

APPRAISAL OF WOMEN FARMERS' PARTICIPATION IN CASSAVA PRODUCTION ACTIVITIES IN IWO AGRICULTURAL DEVELOPMENT PROGRAMME ZONE OF OSUN, STATE, NIGERIA

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ABSTRACT

The study was carried out to appraise women farmers' participation in cassava production activities in Iwo Agricultural Development Programme Zone of Osun State. The study described women farmer's socioeconomic characteristics, ascertained participation in cassava production activities and also constraints faced in participating in such activities. A total of one hundred and twenty (120) cassava women farmers randomly selected constituted the sample size while structured interviewed scheduled was used for data collection and analysis done using descriptive and inferential statistics. Index of 3.40 obtained is an indication that the women always participated in cassava production in the area. The dominant activities of the women were packing (\bar{x} =4.15), harvesting (\bar{x} =3.92), loading in vehicle (\bar{x} =3.77), stem purchase (\bar{x} =3.76) and stem cutting (\bar{x} =3.64). The major constraints to participation in cassava production activities are access to land (\bar{x} =3.80), access to agrochemicals (\bar{x} =3.60), labour (\bar{x} =3.40) inadequate storage facilities (\bar{x} =3.34), inadequate capital (\bar{x} =3.33) among others. The findings also revealed that the major constraints to participation in cassava production activities are access to land, access to agrochemicals, inadequate infrastructural facilities, inadequate storage facilities, inadequate capital among others. It was recommended that women farmers should join or form cooperatives societies in order to get support from the government to boost cassava production in the area. Also, governments should subsidize the price of farm inputs in order to make them accessible and affordable to women farmers. In the same vein, better access to farmlands should also be emphasized.

Keywords: Appraisal, women, farmers, participation, cassava

INTRODUCTION

Women's fundamental activities in agriculture cannot be underestimated. Among the 70% of the total agricultural work force in the world, 80% of food producers, and 10% of those who process basic foodstuffs are women and they also undertake 60 to 90% of the rural marketing. Thus making up more than two-third of the workforce in agricultural production (Onwudiwe, Onwudiwe, Olajide, Eze, and Iyiegbuniwe 2014). In Nigeria, as noted by Stella (2017), women play a particular important role in crop production, including land preparation, planting of crops, maintaining of crops, harvesting, transporting, processing, storing and marketing of produce. Rural women in Nigeria provide sixty 60 - 80 percent of agricultural labour and they participate in all aspects of production (Ukonze, 2004). Ruth (2015) agreed that Women specialize in weeding, transplanting, post-harvest work and in some areas land preparation.

In order to encourage women in agricultural production, Women In Agriculture (WIA) was created as component of Agricultural Development Projects (ADPs). Agricultural Development projects are projects jointly sponsored by the Federal and State Governments, which provides both technical and financial support

to the farmers, these farmers are referred to as contact farmers. Extension workers receive training on the specific innovations to be introduced to the farmers and after wards are sent to the contact farmers to educate them on the new agricultural practices. It is expected that the new practices will eventually spread among other farmers in the community.

The Women in Agriculture (WIA) is a branch of Agricultural Development project (ADP). WIA was established in 1989 in order to put into efficient use, the full potentials of the land worked by women, their capital investment, labour expenditure and other vital agricultural activities (Food and Agriculture Organisation of the United Nations (2011). WIA programme was established in ADPs by the Federal Ministry of Agriculture, Home Economic Division in collaboration with the World Bank. This is to ensure that more female extension workers are employed to work with the women farmers who hitherto were not sufficiently being attended to by the male extension agents. The emphasis is on the need to ensure that women farmers are adequately reached with extension services (improved technologies, labour saving equipment, inputs and credits) as regards crop production, storage, processing and marketing of agricultural produce. WIA provides vital



information to women farmers in relations to crop and livestock production. The information includes better varieties of crops, good management operations; inputs like improved planting materials, fertilisers, chemicals and loan procurement. They provide improved planting materials which they sell to the women farmers to multiply in their different farms. Stella (2017) opined that the importance of the role played by women in agricultural production is such that the widespread failure so far to reach women farmers through formal extension services has major repercussions for national output and food security as well as social justice.

Cassava production has been identified as a crop that is economically proficient to farmers and known to be a poverty fighter (Onwudiwe *et al.* 2014). Cassava is grown on a wide scale and can yield satisfactorily even in acidic soils where most other crops fail (Onwudiwe *et al.*, 2014). The crop has continually played very vital roles, which include income for farmers, low cost food source for both the rural and urban dwellers as well as household food security. It also plays a major role in the effort to alleviate the food crisis in Africa.

Although Nigeria is a world leader in cassava production, but not an active participant in cassava trade in the international markets because most of her cassava is targeted at the domestic food market (Foundation for Partnership Initiatives in the Niger Delta, 2011; AdulAzeez, 2013). Her production methods are primarily subsistence in nature and therefore unable to support industrial level demands. Value addition takes place as soon as cassava is processed, the products from value addition utilised are garri, fufu, tapioca, ethanol, starch, cassava flour, cassava chips, glucose syrup, *lafun*, livestock feed, cassava-based adhesive, among others. This has assisted in stemming the spate of poverty. Nnadi and Akwiwu, 2005 are of the view that cassava processing and the value added products have tremendously led to sustainable poverty alleviation. This result corroborates Okeowo 2015 reports that in Nigeria and other African countries processing of cassava into garri (Amao *et al.*, 2007; Oluwasola, 2010; Lawal *et al.*, 2013; Effiong *et al.*, 2014), fufu (Lawal *et al.*, 2013), dried fufu (Ayinde *et al.*, 2004) and *lafun* (Lawal *et al.*, 2013), is profitable.

Osun state is not an exception, as most farmers in the area cultivate cassava to sustain livelihood. The majority of rural women have always participated in cassava production and processing and their involvement has been mainly for household consumption (Onyemauwa, 2012). This calls for the need to investigate the women farmers' participation in cassava production activities. This would help agricultural policies, programmes and projects achieve greater

agricultural productivity and national food self-reliance.

The general objective of the study is to appraise the women farmers' participation in cassava production activities in Iwo Agricultural Development Programme Zone of Osun State, Nigeria. The specific objectives were to:

1. describe the socioeconomic characteristics of women farmers in the study area
2. Analyse the extent of women farmers' participation in cassava production activities in the zone.
3. identify the constraints to participation of women farmers in cassava production activities.

METHODOLOGY

This study was carried out in Iwo Zone Agricultural Development Programme of Osun State with seven Local Government Areas in the zone namely; Iwo, Irewole, Ejigbo, Ayedire, Ayedaade, Isokan, Ola-Oluwa. Iwo zone has an area of 245km² and a population of 120,919 people (National Population Commission, 2006). People of Iwo zone are primarily Yoruba descent and the zone's primary economic activity is agriculture with the primary crops being cocoa, yam, corn, cassava and vegetable. The geographical and topographical characteristics of the zone favor cassava production. It is bounded in the north by Olaoluwa Local Government Area and to the South and West by Oyo State

A multistage random sampling technique was adopted to select the respondents from the list of registered women cassava farmers gotten from the Iwo zone ADP for the study. The first stage involves the random selection of Iwo zone from the three (3) Agricultural zones in Osun State. The second stage involves the simple random selection of four (4) Local Governments namely: Ejigbo, Iwo, Ayedaade and Ayediire Local Government Areas. At the third stage, two farming communities were randomly selected from each of the selected Local Government Area. Lastly, fifteen (15) women cassava farmers were randomly selected from each of the community selected from the Iwo Zone Agricultural development Programme to make up one hundred and twenty (120) sampled women cassava farmers. A structured interview schedule was used as instrument for data collection. The data collected were analysed using descriptive statistics of frequency distribution and percentages for the study.

RESULTS AND DISCUSSION

Data collected for the study were analysed based on the objectives and hypothesis formulated for the study

Socioeconomic characteristics

The result in Table 1 indicates that more than half (56.6%) of the respondents were within the age range of 40-59 years with the mean age of 47.37 ± 11.823 years, this is consistent with the findings of Adekunle, Adeoye, and Oyeleye (2018) and Girei, Dire, Yuguda, and Salihu (2014) cited Onyemauwa (2012) that women in their early 30s and early 50s take active part in food crop production. The age is also an incentive for lasting development of sustainable cultural practice that can enhance production (Fakoya, Banmeke, Ashimolowo and Fapojuwo, 2010). It is evident from the results that most of the respondents were married (66.7%). This means that most of the farmers may have dependents, hence they may likely be engaged in the cultivation of cassava as a means of supplementing their income. Marital status was significantly associated with farmers production behaviour in Nigeria (Udensi, Daasi, and Emah, 2013). It also was found that most of the respondents were Christians (47.5%). The data also shows that a high proportion of women farmers (89.2%) had completed one form of formal education. Adequate education enhances farmers' level of production, it is therefore expected that the high literacy level of these cassava farmers would positively influence their production behaviour. Majority (90%) of the women farmers had household size of less than 10. This result of this study is in line with Owolabi, Ajayi and Oyeyemi (2018) who reported that 78.8% of his respondents belong to a family of between 1-9. Majority (65%) owned/inherited the land used for their cultivation, 30.8% had it through gifts, while 57.7% had it by purchasing it. Majority (92.9%) acquired the land by lease out of the 35% that are cultivating cassava on tenant land. As observed by Ofuoku (2017), there is significant difference between owned/inherited land and rented/lease land particularly for women. This will enhance cassava production as most of the respondents need not pay for land to cultivate. However, final decision on land investment is determined by the male household head. Response on farming experience shows that 65% of women farmers had 8.39 ± 6.893 years of experience on cassava production. The result shows that most of the women farmers have been in farming profession for quite some period of time and are not beginner in farming activities

especially in cassava production. Experience as a risk management factor, Yunus, Mgaya, Shigalla. and Mahongo (2017) agreed that new farmers are at a higher risk compared to experienced farmers. The results further reveal that most of the respondents are small scale cassava farmers as most of them (75.8%) had farm size of an average of 3.47 ± 1.931 ha. Majority (61.7%) engaged in cassava production activities for profit making while 14.2% were there because of their interest in farming.

Level of women's participation in cassava production activities

Table 2 shows that the level of participation of women farmers in cassava production activities is moderately high. The result reveals the highest participation is parking (4.15 ± 0.932) and the least participation in bush burning (2.64 ± 1.377). The findings reveals that the cassava production activities in which the women farmers highly participated included; harvesting (3.92 ± 1.009) loading in vehicle (3.77 ± 1.083), stem purchase (3.76 ± 1.085), stem cutting (3.64 ± 1.060), stem planting (3.49 ± 1.077). This is in line with Owolabi *et.al.* (2018) that women and children play the central role of harvesting, processing and marketing activities in cassava production in many parts of Africa. It also shows that the women farmers participated less in cassava production activities such as; bush burning (2.64 ± 1.377) land clearing (2.73 ± 1.493), ridging (2.75 ± 1.336), application of herbicides/pesticides (2.85 ± 1.288) and manual weeding (2.96 ± 1.191).

Constraints to participation of women farmers in cassava production activities

The results in Table 3 below shows the major factors constraining the involvement of women in cassava production in the study area and are ranked in order of their importance; access to land (3.80 ± 3.47), access to agrochemicals (3.60 ± 3.32), access to labour (3.40 ± 2.83) among others. This is in line with Oladejo, Olawuyi and Anjorin (2011) that lack of capital, lack of government support, poor weather condition and diseases are major agricultural production constraints faced by women in Egbedore Local Government Area of Osun State in Nigeria.

**Table 1: Distribution of respondents by socioeconomic characteristics (N=120)**

Variable	Frequency	Percentage	Mean±SD
Age (years)			
<30	6	5.0	
30-39	23	19.1	
40-49	42	35.0	47.37±11.823
50-59	26	21.6	
60+	23	19.1	
Marital status			
Single	13	10.8	
Married	80	66.7	
Widowed	17	14.2	
Divorced	6	5.0	
Separated	4	3.3	
Religion			
Christian	57	47.5	
Islam	39	32.5	
Traditional	21	17.5	
Others	3	2.5	
Level of education			
No formal education	13	10.8	
Primary school attempted	5	4.2	
Primary school completed	11	9.2	
Junior secondary attempted	27	22.5	
Junior secondary completed	25	20.8	
Senior secondary attempted	14	11.7	
Senior secondary completed	7	5.8	
Tertiary education	18	15.0	
Household size			
<5	48	40	
5-9	60	50	5.48±2.53
>10	12	10	
Sources of land			
Owned/Inherited	78	65	
Tenant	42	35	
Owned/Inherited			
Gift	24	30.77	
Outright purchase	45	57.69	
Inheritance	9	11.54	
Tenant category			
Pledge	3	7.14	
Lease	39	92.86	
Years of farming experience			
<10	78	65.0	
10-19	32	26.6	8.39±6.893
20-29	5	4.16	
30+	5	4.16	
Farm size (ha)			
<5	91	75.83	
5-9	26	21.67	3.47±1.931
10+	3	2.50	
Reasons for farming cassava			
Profit	74	61.67	
Interest in farming	17	14.17	18.73±13.55
Leisure	8	6.67	
Have no choice	14	11.67	
No reason	7	5.83	

Table 2: Participation index result of women in cassava production

Cassava production activities	VHE %	HE %	U %	LE %	VLE %	Mean (\bar{x})	S.D
Land clearing	20.83	11.67	14.17	26.67	26.67	2.73	1.493
Bush burning	15.83	11.67	16.67	23.33	23.33	2.64	1.377
Ridging	15.83	12.50	21.67	19.17	19.17	2.75	1.336
Stem purchase	24.17	39.17	21.67	4.17	4.17	3.76	1.085
Stem cutting	21.67	38.33	27.50	5.00	5.00	3.64	1.060
Stem planting	17.50	38.33	23.33	3.33	3.33	3.49	1.077
Manual weeding	10.83	26.67	19.17	9.17	9.17	2.96	1.191
Application of herbicides/ Pesticides	10.00	29.17	13.33	16.67	16.67	2.85	1.288
Harvesting	28.33	49.17	12.50	4.17	4.17	3.92	1.009
Packing	28.33	50.83	4.17	3.33	3.33	4.15	0.932
Loading in vehicle	25.00	48.33	7.50	2.50	2.50	3.77	1.083

Code: VHE = Very high extent, HE = High extent (HE), U = Undecided, LE = Low extent, VLE = Very low extent

Table 3: Constraints to women farmers' participation in cassava production

Constraints	Mean	S.D	Rank
Illiteracy	2.76	2.75	14 th
Family issues	2.18	2.18	19 th
Cultural and religious barriers	2.47	2.46	18 th
Unfavorable land tenure system	3.00	3.0	10 th
Inadequate storage facilities	3.34	3.34	4 th
Inadequate infrastructural facilities	2.87	3.40	13 th
Inadequate capital	3.33	3.33	5 th
Under-representation of women in agricultural extension training	2.89	2.89	12 th
Use of un-improved working implements	3.07	3.07	9 th
Inadequate knowledge of improved technology	3.14	3.14	8 th
Poor provisions of improved varieties	3.27	3.27	6 th
Good price	3.24	3.23	7 th
Marketing	2.95	2.95	11 th
Community issues	2.67	2.67	16 th
Government policies	2.67	2.66	16 th
Transfer of farm/ Inheritance	2.74	2.73	15 th
Labour	3.40	2.83	3 rd
Access to agrochemicals	3.60	3.32	2 nd
Access to land	3.80	3.47	1 st

CONCLUSION AND RECOMMENDATION

The study had found out that the women farmers in Iwo ADP zone participated highly in cassava production activities which includes loading in vehicle, marketing, harvesting, packing, stem purchase, stem cutting, stem planting and were also faced with the following major constraints which includes capital, access to land, access to labour, access to agrochemicals, inadequate infrastructural facilities, inadequate storage facilities among other. Based on these findings, the study therefore recommends the Women farmers to join or form cooperative society for easy access to financial support while the Government should subsidize the price of farm inputs in order to make them accessible and

affordable and also make policies that will provide land for the rural women farmers.

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