

3. Gender in irrigated urban vegetable farming

This chapter focuses on gender issues in irrigated urban agriculture and attempts to explain why men dominate irrigated vegetable production in Ghanaian cities in particular and West African cities in general. It also refers to the dominance of women in vegetable marketing.

3.1 General situation

Studies done in many cities in Africa, particularly in East Africa indicate that majority of urban farmers are females. Examples include Kenya, Mozambique, Tanzania, Uganda, Zambia, and Zimbabwe. This has been attributed to the fact that women continue to bear primary responsibility for household sustenance and well-being (Chancellor, 2004), or because of their lower educational status than men, thus, having fewer opportunities of finding suitable wage employment in the formal sector (Obosu-Mensah, 1999). However, there are large differences between countries, cultivated crops (traditional vs. exotic) and between subsistence production and market gardening. In a survey comparing 20 cities in West Africa, men dominated open-space vegetable farming in 16 cities in 10 of 13 countries (Table 3.1).

Table 3.1: Gender ratio in open-space farming in various cities of West Africa (in percent)

Country	City	Female (%)	Male (%)
Benin	Cotonou	25	75
Burkina Faso	Ouagadougou	38 (0-72)	62
Cameroon	Yaoundé	16	84
Côte d'Ivoire	Abidjan, Bouaké	5-40	60-95
Gambia	Banjul	90	10
Ghana	Accra, Kumasi, Takoradi, Tamale	10-20	80-90
Guinea	Conakry, Timbi-Madîna	70	30
Mali	Bamako	24	76
Mauritania	Nouakchott	15	85
Nigeria	Lagos, Ibadan	5-25	75-95
Senegal	Dakar	5-30	70-95
Sierra Leone	Freetown	80-90	10-20
Togo	Tsévié, Lomé	20-30	70-80

Source: Drechsel et al. (2006a).

To understand the role that gender plays in urban vegetable production in Ghana, a pilot appraisal was conducted among vegetable farmers and traders in Accra, Kumasi, Tamale and Takoradi. The surveys showed that most vegetable retailers are women, while open-space farmers in the cities are often in 9 of 10 cases men (Table 3.1). In peri-urban areas and urban household backyard gardening, on the other hand, the situation can be different (IWMI, unpublished).

3.2 Male dominance in urban open-space vegetable farming

The pilot assessment was not able to answer all questions, but allows some preliminary conclusions under consideration of the available literature.

Cultural and economic constraints

Societal definition of gender roles provides a supportive explanation for why men dominate open-space vegetable farming in urban Ghana. Generally, cash crop farming is considered in most Ghanaian communities as work for men. The reason might however be that women have in many cases less access to land (see below) and resources to commence market-oriented farming (Zibrilla and Salifu, 2004). In fact, many women who farm usually cultivate crops such as ayoyo and other indigenous vegetables, which require low initial capital investment for seeds. An example is the Zagyuri site in Tamale. In neighbouring Ouagadougou, more women than men grew traditional vegetables for subsistence supply and as cash crop, but more men than women grow higher-priced exotic vegetables solely for income generation (Gerstl, 2001).

Access to land

Land issues were mentioned as a major constraint for women in Tamale (Zibrilla and Salifu, 2004). In fact, in some regions, under customary law, women do not have a right to hold land except through male relatives or as widows. However, they can have user rights unless land is in short supply. Sometimes they are pushed towards more marginal plots. In the other study cities both male and female farmers explained that most urban land being cultivated belongs to the government (see also e.g. Obosu-Mensah, 1999) and therefore access does not depend on customary rules and one's gender but rather on the individual's ability to lobby among those who farm already or with the caretaker/watchman of the plot.

Nature of vegetable production

In peri-urban settings, farming remains a family business. Staples are grown in the rainy season and indigenous or fruity vegetables in the dry season if plots close to streams are available. Although men dominate among vegetable farmers, women take part in many farm activities (Table 3.2). Together with their children, they are especially involved in water supply, i.e. carrying water from its source to barrels for domestic use or to farm plots (Cornish et al., 2001). Women also irrigate with buckets or pans but are hardly seen irrigating simultaneously with two watering cans and never seen operating a motor pump. A wife's duty to her husband might undermine her attempts at farming for herself.

Table 3.2: Division of farm tasks by sexes in peri-urban Kumasi

Tasks {x = usually applicable; - = less applicable}	Men	Women/children
Clearing the bush	x	-
Raising beds	x	-
Nursery	x	-
Planting and transplanting	x	x
Weeding	x	x
Fertilizing	x	-
Spraying	x	-
Manual fetching and transport	-	x
Manual watering using bucket	x	x
Manual watering using two cans	x	-
Mechanical watering (using pump)	x	-
Harvesting	x	Market women

Source: Cornish et al. (2001); modified.

In urban settings, farming is less a family business but more of an individual enterprise. Families might live on the other side of town or still in their rural homestead, and men purely produce for the market. They are less interested in competing with those fruity vegetables like tomatoes but specialize in exotic and leafy ones which are too perishable for longer transport and can provide seasonally very high revenues on the urban markets (like lettuce, cabbage, spring onions). Leafy vegetables require careful nursing and much more frequent irrigation than those vegetables produced in peri-urban areas. Irrigation can take between 40 and 70% of farmers' time and will be carried out in all seasons, as already after 1-2 days, without rain, lettuce loses its fresh look and market value (Danso et al., 2002a, Tallaki, 2005). The most affordable and common method in Ghana and the sub-region is that water is conveyed in two

15-litres watering cans over about 50-100 m distance to irrigate the crops. In contrast to the general practice of women and children carrying water on the head, the cans cannot be transported as head load. This task is usually taken over by men. Also in peri-urban areas, men irrigate especially the water demanding and often more profitable crops like cabbage, cucumber, and cauliflower, while female farmers grow less water-demanding and less profitable indigenous crops like okra (okra), yoyos (*Corchorus sp*), and alefi (*Amaranthus*) as also reported by Kessler et al. (2004).

Women could be assisted through the provision of credit facilities and/or subsidies to own a treadle pump for irrigation instead of having to lift the watering cans. However, trials in Accra showed that many urban farmers rejected treadle pumps as pump and water hose require two farmers at the same time and pulling the hose can damage the young vegetables or their beds very severely. Moreover, farmers did not know where to store the (relatively heavy) pump over night.

Land preparation is another arduous task and is usually done by men. It is mostly an issue in peri-urban areas where the fields along streams are only opened for dry season cultivation. In urban areas, cultivation is on most sites year-round, an exception can be inundated inland valleys in Kumasi. For clearing, independent women cultivators depend on male laborers (paid labor). Women with limited financial resources to employ help, eventually cultivate smaller plots than their male colleagues.

Another decisive activity in the cultivation of some exotic vegetables is the nursing. The surveys of Cornish et al. (2001) showed that women had less experience in this field and correspondingly less related skills. As seeds are expensive, nursing skills are crucial for the whole business, which requires high germination rate and survival of the seedlings (Obuobie et al., 2004).

3.3 Female dominance in marketing of urban farm produce

In contrast to vegetable farming, women dominate the vegetable marketing sector, in particular retail. This is not a particular situation in Ghana but also common elsewhere (Gerstl, 2001). However, there are differences between crops. There are crops, which are traditionally handled by men, while others are “women crops”. Among vegetables, cabbage, sweet pepper and cucumber are normally associated in Ghana with men, while lettuce, carrots, spinach, okra, garden eggs and others are associated with women. This differentiation is less binding on urban farms where men grow whatever gives profit, but obvious in wholesale and retail. While there are many male cabbage wholesalers, there are hardly any

male lettuce wholesalers. Men also dominate the supply of canteens and restaurants with vegetables. Women's general dominance in retail is partly attributed to the Ghanaian tradition that retail in general is a woman's job, though with exceptions.

Both men and women involved in marketing vegetables see marketing as a quicker way to make money on daily basis, unlike farming which takes some months with staple crops before a farmer receives income from his farm activities. Though some men expressed the willingness to sell their own produce on the market, they are held back by the prevailing culture, i.e. men might wholesale certain crops but retail even less. Those who tried to enter this non-traditional domain complained about non-transparent procedures and often gave up unless they had insider support (E. Opare, pers. communication). Thus women handle 60-90% of domestic farm produce from the point of origin to consumption. Often, they have contract with the farmers, harvest themselves the best beds, and make their living as wholesalers or vendors. Women pursue marketing activities as their primary means of obtaining cash income for household expenditure. They appreciate the low initial investments compared to farming.

These market vendors are not necessarily members of the household of vegetable farmers. In fact, majority of them are not related to the farmers. Women vendors control the income they generate from the sale of vegetables and use it to support the family. Their income, especially of wholesalers, can be higher than of the farmers (Drechsel et al., 2006a). Women spend mainly on food and sometimes on clothing for the children, while the men spend their income on accommodation, children's school fees, utility bills and other major needs or projects of the family. Women also sometimes save part of their income and use it to support their husbands in major projects. Though men and women in a household may not have formally agreed on who spends on what, generally, the Ghanaian culture has already defined who bears what responsibility in the home and this is inherent, at least in the more traditional parts of the society.

3.4 Conclusions

In Ghana, there appears traditionally a clear gender differentiation between cash crop farming men and women engaged in retail. Wholesaler can be of both genders, depending on the crop. But the picture is not that simple as there are many exceptions. More studies are required to analyse the reasons and constraints, which result in this differentiation, and options for more gender equality.