

# Challenges of Women in Urban Agriculture in Kwara State, Nigeria

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Received: November 28, 2012 Accepted: February 20, 2013 Online Published: March 5, 2013

doi:10.5539/sar.v2n3p8

URL: <http://dx.doi.org/10.5539/sar.v2n3p8>

## Abstract

Women play significant roles generally in urban agricultural production. In spite of their roles, women farmers are faced with myriads of challenges that affect their increased production in the urban areas. This study assessed the challenges of women farming in urban areas with reference to Kwara State, Nigeria. A total of 1,801 women farmers were sampled from different urban areas in the state. Focus Group Discussions (FGDs) were organized for them in order to explore their minds on the challenges faced and opportunities available to them in urban agricultural production. The matrix ranking revealed lack of credit facilities as one of the most important challenges militating against increased production by women. Other challenges identified include restricted accessibility to land and lack of farm input among others. Appropriate recommendations were made that production resources should be made available especially for women farmers while women should also be part of decision making concerning agriculture.

**Keywords:** food production, agricultural challenges, economic development, women and population

## 1. Introduction

Women play significant roles in national economic development. They constitute more than half of any nation's human resources and contribute significantly to agricultural production. Their relevance in meeting the challenges of agricultural production and development cannot be overemphasized (Rahaman, 2008). Although in most accounts of agricultural development planning, farmers are generally perceived as 'males' by policy makers, development planners and agricultural service deliverers. One constantly finds references to the farmer and his work, his family. It is uncommon to find references such as farmer and her work, her family signifying that women are not regarded as farmers but rather as helpers on the farm.

Researchers have shown that women contribute significantly to agricultural enterprise. The World Bank (2003) reported that women in Asia provide up to 90 percent of the labour for rice cultivation. Also, in Egypt they contribute about 53 percent of the agricultural labour while in Nigeria, they contribute between 60 and 80 percent of labour particularly in subsistence food production as well as in all sub-sectors of agriculture, such as crops, livestock, fisheries and agro-forestry. Enete and Amusa (2010) pointed out that men have reportedly continued to dominate farm decision making even in areas where women are the largest providers of farm labour.

Women farmers are the main food producers in developing countries and yet they are among the most vulnerable groups (Karki, 2009), their economic empowerment to produce more and to participate in policy formulation is critical to addressing poverty and food insecurity. Studies have shown that Nigerian women play major roles in key farming operations such as planting, weeding, and harvesting, to the extent that certain crops are designated as "female" crops in some areas. For instance, in southeastern Nigeria, yam is being grown by male while cassava and other ephemeral crops like melon, cocoyam are female crops (Ajani, 2008). Anosike and Fasona (2004) pointed out that in Lagos women shoulder the responsibility in the provision of food and welfare for their households despite their access to little productive resources. Amali (1989) added that women's labour input is highest in food production, processing and the marketing of both raw and processed agricultural commodities. Women are often the farmers who cultivate food crops and produce commercial crops alongside the men.

In spite of all these contributions, women farmers in Nigeria both in the rural and urban areas are still faced with monumental challenges which are affecting increased production. Some of these constraints are natural while some are economic. For instance, Olaoye (1999) observed that regular occurrence of drought as a result of erratic rainfall distribution and/or cessation of rain during the growing season reduces Nigeria's capability for increased

crop production. Increase in population is another factor as the National Population Census (2006) reported that the population of Nigeria as at 2006 was 140 million with a growth rate of 2.83% as against 2% of food production. Hence, food production cannot keep pace with population increase. Rural-urban migration is another factor, since very few people especially women are left behind in the rural areas to produce food with crude implements. This study therefore assesses the challenges facing women in food production in the urban areas of Kwara State, Nigeria with a view of finding solutions to the identified problems.

## 2. The Study Area: Small Towns

Small towns of Kwara State form the focus of study (Figure 1). They are relatively small urbanized settlements surrounded by some combination of undeveloped and agricultural land. Classification of settlement into urban may be based on population size, economic and administrative functions. However, the commonest form is the population. Urban areas are therefore, settlements with large population. For instance the 1952/53 and 1991 censuses of Nigeria and constitution of Federal Republic of Nigeria in 1999 defined urban centres as settlements with population of 5,000 and above. This study adopts the population size definition in defining small towns. Many scholars and countries have defined small towns in different ways. In most nations, many of the settlements with less than 20,000 inhabitants (for instance all those with more than 2500 or more than 5000 inhabitants) are considered urban centres; in a few, all settlements with less than 20,000 inhabitants are regarded as rural (UN-Habitat, 2006: 16). For instance, small towns in Nigeria are settlements with about 5,000 – 20,000 inhabitants (Stoveland & Bassey, 2000). Okafor (1988) describe these small towns as medium-sized, intermediate or secondary towns. Small towns in Ghana as defined by Owsu (2005, para 11) are settlements with a population between 5,000 and 50,000 people. According to Christensen and Levinson (2003:1249) “small towns are defined spatially as dense urban settlements surrounded by a hinterland”. Vezina (2002: 9) defined small towns as peri-urban or auxiliary centres with settlements of between 5,000 and 20,000 inhabitants.

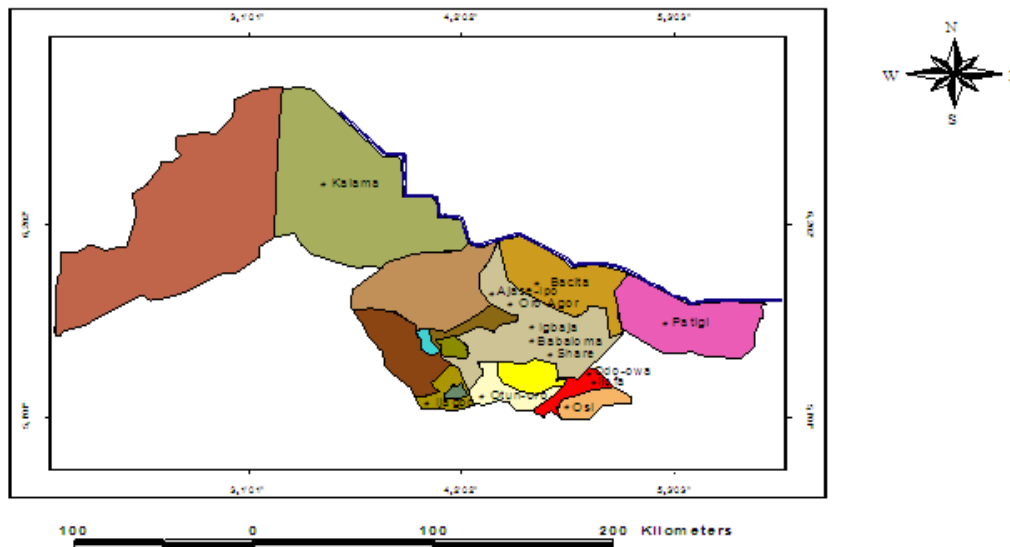


Figure 1. Map of Kwara State showing the sampled small towns

Source: Kwara State Ministry of Lands and Housing, Ilorin, 2010.

The increasing population in the large urban centres led to the evolvement of small towns. These are interface between large urban centres and rural areas. They also provide services to the rural areas and such include diffusion of information and ideas; distribution of imported consumer goods; supply of social services; provision of employment as well as food crop production and marketing of agricultural products among others; all which focus on urban development. In Kwara state, there are about 4,000 settlements of different sizes and population out of which there are few large urban centres and these include: Ilorin, Offa and Omu-Aran with 532, 088, 74,326 and 35,350 people (NPC, 1991) respectively. These settlements constitute 42 percent of the total population of the state while the remaining settlements can be regarded as small towns and villages representing

58 percent of the total population where most agricultural production occurs.

The National Population Commission defined small towns as settlements with population between 5,000 and 20,000 people. The 1991 population census figure projected to 2001 revealed that there are forty-one (41) of such settlements from thirteen local government areas in Kwara State. The small towns in this study are urban areas that have a population of between 5,000 and 20,000 inhabitants.

### 3. Study Methods

This study concentrates mainly on small towns. The towns were identified by sampling all settlements with a population ranging between 10,000 and 20,000 people making a total of thirteen (13) of such towns spread over eight (8) local government areas of Kwara State. Five percent (5%) of the households in the sampled urban settlements was chosen for the questionnaire administration using random sampling procedure. An average household size of five (5) persons as reported by National Bureau of Statistics (NBS, 2006) was employed to give about 36,014 households in the area. Samples were drawn from only households with women farmers while one woman farmer per household was used as the target population. The first building on all the major roads and foot paths in each town was randomly selected to examine a household with a woman farmer while the second was skipped. This was done systematically until 1,801 women farmers were sampled. Matrix 13 x13 ranking was employed to determine the percentage contribution of these challenges to increased food production by women in the study area. This involves putting things in order, from best to worst, smallest to largest, etc. Scoring involved assigning numerical values to each set of problems by the women farmers. This was done according to the most pressing problem constraining women in agricultural production in the study area.

### 4. Results and Discussion

#### 4.1 Women Farming Activities

The survey revealed that almost 95% of the women farmers fell within the age range of 18 to 59 years, 72.6% were married with an average of 7 persons per household. Also, 51.9% had no formal education, 93.1% earned less than N50, 000 annually, 62.6% were part-time farmers and 80.3% of the sampled women farmers were not household heads because they are still married. Furthermore, women farmers participated in almost all farming activities such as planting, weeding, transplanting, fertilizer application, harvesting, transporting and marketing. They also grow different types of crops such as maize, guinea corn, groundnut, potato, beans and vegetables among others.

#### 4.2 Challenges of Urban Women Farmers

Challenges facing women farmers in agricultural production vary from farmer to farmer and location to location. Table 1 reveals the ranking of some identified problems by the women farmers in the study towns. These problems are thirteen in number and they include lack of credit facilities, land ownership problem, farm inputs, poor accessibility to extension services and agents, lack of formal education and middlemen problem in marketing. Others include poor road network, poor storage facilities, marketing problem and the problem of cattle disturbances.

Based on these, (836) 46.4% of sampled women farmers ranked lack of credit facilities as the most pressing problem, 471 (26.2%) ranked it 2<sup>nd</sup>, 284 (15.8%) ranked it 3<sup>rd</sup> most pressing problem, 79(4.4%) ranked it 4<sup>th</sup>, it was ranked 5<sup>th</sup> by 94 (5.2%) respondents, 29 (1.6%) ranked it 6<sup>th</sup> most pressing problem. Only 6 (0.3%) and 2 (0.1%) respondents ranked it 7<sup>th</sup> and 8<sup>th</sup> problem. This is evident from the fact that majority of women farmers do not have access to required credit facilities. Farmers' belief is that once there is access to credit facilities; it can be used to purchase other farm input of which land is inclusive. Due to lack of credit therefore majority of the farmers cultivate small plots simply because they do not have access to credit that can be used to purchase larger plots and farm input for increased productivity.

Furthermore, land tenure was ranked as the most pressing problem by 517 (28.7%) by women farmers, 377 (20.9%) ranked it 2<sup>nd</sup>, 636 (35.3%) ranked it 3<sup>rd</sup>, it was ranked by 162 (9%) as the 4<sup>th</sup> problem. Also, 56 (3.1%), 14 (0.8%), 4(0.2%), 30(1.7%) ranked it 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> problem respectively. Others either use their backyard, family land, husband's land, borrowed land, community land, undeveloped land, and government land. The implication of non ownership is that the landlord may abruptly take over farm plot from the farmers, even before harvest or as at when needed. Similarly, perennial crops cannot be planted on these types of land and most importantly, such urban cultivated land cannot be used as collateral to obtain loans from the banks by urban women farmers. Scholars have identified, in general terms, women's lack of access to land as a major constraint to urban agriculture activities (Maxwell et al., 1998; Smit et al., 1996 ; Maxwell, 1995)

Table 1. Respondents ranking of problems of urban agriculture

Problems	Respondents/Ranks												
1.Credit Facilities	836	471	284	79	94	29	6	2	-	-	-	-	-
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)					
2.Land	517	377	636	162	56	14	4	30	1	2	2	-	-
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
3.Lack of farm input	338	397	238	263	141	116	56	62	33	3	50	24	80
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
4.Seasonal rainfall	77	301	354	479	295	104	49	63	61	6	12	-	-
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
5.Lack of education	25	80	40	75	47	101	236	166	206	157	110	273	255
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
6.Cattle disturbance	6	162	65	125	202	208	237	232	154	87	105	134	84
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
7.Lack of storage facilities	2	1	16	127	218	373	295	332	180	125	107	14	11
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
8.Poor road condition	-	2	39	39	205	313	457	228	159	120	56	73	110
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
9.Inadequate extension	-	9	69	385	440	404	201	125	51	14	63	35	5
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
10.Middlemen Problem	-	-	28	13	22	64	61	146	214	178	106	370	599
			(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
11.Pest & diseases	-	-	4	52	28	8	101	201	257	419	317	313	101
			(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
12.Marketing problem	-	-	24	-	18	6	41	147	266	328	429	312	230
			(3)		(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
13.Drought	-	1	4	2	5	61	57	67	219	362	444	253	326
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)

Source: Fieldwork, 2010.

Note: Ranks are in Parentheses.

Farm input was also ranked number one problem confronting them by 338 (37%) respondents, 397 (22.0%), 238 (13.2%) and 263(14.6%) ranked it 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> problems respectively. This is also important because farm inputs are needed to increase productivity. It could be deduced that access to inputs may depend on level of income, size of land holdings or potential level of agricultural production in which women may be disadvantaged. Generally the productivity of the staple food produce is low in the study area, due mainly to the decline in the use of improved inputs packages by farmers. Most farmers rely heavily on informal channels to access inputs which may amount to not getting the original inputs. Women farmers still rely on the use of simple implements like hoe, cutlass, rake etc for such activities instead of using mechanized implements like harvesters, tractors, ploughs.

Table 2 revealed ranking of agricultural challenges by women farmers by settlements. In Igbaja, out of 143 respondents, 58 (40.1%) ranked credit facilities as the most pressing problem, 52 (36.4%) ranked land 1<sup>st</sup>, 27 (1.5%) ranked lack of farm inputs as number one most pressing problem while only 3 (2.1%), 2 (0.1%) and 1 (0.7%) ranked seasonal rainfall, lack of education and lack of storage facilities as the most pressing problem. Out of 104 respondents in Iloffa, 40 (38.5%) and 41 (39.4%) ranked credit facilities and land as the most pressing

problem confronting them. In Otun-Oro, 41 (39.4%) and 36 (34.6%) ranked credit facilities and land as the most pressing problem in agricultural production.

Furthermore, in Kaiama, 52 (46%), 31 (27.4%) and 22 (19.5%) women farmers ranked credit facilities, land and lack of farm input as the number one most pressing problem confronting them in agricultural production. Out of 144 respondents sampled in Babaloma, 73 (50.7%), 31 (21.5%) and 31 (21.5%) ranked credit facilities, land and farm input as the 1<sup>st</sup> most pressing problem hindering increased agricultural production. At Ijagbo, respondents ranked credit facilities 50 (47.2%), land 37 (34.9%) and lack of farm input 15(14.2%) as their most pressing problem. Findings from Oro-Ago as shown in Table 2 revealed that 47(43.5%), 36(33.3%) and 25(23.2%) of the respondents ranked credit facilities, land and lack of farm inputs as the most pressing problem confronting them in agricultural production.

The outcome of survey in Patigi (see Table 2) revealed that 91 (52.9%), 33 (19.2%) and 31 (18.0%) of the respondents ranked credit facilities, land and lack of farm input as the most pressing problem confronting them in agricultural production. Furthermore, out of 200 respondents in Bacita, 106 (53%), 39 (19.5%) and 35 (17.5%) ranked credit facilities, land and lack of farm input as number one problem hindering their increased agricultural production.

Table 2. Urban agricultural challenges

Small Towns	Ranking of Challenges (in order of most pressing)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Igbaja	58	52	27	3	2	1	-	-	-	-	-	-	-
Iloffa	40	41	18	2	2	1	-	-	-	-	-	-	-
Otun-Oro	41	36	15	-	-	-	4	8	-	-	-	-	-
Kaiama	52	31	22	-	-	-	-	-	-	-	8	-	-
Babaloma	73	31	31	8	1	-	-	-	-	-	-	-	-
Ijagbo	50	37	15	4	-	-	-	-	-	-	-	-	-
Oro-Ago	47	36	25	-	-	-	-	-	-	-	-	-	-
Patigi	91	31	33	11	6	-	-	-	-	-	-	-	-
Bacita	106	39	35	14	6	-	-	-	-	-	-	-	-
Share	91	65	40	4	-	-	-	-	-	-	-	-	-
Ajase-Ipo	53	41	22	-	-	-	-	-	-	-	-	-	-
Osi	60	41	21	9	4	-	-	-	-	-	-	-	-
Odo-Owa	74	34	36	6	4	-	-	-	-	2	-	-	-

Note: Challenges.

1=Credit facilities

2=Land

3=Lack of farm inputs

4=Seasonal Rainfall

5=Lack of Education

6=Lack of Storage facilities

7=Poor road conditions

8=Inadequate extension

9=Middlemen Problem

10=Cattle disturbance

11=Pest and Diseases

12=Marketing Problem

13=Drought

Same goes for Share, 91 (45.5%), 65 (32.5%) and 40 (20.0%) ranked credit facilities, land and lack of farm input as the most pressing problem confronting their agricultural production. In Ajase-Ipo, a total of 116 respondents were sampled, 53 (45.7%), 41 (35.3%) and 22 (19%) ranked credit facilities, land and lack of farm input as the most pressing problem affecting their increased agricultural production. In Osi, 135 respondents were sampled 60(44.4%), 41(30.4%) and 21(15.6%) indicated that credit facilities, land and lack of farm input are their most pressing problems. Out of 156 respondents in Odo-Owa (see Table 2), 74(47.4%) ranked credit facilities as the most pressing problem, 36(23.1%) ranked lack of farm input as number one problem while 34 (21.8%) indicated that land is their most pressing problem.

From the foregoing results, it can be observed that women farmers are faced with different problems in the sampled small towns, of which the most pressing ones are credit facilities, restricted access to land and lack of farm input. These confirm the report of CIAS (2004) that women are faced with many constraints which range from lack of access to farm credit, loans, to shortages of input supply and other economic resources, thereby limiting their contributions to household farming decisions. This study also agrees with the observation of Tunde (2011) that majority of women farmers cultivate small plots of less than 1.00 hectare simply because they do not have access to credit that can be used to purchase larger plots and farm input for increased productivity. For women farmers to be more relevant and productive in agriculture, an effective institutional framework should be developed through programmes that address their training needs. Zoning designated agricultural areas along streams, roads or power lines (buffer zones) would be a milestone towards official support and more sustainability of urban agriculture. Egbuna (2008) also, listed some of the constraints facing urban agriculture in Nigeria to include: land both in terms of access and tenure security; prohibitive urban policies and regulations; limited access to productive resources and agricultural inputs and lack of support services. While in developed countries such as Brazil and Mexico a lack of positive government recognition affects urban farming (Smith et al., 2001).

### 5. Conclusion and Policy Implications

Women's roles in national economic development cannot be overemphasized. For instance, women in the urban areas of Nigeria contribute meaningfully to agricultural production. They are however faced with different challenges. Findings from this study revealed that most of the women farmers from different settlements sampled are faced with a host of challenges such as lack of credit facilities, restricted accessibility to land, farm input, poor road condition and inadequate extension agents among others. Moreover, the study also indicates that lack of credit facilities is the most pressing problem confronting women in agricultural production in the urban areas of Nigeria. The implication of this is that expansion of farms as well as increased production will be affected. It is imperative from this result that there is the need to provide women with enough credit in order for them to be able to expand their farms. Furthermore, women farmers in the urban areas should be given land title. This is because if women own land either individually or communally, the incentive for them to increase production may be greater. In terms of farm input, women should be provided with needed farm inputs for agricultural production in order to increase production and encourage more women into agricultural enterprise.

Proper urban planning that allows use of vacant land for crop production, micro credit and food production can help improve the urban food supply system and contribute to food security. The identification of inadequate access to credit facilities, land tenure system and lack of farm input among others as part of the constraints to urban agricultural production could assist in socio-economic and urban physical planning. The government should therefore give proper recognition to urban women farmers and urban agriculture. More extension workers should be employed to cover urban farming operations. There should be equal participation of women in decision making concerning agriculture at both urban and rural levels. From the foregoing, it could be deduced that an average urban woman farmer can identify resources, problems and importance of urban farm productions in her environment. Evidence from this study suggests that an average urban woman farmer has lots of potentials that can be developed to assist in urban planning for proper agricultural development.

### References

- Ajani, O. I. Y. (2008). *Gender Dimensions of Agriculture, Poverty, Nutrition, and Food Security in Nigeria*. International Food Policy Research Institute.
- Amali, E. (1989). The Role of Women in Agric. Development Process. *Development Studies Review*, 3(1-2), 52-60.
- Anosike, V., & Fasona, M. (2004). Gender Dimensions of Urban Commercial Farming in Lagos, Nigeria. *Urban Agriculture Magazin*, 12, 27-28.
- CIAS. (2004). Women on Dairy Farms; Juggling Roles and Responsibilities. Centre for Integrated Agricultural Systems (CIAS). Retrieved November 14, 2007, from <http://www.cias.wisc.edu/archives/>
- Christensen, K., & Levinson, D. (2003). Encyclopedia of community: from the village to the virtual world. Encyclopedia of Community. (pp. 1249-1254). SAGE Publications.
- Egbuna, N. E. (2008). *Urban Agriculture: A strategy for poverty reduction in Nigeria*. CBN Abuja, Nigeria.
- Enete, A. A., & Amusa, T. A. (2010). *Determinants of Women's Contribution to Farming Decisions in Cocoa-Based Agroforestry Households of Ekiti State, Nigeria*. Field Actions Science Report.

- Karki, K. (2009). Women in Rural Development. Constraints and Opportunity. Retrived from <http://www.articlesbase.com/womens-issues-articles/women-in-rural-development-constrains-and-opportunity-962975.html>
- Maxwell, D. G. (1995). Alternative food security strategy: a household analysis of urban agriculture in Kampala. *World Development*, 23(10), 1669-1681. [http://dx.doi.org/10.1016/0305-750X\(95\)00073-L](http://dx.doi.org/10.1016/0305-750X(95)00073-L)
- Maxwell, D., Wordsworth, O. L., Lamptey, G. M., Zakariah, S., & Armar-Klemesu, M. (1998). *Farming in the Shadow of the City: Changes in Land Rights and Livelihoods in Periurban Accra*. Accra, Ghana: Noguchi Memorial Institute, University of Ghana.
- National Bureau of Statistics (NBS). (2006). *Socio-economic survey on Nigeria, Abuja*.
- National Population Commission (NPC). (1991). Final Results, Kwara State.
- National Population Commission (NPC). (2006). *Population Census of the Federal Republic of Nigeria: Analytical Report of the National level*. NPC, Abuja.
- Okafor, F. C. (1988). The Role of Medium-sized Towns in the Spatial Integration of Nigeria. *African Urban Quarterly*, 3(3&4), 253-263.
- Olaoye, O. (1999). Developing drought tolerant varieties for the Savanna agro-ecologies of Nigeria in 25<sup>th</sup> year. *Commemoratives Publications of Genesis Society of Nigeria*, 173-182.
- Owsu, G. (2005). Small Towns in Ghana: Justification for their Promotions under Ghana's Decentralization Programme. *Africa Studies Quarterly*, 8(2).
- Rahaman, S. A. (2008). Women's involvement in agriculture in Northern and Southern Kaduna State. *Journal of Gender Studies*, 17, 17-26. <http://dx.doi.org/10.1080/09589230701838347>
- Smit, J., Annu, R., & Janis, B. (1996). Urban agriculture: an opportunity for environmentally sustainable development in sub-Saharan Africa. *Post-UNCED Series*. Paper No. 11. The World Bank, Environmentally Sustainable Division and Africa Technical Department.
- Smit, J., Nasr, J., & Ratta, A. (2001). *Constraints to Urban Agriculture*. Published by The Urban Agriculture Network, Inc. A Non-Profit, 501 (c) (3) Organization With the financial support and permission of the United Nations Development Programme(UNDP).
- Stoveland, S., & Bassegy, B. U. (2000). Status of Water Supply and Sanitation in 37 Small Towns in Nigeria. *A Paper Presented at the Donor Conference in Abuja*, 2-4 February, 2000.
- Tunde, A. M. (2011). Women Farmers and Poverty Alleviation in Small Towns of Kwara State, Nigeria. Unpublished Ph.D. thesis. Department of Geography and Environmental Management, University of Ilorin, Ilorin, Nigeria.
- United Nations-Habitat. (2006). *Meeting Development Goals in Small Urban Centres: Water and Sanitation in the World's Cities*. United Nations Human Settlements Programme (UN-HABITAT). London and Sterling, VA.
- Vezina, M. (2002). *Water Services in Small Towns in Africa: The Role of Small and Medium-sized Organisations* in J. Lan (Ed.), *Water Sanitation Program-Africa Region*. (pp. 1-40). The World Bank. Nairobi, Kenya.
- World Bank. (2003). *Nigeria: Women in Agriculture. In Sharing Experiences. Examples of Participatory Approaches*. The World Bank Group. The World Bank Participatory Sourcebook, Washington D.C Retrieved from <http://www.worldbank.org/wbi/publications.html>