

PERCEIVED IMPACT OF CONTRIBUTION OF WOMEN FARMERS TO ROOT AND TUBER CROP PRODUCTION IN BENUE STATE, NIGERIA

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ABSTRACT

The study investigates perceived impact of women farmer's contributions to roots and crops production in Benue State, Nigeria. Five research questions were formulated to guide the study. Survey research design was employed for the study. The study was carried out in Benue State Nigeria. The target population of the study was 352 comprising of 47 Agricultural Extension Officers and 305 registered Women Farmers in Benue State. There was no sampling. A questionnaire items on crop production was the instrument used for data collection. The instrument was face validated by three experts. Three hundred and fifty two copies of the questionnaire were administered to the respondents which were retrieved and analyzed using weighted mean and standard deviation. Cronbach Alpha reliability coefficient was used to determine the internal consistency of the instrument which yielded a reliability coefficient of 0.73. Findings from the study revealed that women farmers in Benue State contributed to crop production and several steps are required by women that could assist them in root and tuber crop production among others. It was recommended amongst others that the identified challenges facing women farmers should be given attention by extension agent in order to improve their contribution to roots and tubers crop production in Benue State, Nigeria.

Keywords: women, farmers, roots and tubers crop production.

INTRODUCTION

In most African countries and Nigeria in particular, agriculture is not just an engine of economic growth but the main stay of majority of the population (particularly rural women population who are major contributor to root and tuber crop production). There has been increasing sociological attention in recent times, focused on the trends in domestic or household Labour patterns, women participation and contribution in agriculture (Bianchi *et al*, 2000). As observed by Gupta (2009), agriculture is a source of raw materials for small-scale, cottage industry and employer of labour. Furthermore, women in Nigeria generally play an important role in small-scale traditional root and tuber crop production including the processing of arable crops and are responsible for as much as 80% of the staple food items. Odebode (2008) states that most women 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. Women farmers are the principal labour force on small holder root and tuber crop farms and perform the largest share in land preparation,

weeding, transporting, processing and marketing of agricultural products. Therefore the significant role they play in meeting the challenges of agricultural production are quite dominant.

The place of women in crop production 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 root and tuber crop in Nigeria. *Auta, Abubakar and Alhassan* (2000) pointed out that several research works conducted on the contribution of women to agricultural production in Nigeria suggests that women's contributions to farm work is as high as 60-90% of the total farm tasks performed. Women make significant contributions to root and tuber crop production (Khushk and Panhwar, 2006; *Arshadet al.* 2010). According to *Quisumbing et al* (1995), rural and national development can hardly be achieved with the neglects of rural women as substantial segment of the society. *Bianchi et al*(2000) posits that the changing gender contributions in paid work would lead to changes in the distribution of work between men and women in the home. Most researchers tend to suggest that women's housework are declining as a result of involvement in paid employment. Even government programmes often fail to focus on women in agriculture. This undermines women potential benefits from programmes, especially those relating to farming activities. Equitable access to resources for women would certainly improve their performance in terms of their contribution to root and tuber crop production and liberate them from their marginalized 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*).

In order to overcome poverty in Nigeria, the government had initiated different policies and structural programmes particularly for women between 1997 to date. These programmes include: Better Life Programme (BLP), Family Support Programme (FSP), Family Economic Advancement Programme (FEAP). Their aims are to ameliorate the suffering of the women by providing them employment opportunities and access to credit facilities to enable them establish their own business particularly crop production with emphasis on root and tuber crop. These programmes also introduced a gender element into anti-poverty programmes, acting on the assumption that women need special treatment in the light of their immense contributions to the national economy, both as small-scale entrepreneurs and home keepers. These highly remarkable contributions of Nigerian women in agriculture are hampered by two major challenges. Firstly, is the problem they encounter in the course of discharging their farm responsibilities. These problems include: lack of access to farm land and loans, 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 house and market, high cost and scarcity of farm labour. Secondly, lack of adequate recognition of the contributions of women by policy makers and Non-Governmental Organizations (NGOs). This has led to lack of adequate policy formulation, programme establishment and projects that will further improve support and enhance their contributions.

This had worsened by inadequate research work on the contributions of women to crop production 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 crop production. The need therefore arises for an in depth study of the perceived impact of women farmers contribution to roots and tuber crop production in Benue State. The researchers observed that women contributions to root and tuber crop production hardly meet the demand for domestic consumption. It was further observed that there has been inadequate or low women involvement in root and tuber crop production in Benue State, empirical evidence of such specific contributions is substantially scanty in literature. In other words, most works on the contributions of women in root and tuber crop production are not usually based on sufficient empirical evidence. It is against this background that this study is undertaken to investigate the perceived impact of women farmers in root and tuber crop production in Benue State, Nigeria. Specifically, the study examines:

- i. steps required by women in improving crop production in Benue State;
- ii. major challenges for women involved in crop production in Benue State;
- iii. measures that will solve the problems that are hindering women's contribution to root and tuber crop production in Benue State;
- iv. policy options that can be implemented to motivate women in crop production in Benue State

Research Questions

- i. What are the steps required by women in improving crop production in Benue State?
- ii. What are the major challenges of women involved in crop production in Benue State?
- iii. What are the necessary measures taken to facilitate the contributions of women in crop production in Benue State?
- iv. What are the policies adopted by government to enhance the contributions of women in crop production in Benue State?

METHODOLOGY

Four research questions guides this study. Survey research design was adopted for this study. This method is concern with the collection of data for the purpose of describing and interpreting existing conditions and prevailing practices. The design is suitable because the study made use of questionnaires developed from literature to collect data from respondents. The area of the study was Benue State. The population for the study was 352 which were made up of 47 Agricultural extension agent and 305 registered women farmers. The instrument for data collection was a 29 item questionnaire titled: Women Farmers' Contribution to root and tuber Crop Production Questionnaire (WFCRTQ).The questionnaire was developed from literature. The questionnaire was subjected to face validation by (3) experts (2) from the Department of Crop Production and (1) from the Department of Agricultural Education all from the University of Agriculture, Makurdi, Benue State- Nigeria. The internal consistency of the instrument was determined using Cronbach-Alpha method of reliability. The reliability coefficient established was 0.66. Three

hundred and forty nine (349) copies of the questionnaire were retrieved from the 352 administered to respondents and was analyzed using weighted mean and standard deviation to answer the research questions. The average mean of 2.50 was used for decision-making. Any item with a mean rating of 2.50 or above was regarded as agreed while less than 2.50 were regarded as disagreed.

RESULTS

Research Question 1: What are the steps required by women for improving root and tuber crop production?

Table 1: Mean Ratings and Standard Deviation of the responses of agricultural extension agents and teachers of agriculture on steps required by women in improving root and tuber crop production. (N = 349)

S/N	Items	\bar{X}	SD	Remark
1	Obtain new varieties stem or corms	3.30	1.04	Required
2	Adopt the use of inorganic fertilizer for every hectare acre of land	2.55	1.13	Required
3	Employ the use of pesticides for root and tuber crop pest control	2.78	1.02	Required
4	Use resistant varieties of root and tuber crops to control disease out break	2.82	1.14	required
5	Appeal to non-governmental organization (NGO) for purchase of inorganic fertilizer	2.66	1.12	Required
6	Formation of women farmers chart for crop production	2.45	0.96	Not Required
7	Access to fertile land for crop production	3.12	0.98	Required
8	More professional counseling and demonstration farms to encourage women farmers in particular	2.71	1.10	Required

Key: \bar{X} = Mean, SD = Standard Deviation, N = Number of respondents.

Data presented in Table 1 revealed that respondents agreed on all the eight steps or items that are required by women farmers in improving root and tuber crop production. Their mean ranges from 2.45 to 3.30 which are above the cut off point of 2.50. The standard deviation of

respondents ranges from 0.96 to 1.14 indicating that the respondents are not too far from one another and from the mean in their various responses

Research Question 2: What are the major challenges faced by women involved in root and tuber crop production ?

Table 2: Mean Ratings and Standard Deviation of the responses of agricultural extension agents and teachers of agriculture on major challenges faced by women involved in root and tuber crop production. (N = 349)

S/N	Items	\bar{X}	SD	Remark
1	Lack of access to credit facilities	2.57	1.06	Agreed
2	No equal access to land as men	2.86	1.02	Agreed
3	High cost of agricultural inputs	2.82	1.16	Agreed
4	Lack of competence in agricultural education	2.74	1.04	Agreed
5	Lack of adequate access to extension services	3.06	0.89	Agreed
6	High tax regime on harvested root and tuber crop by government	2.77	1.05	Agreed
7	Family responsibilities of women limits their active involvement in crop production	3.82	0.88	Agreed
8	More professional counseling and demonstration farms to encourage women farmers in particular	3.09	0.97	Agreed

Key: \bar{X} = Mean, SD = Standard Deviation, N = Number of respondents

Data presented in Table 2 revealed that the mean of the respondents ranges from 2.57 to 3.82 which are above the benchmark score of 2.50. This indicates that respondents agreed on all the challenges confronting women farmers in root and tuber crop production. The standard deviation ranges from 0.88 to 1.16 which showed that respondents are not far from one another in their responses and from the mean.

Research Question 3: What are the necessary measures needed to facilitate the contributions of women to crop production?

Table 3: Mean Ratings and Standard Deviation of the responses of Agricultural extension agents and teachers of agriculture on the measures that will solve the problems that are hindering women’s contribution to root and tuber crop production. (N = 349)

S/N	Items	X [—]	SD	Remark
1	Borrow money from village lenders	2.62	1.03	Agreed
2	Empowered by both government and individuals	2.94	1.16	Agreed
3	Borrow money from industries	3.06	1.10	Agreed
4	Borrow money from cooperative	3.12	0.87	Agreed
5	Acquire enough farm land space	2.83	0.98	Agreed
6	Borrowed money from commercial banks	3.05	1.02	Agreed
7	Borrowed money from Agricultural banks	3.75	1.13	Agreed
8	Financial encouragement from family members mostly husbands.	2.77	0.94	Agreed

Key: X = Mean,SD= Standard Deviation, N = Number of respondents

Data in Table 3 showed that respondents are all agreed on the measures that could be taken to encourage or help women farmers overcome obstacles to root and tuber crop production. Their mean score ranges from 2.62 to 3.75 which are above the cut off point of 2.50. The standard deviation ranges from 0.94 to 1.16 indicating that the respondents are close to one another in their response and not too far from the mean.

Research Question 4:What are the policies adopted by government to enhance the contributions of women in crop production?

Table 4: Mean Ratings and Standard Deviation of the responses of agricultural extension agents and teachers of agriculture on the policy options that can be implemented to motivate women in crop production. (N =349)

S/N	Items	\bar{X}	SD	Remark
1	Provision of agricultural input to women farmers at affordable price by government	2.86	1.15	Agreed
2	Implement agricultural education services	3.03	0.97	Agreed
3	More professional counseling and demonstration farms to encourage women famers in involved in root and tuber crop production.	3.08	0.69	Agreed
4	Appeal to non-government organization (NGO) to assist women farmers in root and tuber crop marketing.	3.48	1.01	Agreed
5	Formation and grouping of women into social organizations and clubs.	3.33	0.35	Agreed

Key: \bar{X} = Mean, SD = Standard Deviation, N = Number of respondents

Data presented in Table 4 showed that the respondents agreed on all the policy options that could be implemented to encourage women farmers in root and tuber crop production. Their mean ranges from 2.86 to 3.33 which are above the cut off point of 2.50. The standard deviation of the respondents ranges from 0.35 to 1.15 which indicates that the respondents are not too far from one another in their response.

DISCUSSION OF FINDINGS

The findings from Table 1 which revealed that women required most of the steps for improving root and tuber crop production was in consonance with study by Ekele, Muduutdai and Banjo (2015). The authors reported that women farmers need skill improvement in post planting and planting operations of rice production in plateau state of Nigeria. Findings from Table 2 that rural women are confronted with arrays of challenges in root and tuber crop production was in line with the work of Ekele and Sallau (2015) who reported that women farmers in Benue State are faced with similar challenges in E-marketing of agricultural products in Benue State. Findings from Table 3 that respondents agreed on all the necessary measures that are needed by women for root and tuber crop production was in agreement with study by Ekele (2015) who reported that in promoting investment in agriculture similar measures are adopted in North Central Nigeria. Findings from Table 4 that respondents agreed on all the policy measures by government on improving root and tuber crop production by women was in line with the work of Ekele (2014) who suggested some cogent policies that could boost the quality assurance and skill development training in agricultural education for sustainable development in North Central Nigeria.

CONCLUSION.

Women are involved in root and tuber crop production which largely serve their domestic consumption. The study has shown that rural women required all the eight steps for improving root and tuber crop production. Furthermore, challenges are identified that constitutes bottleneck in an attempt at engaging rural women in crop production. Also, measures are identified to encourage the involvement of women in root and tuber crop production and government policies that could further encourage women involvement in crop production had been x-rayed.

RECOMMENDATIONS.

Based on the findings, the following recommendations are made.

1. Ministry of agriculture and rural development should take into consideration the required steps that could enable women improve on root and tuber crop production by ensuring that staff of the ministry re-emphasizes on these steps.
2. Extension agents in the state should make use of identified challenges with a view to ameliorating these challenges by proffering solutions.
3. The measures identified should be packaged by extension agent for a forth night training to be organized for rural in root and tuber crop production.
4. Government policies to be adopted to help women in crop production should be such that rural women will directly benefit and not political job seekers.

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