

EFFECT OF URBAN HOUSEHOLD FARMING ON FOOD SECURITY STATUS IN IBADAN METROPOLIS, OYO STATE, NIGERIA

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Abstract: Agriculture is an important tool for reducing the effects of household food insecurity, unemployment and poverty which are major problems in urban areas in Nigeria. Food insecurity continues to worsen in some urban areas of the country and many households resulted into urban farming as a means of coping. The study investigated the effect of urban household farming on food security status in Ibadan metropolis, Oyo State, Nigeria. Primary data was collected for the study using structured questionnaire. Two-stage sampling technique was employed for this study. The first stage involved the random selection of two urban local government areas from Ibadan metropolis. This was followed with the selection of 110 urban farming households from these local government areas. Data were analysed using descriptive statistics, Foster-Greer-Thorbecke and probit regression. Results showed that sex, years of schooling, marital status, household size, access to extension agent, hired labour and type of farming enterprises are determinants of food security. The study recommends the policies that make extension services accessible to urban farmers and also skills development among others.

Key words: food insecurity, urban farming, two-stage sampling, agricultural production.

Introduction

Food is perhaps the most important commodity linking rural producers and urban consumers (Rengasamy et al., 2003). Urban farming has been assumed to be global concern and it has become a topic of scientific research in recent years. This is because the increasing growth of hunger in most parts of the world, especially in developing nations, has presented a huge challenge to governments. Sub-Saharan Africa (SSA) has the highest rates of urbanization globally and more than half of its entire population will be living in cities during the next two decades

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(Adeyemo et al. 2009). This situation implies that in SSA, especially Nigeria, the problem of urban poverty, unemployment and urban food insecurity will become exacerbated rather than ameliorated by the phenomenon. Urban farming is one of the positive activities urban residents in Nigeria undertake in an effort to take control of food security, social ills and environmental degradation in their communities. However, in times of harsh economic situations and periods of food insecurity, urban farming is often adopted as an important livelihood strategy for survival. It is estimated that about a fifth to a third of families in some cities are engaged in urban farming, and some do not have any other source of sustenance or income (Rees, 2009).

Food security exists when all people at all times have access to safe nutritious food to maintain a healthy and active life (Idachaba, 2006). The main goal of food security for individuals is to be able to obtain adequate food needed at all times, and to be able to utilize the food to meet the body's needs. Agriculture is an important tool and vehicle for reducing the effects of household food insecurity, unemployment and poverty which are major problems in urban areas in Nigeria (Moore, 2000). Studies have shown that there is enough domestic production of food in Nigeria and that the problem with food security lies in unimproved urban farming, poor storage, marketing and distribution arrangement, which greatly reduce available market supplies of food (Omonona, 2007, Babatunde et al., 2007).

Urban agriculture seems to be a viable intervention strategy for the urban poor to earn extra income and grow their own food. However in Nigeria, policy makers and governments have neglected this veritable sector. There is need to highlight the potentials and constraints to its development so as to capitalize on the potentials and integrate it into the city system in a more viable and sustainable way (Morgeot, 1994). It is acknowledged that as the world's urban population grows, so too does the population of the urban poor (Beall and Fox, 2007). In 2012, Global Hunger Index (GHI) ranks Nigeria 40 among 79 countries based on rising food prices, malnutrition and deaths as a result of wide-spread poverty. This index is an indication of the prevalence of food insecurity in the country. It is also a sign of extreme suffering for millions of poor people (Global Hunger Index Report, 2012). Successive governments have made efforts to achieve food security in the country through the setting up of a number of agricultural development institutions, and special programmes and projects which include: the National Special Programme on Food Security, NSPFS (2002) and Food Security Thematic Group [FSTG] in 2009 among others. However, an overwhelmingly large proportion of Nigerians are still food insecure. The country now faces the challenge of meeting the basic food needs of its population.

Food security is defined as access by all people at all times to enough food for an active healthy life (World Bank, 2006). It is also a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe

and nutritious food that meets their dietary food preferences for an active and healthy life (UNFAO, 2001). Food security is indispensable prerequisite for the survival of mankind and its economic activities including food production. Food is different from other commodities because of its inevitability for survival and existence. However, increasing food production, supply and sufficiency at broader levels does not necessarily ensure that each and every individual is food secure. It is the contention of Food Agriculture Organisation (2010) that for a country to have sustainable food security, food supplies must keep pace with increasing population and urbanization. As such, according to FAO, addressing agriculture and population growth is vital for achieving food security (FAO, 2010). This is so because urban agriculture responds to competition for land, as do many urban non-agricultural land uses.

Urban Agriculture (UA) is defined as mostly crop and livestock rearing on private, leased, or rented land in peri-urban areas, in backyards, on vacant public lands and in semi-public areas (Jongwe, 2014). It has become one of the main activities undertaken by urban residents to alleviate threatening poverty and to improve both food security and nutrition in their households (Hadebe and Mpfu, 2013).

Nugent (2000) asserts that urban agriculture improves both access to and food intake of fresh foods, especially among populations suffering from food insecurity, through their own self-provisioning which reduces market expenditure. Urban farming is therefore one of the survival strategies poor urban residents adopt to reduce poverty and improve their food security. Many studies from other countries have proved that urban agriculture contributed in no small measure to food security of many major cities, both as an important component of the urban food system and as means for vulnerable groups to minimize their food insecurity problems (Ibrahim et al., 2009; Ibok et al., 2014; Sekhampu, 2013; Ibok et al., 2014).

Despite the increasing global concern of improving food security, the nature and extent of food security at the household level in rural and urban areas are not well documented in Nigeria. The purpose of this study was, therefore, to investigate the critical effect of urban household farming on food security in Ibadan metropolis, Oyo state, Nigeria. The specific objectives of the study were to: profile food security status of urban farming households, and determine the factors affecting food security among urban farming households.

Material and Methods

This study was carried out in Ibadan city, the largest indigenous city in sub-Saharan Africa. It is located in the south western part of Nigeria. Ibadan is located between longitudes 70°20' and 70°40' east of the Greenwich meridian and between latitudes 30°55' and 40°10' north of the equator. The city lies in the equatorial rain

forest belt and has a land area of 445–455 km². Ibadan land has 11 local governments made up of five within the metropolis and six at the periphery of the metropolis. Its population is 2,550,593 (National Population Commission, 2006 census). The population of central Ibadan, including five Local Government Areas (LGAs) is 1,338,659 according to the 2006 census results, covering an area of 128 km².

Primary data was collected for the purpose of this study using structured questionnaire. Some of the data collected include: socio-economic and demographic characteristics and agricultural production activities, expenditure on food and non-food consumption pattern. Two-stage sampling technique was employed for this study. The first stage involved the random selection of two local government areas from Ibadan metropolis. The local government areas were selected because of the prevalence of farming activities such as growing of food crops. The last stage involved random selection of one hundred and ten farmers from the selected local government areas.

This study employed a number of analytical tools based on the objectives of the study. The tools included: descriptive statistics, Foster-Greer-Thorbecke and probit model. Descriptive statistics such as mean, median, mode frequency distributions were used. Food Security Index was used to measure the food security status of the respondents. It was derived from Foster, Greer and Thorbecke (FGT) weighted poverty measure and was applied to several studies whose main focus was food security (Hasan and Badu, 1991; Bamou and Mkouonga, 2008; Omonona and Agoi, 2007, Adepoju and Adejare, 2013). The food security was estimated as the two-thirds of the mean per capita monthly food expenditure of all households. Households were then classified into their food security status as food insecure and food secure households based on the food security line. A food insecure household is that whose per capita monthly food expenditure falls below two-thirds of the mean monthly per capita food expenditure while a food secure household is that whose per capita monthly food expenditure is above or is equal to two-thirds of the mean per capita food expenditure. The FGT weighted poverty measure was adopted from Foster, Greer and Thorbecke (1984) for quantitative food security status. The FGT index is given mathematically as:

$$P\alpha = \frac{1}{N} \sum_{i=1}^q \frac{z - Y_i}{z} \alpha \geq 0 \quad (1)$$

where: Y_i = Per capita household food expenditure ($i = 1, 2, \dots, q$);

z = Food security line;

N = Total number of population;

q = Number of food secure households;

$P\alpha$ = Weighted food security index, $\alpha \geq 0$ and it can take values of 0, 1 and 2.

When $\alpha = 0$, the FGT index P_0 measures food security incidence. This represents

the proportion of the households that are food secure i.e. the proportion of households that fall below the food security threshold (line). When $\alpha = 1$, the FGT index P_1 measures the food security depth of the households. This denotes the proportion of food security line that the food secure household will require to get out of food insecurity. When $\alpha = 2$, the FGT index P_2 measures the severity of food security status. It measures how far away the food secure households are from the food security line.

A Probit regression model was used to determine factors affecting food security status of urban farming in Ibadan metropolis, Nigeria. The food security status of households which is bivariate, taking the value of 1 for food secure households and 0 for food insecure households was used as the dependent variable. The model assumes that there is a latent, unobserved continuous variable Y^* that determines the value of Y and includes believable error term distribution as well as realistic probabilities (Oni et al., 2011; Adepoju and Adejare, 2013). The model is specified as follows:

$$Y = \beta X_i + \varepsilon_i \quad (2)$$

where $\varepsilon \sim N(0, 1)$. Then Y can be observed as an indicator for whether this latent variable is positive:

$Y = (\text{food secure}=1, \text{food insecure}=0)$;

$X = \text{Vector of explanatory variables}$;

$\beta = \text{Coefficients}$;

$\varepsilon_i = \text{Random error}$;

The explanatory variables are:

$X_1 = \text{Age of the farmer (years)}$;

$X_2 = \text{Gender of farmer (male}=1, \text{female}=0)$;

$X_3 = \text{Marital status of farmer (married}=1, 0 \text{ otherwise)}$;

$X_4 = \text{Household size (number)}$;

$X_5 = \text{Years of schooling of farmer (years)}$;

$X_6 = \text{Farming experience (years)}$;

$X_7 = \text{Farm size (hectares)}$;

$X_8 = \text{Access to extension agent (yes}=1, \text{otherwise } 0)$;

$X_9 = \text{Hired labour (man-days)}$;

$X_{10} = \text{Family labour (man-days)}$;

$X_{11} = \text{Diversification index (using the Herfindal index)}$;

$X_{12} = \text{Types of farming enterprise (crops}=1, \text{otherwise } 0)$;

The diversification variable (DIVER) was measured by using the Herfindal index defined as:

$$\text{DIVER} = \sum_{i=1}^n R_i^2 \quad (3)$$

$$\text{where, } R_i = \frac{A_i}{\sum_{i=1}^n A_i} \quad (4)$$

where: A = share of farm revenue from enterprise i operated by the farm household and n = number of farm enterprises owned by household.

Results and Discussion

Table 1 shows the distribution of the respondents by sex. The results show that 85.5% of urban crop farmers are male while only 15.5% are female. However, majority of the respondents are crop farmers (83.1%) and livestock producers (87.9%). The results disagree with Hadebe and Mpofu (2013), who state that women are mainly involved in urban agriculture activities and take the decision on the types of crop to be grown in the garden. Table 1 also reveals that majority of the sampled respondents are between the ages of 41 and 60 years in all categories of urban farmers. The mean age of urban farming household heads stood at 51.2 years, implying that the majority of the respondents were still at their active working age. The implication is that, at this age an individual will be willing to adopt innovations that improve his/her productivity. The results support Dercon and Krishman (1996), who claim that at the active working age, household heads adopt innovations that positively affect their productivity and income.

The distribution of the marital status of household heads in the study area shows that 90.9% of farmers are married while others are single, divorced, widowed or separated. Households where the respondents are married and both the spouses are working are expected to be more food secure than households with single, widowed, divorced or separated individuals. It is widely believed that the size of a household affects its food expenditure and consumption pattern, hence its food security status. Table 1 shows that 96.2% and 90.1% of crop and livestock farmers respectively have 4–8 individuals in their household respectively. Large household size tends to reduce per capita food expenditure of the households thus increasing their likelihood of being food insecure.

The level of the formal education of a household head is an important factor to improved farm production and management techniques. The educational status of an individual in the household plays an important role in his or her income earning capacity and food expenditure. The results revealed that all the sampled urban farmers had one form of formal education or the other. The level of education attained by respondents was expected to have a positive influence on their economic activities outside their primary occupation.

Table 1. Socio-economic characteristics of urban farmers in the study area.

Household characteristics	Crop farmers (%)	Livestock farmers (%)	All farmers (%)
<i>Sex</i>			
Male	83.1	87.9	85.5
Female	16.9	12.1	15.5
Total	100	100	100
<i>Age (years)</i>			
< 20	4.1	3.1	2.7
21–40	6.3	15.0	10.3
41–60	77.9	75.8	76.1
> 60	11.7	6.1	10.9
Total	100	100	100
Mean	51.8	49.8	51.2
Standard deviation	9.1	8.5	8.9
Minimum	30	29	29
Maximum	70	64	70
<i>Marital status</i>			
Married	85.7	97.0	90.9
Otherwise	14.3	3.0	9.1
Total	100	100	100
<i>Household size (persons)</i>			
1–3	2.6	1.5	2.1
4–8	96.2	90.1	92.3
>8	1.2	5.4	5.6
Total	100	100	100
Mean	5.4	5.1	5.2
Standard deviation	1.3	1.2	1.2
Minimum	1	1	1
Maximum	8	8	8
<i>Level of education</i>			
No formal education	0	0	0
Primary education	28.6	6.1	25.4
Secondary education	24.7	33.3	24.1
Tertiary education	46.8	60.6	50.5
Total	100	100	100

Source: Field survey, June 2013.

Table 2 shows the farm specific characteristics of urban farmers in the study area. The results showed that the majority of farmers (78.9%) had less than five years of experience of urban farming. However, 72.2% of crop farmers have farming experience less than 5 years while 81.8% of livestock farmers have farming experience less than 5 years. In the study area, farming experience is an important factor determining both productivity and production level of farmers. But the effect of farming experience on productivity and production may be positive or negative. The negative effect may be derived from aging or reluctance to change from old and accustomed farm practices and techniques to modern and

improved ones. This implies that farm household heads that have considerable experience might translate to right attitude towards improved and better farming practices.

Table 2. Farming characteristics of urban farmers in the study area.

Farming characteristics	Crop farmers (%)	Livestock farmers (%)	All farmers (%)
<i>Farming experience (years)</i>			
<5	72.7	81.8	78.9
6–10	19.5	15.2	18.1
>10	7.8	3.0	4.0
Total	100	100	100
<i>Amount (-)</i>			
<2,000	41.6	3.3	25.3
2,001–40,000	33.8	15.2	19.1
40,001–60,000	11.6	18.2	12.3
>60,001	13	63.3	43.3
Total	100	100	100
<i>Land ownership</i>			
Owned	32.5	39.4	35.7
Leased	13.0	6.1	10.3
Inheritance	29.9	27.3	25.5
Borrowed	19.5	21.2	22.5
Squatting	5.1	6.0	6.0
Total	100	100	
<i>Reasons for farming</i>			
Reliable food supply	3.9	30.3	21.9
Support family income	92.2	57.6	70.1
Commercial purposes	3.9	12.1	8.0
Total	100	100	100
<i>Farm size (hectares)</i>			
<1	59.7	63.6	59.7
1–3	32.5	24.2	32.5
>4	7.8	12.1	7.8
Total	100	100	100

Source: Field survey, June 2013.

The results reveal that 44.1% of the crop farmers and 3.0% of the livestock farmers have total monthly household income of less than ₦20,000 while about 13% and 63% of the crop farmers and livestock farmers have household income greater than ₦60,000 and this will have a positive effect on their standard of living, quality of food consumed and the composition of their diet. Table 2 further shows that 32.5% of the crop farmers and 39.4% of the livestock farmers work on owned lands respectively while about 13.0% and 6.1% of the crop and livestock farmers

work on leased lands respectively. As also shown in Table 2, about 29.9% and 27.3% of crop and livestock farmers, respectively, work on lands obtained through inheritance. In addition, 19.5% and 21.2% of crop and livestock farmers, respectively, work on borrowed lands. In all the systems of farming, however, ownership through self-acquisition and inheritance accounts for the largest proportion of farm holdings in the study area. Hassan and Babu (1991) have found that the level of asset ownership in a household is an indication of its endowment and provides a good measure of household resilience in times of food crisis, resulting from famine, crop failures, or natural disasters. This is because a household can easily fall back on its assets in times of need by selling or leasing them. Land was the asset predominantly owned by households. This is not surprising as land is the basic resource required for farming.

The results of distribution of households by reasons for farming show that 3.9% and 30.3% of the crop and livestock farmers, respectively, are engaged in urban farming to ensure reliable food supply for the family respectively while 92.2% and 57.6% of the crop and livestock farmers, respectively, are involved in urban agriculture to support family income. Only 3.9% and 4% of the crop and livestock farmers, respectively, are engaged in urban farming for commercial purposes. It can be inferred that respondents use urban farming to augment their main means of livelihood and meet their basic needs.

In Table 2, the results show that farming in the urban areas is dominated by small farm holders. However, 59.7% and 63.6% of crop and livestock farmers, respectively, have farms of less than one hectare in size, only about 32.5% and 24.2% of crop and livestock farmers, respectively, have farms of between 1 and 3 hectares in size. Few of the farmers have farm size greater than 4 hectares.

Food security profile of urban farming households is presented in Table 3. The results in Table 3 show the food security line of ₦1685.03k. On the basis of this food security line, 42.3% of the households were considered as food secure.

Table 3. Food security profile of urban farming households.

No.	Calculation of food security status	Unit	Value
1	Total household size	Number	110
2	Mean per capita household food expenditure (MPCHHFE)	-	2,527.55k
3	Food security line (i.e. 2/3 of MPCHHFE)	-	1,685.03k
4	Moderate food security line (i.e. > 1/3 of MPCHHFE)	-	>842.52k
5	Core food security line (i.e. 1/3 of MPCHHFE)	-	842.52k

Source: Field survey, June 2013.

The food security status of urban farming households was disaggregated by age, sex, marital status, level of education and household size. The results of urban

farming household food security profiled by selected socio-economic variables are presented in Table 4. The results showed that urban farming households whose heads were older than 60 years had the highest incidence, depth and severity of food security in both the crop and livestock enterprises. Household heads within this age group are at their low economic active age and are consequently expected to be less food secure than those in other age groups. However, a likely reason for the high incidence of food security within this age group is that these households are large sized with most of the members who are employed in other sectors in the city and are also getting remittances for their upkeep from their grown up children.

In case of gender, the results revealed that male-headed urban farming households had a higher incidence ranging between 0.54 and 0.68 of food security while the female households had an incidence of 0.23 and 0.02 for crop and livestock farmers respectively. However, food security depth and severity indices follow the same trend. The food severity index also reveals a higher level of security in food expenditure distribution among male-headed households than female-headed households across the crop and livestock enterprises. Table 4 also shows that urban farming household heads that were married were more food secure than those with separated, single, divorced and widowed heads. This could be attributed to the fact that married household heads are likely to have larger households which are engaged in income generating activities and contributing to household income. The food security incidence of 0.70 means that married urban farming household heads that cultivate crops on the average are food secure, whereas those households that rear livestock are 0.06 food secure. The food depth and severity indices also follow the same pattern.

The level of education of urban farming households depicted that households whose heads had tertiary education had the highest food security incidence (0.52) and (0.68) for crop and livestock farming households respectively. Urban farming households whose heads had primary education had the lowest incidence (0.44) and (0.46) for crop and livestock farming households respectively. However, the depths of food security for the urban crop and livestock farming households were 0.10 and 0.05 respectively, implying that they followed the same trend as food security incidence. The food severity index also revealed the highest and lowest level of equality in food expenditure distribution among households whose heads had tertiary education and primary education. This result is in agreement with the findings of Riber and Hamrick (2003), who state that educated household heads are mostly food secure.

The profile of the household size by food security incidence showed that 66.1% and 66.1% of urban farming households in crop and livestock enterprises with household size of 1–3 persons were food secure. The results show that household food security decreased as household size was increased in both the crop and livestock enterprises. Urban farming households with household size greater

than 8 persons had the lowest food security incidence of 19.4% and 10.4% in crop and livestock enterprises respectively. The depth and severity followed the same pattern.

Table 4. Food security profile by selected socio-economic variables.

Household characteristics	Crop farmers			Livestock farmers		
	P ₀	P ₁	P ₂	P ₀	P ₁	P ₂
<i>Age group</i>						
21–40	0.504	0.091	0.022	0.000	0.000	0.000
41–60	0.513	0.102	0.031	0.081	0.032	0.010
>60	0.522	0.113	0.127	0.100	0.051	0.021
<i>Sex</i>						
Male	0.541	0.212	0.112	0.681	0.021	0.011
Female	0.234	0.123	0.045	0.021	0.000	0.000
<i>Marital status</i>						
Single	0.482	0.105	0.036	0.012	0.011	0.011
Married	0.700	0.224	0.053	0.060	0.030	0.051
Divorced	0.601	0.153	0.043	0.011	0.000	0.010
Widowed	0.501	0.139	0.032	0.000	0.000	0.010
Separated	0.506	0.025	0.017	0.000	0.000	0.000
<i>Level of education</i>						
Primary education	0.442	0.082	0.022	0.461	0.030	0.100
Secondary education	0.521	0.091	0.035	0.600	0.04	0.121
Tertiary education	0.540	0.100	0.042	0.680	0.051	0.220
<i>Household size (persons)</i>						
1–3	0.661	0.231	0.142	0.661	0.231	0.142
4–8	0.423	0.199	0.051	0.423	0.199	0.051
>8	0.194	0.110	0.011	0.104	0.110	0.011

P₀, P₁ and P₂ represent poverty incidence, depth and severity respectively. Source: Field survey, 2013.

Determinants of food security status of the urban farming household are presented in Table 5. Table 5 shows the results of the factors that affect food security status of the households in the study area. The results show that pseudo R² is 0.425 and it is significant at 1%. Out of the 11 explanatory variables included in the model, 7 were found to significantly influence the probability of household to be food secure. These are sex, marital status, household size, years of schooling, access to extension agent, hired labour and type of farming enterprise. Sex of urban farmers significantly affected food security. Being a male farmer tended to increase the probability of food security of urban farming households by 0.8% while individual married household head had the probability of being food secure increased by 50.8%. The results disagree with Haliu and Regassa (2007), who state that divorced, separated, widowed and single individuals are more likely to be food

secure than married individuals. In the case of household size, the greater the number of persons in household, the more the hands can be used as family labour. An additional number of persons in urban farming households increased the probability of food security by 12.1%. Availability of farm labour at all times tends to increase productivity and food security. The implication is that these individuals are made available for farm work and can also be employed in other non-farming activities that increase the income of the urban farm family. The results further show that the years of schooling of respondents decreased food security by 3.5%. In the situation where farmers spend most of their time searching for more lucrative jobs in the city because of an additional certificates instead of being more serious with their farm work sometimes increase their vulnerability to food insecurity. The results reveal that access of urban farming households to an extension agent increased their probabilities to be food secure by 0.8%. This is because contact with extension services tends to enhance the chances of a household having access to better crop production techniques, improved inputs, as well as other production incentives that positively affect farm production and thus household food security. However, the use of hired labour by urban farming households reduced their food security by 0.01%. The implication is that the profit of farmer is reduced as a result of increased expenditure resulting from hiring labourers to work on his/her farms. On the other hand, food security of urban farming households that produce crops is likely to be reduced by 13.0%.

Table 5. Urban farming households and food security status.

Variable	Coefficient	Standard error	Marginal effect (dy/dx)	T-statistic
Age	0.01201	0.0270	0.0029	0.45
Sex	0.0333***	0.0114	0.0081	2.91
Marital status	1.2933**	0.5687	0.5084	2.31
Household size	0.3066***	0.0665	0.1205	4.73
Years of schooling	-0.0907*	0.0265	-0.0357	-1.88
Farming experience	0.1523	0.0962	-0.0598	1.58
Farm size	0.0041	0.0399	0.0016	0.10
Access to extension agent	0.9206***	0.0065	0.0081	3.20
Hired labour	-0.0003***	0.0001	-0.0001	-2.76
Family labour	-0.2777	1.5383	-0.1091	-0.10
Diversification index	-0.1651	0.1023	-0.0649	-1.62
Type of farming enterprises	-0.5358***	0.1252	-0.1307	-4.39
Constant	-0.7161	1.3752	-	-0.52
Log-likelihood = -59.4854				
Pseudo R ² = 0.4252				
Prob> Chi ² = 0.0000				

Source: Computer printouts ***, **, * denote significance at 1%, 5% and 10% respectively.

Conclusion

The study looks at the effect of urban household farming on food security in Ibadan metropolis. The analysis of the urban farming household food security status shows the food security line as -1685.03 which was 2/3 of per capita food expenditure. The study showed that the majority of the urban farming households were not food secure and fell below food security line. In determining the factors affecting urban farming household food security, the results show that sex, years of schooling, marital status, household size, access to an extension agent, hired labour and type of farming enterprises are significant determinants of food security among the households in the study areas. Policies that will make extension services accessible to urban farmers will go a long way in addressing their resource acquisition constraints and eventually improving household food security in the country.

Enhancing food security in the study area will also involve the empowerment of urban farming households with basic educational skills required for effective employment in the modern sector of the economy, thereby increasing their income generation potentials.

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UTICAJ POLJOPRIVREDE GRADSKIH DOMAĆINSTAVA NA STATUS
PREHRAMBENE SIGURNOSTI U METROPOLI IBADAN, DRŽAVA OJO
U NIGERIJU

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R e z i m e

Poljoprivreda je glavno sredstvo za smanjenje uticaja prehrambene nesigurnosti u domaćinstvima, nezaposlenosti i siromaštva koji su osnovni problem u gradskim sredinama u Nigeriji. Prehrambena nesigurnost nastavlja da se pogoršava u nekim gradskim sredinama države, što je dovelo do toga da mnoga domaćinstva počinju da se bave urbanom poljoprivredom kao načinom prevazilaženja teškoća. Rad ispituje uticaj poljoprivrede gradskih domaćinstava na status prehrambene sigurnosti u metropoli Ibadan, u državi Ojo u Nigeriji. Primarni podaci za istraživanje su prikupljeni korišćenjem struktuiranog upitnika. Tehnika dvofaznog uzorkovanja je korišćena za ovo istraživanje. Prva faza je uključivala slučajni odabir dve gradske lokalne upravne oblasti iz metropole Ibadan. Zatim je izabrano 110 gradskih poljoprivrednih domaćinstava iz ovih lokalnih upravnih oblasti. Podaci su analizirani korišćenjem deskriptivne statistike, Foster-Greer-Thorbecke i probit regresije. Rezultati su pokazali da su pol, godine školovanja, bračni status, veličina gazdinstva, pristup savetodavcu, najamna radna snaga i tip gazdinstva determinante prehrambene sigurnosti. Rezultati istraživanja preporučuju razvoj sistema savetodavnih usluga za gradske poljoprivrednike, kao i razvoj njihovih veština.

Ključne reči: prehrambena nesigurnost, gradska poljoprivreda, dvofazno uzorkovanje, poljoprivredna proizvodnja.

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