Gender and Urban Agriculture: The case of Accra, Ghana.

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This paper describes the roles and values of male and female with respect to production, and marketing of vegetable crops within Accra, Ghana. An attempt has been made to (1) explore and compare labor divisions and responsibility among members in farming and non-farming households (2) analyse gendered access to and control of production resources (3) investigate gender differentiation of constraints and opportunities in urban agriculture in Accra.

1 Introduction

Gender issues in agricultural production have become an important subject of investigation, ever since questions were raised on whether women and men benefit equally from economic development. It has been observed that women are under-nourished, under- educated, overworked, under-paid and hence poorer than their male partners, as 70% of the 1.3 billion people living on a dollar a day are women (UN, 1995). It was emphasized during the development of the Millennium Goals (MDG's) in 2000, that although women are largely engaged in many sectors of the economy, a major concern is the fact that they are less than men when it comes to productive jobs even under condition of freedom and equity.

Gender relations are influenced by ethnic origin, age, religion, marital status, traditions, ideologies, societal perceptions as well as cultural and economic conditions. Gender gap is manifest in various facets of life. In agriculture, this include among others, access to and control of tangible and intangible resources, as well as division of labour at the household level and among farming activities. Wilbers (2003) observed that traditions of patrilineal inheritance limit women's access to acquire land to live and do subsistence farming. Gender differences also exist between women heads-of-households and men heads-of-households. Female farmers in female headed households tend to limit their labour input in farm activities because of heavy commitment to reproductive roles such as nurturing and caring for children and attending to elderly members of the household (Kamara et al., 1993). It turns out that in many cases, women use their land primarily for subsistence crops to feed their families while men cultivates cash crops and keep the income.

The recognition and integration of gender concerns into various national and international policies and programmes have increased over the years. Considerable progress has been made by RUAF on gender mainstreaming in the past three years. However, it is still necessary to understand and assess the contribution of women and men in urban agricultural development and the impact of this development on both. The general conceptions that women are always at disadvantage in terms of access to productive resources, extension services, marketing information and credit and that they are not capable of doing similar farming activities as men need to be tested on case by case basis. Gender analysis in urban agriculture is essential for

policy formulation and programme planning to ensure equity in resource allocation and a balanced development that benefits both male and female urban dwellers.

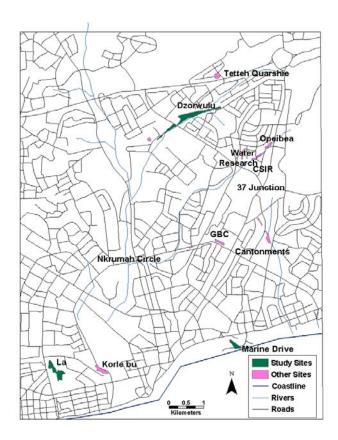
Therefore, the objective of this study was to generate gender disaggregated data to complement existing studies within urban and peri-urban households in Accra in order to make recommendation for the formulation of appropriate policies on urban and peri-urban agriculture.

1.1 Study area

Accra, the capital of Ghana, is located in the coastal-savanna zone with about 1.7 million inhabitants 49% male being and 51% female. Population growth rate is 3.4% per year (Ghana Statistical Services, 2000). Accra is dominated by the Gas and Akans tribes and are predominantly christian with only about 10% being Muslim. Accra has a hot humid climate. Mean temperatures vary from 24 °C in August to 28 °C in March. The rainfall pattern is bimodal with the major season falling between the months of March and June, and a minor rainy season around October. Natural drainage systems in Accra include streams, ponds and lagoons. Flood water drains and gutters are used for grey water, and often drain into the natural systems. There are seven urban agriculture production types in Accra. These are backyard gardening, fish farming, livestock farming, irrigated vegetable gardening, small ruminants and poultry, seasonal crop farming, miscellaneous, which entails the raising of export crops, micro livestock, snail farming, and bee keeping. Irrigated urban vegetable production has been found to be the dominant agriculture activity within urban Accra (Armar-Klemesu, 2000; Danso et al., 2002. It is mostly practiced along streams and drains in up to seven open spaces in the city. Some of these sites have been under cultivation for more than the last 50 years. Vegetables commonly grown include lettuce, cabbage, cauliflower, green pepper, spring onions, onions, Ayoyo, Alefi and Gboma mainly during the dry season while in the wet season, maize and okro are cultivated in addition. Besides open space farming, many households are engaged in some form of backyard gardening.

1.2 Study methodology

Interviews were conducted on 30 farming households and 30 non-farming households in Dzorwulu, Osu (Marine drive), and La within Accra (See Map 1) to get information on labour division and decision making. In this study, farm household is a family whose head (person responsible for the provision of family financial needs and who serves as the main decision maker) is engaged in farming while for non-farming household the head is not involved in farming activities. Stratified purposive sampling technique was employed. Data analysis was done using SPSS 10.



Map 1. Part of Accra Metropolis showing urban agriculture sites

2 Results and Discussion

2.1 Household characteristics

The farming households interviewed are predominantly (73%) men whereas the non-farming households interviewed consist of 60% women and 40% than men. All the households interviewed are headed by men. Eighty-three percent of the farming household is of 40 years and above while 17% fall between 20-29yrs of age. None of the farmers is below 30 years. Farming is the primary occupation of most (90%) of the farmers, although they all have other sources of supplementary income, such as trading, teaching, etc. For the non-farming households, 10% fall within 20-29yrs age group, 53% are between 30-39yrs while 36% are over 40yrs. They are predominantly traders (30%) but a considerable number are on vocational jobs (20%), or employed in various offices (17%) while few are housewives. The sample households have various educational backgrounds. Only 23% of farmers interviewed lack formal education, a greater number had primary (33%) or secondary (37%) education while 6% had Tertiary education. This confirms previous findings that people of all educational backgrounds are involved in urban farming in Accra (Obosu-Mensah 1999, Danso et al, 2002, Keraita, 2002). Similar observations have been made for other cities by Mougeot, 1994; Lee-Smith and Memon, 1994; Maxwell and Zziwa, 1992; and Freeman,

1991). The number of farmers without formal education is seven times greater in the farming households than non-farming households.

2.2 Division of labour and responsibilities in farming and non-farming households

Information gathered during field survey show that the control of own labour and the degree to which one can regulate the actions of others in the household is highly gendered. Households' reproductive activities such as cooking, washing of clothes, taking care of children and general household cleaning are done mostly by women while men are more involved in the provision (financial wise) of food and shelter. Both parents undertake joint responsibility in disciplining the children (63%) and in providing clothing for them (Fig 1)

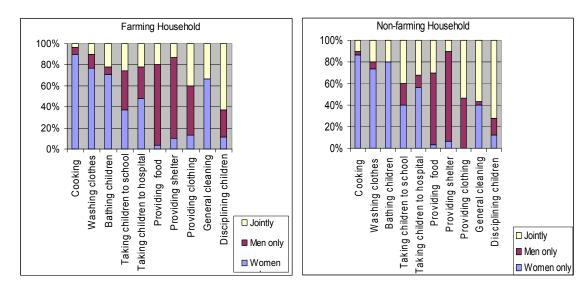


Figure 1. Distribution of households by gender of person carrying out activities

Respondents indicated that the responsibilities of man and woman in the households are defined by the tradition/society for most household activities (Table 1). Apart from taking children to school, attending parent teachers meetings, and going to hospital, which are jointly decided by couples, all other activities highlighted in the study are executed based on norms, roles and responsibilities of men and women in the society. These roles are complementary, and enhance growth and stability in households where the roles are clearly defined. Similar trend was observed for farming and non-farming households except that proportion of joint decisions in the non-farming households are higher than in the farming households (See Fig 1).

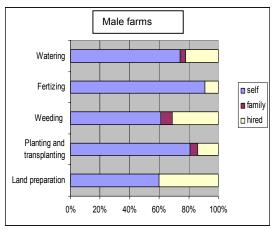
Table 1. Who defines Household Responsibilities?

	Farming Households				Non-farming Households			
	Tasks defined by: (%)				(%)			
Household tasks	Woman	Man	Joint	Tradition/	Woman	Man	Joint	Tradition
				society				/ society
Cooking	3	3	10	84	3	0	17	80
Washing clothes	7	13	20	60	3	3	23	70
Bathing of children	7	4	33	56	8	0	28	64
Taking children to school,	19	24	50	7	12	12	48	28
attending PTA meetings								
Taking children to hospital	22	27	44	7	12	12	64	12
when sick								
Providing food for the family	7	0	20	73	3	7	33	57
Providing shelter	10	7	13	70	3	7	17	73
Providing clothing	10	0	50	40	0	7	53	40
General cleaning	12	0	28	60	10	3	67	20
Disciplining children	7	8	74	11	8	16	72	4

This could be linked to the higher educational backgrounds of the non-farming households as discussed before. This presupposes that the higher the educational level of the household head, the more equal the labour division among household members irrespective of tradition. In many homes where couples are educated and gainfully employed, financial responsibilities and domestic chores are no longer borne exclusively by males and females respectively. In such situation, household duties are performed by whoever is available at the particular time. However, in gender analysis leading to policy formulation, one should not overlook the educational levels, norms, perceptions and cultural values of the society. In additions, it would be important to understand and differentiate between the static and dynamic roles and responsibilities of the society in question. Reproductive roles often attributed to women are more static than productive roles in the household.

2.3. Division of labour and responsibilities in farming related activities

Men and women farmers carry out farming activities in different manner. Women farmers usually employ labour in land preparation. Land preparation is done manually and this is an energy draining exercise, which most women are not able to do themselves. Fifty percent of women cultivators employ hired labour for land preparation (Fig 2). The results again indicate that all the women cultivators (100%) provide the main labour for watering and fertilizer application. This is due to the fact that some women use water hose which they connect a piped water source and then irrigate. They also cultivate less water demanding crop such as ayoyo and alefi



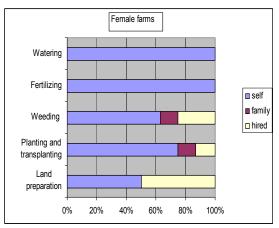


Figure 2. Distribution of labour in farming activities.

(Family here refers to children or other family members except spouse)

Female farms: is this a farm which is lead by a woman? If yes, are there a lot of non-farming households where there are farming households done by women? In the non-farming households considered, no one is involved in farming

Harvesting of farm produce is mainly done on the farm by traders (market sellers) who subsequently sell directly to consumers or sell to other market sellers. Farmers sell the mature crops to sellers on per bed basis because they prefer to sell in bulk rather than in bits. Nearly, all market sellers are women.

Mawudem (2001) and Obuobie et al (2004) also reported that exotic vegetables retailers in Accra are predominantly men. In comparison, all hired labour in both male and female farms are men. Those who employ hired labour are mainly the aged, women and those with large farms. The field study showed that both men and women farmers work with their children in the farms, although women tend to work relatively longer on the field with them than men. The farm tasks that children perform such as weeding and planting are less labour demanding. In most cases children have less time in the farm because of their school activities.

Although division of labour between men and women in crop production vary considerably from region to region and from one community to the other, men are usually involved in high energy demanding activities such as land preparation while women are more into sowing, weeding, applying fertilizer and pesticides, harvesting and threshing (http://www.fao.org/Gender/en/lab-e.htm). This is also the case in Accra.

2.4 Gender division in access to productive resources.

Access of farmers to Land and credit services

Hasna (1998) reported that Ghanaians, "assert categorically that women do not own land either in their marital or natal ancestral home" and implied that women are not able to cultivate as much as men because they do not own the land. The study revealed that a slightly different situation prevailed with respect to urban open—space farming. Even though some communities disallow women from owning land, this pertains mainly to communal lands in peri-urban and rural areas and has little or no effect on access to land for farming in the open

spaces within the cities. Seventy percent of the lands being cultivated in the urban areas belong to the government and access to these lands is not based on gender differences. This is very interesting, as this would mean that the urban situation would "rule out" culture and traditions, or would at least make them less important.

Eighty seven percent of the farmers indicated that men and women have equal access to government lands in urban open-spaces in Accra. In essence, access to government land is based on availability and the lobbying strategies of individuals. In most cases, access is achieved via direct contact with the owner or caretaker or through a third party working with the government institutions in the area. In some peri urban areas of Accra where sharecropping is used as payments for cultivating land owned by individuals, landowners or traditional leaders (e.g. chiefs) prefer that men rather than women cultivate larger plots, hence providing them with greater benefit. The landowners perceived that men are likely to produce higher yields than women.

In general urban farmers do not have access to formal credit schemes in Ghana. This is mainly due to the fact that farmers cannot meet the collateral demands of the financial institutions. In addition, most of the urban farmers have limited space for cultivation and do not own the land. In spite of these problems, some urban farmers have managed to have a win-win situation with the vegetable sellers in terms of access to informal credit. Sellers pre-finance farming activities by providing seeds, fertilizer, pesticides or cash in order to produce for them. Sometimes sellers order the products before cultivation usually through verbal agreement based on trust and confidence. The final amount of money received may differ from the initial amount agreed on as demand and supply might have changed during the growing period. Similar situations have been observed in Lome, Togo and Cotonou, Benin in West Africa (Danso and Drechsel, 2003).

Access to Extension services and market information

Out of the 30 farmers interviewed, 80% indicated that men and women have equal access to market information concerning the demand for their produce as well as access to extension services. Prevailing market prices circulate through farmers' associations (which comprise of both male and female farmers) and through interaction with other farmers as well as vegetables sellers. Although there is equal access to productive resources, women have their own preference. It was observed that women tend to prefer farming sites that are close to a pipe borne water or streams because of the strenuous nature of watering. The common practice is the use of two 15-litre watering cans at the same time, where the cans are filled and conveyed over some distance to the field. Eighty percent of the sample farmers indicated that there are no policies that limit the access of men and women to productive resources in the urban areas.

2.5 Gender related issues in Accra UA: Consequences for UA projects and policies

Men dominate urban farming in Accra as a result of the arduous nature of the farming tasks especially land preparation which is mainly manual and the fact that vegetables require more activities such as regular watering, planting and transplanting, shading in some cases, regular turning of the soil and weeding. Land clearing, land preparation and watering are the most difficult tasks and are usually considered as male activities. Whereas men could supplement their effort by providing paid labour, half of independent women cultivators mainly depend on male labourers (paid labour) to carry out land clearing and preparation. Women with

limited financial resources cultivate relatively small plots that can easily be managed. This is illustrated in the following comments made by a typical woman farmer who had been cultivating in Accra for 11 years.

"I started with five other women but they have all left because of the difficulty of the tasks involved. Talking about land clearing and preparation, forking of beds, spraying of chemicals etc., it takes much determination to continue cultivating. I mostly use men hired labour for land clearing and preparation. When I have not got enough money to hire labour, I do the land preparation myself but then I'm able to cultivate only part of my plot."

Moreover, male farmers produce more water-demanding crops like lettuce, cabbage and cauliflower which are fortunately more profitable, while the women grow less water-demanding and less profitable crops like okro, yoyos (*corchorus sp*) and alefi (*Amaranths*). In effect, women who would like to gain a living from urban farming lose many opportunities because of the longer periods use for irrigation (Keraita et al., 2002).

In contrast, women and children usually carry water over 200 metres to barrels for irrigation in the peri urban areas, but this is usually done as paid or family labour.

Traditional roles of men and women provide additional explanation to the dominance of men in open space vegetable farming in Ghana. In many communities, farming is generally considered to be men's work, particularly if it is market oriented. Zakaria *et al.* (1998) reported that it is still not acceptable for women who hail from Northern Ghana to farm by themselves in any city. Women mostly work on the farms of their husbands where they are made to focus on food crops for home consumption whilst the husbands concentrate on commercial crops. In many cases, the women are given the unfertile lands to cultivate. They apply manure and other soil improvers to increase the fertility of the land. The men collect the fertile land and reallocate the unfertile portion of the land to the women for cultivation.

Women play a major role in marketing of urban vegetables. This gives them the chance to attend to their domestic activities and at the same time serving as a source of income generation for their households. Urban vegetables are produced entirely for sale and marketing is done at the farm gate. Male farmers do not engage themselves in direct marketing to consumers. Previous studies conducted in Accra presented similar findings (Armar-Klemesu, 1998; Flynn-Dapaah, 2001; Obuobie et al 2004). Several reasons have been assigned to the above assertion. These includes: (1) the arduousness of farm work, especially land clearing, land preparation, carrying watering cans for watering and spraying,(2) general lack of interest in farming and cultural definitions of gender roles (i.e. men do the farming and women do the selling),(3) the general perception that marketing is more profitable and less risky than farming.

In this case study, both men and women involved in marketing vegetables see it as a quicker way to make money on a daily basis, unlike farming, which takes some months before a farmer receives income from his farm.

Interestingly, some male farmers attempted to retail their own produce on the market to make more profit. However, most of them were held back by the prevailing norms and cultural values defined by the society that men do not retail vegetables. In coastal West Africa, women handle 60-90% of domestic farm produce from point of origin to consumption (Mawudem, 2001). Women pursue marketing activities as their primary means of obtaining cash income for household expenditure. They are usually better at bargaining to obtain better prices.

Urban agriculture projects and policies should consider the distinctive gender dominance in production and marketing of crops in Accra, Ghana. More female involvement in the production line of UA can be facilitated through (1) availability/provision of water lifting and application technologies that do not require much time and expenditure of energy (2) provision of credit facilities to pay for hired labour (3) introduction of simple processing methods and technologies that allow diversification of the production process. Increase involvement of women in UA production would increase their contribution to household income and this would, in its turn, increase their position within the household. As it is difficult to change existing norms, traditions and perceptions of people, policy intervention in the short term should target issues that relate more to access to resources as well as acquisition of necessary skills and materials to ensure sustainable UA production.

3. Lessons learnt

- 1. Farming and non-farming household studied in Accra have divers socio-economic characteristics. While men are mainly associated with the provision of households' financial needs, women are associated with the execution of household chores. These roles, where clearly defined are complementary and hence could promote growth and stability in the households. In most cases, these roles are defined by the norms, values and perceptions of the members of the society.
- 2. Access to productive resources is not gender biased as about 70% of land used in the urban area of Accra belong to the government in which case access depend on lobbying strategies. Majority of the farmers indicated that there are no policies that limit men and women access to productive resources in urban agriculture. The metropolitan director for urban agriculture supported this finding.
- **3.** Males dominate urban farming because of the arduous nature, of the work whereas women dominate marketing because marketing appears to be profitable with less risk. In addition, women are more flexible in bargaining than men at the marketing end of the production chain. However, there is a close collaboration between the farmers and the sellers in terms of access to information on soil borne diseases and demand for specific crops within the year.

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