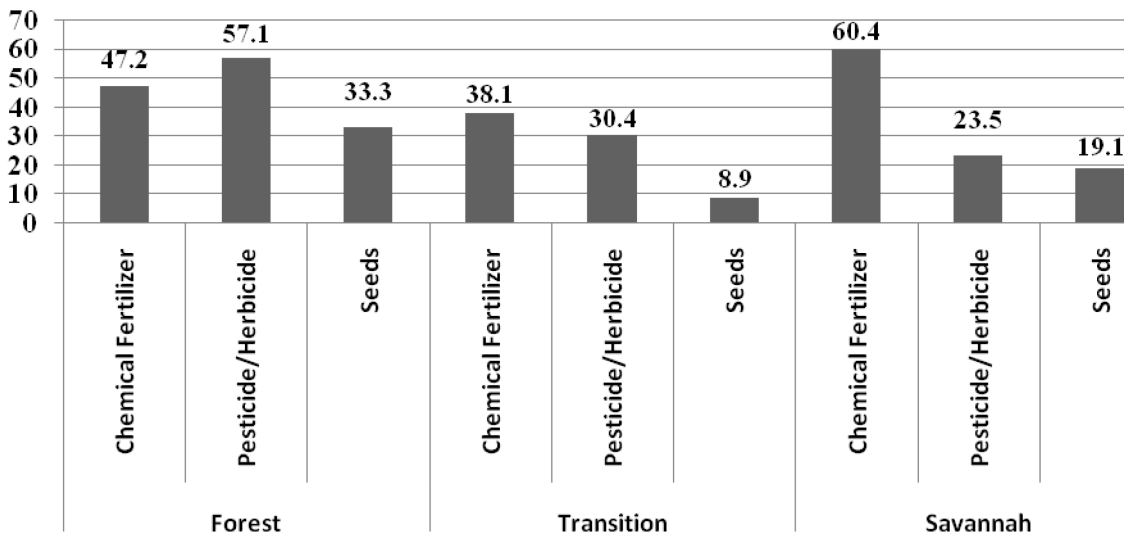


Figure 5: Percentage of Farmers Hiring a Tractor in the Previous Season

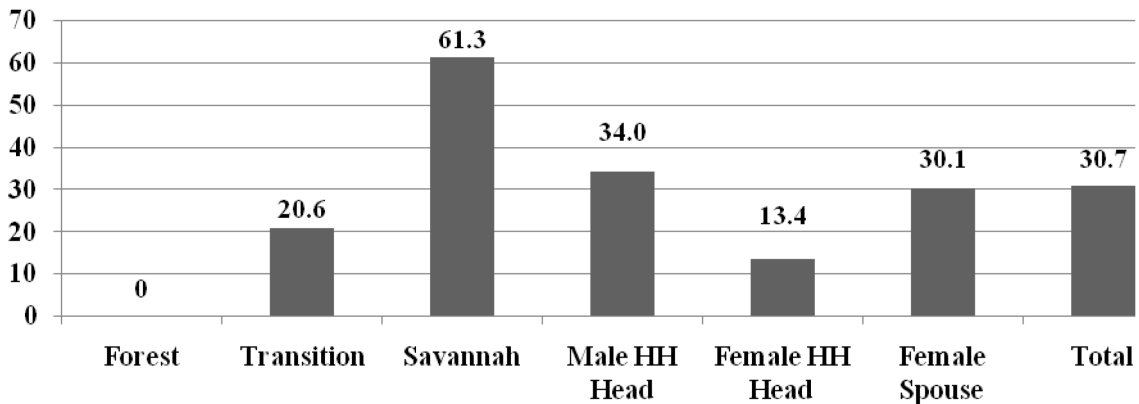
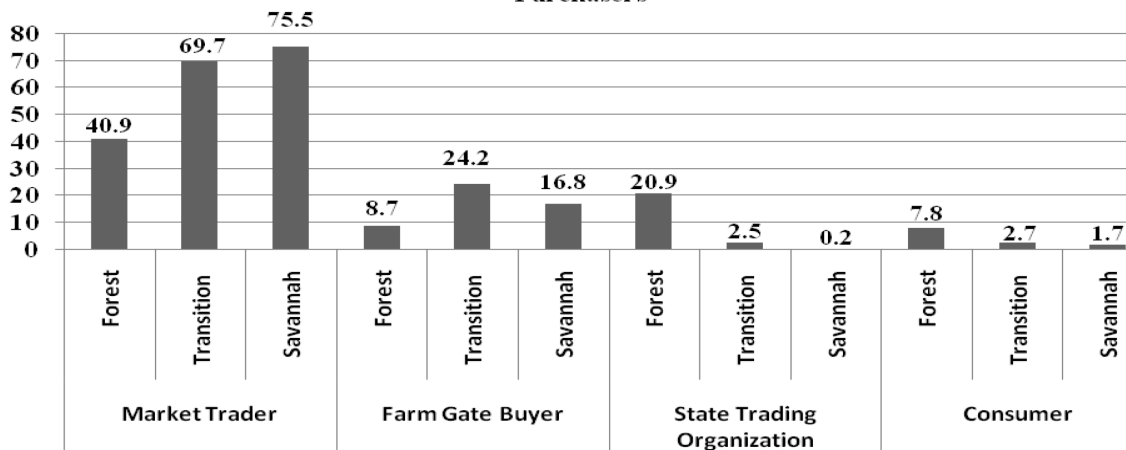


Figure 4 indicates the percentage of farmers who use inputs that increase crop productivity. More than half of the farmers in Forest and Savannah Zones, and almost 40% of the farmers in the Transition Zone use chemical fertilizer. Pesticide/herbicide use was highest in the Forest Zone, which may reflect both better access and a stronger need for the use of this input in the farming systems of this zone. The use of improved seeds was the lowest in all three zones, ranging from 8.9% in the Transition Zone to 33.3% in the Forest Zone. Around 80% of the farmers purchased their inputs from private input dealers. In case of seed, however, the respective figure was only 63%. For 80% of those farmers who received a loan for purchasing inputs, it was the input dealer who provided the loan.

Hiring tractors was expectedly highest in the Savannah Zone, where more than 60% of the respondent had hired a tractor in the past season. Female household heads seemed to face constraints accessing this service. Of those respondents not using a tractor, 35.8% indicated that tractor services were too expensive or unprofitable.

Figure 6 displays the channels that farmers use to sell their outputs. Market traders were by far the most important option in all three zones, followed by Farm Gate Buyers. State Trading Organizations play a role only in the Forest Zone, which is presumably linked to the role of cocoa in this zone.

Figure 6: Percentage of Farmers Selling Outputs to Different Types of Purchasers



Nearly 80 percent of the farmers reported that they had the option of selling their main outputs to more than one buyer, and a similar percentage reported having information about other sellers' prices. Slightly more than half of the respondents chose their buyer on the basis of price, followed convenience of location. The situation was different for cocoa producers: Only 59% reported having access to more than one buyer when selling their produce.

Policy implications

Even this pilot survey was not designed to produce results that are in a statistical sense representative at the regional or national level, the findings point to some important policy implications regarding the priorities of programs that aim to support agricultural development. The current policy debate in Ghana focuses strongly on the need to increase farmers' access to markets. While this is certainly a valuable goal, this is not perceived to be the major constraint by the majority of farmers in any of the study districts. From the farmers' point of view, it

would be more important to increase their access to financial services, and to do more to solve the problems of pests and diseases in crop production.

Improving access to financial services

It is, of course, not a new finding that farmers need better access to financial services. In fact, numerous strategies have been tried to achieve this goal. Strengthening Farmer-Based Organizations to provide group-based access to credit has been a main strategy, next to the strengthening of Rural Banks. The survey results indicate that the strategies have had limited success, so far. It is well-known that developing sustainable financial institutions in the agricultural sector is a major challenge, due to problems such as the high risk of agricultural production, the fact that risks such as droughts affect all farmers at the same time, strong political incentives to write off farmers' debts, which challenges the sustainability of credit institutions, lack of collateral on part of the farmers, and high transaction costs of reaching large numbers of smallholder farmers.

The survey results indicate that the government and development partners should maintain or strengthen their efforts to reduce the credit constraint in spite of these challenges. Innovative instruments, such as linking weather-based insurance schemes with agricultural finance may have a potential. Using some important principles from micro-finance, such as building a credit history, might be important, too.

Contract farming or other forms of vertical integration may also improve farmers' access to services. Of course, they involve their own challenges, such as contract enforcement.

Land titling may also be considered as a strategy to improve access to credit. Only 2% of the interviewed farmers had a land title, ranging from 5.7% in the Forest Zone to 0% in the Savannah Zone. Land titling is an expensive and long-term undertaking, which may not be justified on the grounds of improving access to finance alone. However, in view of increasing competition for land, land titling may also be an important strategy to secure smallholders' access to land.

Increasing the use of improved seeds

The survey results also indicate that increasing the use of improved seeds might be an important strategy to increase agricultural productivity. It is well known that in the absence of using improved seeds, other inputs, such as fertilizer and irrigation are less effective than they could be. Hence, it is important to note that the use of improved seeds is substantially lower than the use of other productivity-increasing inputs. This finding also indicates that the credit constraint is not the only obstacle that prevents farmers from using improved seeds.

Strategies to increase the use of improved seeds require a more thorough review of the seed sector. The findings indicate that the private input dealers have not become as important a source for improved seeds than they have for other inputs. Further studies would be helpful to identify whether this is due to a lack of demand for improved seeds, indicating a lack of varieties that the farmers find profitable, or due to a shortage in the supply of those seeds. Depending on the underlying causes, different strategies may be required to increase the use of improved seeds: These may include reforms in the agricultural research system that lead to a higher output in improved varieties for which farmers have a demand; reforms in the seed multiplication system to increase supply of certified seeds; strengthening the capacity of agro-input dealers to trade in improved seeds; and linking the fertilizer subsidies with incentives for using improved seeds.

Improving access to agricultural extension and addressing problems of crop diseases

The findings indicate that improving access to agricultural extension would be an important element of any strategy to improve agricultural productivity, considering that at present, both access to extension services is low, and the adoption of innovations is low, too. Of course, improved access to agricultural extension is not a new goal either, and numerous approaches have been tried to achieve this goal, as well. The survey underlines the need for strategies that strengthen the role of farmers in defining what agricultural

extension agents should focus on. A survey among extension agents conducted by IFPRI and ISSER indicated that the percentage of extension agents who considered crop diseases and pests as a major problem was lower than the respective percentage of farmers. Hence, giving farmers more voice in extension planning might help to focus extension services stronger on farmers' needs. Making extension more demand-driven and accountable to farmers may also increase the incentives of extension agents to approach researchers to find solutions.

Closing the gender gap in agricultural services

The business climate study shows that, expectedly, there is a gender gap in the access to agricultural services. What is less obvious, the study shows that the extent of this gap differs considerably across services. The gap was most pronounced in the case of agricultural extension services. This gap prevails even though the government has for a long time made dedicated efforts to address it, for example, by creating a "Women in Agricultural Development" Directorate, with associated staff in each District Office. A recent World Bank/IFPRI study found that female agricultural extension agents in Ghana are more effective in reaching female farmers, which indicates that this is an important strategy to follow. The study findings also indicate that it is necessary to distinguish between female household heads, and female spouses in male-headed households. While both categories of women are involved in farming, their opportunities and needs may well differ.

In conclusion, the study suggests that to achieve a Smallholder-Based Green Revolution, there is a need for a renewed emphasis on resolving the constraints to increased agricultural productivity, and to do so in a gender-sensitive way.

The Ghana Strategy Support Program (GSSP) is a research, communication, and capacity-strengthening program to build the capabilities of researchers, administrators, policymakers, and members of civil society in Ghana to develop and implement agricultural and rural development strategies. With core funding from the U.S. Agency for International Development (USAID)/Ghana and a mandate to develop a multi-donor-funded program, IFPRI launched GSSP as a partnership between Ghana and its development partners. Any opinions stated in this note are those of the author(s) and do not necessarily reflect the policies or opinions of IFPRI.

For further information:

Shashi Kolavalli, Senior Research Fellow and Program Coordinator
GSSP – IFPRI

Postal Address: c/o IWMI, PMB CT 112, Cantonments, Accra, Ghana

Local Address: Martin Odei Block, CSIR Campus, Airport Residential Area

Tel: +233-(0)-21-780716 • Fax: +233-(0)-21-784752

<http://www.ifpri.org/themes/gssp/gssp.htm>