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Full Length Research Paper

A study of women farmers' agricultural information needs and accessibility: A case study of Apa Local Government Area of Benue State, Nigeria

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The study was aimed at determining women farmers' agricultural information needs and accessibility, using Apa local government area of Benue State as a case study. A sample size of 70 women farmers was initially taken for the study but only data for 65 respondents were analyzed. Simple random sampling technique was used for the sample selection and questionnaire was used to elicit information from the respondents. Both descriptive and inferential statistics were used for data analysis. The result showed highest information needs in the areas of pesticides and fertilizer applications and improved farm implements. Husbands, fellow women and mass media were the main sources of agricultural information to women farmers and accessibility of information from these sources was relatively high. Age, educational level and income of women farmers showed significant relationships with their accessibility to agricultural information at 5% level of significance. It is recommended that enough information should be provided in the needed areas and women adult literacy and economic empowerment programmes should be given serious attention to enhance their access to needed agricultural information.

Key words: Applications, questionnaire, Benue, empowerment.

INTRODUCTION

Women have been making prominent and important contributions to agriculture right from creation and they actually constitute the bulk of the world's food producers. A united Nation's estimate puts women's domestic food production at 80% in Africa, 60% in Asia and the Pacific and 40% in Latin America (FAO. 1998).

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 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. Similarly a good number of women in rural areas undertake many responsibilities concerning care and management of farm animals like poultry, goats and sheep (Loagun, 1998).

Problem definition

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 (Daman, 1997). The women folk do not have needed technical knowledge to enable them derive productive use of farm input for optimum yield. According to Gullen (1994), 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.

Generally, it is a known fact that male farmers have more access to agricultural extension services than women

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in Nigeria. Osuman (1997) observed that agricultural extension services are mostly staffed by men and are inclined to helping men folk. According to Morna (1989), in Malawi, when agricultural extension workers visit rural areas to explain improved technologies or other access to inputs, they usually interact with men, not women.

In a study on rural women in food chain activities, Obinne (1995) found that women farm managers have inadequate access to extension services. Since they (women farmers) are engaged in both on-and off-farm activities they do not have time to enjoy the extension service offered. Similarly, Protz (1997) posited that due to the multiple roles women play in the rural household (including caretakers of children and the elderly), they do not fully benefit from extension services, particularly, when the time of delivery (of extension service) conflicts with their other household responsibilities. According to FAO (1998), rural women are burdened by their domestic tasks and family obligations and controlled by social restraints such that they are constrained time-wise to be away from home to attend to extension training programmes.

The above reviewed situation with regards to women farmers agricultural information needs and their access to same confirms existence of some problems that need further investigation. This study attempts to provide answers to the following questions: What are the current information needs of women farmers in Apa local government area of Benue State? What is the level of their access to the needed information? What are the factors affecting the women farmers access to new agricultural information?

Objectives of the study

The broad objective of the study is to assess the agricultural information needs of women farmers in Apa local government area of Benue State and to determine the socio-economic factors affecting their access to the information. Specifically, the objectives of the study are to:

(i) Study the socio-economic characteristics of women farmers in Apa LGA of Benue State
(ii) Identify the various agricultural information needs of women farmers in the study area.
(iii) Determine the accessibility of the needed agricultural information to women farmers.
(iv) Determine the relationship between socio-economic characteristics of women farmers and their access to agricultural information.

Hypothesis of the study

The hypothesis for the study is: “Women farmers’ socio-economic characteristics have no significant relationship with their access to agricultural information.”

Significance of the study

The contribution of women to agricultural production over the years has been acknowledged and there is a need to make available to them appropriate information to enhance their productivity. In order to ensure appropriate farm technologies to women farmers, there is need to identify their information needs and their access to same. This study shall therefore help technology developers and extension agents identify women farmers’ information needs in order for appropriate technologies to be developed and transferred to them. This study will also go a long way in helping government to develop agricultural policy and programmes that will give more attention to the needs of women farmers which shall eventually enhance their agricultural productivity.

METHODOLOGY

Apa local government area (LGA) is one of the 23 local government areas in Benue State, Nigeria. It was created in 1991 and has a population of about 52,412 people based on the 1991 national census. The male population was about 25,986 while there were 26,431 females. Apa LGA is basically rural, lacking social amenities such as standard medical facilities, good water supply, access roads and schools. The inhabitants of Apa LGA are predominantly farmers and cultivate various arable crops such as guinea corn, millet, maize, yam, beans, rice, beniseed, oil palm, citrus among others.

The population for the study consisted of women farmers in Apa LGA. Seven council wards out of eleven were selected through a simple random sampling technique for the study and they were Ugbokpo, Igoro, Ofoke, Oiji, Edikwu I, Edikwu II and Iga-Okpaya. A simple random sampling technique was also used to select ten respondents within each of the earlier selected council wards for the study. On the whole, seventy women were selected and this constituted the sample size for the study.

A questionnaire made up of 32 items was designed and used as instrument for primary data collection. Some copies of the questionnaire were given to literate respondents to complete while enumerators were used to assist the illiterate respondents in completing the questionnaire. Only data for 65 respondents (93%) out of the 70 initially selected were used for the analysis. The questionnaire for the remaining five respondents were either not returned or rejected for incomplete information.

The women farmers’ Socio-economic characteristics considered for the purpose of this study include age, marital status, religion, educational level, income level and farm size. They were measured using the conventional methods. Both descriptive and inferential statistics were used for the analysis of data collected. Chi-square was used to test the stated hypothesis.

RESULTS AND DISCUSSION Socio-economic characteristics of the respondents

The socio-economic characteristics of the respondents

Table 1. Socio-economic characteristics of women farmers N = 65.

Characteristics	Frequency	Percentage (%)
Age (Years)		
20-29	6	9.20
30-39	13	20.00
40-49	24	36.90
50-59	15	23.10
60 and above	7	10.80
Marital Status		
Single	10	15.40
Married	45	69.20
Widowed	8	12.30
Divorced	2	3.10
Educational Level		
No formal education	23	35.40
Primary/Adult education	26	40.00
Secondary education	12	18.50
Tertiary education	4	3.10
Income Level		
High	19	29.20
Average	30	46.20
Low	16	24.60
Farm Size		
Large	24	36.90
Medium	26	40.00
Small	15	23.10
Religion		
Christianity	63	96.90
Islam	2	3.10
Traditional religion	-	0.00

Source: Field survey, 2005.

examined include age, marital status, literacy level, farm size, income level and religion and these are shown in Table 1. The women within the age bracket of 40 - 42 years constituted the highest frequency as 24 (36.9%) of them fall into this group. This was followed by those between 50 and 59 years who were 15 (23%). The respondents between 20 and 29 years had the lowest frequency of 6 persons (9.2%). The number of respondents within the age bracket of 60 years and above (10.80%) was also relatively small. This result follows the normal distribution curve as very young women and the elderly ones did not participate on the farm activities as much as those between 30 and 59 years.

Table 1 also showed that majority of the women farmers in the study area (69.7%) were married; 15.4% were single; 12.3% were widows and 3.1% were divorcees.

The result of the study showed that 35.4% of the respondents had no formal education; 40% had primary/adult education; 18.5% had secondary education and 6.2% had tertiary education. About 29% of the respondents were within the high income bracket while 46.2 and 24.6% were in the average and low income brackets respectively. The farm size distribution of the respondents shows that 36.9 and 40% of the respondents had large and medium size farms, respectively, while 23.1% had small farm size. With regards to religions affiliation, majority of the respondents (96.9%) were Christians while only 3.16 were Moslems. None of the respondents mentioned traditional religion as a personal religion.

Agricultural information needs of women farmers in the study area

The areas of agriculture where majority of the respondents

Table 2. Areas of agricultural information needs of respondents N = 65.

Areas of Information needs	Frequency	%	Ranking
Improved farm implements	33	50.8	3
Improved livestock breeds	12	18.5	8
Improved variety of crops	31	47.7	4
New cropping System	11	16.9	9
New irrigation methods	3	4.6	10
Fertilizer application	42	64.6	2
Pesticide application	44	67.7	1
Better farm produce processing Methods	16	24.6	7
Improved marketing system	27	41.5	5
Better storage system	22	33.8	6

Source: Field survey, 2005.

Table 3. Level of agricultural information need of respondents.

Level of Need	Frequency	Percentage (%)
High	33	50.8
Moderate	26	40.0
Low	6	9.2
Total	65	100

Source: Field Survey, 2005.

Table 4: Sources of agricultural information N = 65.

Sources	Frequency	Percentage (%)
Extension agent	15	23
Mass Media	20	30
Husband	42	64.6
Fellow women	35	53.8
Other sources	17	26

Source: Field Survey, 2005.

respondents needed information include pesticides application (67.7%), fertilizer application (64.6%) and improved farm implement (50.8%). Other areas that were mentioned by a good number of the respondents include improved variety of crops (47.7%), better marketing system and outlets (41.5%) and improved storage system (33.8%) (Table 2).

Level of agricultural information needs of women farmers

The study shows that 50.8% of the respondents in the study indicated high need for agricultural information on improved agricultural technologies while 40 and 9.2% had moderate and low agricultural information needs respectively. This is shown in Table 3.

Sources of agricultural information to the respondents

The sources of agricultural information available to the respondents as indicated are shown in Table 4. Majority of the respondents indicated husbands (64.6%) and fellow women (53.8%) as their sources of agricultural information. Other sources of agricultural information mentioned include mass media (indicated by 30%), extension agents (23%) and others (26%).

The result, to some extent, agrees with the findings of Yahaya (2001) and Rajah (1990) that women farmers usually get agricultural information on improved

Table 5. Level of access to agricultural information sources N = 65.

Sources	Level of Access			
	High	Moderate	Low	No access
Extension agents	11.9	15.3	33.9	39.0
Mass media	33.9	25.9	20.3	20.3
Husband	67.8	16.9	-	15.3
Fellow women	35.7	38.9	16.9	8.5

Source: Field survey, 2005.

Table 6. Chi-Square analysis of relationship between women farmers' access to agricultural information and some socio-economic variables.

Socio-economic variables	Calculated X^2	Decision
Age	16.23	S
Marital status	1.70	NS
Educational level	13.52	S
Income level	19.27	S
Farm size	4.09	NS
Religion	2.53	NS

Degree of freedom (Df) = 4; X^2 Tabulated = 9.49; Significant (S): P<0.05; Not significant (NS) P > 0.05.

technologies from their husbands, fellow women and mass media. The low percentage of women farmers having extension agents as their sources of agricultural information agrees with the findings of Matarmi (1991) and Osuman (1997) who observed that male farmers have more access to agricultural information through extension agents than the female farmers do.

Women farmers' access to agricultural information sources

The level of access to the various agricultural information sources by women farmers in the study area is shown in Table 5. The level of access of respondents to the various sources of information revealed that their husbands were the major source of information with the highest level of access (67.8%), followed by fellow women (35.7%) and then, mass media (33.9%). About 39% of the respondents indicated that they had no access to extension agents at all as a source of information. This puts extension agents as the source with the least percentage level of accessibility.

Testing of hypothesis

Hypothesis (Ho)

Women farmers' socio-economic characteristics have no significant relationship with their access to agricultural information.

A 3 x 3 contingency table for each of the selected socio-economic variables of women farmers and their level of access to agricultural information was drawn. The socio-economic characteristics considered were age, marital status, religion, educational level and farm size. For the purpose of the 3 x 3 cross tabulation, the variables were categorized as follows; Age: youth, middle-aged and old; Educational Level: No formal education, primary/secondary and tertiary education; Marital status: single, married and divorced/widowed; Income: High, average and low; Farm Size: Large, medium, small; Religion: Christianity, Islam and traditional religion.

The hypothesis was subjected to chi-square test and the results are as presented in Table 6. Women farmers' age, educational level and income level were found to have significant relationships with their access to agricultural information at 5% level of significance. This implies that the older, more educated and richer a woman farmer is, the more likelihood of having access to agricultural information. These findings agree with those of Gill (1987), Olowu and Igodan (1989) and Matanmi (1991).

The results showed that marital status, religion and farm size have no significant relationships with the respondents' access to agricultural information as their values of calculated chi-square are less than the tabulated ones. These results agree with those of Loagun

(1998) who found that marital status, religion and farm size of women farmers had no significant relationships with their access to agricultural information.

Conclusion

The study shows that majority of women farmers in the study area have high agricultural information need generally but particularly, in the areas of insecticide, fertilizer and improved farm implements. The major sources of agricultural information to the respondents were their husbands and fellow women. These major sources of information to the respondents in the study area were informal and the reliability of messages through them may not be guaranteed. The women farmers did not have expected access to professional extension agents. Women farmers' income and educational levels as well as age were found to influence their access to agricultural information.

RECOMMENDATIONS

The following recommendations are being made in view of the aforementioned findings of this study:

1. Agricultural extension agencies should take note of the information needs of women farmers particularly in areas of pesticide, fertilizer and improved farm implements and endeavour to step up their services in these areas of need.
2. Women adult literacy education programme is required to help women farmers acquire basic skills and abilities to seek and receive needed agricultural information through modern communication channels such as mass media, extension agents, etc.
3. Government should encourage and assist women farmers by giving them special attention in terms of access to needed farm inputs. New farming implements which will reduce drudgery and are affordable should be made available to women farmers.
4. Finally, considering women's designated roles in agricultural production efforts, agricultural information to farmers should be gender specific and sensitive.

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