AN ASSESSMENT OF THE CONTRIBUTION OF WOMEN FARMERS TO AGRICULTURAL DEVELOPMENT IN BENUE STATE

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Abstract

This research is carried out to investigate the contributions of women farmers to agricultural development in Benue State. Women are involved in the agricultural activities in Benue State, but there is no empirical investigation of the extent of their contributions. Based on this background, this study seeks to empirically access contributions of women farmers to agricultural development in Benue State. This study is guided by research questions which include: what are the contributions of women in farming/livestock activities to agricultural development, what are the major challenges to women involved in agricultural development. The objectives of the study include: examining the contributions of women in farming/livestock activities to agricultural development, identifying the major challenges to women involved in agricultural development. The research design for this study is survey. The population for the study comprises all women farmers who are 18 years and above. The sample size of the study is 400 and this sample is derived from Taro Yamen's Formula. A structured interview guide is used as the main source of data collection for the study. The data collected are analysed using descriptive statistics frequencies and percentages. The result of the findings show that women farmers are mainly involved in agricultural production but not in agricultural development. The nature and extent of their contributions in agriculture are mainly domestic in nature. The study therefore concludes that sampled women farmers are significantly contributing in subsistence agriculture which aids agricultural development, and the study recommends among other things that women farmers should be encouraged to improve their agricultural developmental skills and value chain from agricultural production, post-harvest and consumption as this is instrumental to agricultural development in Benue State and in Nigeria at large.

Introduction

Agriculture is a major global economic source as it contributes largely to every country's development. Most developing nations depend more on agricultural based economies. In fact, many Asian and South American countries produce major food items eaten all over the world. Specifically, China and America produce a lot of agricultural resources. It is therefore needful that every country knows how to enhance agricultural production using the new technological advances available as countries which are using the new trends and methods are growing very fast in this field (Kwa, 2001).

The International Development Community has also recognised agriculture as an engine of economic growth and poverty reduction in countries where it is being considered as the main occupation of the people (World Bank, 2007). The Food and Agricultural Organisation (FAO, 1995) cited by Fresco, (2000) reported that rural women constitute 70% of the agricultural workers, 60-70% of the labour, 80% of food storage and transportation from farm to village and 60% of the harvesting and marketing. This implies that women play significant role in agriculture which is the key sector that provides food for humankind. Generally, women are majorly involved in food cultivation; production, processing, preparation and marketing. Despite these activities, women's contribution to food and agricultural production are still largely underestimated. There is therefore the need to assess the contributions of female farmers to agricultural development in Benue state.

In many African countries, especially south of the Sahara, women constitute the primary labour force on small farms. The World Bank (2007) rough aggregate data states that African women provide about 90 percent of the labour for processing food crops and providing household water and fire wood; 80 percent of work in hoe ridging and weeding, and 60 percent of the work in harvesting and marketing.

Furthermore, women in Africa (including Nigeria) generally play an important role in small-scale traditional agricultural production (Afolabi, 2008). Rural women have taken over the production and processing of arable crops and are responsible for as much as 80% of the staple food items. Estimates of women's contribution to the production of food crops range from 30% in the Sudan to 80% in the Congo, thus, contributing substantially to national agricultural production and food security (OECD cited in Odebode, 2008).

Most farmers in Nigeria operate on the subsistence and smallholder level in an extensive agricultural system; therefore, the country's food security lies in their hands. Female farmers are the principal labour force on small holder farms and perform the largest share in land preparation, weeding, transporting, processing and marketing of agricultural products. Women therefore contribute greatly to agricultural production in Nigeria as they take the lead in most agricultural activities. They make up to 60-80 percent of the labour force (Odebode, 2008). Therefore, the significant role they play in

meeting the challenges of agricultural production and development are quite dominant and prominent (OECD cited in Odebode, 2008). The importance and relevance of women in agricultural development can therefore not be overemphasised. This is because they are known to be more involved in agricultural activities than men in sub-Saharan African (SSA) countries including Nigeria. (Odebode, 2008). Therefore, women's contribution to agricultural development is so important in that it accounts for over 70% of the non-oil export, employs about 70% of the country's labour force and provides over 80% of the food needs of the nation (USDA, 2007).

Availability of land, inputs, agro-chemical and labour are major ingredients for sustained survival and improvement of the agricultural sector and production. Much of the labour available in Nigeria agriculture is supplied by women (World Bank, 2003). This by implication means that women contribute largely to small-scale farming in Nigeria. Auta, Abubakar and Hassan (2000) pointed out that several research works conducted on the contributions of women to agricultural development in Nigeria suggest that women's contributions to farm work is as high as 60%-90% of the total farm tasks performed. Their contributions range from or spread across land clearing, land tilling, planting, weeding, chemical application, harvesting, processing, threshing, winnowing, milling, transportation and marketing. This study seeks to investigate if this assertion applies to female farmers in Benue state.

The implication of this is that for any meaningful development to take place in agriculture, women farmers would have to be highly motivated and encouraged to become actively involved. Nigerian women, like other Third World women, essentially have three major roles or responsibilities, each of which is associated with a range of specific needs, inequalities and constraints. The responsibilities are reproduction, production and community management (Meagher and Miller, 2010). In addition to their main roles as housewives and farmers, more and more women are becoming the income earners in their families and yet, they still spend their time caring for children, and taking care of household responsibility like fetching, boiling, disposing of water and the maintenance of family sanitation standards and facilities.

Meagher and Miller, (2010) state that from a sample survey of 600 rural women in western, eastern and northern Nigeria, over 80% of Nigerian women engage in agricultural production. They cultivate mostly non-cash vegetable crops. Processing of food is a major occupation of women; milling rice, drying and smoking fish, preparing garri from cassava, extracting palm oil and groundnut oil, harvesting and processing of wild foods such as vegetables seeds. Other products produced by rural women include pottery, woven cloth and crafts work. A very important, yet frequently overlooked role of Nigerian women in rural agricultural production and livelihood system is the enormous amount of transport services they perform by carrying heavy loads on their heads (fire-wood, water, farm produce, goods) to and fro the market.

These highly remarkable contributions of Nigerian women in agriculture are hampered by two major challenges. First is the problem they encounter in the course of discharging their farm responsibilities. These problems include; lack of access to farm land and loans, scarcity and high cost of farm inputs, lack of storage facilities, lack of adequate means of transportation of agricultural seedlings to the farm and produce from farm to the house and market, high cost and scarcity of farm labour.

Second is the lack of adequate recognition of the contributions of women by policy makers and Non-Governmental Organisations (NGOs). This has led to lack of adequate policy formulation, programme establishment and projects that will further improve, support and enhance their contributions. This is worsened by inadequate research work on the contributions of women to agricultural development in all farming communities in Nigeria. Farm labour which is one of the crucial factors of this production is supplied by women; this means that women play vital contributions to agricultural development. The need therefore arises for an in depth study of the contributions of women farmers in Benue state to agricultural development with the view to identifying their major challenges for subsequent solutions.

Official statistics often underestimate the value of women's work and their overall contribution to national wealth. Women continue to provide a large proportion of the labour that goes into agriculture. FAO's estimates show that women represent a substantial portion of the total agricultural labour force, as individual food producers or as agricultural workers, and that around two-thirds of the female labour force in developing economies is engaged in agricultural work (FAO, 2003). To further clarify this issue, there is the need to carry out an empirical study on the assessment of women's contribution to agricultural development in Benue state which this research seeks to do.

Agricultural development has been a major concern to most developing countries within the last two decades. It represents a cluster of six related but separate concepts; agricultural expansion; increased production per acre of cropped land or per head of livestock; agricultural growth; a situation characterised with agricultural products per agricultural worker, rising income per person employed and agricultural transformation (Odebode, 2008).

Nigeria Agricultural Digest (2010) describes Agricultural Development as a growth or progression from a lower and often undesirable state to a high and preferred one in the agricultural sector.

Women in Agriculture (WIA) was also operative as one of the components of the UNDP major project NIR/87/014, tagged 'Strenghening agricultural extension services in Nigeria' between November 1988 to March 1991with the aim of assisting the Federal government of Nigeria in meeting its declared objective of self-sufficiency in food production and increased agricultural export by helping to increase the rate of adoption

of appropriate innovations by the rural farming communities. The Federal government of Nigeria (FGN) therefore requested for FAO/UNDP assistance (Odebode, 2008).

The Integrated Agricultural Development Programme (IADP) led to the establishment of Agricultural Development Project (ADP) which is now present in each of the thirtysix states, and the Federal Capital Territory of the country. Idachaba cited in Odebode (2008) reports that the ADPs constitute the single largest agency charged with the responsibilities for agricultural extension services in Nigeria. The ADPs started nearly a decade before the WIA (Women-In-Agriculture) was introduced in different places. The recognition of the dominant role of Nigerian women in farm production, and the need to modify extension system to address it was initiated by the Federal government of Nigeria after a series of World Bank study missions to a number of loan-assisted projects in various parts of Nigeria. These studies confirm the high contribution of women (60%) of farmers) to agriculture while they receive little or no information or intervention from the extension agents Mijindadi cited in Odebode (2008). The recognised involvement of women in agriculture and especially food production made it possible for the government to establish a WIA unit in April 1989. The activities of the WIA as a component within the extension department has been on rendering of agricultural extension services through female extension staff to female farmers as individuals and groups in areas of crops and livestock production, handling and marketing techniques, processing, storage, and utilisation. The ADPs started nearly a decade before the WIA (Women-In-Agriculture) was introduced in different parts of Nigeria. The agricultural programme for female farmers aim at harnessing the total on-farm and off-farm agricultural capabilities of female farmers in order to build better lives for themselves, families and communities.

The main objective of the WIA unit of the ADP is to improve the living standard of rural women farmers. The specific objectives of the WIA unit of the ADP according to Odebode (2008) include:

- 1. Identification of constraints faced by women farmers;
- 2. Sourcing and collaborating with research institutions to develop suitable technologies to meet identified constraints and needs;
- 3. Ensuring timely extension support to women farmers in the area of agricultural production, processing, utilisation (with greater emphasis on production)
- 4. Improving extension services through increase in number of female extension agents;
- 5. Introducing improved and appropriate technologies which are labour saving and can remove drudgery, and are yet affordable by the women farmers.
- 6. Organising women groups and encouraging groups to register as viable cooperative groups so as to have access to credit facilities;

- 7. Introducing newly recommended farm technologies by conducting SPATS and establishing women groups.
- 8. Updating and up-grading the skills of WIA agents in agricultural/food production, preservation, storage, processing, utilisation and nutrition.
- 9. Training women farmers to increase their agricultural food production income and to improve their nutritional status;
- 10. Developing local recipes from farm produce;
- 11. Providing assistance to women in post harvest technologies; and
- 12. Initiating technologies that will reduce the drudgery associated with day-to-day activities of women.

Women in Benue state are often involved in agricultural and food processing industries. They plant fruit trees and process the fruits into juice. They often do this locally. They are constantly involved in rice plantation and milling. In fact, majority of the machine owners and labourers are women (Denga, 1995).

However, women's contributions to agricultural development often remain concealed due to some social barriers and gender bias. Even government programmes often fail to focus on women in agriculture. This hinders women from benefitting from programmes, especially those relating to farming activities and livestock production. Providing equitable access to resources for women contributing to agricultural development would certainly improve their performance and liberate them from their marginalised status in the society. The bulk of the work women do is excluded from the economy. For instance, caring for children, gathering fuel, and water, processing food, preparing meals, housekeeping and others. (Denga, 1995).

The need therefore arises for an in depth study of the contributions of women farmers in Benue state to agricultural development with the view to identifying their major challenges for subsequent solutions. It covers years 2005 to 2015.

Objective of the Study

The general objective of this study is to assess the contributions of Benue women farmers to agricultural development in Benue state. Specifically, these objectives are as follows:

- 1. To assess the contributions of women farmers in crop activities to agricultural development in Benue state.
- 2. To assess the contributions of women farmers in livestock activities to agricultural development in Benue state.
- 3. To identify the major challenges for women involved in agricultural development in Benue State.

Research Questions

This study was guided by the following questions.

- 1. What are the contributions of women farmers in crop activities to agricultural development in Benue state?
- 2. What are the contributions of women farmers in livestock activities to agricultural development in Benue state?
- 3. What are the major challenges for women involve in agricultural development in Benue State?

Methodology

This study is concerned with an assessment of the contribution of women farmers to agricultural development in Benue state.

This study uses the survey method for its research design. The method is used to collect data for the purpose of describing and interpreting existing conditions and prevailing practices; it also focuses on making comparisons and evaluation. Information for the work was sourced from women farmers that are contributing to agricultural development in Benue State. This entails getting information from large respondents which are representatives of the entire population, thus making it possible to generalise the findings.

The population for the study comprises all female farmers ranging from 18 years and above in Benue state. The population size is 976,623 according to National Population Commission, (2006).

The sample size of the study is 400 and this sample is derived from Taro Yamen's formula.

This is slightly higher than sample size determination by Yaro Yamane (1967)

$$n = \frac{N}{1 + N (e)^2}$$

Where

n= sample size

N= find population

E= level of significance

1= unity

n =
$$\frac{N}{1+N ?e?^2}$$

n = $\frac{295,291}{1+295,291 (0.05)^2}$
= $\frac{295,291}{739,2275}$
=399≈ 400

The sample is selected using multistage sampling technique. Benue State is divided into three clusters based on the existing senatorial districts.

Two local government areas are randomly selected from each of the senatorial district while five council wards are selected from each cluster of these local governments using simple random sampling technique. One hundred and twenty five female farmers are selected randomly from zones A and B, while one hundred and fifty female farmers are selected from zone C bringing the sample size to 400. The sample size of zone C is more in number than zones A and B because while there is one major ethnic group in zones A and B (Tiv), there are two major ethnic groups in zone C (Idoma and Igede). The distribution is presented in table 3.1

The selected local government areas comprises the following number of council wards

Table 3.1 Names of Local Government Areas and Council Wards Selected as Samples.

Name of Local	Name of council wards	Name of selected council	
government area (as		wards	
chosen from the			
senatorial zones.			
(Zone A)	Ikyurav/Mbatwer,	Ikyurav/Mbatwer,	
1. Konshisha	Mbagusa/Mbatser,	Iwarnyam, Mbakyase,	
	Mbaikyase, Iwarnyam,	Mbavaa, Mbatem/Tse -	
	Mbake, Mbanor, Mbatsen,	Agberagba,	
	Mbavaa, Mbawar,		
	Mbayegh/Mbaikyer,		
	Mbatem/Tse-Agberagba		

(Zone A)	Atereyange, Azendeshi,	Azendenshi, Uyam,
(Zone 11)	Borikeyo, Ityuluv, Kundav,	
2. Ukum		Lumbuv, Mbatian, Mbuzum
	Kendev, Lumbur, Mbatian,	
	Mbayenge, Mbazun Tsaav,	
	Ugbaam, Uyam,	
(Zone B)	Binev, Etulo, Mbaade,	Etulo, Mbayaka, Mbazagee
(Zone B)	Mpaapen, Mbatirkyaa,	Mpaapen, Shorov,
1. Buruku		Wipaapen, Shorov,
	mbaazagee, Mbaikyongo,	
	Mbaityough, Mbakyaan,	
	Mbayaka, Shorov, Mbaakura,	
	Mbaya	
(Zone B)	Akpachai, Aliade/Mbalav,	Aliade/Mbalav, Mbabur,
	Gbemacha, Ikwe, Ikyogbajir,	Mbaikyaan, Mbasombo,
2. Gwer East	Ikyonov, I shough, Mbabur,	-
		Mbalom,
	Mbaikyaan, Mbaise/Mbalane,	
	Mbalom, Mbasombo,	
(Zone C)	Amejo, Eke, Ichama1	Amejo, Eke, Ugbokolo,
1. Okpokwu	Ichama2, Ojigo, Okonobo,	Okpale/Ingle, Okonobo,
	Ingle /Okpale, Okpoga -	
	North, Okpoga -South,	
	Okpoga-west, Okpoga	
	central, Ugbokolo	
(Zone C)	Adiko, Adum west,	Adum west, Adiko,
	Ikwokwu, Irabi, Itogo,	Ikwokwu, Obarike, Ogore
2. Obi	Obarike, Obeko, Odiapa,	
	Ogore, Okpokwu,	
	Okwutungbe, Orihi.	

Source: INEC office Makurdi, 2014

Two local governments each are selected from the three senatorial zones of the state.

Both primary and secondary sources of data are used. The primary source is gathered through structured interview guide made up of 24 item questions. The items are administered on four hundred women farmers, (both crop and livestock), staff of BNARDA, staff of WIA. The structured interview is divided into sections; part one deals with the personal data of the respondents, while part two deals with Benue women's contributions in agricultural development which examines what aspect of agriculture the women are involved in, the type of livestock unique to women, the type of crops grown unique to women in their locality, factors that mostly influence female farmers' decision on which crops to grow, the number of livestock that are kept by the women farmers and other economic activities the women engage in.

Tools for Data Analysis

The data collected from the respondent are both quantitatively and qualitatively analysed, collated and presented in tables and bar charts. Percentages are used in comparing and analysing the data obtained.

The percentages for each are obtained using the formula below.

$$P = \frac{N}{T} \times 100$$

Where P = Percentage responses

N = Number of respondents to each question.

T = Total number of respondents

Using the percentage response value, the researcher considers scaling any item receiving a response above 50% as acceptable and responses less than 50% as not acceptable. Using the above formula, any questionnaire item receiving percentage response score of 50% above is regarded as accepted or significant. In the same vein, any item receiving response below 50% is regarded as insignificant or rejected.

Qualitative data has as its focus social actions such as the description of the women farmers' way of life, their experiences, attitudes and beliefs as related to agricultural activities in the study area. This involves an in-depth discussion with the women farmers with the help of research assistants which are trained and given helpful instructions by the researchers.

Results

The data results are presented according to the research question raised for the study.

Table 1: Aspects of Agriculture Women Farmers are involved in.

RQ. 1 What are the contributions of women farmers to agricultural development in Benue State?

Aspect of Agriculture	No. of Respondents	Percentage %
Crop production	278	73.77
Livestock production	48	13.34
Vegetable production	27	6.66
All of the above	22	6.23
Total	375	100

Source: Field survey, 2015.

The above table reveals that 278 (73.77%) are involved in crop production, 48 (13.33%) are engaged in animal production, 27 (6.66%) are engaged in vegetable gardening and 22 (6.22%) are involved in all the aspects of agriculture. It is very clear from the above table that majority of the women farmers in the study area are involved in crop production.

 Table 2 : Problems Women Farmers Encounter in Contributing to Agricultural

 Development in Benue State.

Problem Encounter in Agricultural	No. of Respondents	Percentage %
Contributions		
No equal access to land as men	119	31.77
Lack of adequate access to credit facilities	71	18.88
Lack of adequate access to extension services	47	12.45
Financial problem	117	31.35
Family responsibilities	21	5.55
Total	375	100

Source: Field survey, 2015.

In the course of the interview with the women farmers in Benue State, a number of problems encountered by women farmers in agricultural contributions are identified, 119 (31.7%) of the female farmers have unequal access to land as men. On lack of access to credit facilities, 71 (18.8%) out of 375 female farmers interviewed agreed that they lack adequate access to credit facilities like men, 47 (12.4%) female farmers said they lack adequate access to extension services, 117 (31.3%) respondents reveal that they have financial problems and 21 (5.5%) complain of family responsibilities.

Discussion of Findings

The study examines the contributions of women to agricultural development in Benue State. Benue farmers are involved in crop production, animal husbandry or livestock, vegetable gardening. The major crops grown which are unique to female farmers in Benue State are maize and guinea corn, cassava, groundnut, yam, rice soya beans, millet, beniseed amongst others. This study reveals the reasons that mostly influence women farmers' decision on which crops to produce, which is the profitability of the product. Most of the women said that the money realised from their farm produce is used for the up-keep of their families.

This study shows that a significant number of women are involved in livestock and poultry production. This is in line with the views of Gueye (2000), Tung (2005) which states that women often have prominent roles in managing poultry and dairy animals, (Tangka, Jabba and Shapiro 2000) in caring for animals that are housed and fed within the home stead. They maintain that they control and manage livestock such as goat, sheep, cattle, and poultry among others. They add that women have near total control over the care and management of both livestock and poultry, which are small scale and home based.

The respondents also assert that livestock and poultry products are sometimes used to provide meat for the family meals, entertainment of guests and in some cases, given as gifts to dignitaries. They further state that the income derived from the sales of both livestock and poultry products serve as means of income for women and it is meant for the welfare of the family. This may be in form of paying school fees, settling of hospital bills among other cares of the family. This shows that livestock and poultry products are used to augment the income of the women in the study area.

From the findings, it is discovered that female farmers face some constraints in agricultural production in Benue State. They lack access to land due to the patrilineal system of inheritance which gives men exclusive claim to land; lack of access to capital and credit, limited access to extension workers and their services; lack of access to farm inputs such as fertilizers, agro-chemicals and improved machinery. Others include bad and inaccessible roads, which makes marketing and communication difficult.

This shows that women farmers' contribution to agriculture are mainly limited to agricultural production which centres on crop production, livestock production, food processing and distribution. What this means is that women farmers in Benue state have contributed to the chain of agricultural development minimally. It must also be stated that given the prevailing situations and condition, this is the best that they can contribute to agricultural development. However, with the support of government and other supporting agencies, it is unimaginable, the level of contributions that they can muster to agricultural development.

Conclusion

It is imperative to state here that despite the contributions of women farmers to agricultural production, they are faced with the problem of unequal access to land, agricultural inputs, extension worker and technology. The researchers conclude that given support by government and the society, the tendency of women farmers to increase the efficiency of their farm businesses with improved production and post-harvest handling practices will be strengthened. The practices include improved seed varieties, access to quality inputs, mechanisation, and market access which aid agricultural development.

Recommendations

Based on the findings of this study, the following recommendations are hereby proffered to improve the contributions of women to agricultural development in Benue state.

Agricultural inputs and agricultural extension services should be made available to women farmers. This can be done by making fertiliser and other farm inputs cheaper and more easily available to Benue women farmers. This will be made feasible when unending processes of banks and other credit schemes are simplified and conditions for borrowing made less stringent. This will enable more women to be economically empowered to purchase fertilizers, improved seedling, livestock feeds and farm implements for farm activities.

Government should ensure better access of Benue women farmers to production resources like improved technology that fits their needs. Researchers and engineers should be encouraged to do research and develop technology and machinery that specially addresses women's need. This would help to empower them by increasing their productivity.

There is also the need to de-emphasise the cultural value of land that has stopped women from inheriting land. The economic value of land as a production resource to enhance one's economic well-being, and to which all siblings are entitled to, should be stressed.

Agricultural research and extension programmes should be more responsive to the needs of women. Women extension agents should be involved in farm activities that would correspond to the needs of rural women farmers. Furthermore, a way must be found within our cultural and religions setting to give women access to extension services. This may involve training female extension workers who can then reach other women, including those in seclusion. The problem of inadequate capital for investment is another major factor plaguing women's agricultural production activities. As a way out, women farmers should form cooperative bodies that can source for loan lending to individual women members to invest in agricultural activities.

It is the hope of the researchers that when the aforementioned recommendations are heeded and responded to, women farmers in Benue state would be better placed to contribute to agricultural development in the state in particular and the nation at large.

References

- Afolabi, M.M. (2008). Women as pillars of national economy in Nigeria: A study of economic activities of rural women in six local government areas of Ondo State. IAFFE Summer Conference, International Association for Feminist Economics, Torino, Italy, 19 June-21 July 2008.
- Auta, S.J., S.Z. Abubakar and R. Hassan (2000). An assessment of the contribution of women to family farming in north-eastern Nigeria. A Research Report submitted to the National Agricultural Extension and Research Liaison Service, Ahmadu Bello University, Zaria, Nigeria.
- Denga, D.I. (1995). *A compendium Benue State- The land of Great potentials*. Calabar, Nigeria. Rapid Educational Publishers limited.
- F. A. O. (1997). Higher Agricultural education and Opportunities in Rural Development for Women. An Overview and Summary of Five Case-Studies. Information Division, Food and Agriculture Organisation of the United Nations. Rome Italy.
- Food and Agricultural Organization (2004) Concept Paper-The International year of Rice 2004, Rome.
- Fresco, L. O. (2000). Food and nutrition security towards human security. In food security and vegetables: a global perspective. Nath, P, Gaddagimath, P. B, and Dutta, O. P. (ed) Prm Nath. Agricultural Science Foundation, Bangalore (India) 2004. P7-24.
- Guèye, E. F. (2000). The role of family poultry in poverty alleviation, food security and the promotion of gender equality in rural Africa. *Outlook on Agriculture*, 29(2): 129–136.

- Kwa, A. (2001). Trade-Related Agenda, Development and Equity T.R.A.D.E. *Occasional Papers 4*.
- Meagher, S. M. and Miller, L. L. (2010). Gender and Development in Theory and Practice. Accessed June 5, 2010 from http://dgroups.org/file2.axd/c2838edd-3 3 d 8 4 9 1 e a a e 0 438d5adc0740/Feminist%20Theories%20of%20Development%202003.ppt.
- Obademi, A. O and Adikkwu, O. (2018) Teacher's class interaction does not significantly influence teaching and learning of mathematics in senior secondary school
- Odebode, S. O. (2008) Appropriate Technology for cassava processing in Nigeria: User Point of View Journal of International Women Studies 9, No. 3, 269-283 (USA).
- Tangka, F. K.; Jabbar, M. A. and Shapiro, B. I. (2000). *Gender roles and child nutrition in livestock production systems in developing countries: a critical review*. Socioeconomic and Policy Research Working Paper No. 27. Nairobi: ILRI International Livestock Research Institute.
- Tung, D. X. (2005). *Smallholder poultry production in Vietnam: marketing characteristics and strategies*. Paper presented at the workshop "Does Poultry Reduce Poverty? A Need for Rethinking the Approaches", 30–31 August, Copenhagen, Network for Smallholder Poultry Development.
- United States Department of Agriculture (USDA) (2007) http://.//www.usda.a.01.htlm Accessed 15 January, 2007.
- World Bank (2007) World Development Report 2008: Agriculture for Development. Washington, D. C. World Bank Publications. World rural women's day.
- World Bank. (2003). Nigeria: Women in agriculture, *In:* Sharing Experiences—Examples of Participating Approaches. The World Bank Group. The World Bank Participating Source book, Washington, D.C. http://www.worldbank.org/wbi/publications.html