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ACTIVITIES OF WOMEN IN HOME GARDENING IN OVIA NORTH-EAST LOCAL GOVERNMENT AREA OF EDO STATE, NIGERIA

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ABSTRACT

The study investigated the activities of women in home gardening in Ovia North-East L.G.A. of Edo state. A total of 80 respondents were sampled using the snowball sampling technique. Data were analysed using frequency counts, percentages, means and chi-square analysis. Results revealed that 36.0% of the women were mainly between 41 to 50 years of age. About 74.7% were married and 64.0% had passed through tertiary institutions. The major crops cultivated were pumpkin (93.3%), bitter leaf (90.7%), pepper (88.0%) and green vegetables (84.0%). Some of the activities carried out by the women themselves in the garden include planting (X=3.37) and weeding (X=2.91). The reasons adduced for establishing home garden were ready supply of food for the household (88.0%) and income generation (66.7%). A significant association exist between the respondents' years of farming experience and the activities carried out in the garden ($\chi^2 = 9.10$; $p < 0.05$). It was recommended that more women should be encouraged to establish home gardens around their house and those that already do should be reached with extension services on how to tackle problems such as pest and disease infestations.

Keywords: Activities, women, home garden.

INTRODUCTION

The increasing demand for food as a result of the rising population and the alternative uses to which food materials are being put have led to the food crises currently affecting many parts of the world and the spike in food prices. This development poses a lot of threat to three groups: poor households, governments of low income food-importing countries and development agencies that use food to tackle emergencies in different parts of the world (Wiggins and Levy, 2008). This trend has renewed the calls for more sustainable methods of food production systems in order to meet this challenge. Home gardens have been touted as a means of meeting the food needs of many households especially the low income households that abound in most of the developing countries.

Home gardens or backyard farms are usually established around the house to cater for the immediate food needs of members of a household and sometimes referred to as family food production system. This system

is found in most regions of the world and is an integral part of both rural and urban communities. Home gardening can be a sustainable strategy for improving food security and income generation when the gardens are well adapted to local agronomic and resources conditions, cultural conditions and preferences (Midmore *et al*., 1991). This type of gardening is accessible to the poorest people since it relies on low-cost technology and may be well adapted to hostile environment. Home gardening provides direct access to food that can be harvested, prepared and fed to the family on a daily basis, poor or landless individuals can practice it on small patches of homestead land, vacant plots, roadsides or edges of fields or in containers placed around the house. The gardens are also usually meant to augment and at the same time improve family diet by supplementing vitamins, minerals and proteins necessary for a nutritionally balanced diet. In this light, home garden has been described as a small scale supplementary food production system by and for household members (Hoogerbrugge and Fresco, 1993).

Home gardens as posited by Marsh (1998) is more than a place to plant crops as they may also contain trees for shade, wind breaks, fire wood, building materials, fiber, cooking oil, spices, condiments, medicinal herbs and other useful household materials. These gardens may also become the principal source of household food and income during periods of stress such as the pre-harvest lean season, harvest failure, prolonged unemployment, etc (Marsh, 1998).

Women have been noted to contribute immensely to food production especially in sub-Sahara Africa in terms of production, processing, transportation and storage (FAO, 1996; Oladele, 2003; Banmeke and Olowu, 2005). This makes them important in enhancing the level of food security in food deficient parts of the world. Although it is often assumed that women are the principal home gardeners, their role just like in the normal food production system varies by region and culture. However, as home garden contributes immensely in enhancing household food security and income generation thereby reducing poverty, it is essential to investigate the major activities of women in home gardens and ascertain the major factors affecting their production. Therefore, the study investigated the role of women in home garden in Ovia North-East Local Government Area of Edo State, Nigeria.

The specific objectives of this study were to:

- determine the personal characteristics of women home gardeners in the study area,
- ascertain the major crop species grown by the respondents in their home gardens,
- investigate the activities carried out by women home gardeners,
- determine the respondents' reasons for establishing home gardens,
- identify the problems encountered by respondents in their gardens and
- determine the types of assistance received by respondents from extension service

Hypothesis of the study

The hypothesis of the study is stated in null form that "there was no significant relationship between the personal characteristics of the respondents and their activities in the home gardens".

METHODOLOGY

The study was conducted in Ovia North East Local Government Area of Edo State. The Nigerian Institute for Oil palm Research (NIFOR) was purposively selected from the local government area because it is the largest community in the local government area, has a very large population with a high concentration of home gardens.

The study was carried out between July and September 2007. Based on the fact that there was no documentation or presence of any association of home gardeners to check the actual population of those involved in home gardening, a snowball sampling technique was used in selecting 80 women with home gardens residing in the staff quarters of NIFOR. Data were collected from the respondents using copies of a well structured questionnaire. However, only 75 copies of the questionnaire were retrieved and found to be useful. The major crops cultivated by the women gardeners were ascertained by asking them to indicate the crops cultivated from a list of 19 different crops. The major activities carried out in the home gardens was determined by asking the respondents to rate activities such as planting, weeding, mulching on a four point rating scale of "very often" (4 points), "often" (3 points), "rarely" (2 points) and "never" (1 point). The major problems encountered in the gardens were ascertained by asking the respondents to rate nine problems using a four point rating scale of "very often" (4 points), "often" (3 points), "rarely" (2 points) and "never" (1 point). Data were analysed using frequency counts, percentages, means, standard deviation and chi square analysis.

RESULTS AND DISCUSSION

Personal characteristics of the respondents

The personal characteristics of women with home gardens in the study area are presented in Table 1. Results in Table 1 reveal that 36.0% of the women are between the ages of 41 to 50 years, which is an indication that most of the respondents are middle aged and still in their active age. Also, 74.7 and 46.7% of the respondents are married and have a family size of between 1 to 5 persons, respectively. This is expected because the marriage institution is considered as very important in the study area and also the family size is not large which may be adduced to the location of the respondents. Furthermore, 64.0% of the women have passed through tertiary institutions which confirm the assumption of the researchers that women in the study area would have a high level of education when compared with other women in other areas. Results in Table 1 further reveals that 40.0% of the respondents are housewives, while 44.0% have farming experience of between 16 to 20 years which probably explains their having home gardens around their houses.

Major crop species grown by the respondents in their home gardens;

The major crop types cultivated by the respondents are presented in Table 2. The major crops cultivated in the home gardens by the women are pumpkin (93.3%), bitter leaf (90.7%), pepper (88.0%), green vegetables (84.0%) and maize (80.0%). This result is in line with a priori expectation as vegetables are the dominant crops often cultivated in gardens around houses. This is similar to the findings of Hoogerbrugge and Fresco (1993) who asserted that 60% of leaf vegetables and 20% of all vegetables consumed by the household in Sri Lanka is produced in

Table 1: Personal characteristics of the respondents

Personal characteristics	Frequency	Percentage
Age category		
Less than 30 years	14	18.7
31 -- 35 years	14	18.7
36 - 40 years	11	14.7
41 - 50 years	27	36.0
Above 50 years	9	12.0
Marital status		
Single	7	9.3
Married	56	74.7
Divorced	4	5.3
Widowed	8	10.7
Family size		
Less than 5	35	46.7
6 - 10	34	45.3
11 - 20	6	8.0
Educational status		
No formal education	16	8.0
Primary	7	9.3
Secondary	14	18.7
Tertiary	48	64.0
Primary occupation		
Housewife	30	40.0
Civil servant	22	29.3
Farming	5	6.7
Trading	15	20.0
Tailoring	3	4.0
Farming experience		
Less than 5 years	15	20.0
6 - 10 years	14	18.7
11 - 15 years	13	17.3
Above 16 years	33	44.0

home gardens. This indicates that irrespective of geographical and cultural differences, there are similarities in the type of crops grown in home gardens. Furthermore, Marsh (1998) noted that home gardens typically produce more than 50% of vegetables, fruits, medicinal plants and herbs consumed by households.

Table 2: Crops cultivated by the respondents

Type of crop	Cultivated*	Not cultivated*
Pumpkin	70 (93.3)	5 (6.7)
Bitter leaf	68 (90.7)	7 (9.3)
Pepper	66 (88.0)	9 (12.0)
Green vegetables	63 (84.0)	12 (16.0)
Maize	60 (80.0)	15 (20.0)
Plantain	58 (77.3)	17 (22.7)
Tomatoes	55 (73.3)	20 (26.7)
Okra	55 (73.3)	20 (26.7)
Yam	53 (70.7)	22 (29.3)
Cassava	46 (61.3)	29 (38.7)
Banana	40 (53.3)	35 (46.7)
Orange	35 (46.7)	40 (53.3)
Guava	29 (38.7)	46 (61.3)
Mango	27 (36.0)	48 (64.0)
Cashew	24 (32.0)	51 (68.0)
Pear	20 (26.7)	55 (73.3)
Groundnut	6 (8.0)	69 (92.0)
Melon	6 (8.0)	69 (92.0)
Garden egg	3 (4.0)	72 (96.0)

*Multiple responses. Figures in parenthesis are percentages

Activities carried out by women in their home gardens

Some of the main activities carried out in the home garden by the respondents are presented in Table 3. Findings in Table 3 indicates that planting ($\bar{X}$=3.37), weeding ($\bar{X}$=2.91) and watering ($\bar{X}$=2.56) are some of the activities the women carry out by themselves in the garden. This finding is expected because as indicated in Table 1, about 44% of the women have between 16 to 20 years farming experience which makes them quite familiar with farming activities. This will necessarily influence the kind of activities the women can actively participate or be involved in.

Respondents' reasons for establishing home gardens

Results in Table 4 indicate the reasons why respondents established home gardens. Supply of food to the household (88.0%), nutritional benefits (74.7%) and income generation (66.7%) are some of the major

Table 3: Major activities carried out by respondents in their home garden

Activities	Mean	Standard deviation
Planting	3.37	0.67
Weeding	2.91	1.00
Watering	2.56	0.98
Mulching	1.51	0.74
Fertilizer application	1.36	0.56

Scale: "Very often" = 4 points, "often" = 3 points, "rarely"= 2 points, "never" = 1 point.

reasons why women in the study area decided to establish home gardens. These are certainly some of the advantages of having home gardens when members of a household decide to establish gardens around their homes. Similarly Marsh (1998) opined that sales of home garden produce may be the only source of independent income for some women that are not engaged in any paid labour outside their homes. This assertion may not be far fetched as 40% of the respondents of this study indicated that they are housewives as indicated in Table 1 above.

Table 4: Reasons for establishing home gardens

Reasons	Agree	Disagree
Food supply to the household	66 (88.0)	9 (12.0)
Income generation	50 (66.7)	25 (33.3)
Hobby	29 (38.7)	46 (61.3)
Ready source of spices	38 (50.7)	37 (49.3)
For firewood	17 (22.7)	58 (77.3)
Medicinal purpose	30 (40.0)	45 (60.0)
Due to unemployment	5 (6.7)	70 (93.3)
To utilize the land around the house	36 (48.0)	39 (52.0)
Experiment	8 (10.7)	67 (89.3)
Nutritional benefits (e.g. fresh vegetables)	56 (74.7)	19 (25.3)

Problems encountered by respondents in their gardens:

Some of the problems encountered by the respondents in their garden are presented in Table 5. Findings from Table 5 reveal that the major problems encountered by the respondents in their home gardens include weed infestation ($X=3.\overline{00}$), pest infestation ($X=2.3\overline{6}$) and theft ($X=2.\overline{33}$) of their produce. Weed infestation often becomes a major problem in home gardens especially when the required labour is not readily available. Pest infestation just like on conventional farms poses a major challenge for farmers with traps used as a means of curbing the menace. Theft of produce is a major challenge to home gardeners especially in urban areas where most people do not have farms.

Table 5: Problems encountered in the home gardens by the respondents

Problems	Mean	Standard deviation
Weed infestation	3.00	1.00
Pest infestation	2.36	0.99
Theft	2.33	1.08
Disease attack	2.01	0.93
Inadequate labour supply	1.73	0.82
Poor yield	1.67	0.74
Low soil fertility	1.63	0.86
Lack of adequate water	1.59	0.75
Soil erosion	1.49	0.66

Scale: "Very often" = 4 points, "often" = 3 points, "rarely" = 2 points, "never" = 1 point

Assistance from extension personnel by women gardeners

The assistance rendered by extension agents to women gardeners is indicated in Table 6. Findings here indicate that the respondents hardly receive assistance as regards the dissemination of information ($X=1.13$) and the management of their gardens ($X=1.15$) from extension agents. This is an indication that home gardeners are not included among the target audience of extension personnel, which is further compounded by the seemingly non functionality of most extension outfits in different parts of the country.

Test of Hypothesis

The result of the test for any relationship between the personal characteristics of the respondents and the activities they carried out on their farms is presented in Table 7. Findings in Table 7 indicated a significant association only between the farming experience of the respondents and the activities they carry out on their farms ($\chi^2 = 9.10$; $p < 0.05$). This is expected because farming experience would definitely impact on their ability to embark on certain farming activities and again 44% of the respondents are well experienced as regards farming as indicated in Table 1.

Table 6: Assistance rendered by extension agents to women gardeners

Assistance by extension personnel	Mean	Standard deviation
Information dissemination	1.13	0.55
Co-operative information	1.44	0.82
Management of garden	1.15	0.45
Sources of production inputs	1.17	0.64

Scale: "Very often"= 4 points, "often"= 3 points, "rarely" = 2 points, "never" =1 point

Table 7: Relationship between respondents' personal characteristics and the activities carried out in the garden

Personal characteristics	Degree of freedom (df)	$\chi 2$	P value	Decision
Farming experience	3	9.10	0.02	Significant
Family size	2	4.91	0.08	Not significant
Educational status	3	3.52	0.31	Not significant
Age	4	2.13	0.71	Not significant
Marital status	3	3.52	0.31	Not significant

CONCLUSION AND RECOMMENDATIONS

Findings of this study indicate that housewives are not the only category of women that have home gardens. It is obvious that other women that are engaged in different economic activities also establish these gardens. Vegetables are the major crops grown in the gardens and the major reason for keeping the garden was to augment the food supply to household members. The major constraints faced by the respondents in the garden are weed infestation, pest infestation and theft of garden produce. Furthermore, these women do not receive much assistance from extension agents as regards their activities. To contribute to the United Nations' Millennium Development Goal of reducing food insecurity and poverty by 2015, it is therefore incumbent that extension services should provide women gardeners with relevant information on how to improve the management of the home gardens and more women should also be encouraged to establish such gardens around their houses.

REFERENCES

Banmeke, T.O.A., Olowu, T.A. 2005. Accessibility of Women Farmers to Agricultural Information in South Western Nigeria, *South African Journal of Agricultural Extension*, 34 (2): 237- 246.

(FAO) Food and Agricultural Organisation 1996. Food for all: Report of the world food summit, FAO publication, Rome, pg 58-60.

Hoogerbrugge, I., L.O. Fresco, 1993. Home garden systems: Agricultural characteristics and challenges, International Institute for Environment and Development, Gatekeeper Series, No. 39.

Marsh, R., 1998. Building on Traditional Gardening to Improve Household Food Security, Food, Nutrition and Agriculture, FAO (22), http://www.fao.org/Docrep/X0051t02.html. accessed 24/5/2007.

Midmore, D. J., Ninez V., Venkataraman, R. 1991. Household gardening projects in Asia: Past experience and future directions, AVRDC Technical Bulletin. 19 (1).

Oladele, O.I. 2003. Institutional strengthening as a tool for empowering women farmers: Lessons of women in agriculture in Nigeria. http://www.makere.ac.ug/womenstudies/full%20papers/Oladele.htm

Wiggins, S., Levy, S. 2008. Rising food prices: cause for concern, Natural Resources Perspectives, No. 115, Overseas Development Institute

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