Gender Mainstreaming: Who Wins?
Gender & Irrigated Urban Vegetable Production in West Africa

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Abstract
Gender roles in agriculture can be quite specific, not only in view of particular labor inputs during the production cycle but also in terms of who farms and who trades certain crops. Using data collected over ten years in West Africa, this study looked at market-oriented urban vegetable production in West Africa and Ghana in particular. Gender disaggregated data on key issues such as access and control of resources, division of tasks, decision-making process and challenges faced was collected from farmers and traders. With several exceptions, a clear gender distinction emerged across the sub-region: men dominate urban vegetable farming, while women manage vegetable marketing. The general differentiation is attributed to societal norms, but other factors play a role as well. Female farmers, for example, feel constrained by existing irrigation practices that are energy-intensive and conflict with household duties. Male farmers, on the other hand, feel significantly oppressed by their dependency on credit and prices dictated by market women, and feel disadvantaged when entering the vegetable retail market. Improved irrigation technology could facilitate a better gender balance on the farm, but mainstreaming gender balance in vegetable wholesale and retail is likely to disadvantage women.

Introduction
Across urban West Africa, the gender ratio for farmers involved in commercial vegetable production varies significantly (Table 1). In Banjul, for example, urban farming is dominated by community groups of women, and in Freetown vegetables are cultivated by individual female farmers. However, both cases appear to be exceptions. Our research found that in 10 of 13 countries, and in 16 of 20 cities in the sub-region, there are significantly more men involved in open-space urban vegetable farming than women (Drechsel et al. 2006). On the other hand, in most of these countries, women dominate the vegetable retail sector. Reasons for the gender differentiation are often described as cultural or traditional. Certain crops are associated with gender, women have limited access to land and starting capital, and the tedious manual irrigation practice on open urban land-far from where they live-makes it harder for women to become more involved in farming (Velez-Guerra 2004; Obuobie et al. 2004, 2006; Gerstl 2001). To walk the talk of gender mainstreaming, a careful analysis of current gender roles, reasons, and related perceptions is needed. The objective of this study was to generate gender disaggregated data for such an analysis on vegetable farming in urban Ghana.

In many cities, the situation is more complex than can be inferred from Table 1. There can be further gender differences between urban and peri-urban areas within the same city. In Yaoundé, Cameroon, for example, Gockowski et al. (2003) found that intensive urban vegetable farming is the domain of men, while the opposite is true in peri-urban areas. In Accra, Ghana, both male and female farmers can be found in sites with flood (furrow) irrigation; however, when watering cans are needed for irrigation, male farmers far outnumber female farmers. Women interviewed on vegetable farms along the beach of Lomé, Togo were usually part-time farmers or hired laborers. In Ouagadougou, Burkina Faso, more women than men grow traditional vegetables for subsistence, but more men than women farmed exotic products for profit (Gerstl 2001). In all cases observed in the present paper, however, gender roles appeared to be more or less defined.

Case Study: Urban agriculture in Ghana
In urban and peri-urban Accra, three general types of farming can be observed (Table 2). In this study, we focus only on the first category of market-oriented open-land vegetable farming within the city. In the rainy and dry season, about 50 to 100 hectares (ha), respectively, are used for irrigated vegetable production in urban Accra, distributed over many small open spaces including some larger sites of 4 to 20 ha; some of these plots have been in use for more than 50 years (Obuobie et al., 2006). Vegetables commonly grown include lettuce, cabbage, cauliflower, green pepper, spring onions, as well as local spinach varieties mainly during the dry season. During the wet season, maize and okra are also cultivated. The data for this case study was obtained through a series of farm,

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Table 2: Vegetable Production Systems in Urban Agriculture in Accra, Ghana

<table>
<thead>
<tr>
<th>Production System</th>
<th>Description</th>
<th>Who is involved</th>
<th>Value chain</th>
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<tbody>
<tr>
<td>Open-land vegetable production for markets</td>
<td>Farming is intensive on larger open areas within the city, where individual plots are small (0.01-0.05 ha per farmer). About 60% of vegetables grown are exotic produce, such as lettuce, cabbage and spring onions, which have high market demand.</td>
<td>About 800-1000 farmers involved, 80-90% of them men. However, almost all vegetable sellers are women.</td>
<td>Vegetables are sold in the farms to female retailers. They are then taken to central point for sale and distribution. Exotic vegetables produced are eaten (raw) by about 200,000 Accra residents daily as a supplement to certain popular street food dishes. Indigenous vegetables are usually served in stews.</td>
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<tr>
<td>Backyard farming</td>
<td>Includes both animal (usually poultry) and crop farming around houses, and mainly for subsistence purposes, with sale of excess production. Plot sizes vary but on average smaller than those used in other production systems.</td>
<td>Practiced in 2 out of every 3 households in middle to high-income areas and in compound houses. Involves mostly women and older children.</td>
<td>Improves household nutrition and saves money used to buy food from markets. Crops can be maize, plantain, cassava, local fruits or indigenous vegetables.</td>
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wholesale and retail market surveys with individual and gender-disaggregated focus group discussions over the course of several years (Obuobie et al., 2004; Henseler et al., 2005; Hope et al., 2009).

The results showed that more than three out of four farmers engaged in urban vegetable production are men, while vegetable wholesale and retail is largely managed by women. Farmers of either gender did not consider access to knowledge, land or nearby water sources as a factor restraining women from taking up farming. Within the city, the land usually belongs to government institutions and is informally farmed. Access is not restricted by gender but depends on individual lobbying with the caretaker or already existing local farming group. The situation can be different elsewhere. In Lagos, Nigeria, for example, women are more often farming less fertile plots with more difficult access to water (Anosike and Fasona, 2004).

In Ghana, female urban farmers described land preparation and in particular, the manual collection and transportation of water for the most profitable water-demanding exotic vegetables as an ‘energy draining exercise’. Due to the hot climate, exotic vegetables cultivated in Kumasi or Accra, need irrigation twice a day (unless precipitation is expected that day). Motor pumps are still a novelty; the manual fetching of water from streams and the transport of two 15-liter watering cans remains a common feature of farming, and can make up 75% of all working time (Drechsel et al., 2006). Moreover, to avoid evaporation, the fields are irrigated in the morning and evening. Women are again disadvantaged; during these times they are expected to perform traditional family duties, such as cooking.

Male farmers, on the other hand, mentioned that limited access to formal credit schemes was a particular constraint; they are unable to meet the collateral demands (in the form of land assets) of financial institutions. Nevertheless, informal credit schemes are very common. For example, vegetable sellers, who are usually women, pre-finance farming activities by providing seeds, fertilizer, pesticides or cash through verbal agreement with the farmer. This means that a farmer has to sell to the vegetable seller providing the backing at prices negotiated even before cropping and harvesting are done. This is a significant limitation, and farmers feel in most cases ‘cheated’ as vegetable sellers dictate the price without sharing actual market price information. A similar situation has been observed in several other countries in the sub-region. Only a few male farmers tried to market their produce directly (Danso and Drechsel, 2003) but then outside official markets. For example, young men from Francophone neighboring countries are selling in Accra’s streets, onions imported for example from Niger. Also in the wholesale sector, male cabbage retailers are common. They are running cars between peri-urban farms and urban markets, while the consumer-oriented retail market of cabbage and other perishable vegetables remains dominated by women. A male retailer, especially if selling within an official market area, would be disadvantaged by the social label given to leafy vegetable retail as ‘women’s work’, while there is no social barrier for women entering vegetable farming.

From the larger perspective, the current gender roles as defined by society within the context of this study might be more to the disadvantage of men than women. Women perceive selling vegetables as a quick way to make money, because it is less arduous than farming, more flexible and it complements their daily schedule, while also being less risky in terms of capital investments. Women engaged in wholesale can even show four times higher profit margins than farming male family members or retailers (Drechsel et al. 2006).

Conclusions
The study supports the notion that in urban Ghana, both genders have distinct roles for the farming and selling of vegetables. Men dominate vegetable farming and women manage the selling of vegetables. In principle, and for particular commodities, both sectors can also be accessed by the other gender, but in

1 Under gender mainstreaming, we understand in this paper a public process that tries to encourage the reduction of gender inequalities by creating the conditions for the equitable access of men and women to resources and benefits and related decision-making.
reality this does not occur too often. The reasons are driven by cultural tradition in selling vegetables, laborious irrigation practices and time constraints in farming. Further studies could explore whether the aforementioned gender barriers can be more easily overcome by an increasing number of women in farming (supported by a change in irrigation technology), or by men entering retail (against cultural pressure).

In general, however, male farmers feel significantly more oppressed in terms of their dependency on the female vegetable sellers, than women complaining about missing opportunities to farm. Issues like these reconfirm that any policy effort towards gender mainstreaming has to be based on careful situational analysis in order to fully understand any advantages and disadvantages that might occur. This study suggests that in urban vegetable farming, full gender mainstreaming might eventually disadvantage women as men might take over their marketing stronghold and a key opportunity for income generation of women.

**Works Cited**


Gockowski, James, Julie Mbazoo, Glory Mbah and Terese Foua Mouenda. 2003. African Traditional Leafy Vegetables and the urban and Per-urban Poor. Food Policy 28(3): 221-235


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