



RESEARCH ARTICLE

ASSESSMENT OF AGRICULTURAL PRODUCTION INFORMATION NEEDS OF WOMEN FARMERS
IN OSUN STATE, NIGERIA

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ABSTRACT

This paper assessed the agricultural production needs of women farmers in Osun state, Nigeria. It is argued that women are responsible for generating food security for their families in developing countries and the contribution of women to agricultural production over the years has been acknowledged. Thus, there is the need to make available to them appropriate production information to enhance their productivity and contribution to agriculture and rural development. To achieve the main objective, the study identified the socio-economic characteristics of the respondents, determined the activities carried out under agricultural production by the respondents, identified the respondents' sources of information, their accessibility to these sources and investigated constraints faced by the women farmers in agricultural production. With a simple random sampling technique, a total of one hundred and four (104) respondents were selected for the study which primary data was obtained through interview schedule based on the stated objectives of the study. Frequency counts, percentages and mean values were used as descriptive statistics while Pearson Product Moment Correlation was used to determine the relationship between the socio economic characteristics of the respondents and agricultural production information needs of women farmers. The results of the findings revealed that the mean age of the women farmer was calculated to be 41.25. Also, most of the women farmers had between 5 and 9 members in their household. 75.0% had one form of formal education or the other with 94.2% of the women being married. The most highly accessible sources of information to the women were radio and ADP extension workers. The result of the findings also revealed that the areas where agricultural production informations are needed include record keeping (0.58), linkage with input supply (0.52), and acquisition of land and credit (0.48). A significant relationship was found between house hold size (0.272**), level of income (0.448**) and agricultural production information needs of women farmers. High cost of farm input and insufficient capital were ranked as the most serious constraints. Therefore, the study recommended that Government should try as much as possible to subsidize the cost of farm input so as to increase agricultural production and credit facilities should be made available to women farmers in order to increase their scale of production.

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INTRODUCTION

In recent times concern for the abject poverty and underdevelopment status of the rural communities of Nigeria has given rise to the several rural development programmes while some of these programmes have yielded fruitful result, many others have not achieved the aim for which they were set up. Rural areas, towards which most developmental programmes are directed, are characterized by the depleted work force, subsistent production, lack of basic infrastructure, lack of social amenities such as portable water, electricity, communication, accessible road and medical facilities. The most disappointing of the characteristics of rural areas is their inability to fully harness abundant natural resources (Obasanjo and Mabogunje, 1991). History has it that increase in agricultural sector productivity has contributed greatly to economic growth and the reduction of poverty. According to Brown *et al.* (2001) meeting world food needs in the year 2020 will depend even more than it does now on the capabilities and resources of women. They went further to argue that women are responsible for generating food security for their families in many developing countries particularly in sub-Saharan Africa. Women not only process, purchase, and prepare food, but they also play a significant role in national agricultural

production, producing both food and cash crops. Thus, the feminization of agricultural work requires a clear gender perspective to be integrated into policies for effective poverty reduction. Not only are women the mainstay of the agricultural food sector, labour force and food systems- they are also largely responsible for post-harvest activities. Furthermore, the inability of women to access credit on competitive terms to invest in new economic opportunities means their incomes are lower than they need as giving micro-credit to poor women in rural areas has proved to be a strong concept as exemplified by Grameen Bank of Bangladesh.

In the past, rural communities development was considered synonymous to agricultural production output, this is not correct because the scope of rural development is wider as it entails generally of employment, improvement in health, nutritional and housing, equitable distribution of income and basically creating wider opportunities for individuals to realize their full potential through education and sharing in all decision and action which affect their life's, this is why an effective rural development programme must be directed at increasing the efficiency of rural population such that the output, quality of life and productivity are enhanced. Another important consideration is that every rural development programme should include women and ensure their active participation in the planning, implementation, monitoring and evaluation of the relevant programmes. Women continue to play significant roles in their

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contribution to agricultural development; however women have more specific needs and constraints in participation and having access to information (Kotze, 2003). According to Van Crowder (1997), women farmers are constrained by social and institutional fact which includes access to credit input, modern technology, these are facts that limit women ability to improve agricultural production and the well beings of their families in the pre-colonial days, women in Africa cultivated food crops while men hunted and fought wars. Women constituted an important live wire of peasant farming distributed all over Nigeria. It is estimated that about 44% of farm labour in southern states, 45% in the eastern states, 13% in the middle belt states and 51% in the northern states are women (Olaleye, 1998). Women are equally efficient in seed bed preparation, tilling, sowing, fertilizer application, fodder cutting, weeding, inter cropping, transplanting husking, threshing, drying, storing cereals and fodder (including making mud bins for storage), selling produce and harvesting of all the crops, fruits and vegetables (Shah & Khan, 2004). Women often devote more time to these tasks than men do. They carry out these tasks in addition to their normal domestic chores of work. Surveys have revealed that a woman works 12 to 15 hours a day on various economic activities and household chores (ESCAP, 1997). On an average, women in a farm family remain extremely busy during the two farming seasons in sowing and harvesting. Women participation in agricultural production is not a new phenomenon. They contribute about 60% of the labour force, produce 80% of food, earn 10% of the monetary income, but own just 1% of the farm assets (Banji and Okunade, 2005).

Stanley (1990) posited that information is one of the basic needs after air, water, food, and shelter and the developments in society depend largely on the availability and access to accurate and reliable information. Expectedly, the information generated from different sources should reach the intended users and ultimately meet their needs. According to kaponiyi and Sodeinde, 2005, communication of agricultural production information has a very vital role to play in any serious effort to improve the condition of rural dwellers as agriculture being the major occupation of rural dwellers need to be continuously improved as and this largely depend on the abundance of technological information available in the system. According to (Banmeke and Olowu, 2005), Variations in the information needs of women farmers in the south western Nigeria have been demonstrated as socioeconomic variables may influence the agricultural information needs of the women farmers in the country. They further emphasized that the specific information needs of the target audience should be taken into consideration, to meet their needs and aspirations. Women in Nigeria engage in various farming activities such as planting, weeding, hoeing, harvesting, threshing and winnowing of agricultural products as well as the processing, storage and marketing of these farm produce. Many of these women farmers in the country are also directly involved in the production of some important crops: as yams, maize, cassava, groundnut, among others. Although rural women are actively involved in the process of food production, processing and marketing. Social and economic constraints have placed barriers around their access to scientific and technological information (Damisa and Yohna, 2007). The women folks do not have the needed technical knowledge to enable them derive productive use of farm input for optimum yield. According to Trauger (2004), African women farmers labour without crucial support that could raise their agricultural productivity. Scarce inputs like credit, improved seeds, among others rarely flow to women in the African country side. Women play a dominant and prominent role in agricultural production and development and improving the status of women farmers is often seen as a crucial element to improving the well-being of women, their families and their communities. Yet women in comparison to men are often disadvantaged in all aspects and are usually underserved by extension. Hence creating an information gap which this study tends to fill. Taylor and Fransman (2004) suggest that programmes that provide different kinds of learning and encourage dialogue and exploration of different experiences are likely to create appropriate environment for women to

learn. Therefore, the general objective of this research is to conduct an agricultural production information needs assessments of women farmers in Osun state, Nigeria. Other specific objectives are to: identify the socio economic characteristics of the respondents, identify the activities carried out under agricultural production, determine the respondents' sources of information, their accessibility to these sources and identify the constraints faced by the women in agricultural production. The study further determined the relationship between the socio economic characteristics of the women and their agricultural production information needs.

METHODOLOGY

The study was carried out in Obokun Local Government Area (LGA) of Osun State which is one of the 30 LGA in the state. The study utilized primary data which were obtained through a well structured, pretested and validated interview schedule of both closed and open ended questions based on the stated objectives of the study. Simple random sampling technique was used to select 50% of the women farmers based on the list of the registered women farmers with the department of agriculture, women and rural development in the local government headquarter of the study area. In all a total number of one hundred and four (104) respondents constitutes the sample size. Both descriptive and inferential statistical tool was used for data analysis such as percentage, frequency table, and mean. Descriptive statistical analysis was used to analyze the socio-economic characteristics of the respondents and Pearson Product Moment Correlation was used to test the hypothesis of the study. Two major variables that were used are dependent and independent variables. The dependent variable of the study was the women's agricultural production information needs in the area. This was measured by asking the women farmers their basic information needs to be met in agricultural production. These needs were measured by how well they were informed about these areas and the independent variables were the socio economic characteristics of women in the study area.

DATA ANALYSIS AND INTERPRETATION OF RESULT

Socio-Economic Characteristics of Respondents

The result of Table 1 below reveals the responses to the respondents' age, number of years of farming experience, education level, household size, level of income and source of labor.

Table 1. Distribution of Respondent according to Socio-Economic Characteristics

Age		
31-40	22	21.2
41-50	18	17.3
51-60	14	13.5
61-70	10	9.6
Above 80	2	1.9
Marital status		
Single	6	5.8
Married	98	94.2
Educational level		
No formal education	26	25.0
Primary education completed	24	23.1
Primary education uncompleted	2	1.9
Secondary education completed	42	40.4
Tertiary education	10	9.6
Years of experience		
1-10	42	40.5
11-20	32	30.7
21-30	14	13.5
31-40	6	5.8
41-50	6	5.7
51-60	4	3.8
House hold size		
0-4	34	32.7
5-9	60	57.7
10-14	10	9.6

Income level		
10000-50000	84	80.6
50000-100000	16	16.6
>10000	4	3.8
Mode of inheritance		
Inherited	62	59.6
Lease	2	1.9
Rented	40	38.5
Source of labour		
Self	26	25.0
Hire	76	73.1
Family	2	1.9
Type of farming		
Cash crop	2	1.9
Mixed Farming	2	1.9
Crop Production	100	96.2

Source: Field Survey, 2011

Majority of the respondents falls between the age bracket of 21 and 40 years which implies that the respondents were within their prime age and expected to be active and agile in agricultural production. In terms of marital status, 5.8% of the respondents were single while 94.2% were married which implies that most of the women farmers in the study area were married and had support from their spouses and children. 80.6% of the women earned between 10000 and 50000 monthly and a high percentage of the respondents (75.0%) had one form of formal education or the other which might serve as an advantage to adoption of agricultural innovations as high level of formal education has been revealed by Ogunwale 2000 to influence rate of adoption of agricultural innovations thereby enhancing productivity. With years of experience in farming, most (40.5%) of the respondents had 10 years of experience. This implies that women farmers in the study area had considerable years of farming experience. A high (57.7%) of the respondents had between 5 and 9 members in their house hold, hence family labour could be available for crop production. 59.6% of the respondents acquired their farm land through inheritance and the same percentage (59.6%) were mainly involved in food crop production.

Activities carried out under agricultural production

The activities carried out under agricultural production such as pre-planting operation, planting operation and post planting operation are presented in Table 2. The result depicts that for pre-plant operation, 92.3% of the respondents carried out site selection activities yearly. 57.7% carried out land clearing activities monthly and 88.5% carried out seed bed preparation activities yearly while 90.5% of the respondents carried out land preparation on yearly basis. For the planting operation, 88.5% carried out nursery operation activities yearly, 94.2% carried out seed selection activities yearly and 92.3% carried out seed sowing and planting activities yearly while 82.7% carried out seed sowing and planting weekly. For post planting operation, 73.1% carried out fertilizer application activities yearly while 86.5% carried out weed control activities monthly. Also 92.3% carried out pest and diseases control activities monthly and 59.6% carried out supplying activities yearly. It can be inferred from the result of findings that most of the three stage operations were carried out yearly except for seed sowing which was done weekly and weed control activities which was done monthly.

Sources of information and Accessibility level

The data in Table 3 reveals the ranking order of the various sources of information available to women farmers in the study area. The result depicts that to most of the women farmers, farmers' programme on radio is the most accessible source of information with a weighted mean score of 1.63. Followed by information from ADP extension workers with a WMS of 1.54. This implies that most of the women farmers used radio and ADP extension workers as their primary source of information, hence, technical information provided by these agents would be crucial to successful crop production practices.

Constraints Encountered in Agricultural Production

Table 4 shows the result of responses to the question that respondents should identify the constraints they face during their farm operations.

Table 2. Distribution of Activities Carried out Under Agricultural Production

Planting operation	Yearly	Monthly	Weekly	Daily	Total
Pre-planting operation					
Site selection	96(92.3)	8(7.7)	0(0)	0(0)	104(100)
Land clearing	32(30.8)	60(57.7)	10(9.6)	2(1.9)	104(100)
Seed bed preparation	92(88.5)	10(9.6)	0(0)	2(1.9)	104(100)
Land preparation	94(90.4)	8(7.7)	2(1.9)	0(0)	104(100)
Planting- operation					
Nursery operation and transplanting	92(88.5)	12(11.5)	0(0)	0(0)	104(100)
Seed selection	98(94.2)	6(5.8)	0(0)	0(0)	104(100)
Seed rate	96(92.3)	8(7.7)	0(0)	0(0)	104(100)
Seed sowing and planting	86(82.7)	18(17.3)	0(0)	0(0)	104(100)
Post -planting operation					
Fertilizer application	76(73.1)	26(25.0)	2(1.9)	0(0)	104(100)
Weed control	8(7.7)	90(86.5)	6(5.8)	0(0)	104(100)
Pest and diseases control	4(3.8)	96(92.3)	4(3.8)	0(0)	104(100)
Supplying	62(59.6)	34(32.7)	8(7.7)	0(0)	104(100)

Source: Field Survey, 2011

Table 3. Distribution of how accessible they are to the Sources

Source of information	Very accessible	Accessible	Not accessible	WMS	RANK
Television	42(40.4)	12(11.5)	50(48.1)	0.92	3
Friend	16(15.4)	16(15.4)	72(69.2)	0.46	4
Husband	10(9.6)	6(5.8)	88(84.6)	0.25	5
NGOs	4(3.8)	2(1.9)	98(94.2)	0.10	7
WIA Contact farmers	0(0)	12(11.5)	92(88.5)	0.12	6
Radio	70(67.3)	30(28.85)	4(3.4)	1.63	1
ADP extension agents	64(61.5)	32(30.8)	8(7.7)	1.54	2
Newspapers/bulletins	2(1.9)	0(0)	102(98.1)	0.04	10
Agricultural show	2(1.9)	4(3.8)	98(94.2)	0.08	8
Field day	0(0)	4(3.8)	100(96.2)	0.06	9

Source: Field Survey, 2011

Table 4. Distribution of Constraints Encountered

Constraints	Serious constraint	Mild constraint	Not a constraint	WMS	RANK
Poor transport system	34(32.7)	66(63.5)	4(3.8)	1.29	9
Poor storage facilities	32(30.8)	70(67.3)	2(1.9)	1.29	9
No access to farm land	50(48.1)	50(48.1)	4(3.4)	1.44	6
Lack of electricity	16(17.3)	84(80.8)	2(1.9)	1.12	13
Inadequate credit	68(65.4)	34(32.7)	2(1.9)	1.63	5
Poor marketing channel	22(21.2)	82(78.8)	0(0)	1.23	10
Lack of information	44(42.3)	58(55.8)	2(1.9)	1.40	7
Inadequate capital	92(88.5)	8(7.7)	4(3.8)	1.85	2
High cost of farm input	98(94.2)	4(3.8)	2(1.9)	1.92	1
Poor health condition	26(25.0)	78(75.0)	0(0)	1.25	11
High labour wages	88(84.6)	14(13.5)	2(1.9)	1.83	3
Shortage of improved planting materials	88(84.6)	12(11.5)	4(3.8)	1.81	4
Soil infertility	68(65.4)	34(32.7)	2(1.9)	1.42	8
Low literacy level	20(19.2)	84(80.8)	0(0)	1.19	12

Source: Field Survey, 2011

Table 5. Distribution of respondent by their area of needs in agricultural production

Information need	Very well informed	Average informed	Not informed	WMS	RANK
Weed management	78(75.0)	26(25.0)	0(0)	1.63	4
Harvesting	84(80.8)	20(19.2)	0(0)	1.81	1
Land preparation	80(76.9)	24(23.1)	0(0)	1.77	2
Site selection	72(69.2)	26(25.0)	6(5.5)	1.63	4
Fertilizer application	26(25.0)	42(40.4)	36(34.6)	0.90	11
Linkage with input supply	20(19.2)	14(13.5)	70(67.3)	0.52	13
Acquisition of land and credit	22(21.2)	6(5.8)	76(73.1)	0.48	14
Land conservation	48(46.2)	24(23.1)	32(30.8)	1.15	9
Record keeping	24(23.1)	12(11.5)	68(65.4)	0.58	12
Planting method	80(76.9)	22(21.2)	2(1.9)	1.75	3
Mix farming	66(63.5)	34(32.7)	4(3.8)	1.60	7
Pest control	72(69.2)	24(23.1)	8(7.7)	1.62	6
Nursery operation	48(46.2)	30(28.8)	26(25.0)	1.21	8
Increasing production	46(44.2)	28(26.9)	30(28.8)	1.15	9

Source: Field Survey, 2011

The constraints faced by the women farmers were categorized into serious constraints, mild constraints and not a constraint. High cost of farm input was ranked as the most serious constraints with a weighted mean score (WMS) of 1.92 followed by inadequate capital (1.85). This implies that high cost of farm input and inadequate capital were the most serious constraints faced by the women farmers among others in the study area.

Agricultural production information Needs

Table 5 categorizes the need area of the women based on how well they were informed about these areas. The need assessment brought up several areas where respondents will like to receive training. The respondents require information on acquisition of land and credit, linkage with input supply, fertilizer application and record keeping. Also production informations are needed on fertilizer application and land conservation. Availability of these production information needs of women farmers which stems from crop production will enable extension agents to get the right information needed to the appropriate target.

Correlation analysis between the socio economic characteristics of the women farmers and their production information needs

The result of Pearson Product Moment Correlation (PPMC) shows a significant relationship exist between house hold size (0.272**), level of income (0.448**) and women needs in agricultural production. This implies that a unit increase in house hold size will stimulate a corresponding increment in the needs of women for agricultural improvement. The result also indicates that level of income of the respondents also has a decisive influence on the needs of women in agricultural production. This implies that improvement in the needs of women in agricultural production increases with the level of income.

Table 6. Relationship between Socio-Economic Characteristics of women extension farmers and their needs

Variables	R-value	Remark
Age	0.183	Not significant
Educational background	0.126	No significant
Years of farming experience	0.151	No significant
House hold size	0.272**	Significant
Level of income	0.448**	Significant

Source: Field Survey, 2011

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Conclusion

Most of the women farmers indicated the need for acquisition of land and credit, linkage with input supply, fertilizer application and record keeping. They have depended on information provided by radio agricultural programme and ADP extension workers. Agricultural production information was found to be influenced by household size and level of income. High cost of farm input and inadequate credit were the major constraints encountered. Therefore, the study recommends that Government should provide farm inputs at a subsidized price in order to reduce the high cost of farm inputs and credit facilities should be made available to women farmers in order to increase their scale of production.

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