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AGRICULTURAL INFORMATION UTILISATION PATTERN AMONG WOMEN FARMERS IN SOUTH-WESTERN NIGERIA

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ABSTRACT

This study investigated the pattern of agricultural information utilization by women farmers in South-Western Nigeria. A stratified and multi-stage random sampling technique was adopted in selecting 347 women farmers from four states. Data were analysed using descriptive statistics, chi-square and t test. Results show that 43% of the respondents are between the ages of 41 to 50 years and 47.8% have no formal education. Women farmers mainly source for agricultural information from extension agents and fellow farmers, while information on improved seeds/seedlings and crop combination were often used while information on market locations, cooperative associations and current market prices were more utilized. Major constraints in the utilisation of information were lack of social amenities and low level of education. There are no significant relationships between respondents personal characteristics and the utilisation of agricultural information but a significant difference exists in the utilisation pattern of agricultural information across the agro-ecological zones. It was recommended that farmers should be assisted through adult education and establishment of community information technology centres.

Keywords: Utilisation, Agricultural information, Women farmers.

INTRODUCTION

In defining the term information, Martins (1995) asserts that it is "an intrinsic property of various systems, which exists irrespective of whether any human or other forms of intelligence perceive it or utilize it". Information can be considered as a crucial factor for everyday living when taking into cognisance the innumerable uses to which it can be put. Martin (1995) in lending credence to this assertion posited that the use to which information is put is literally countless and may be referred to as the "lifeblood of a society". This invariably may be considered as a reason why information is regarded as power. The importance of information was also espoused by Stanley (1990) when he asserted that information may be regarded as one of the basic human need after air, water, food and shelter.

Agricultural information is therefore an important element that is germane for any meaningful development in the agricultural sector of any economy. In the opinion of Olawoye (1996) access to agricultural information can go a long way in increasing the productivity of farmers. The changing nature of agricultural information and the new global ideology are significantly shaping agricultural and rural development. Agricultural information is changing in terms of its contents, the means by which it is transferred, and it's marketability as a "commodity. van den Ban (1998) noted that several organizations are functioning to disseminate agricultural information and can potentially meet the demand of farmers. But the ability of these organizations to reach farmers varies considerably due to wide variations in contact intensity (van den Ban, 1998). Within the context of agricultural development, there is need for effective interaction among the key players in technology generation on one hand and those actively involved in the dissemination of such technological information on the other, as well as those that such information are directed at. It was this realization that led to the development of the concept of Agricultural Knowledge Information System (AKIS). AKIS according to Röling (1994) is the articulated network of

actors (individuals or organizations) expected to work synergistically to support innovation in a given domain of human activity. The FAO and World Bank (2000) also defined AKIS as system of people and institutions that generates, transfers, and utilizes agricultural knowledge and information. Information revolution possesses the potential to ensure that knowledge and information on important technologies, methods and practices are put in the right hands. According to Balit (1998), knowledge and information are basic ingredients of food security and are essential for facilitating rural development and bringing about social and economic change. The Internet (ICT) has opened a new communication channel that brings new knowledge and information resources to rural communities (Arokoyo, 2005). According to Munyua (2000), some developing countries have started using the ICT with the support of organizations such as FAO, though community-based ICT project is fraught with some constraints.

Therefore the utilization of relevant, accurate and up-to-date information in all spheres of life especially in vital sectors of the economy such as the agricultural sector by the key players would ensure increased productivity. Women farmers have been noted as one of the key players in the agricultural sector especially in the developing countries where they contribute immensely to production activities (United Nations, 1995, Oladele, 2003). The effective and efficient utilization of agricultural information by this category of farmers is expected to ultimately lead to increased production and therefore income generation and poverty reduction. it is imperative therefore to ascertain how women farmers that constitute a significant segment of the farming population in developing countries utilize agricultural information in their production activities.

Therefore the general objective of this study was to investigate the agricultural information utilisation pattern among women farmers in south western Nigeria. Specifically the study intended to: ascertain the personal characteristics of women farmers in the study area; determine the main sources of agricultural information to women farmers in the study area; investigate the agricultural information utilisation pattern among women farmers in the study area; ascertain the constraints facing women farmers in the utilisation of agricultural information in the study area.

Hypotheses of the study:

The following null hypotheses are stated

- There is no significant relationship between the personal characteristics of the women farmers (age, marital status, educational level) and the utilisation of agricultural information.
- There is no significant difference in the agricultural information utilisation pattern among women farmers across agro-ecological zones.

Data collection procedure:

A stratified and multi-stage random sampling technique was used in selecting 347 women farmers from across the two main agro-ecological zones in the south western part of Nigeria. Ogun and Oyo states were randomly selected from the derived savannah stratum, while Ondo and Delta states were randomly selected from the rain forest stratum. Thereafter one extension zone was randomly chosen from each of the selected states and two extension blocks from each zone was also chosen. Thereafter, two extension cells were selected from the chosen blocks and on the whole not less than 10% of women farmers registered with the Agricultural Development Programmes (ADP) were selected.

An interview schedule was used in obtaining information from the respondents after it was content validated by experts in the field of rural sociology and communication. An item

analysis was again conducted and items with less than r = 0.48 were discarded or rephrased. Agricultural information was categorized as technical information and economic information, while utilization was measured on a 4 – point rating scale of Very Often = 3, Often =2, Rarely =1 and Never =0. Statistical tools such as means, standard deviations, chi-square and t-test were used in analyzing data.

RESULTS AND DISCUSSION

Personal Characteristics of Women Farmers:

Table 1 show that 43.3% of the respondents are within the ages of 41 to 50 years which may be considered as an active age. Yahaya (2002) had earlier posited that women farmers are more active between the ages of 20 to 50 years. Also, 47.8% of the women farmers have no formal education which is in consonance with the assertion by Quisumbing and Meizen-Dick (2001) that many farmers in sub-Saharan Africa have a low level of education. Furthermore, 83.4% of the women farmers are married which is expected because of the importance attached to the marriage institution especially in most rural areas in the study area.

Table 1: Distribution of Women Farmers Personal Characteristics (N= 347)

Variables	Frequencies	Percentages
Age(Years)		
Below 30	11	3.1
31 – 40	92	26.4
41 – 50	150	43.3
51 -60	90	26.0
Above 60	4	1.2
Educational qualification		
No formal education	166	47.8
Primary	97	28.0
Secondary	62	17.9
OND/NCE	19	5.5
B.Sc/HND	3	0.9
Marital status		
Married	289	83.4
Single	18	5.0
Divorced	6	1.8
Widowed	34	9.8

Sources of Agricultural Information to Women Farmers:

Table 2 indicates that women farmers mainly source for agricultural information from extension agents (M = 4.63), fellow farmers (M= 4.40), Neighbours/ friends (M = 4.25) and radio (M = 3.99). This result agrees with that of Ajayi (2003) who found that the use of the radio, extension agents and fellow farmers were some of the major sources of information from which farmers generally seek information. However, the kind of information sought by an individual often determines the kinds of sources the individual seeks such information. Thus many a time, farmers prefer the easiest available source of information (need not be the best or reliable) to solve their problems. The satisfaction with that source would depend upon the experience with the solutions suggested and other characteristics perceived in that source of information (van de Ban, 1998). It is surprising to note that none of the respondents has access to information communication technology (ICT) which is an indication that some of

the rural farmers in many developing countries still depend on traditional sources of information.

Table 2: Women farmers' sources of agricultural information

Sources	Means (M)	Standard deviation	Rank order
Extension agents	4.63	1.31	1
Fellow farmers	4.40	2.71	2
Neighbour/ friends	4.25	2.23	3
Radio	3.99	2.39	4
Television	2.14	2.03	5
Newspapers	1.36	1.21	6
Posters/Bulletins	1.33	1.18	7
Commercial agents	1.21	0.88	8
Community based Internet	0	0	9

Scale: More than once a week =6, once in 2 weeks =5, once in 3 weeks =4, once a month =3, once in 2-3 months =2, rarely =1

Agricultural Information Utilisation Pattern among women farmers:

Table 3 shows that women farmers often use information on improved seeds/seedlings (M=2.53), crop combination (M =2.42), diseases and pest control in crops (M=2.27). The pattern of agricultural information utilisation observed in this study may not be unconnected with the close contact with extension agents (Table 2) whose activities are noted to be mainly crop bias (Saidu, 1992). This is why Aina (1995) challenges extension agencies to reconsider the trend where extension services are lopsided in favour of technical information despite variations in agricultural tasks performed generally and by women in particular.

Table 3: Utilisation of technical agricultural information

Technical information categories	Means	Standard deviations	Rank order
Improved seeds/seedlings	2.53	0.87	1
Crop combination	2.42	0.90	2
Disease and pest control	2.27	0.91	3
Storage methods	2.17	0.81	4
Processing agric. produce	2.12	0.94	5
Harvesting techniques	1.95	0.96	6
Soil management	1.90	1.00	7
Disease and pest control in livestock	1.81	1.18	8
Feeding of livestock	1.69	1.08	9
Livestock breeding	1.58	1.06	10
Housing of livestock	1.49	1.11	11
Weather forecast	1.06	1.00	12
Agro forestry	1.04	1.11	13
Handicraft making	1.00	1.00	14
Operating farm machinery	0.65	0.89	15

Scale: Very often= 3, Often = 2, Rarely =1, Never =0.

Table 4 reveals that women farmers utilized more information pertaining to market locations (Mean = 2.18), cooperative associations (Mean = 1.99) and current market prices (Mean =1.91). This result agrees with the findings of Olowu and Yahaya (1998) in their survey of

information needs of women farmers in Northern Nigeria that information were needed by women farmers in the current and future market prices.

Table 4: Utilisation of economic agricultural information

Economic information categories	Means (M)	Standard deviations	Rank order
Market locations	2.18	1.07	1
Cooperative associations	1.99	1.14	2
Current market prices	1.91	1.22	3
Labour availability	1.87	1.04	4
Income generating activities	1.85	1.18	5
Future market prices	1.83	1.17	6
Procedure for profit maximization	1.75	1.16	7
Community self help	1.74	0.97	8
Budgeting methods	1.60	1.07	9
Advantages of selling beyond farm gate	1.59	1.08	10
Credit sources	1.55	1.11	11
Procedure foı credit procurement	1.55	1.12	11
Stock record keeping	1.42	1.08	12
Credit management	1.39	1.01	13
Adult literacy	1.32	1.00	14
Risk management in agric	1.21	1.07	15
Pricing export produce	0.74	1.05	16
Exporting procedure	0.51	0.88	17
Agricultural insurance	0.49	0.85	18

Scale: Very often= 3, Often = 2, Rarely =1, Never =0.

Constraints in the Utilisation of Agricultural Information:

Table 5 shows that most of the women farmers noted that the lack of social amenities (M =2.18) and their lack of education (M =2.08) as some of the important constraints affecting their utilization of agricultural information.

Table 5: Constraints in the utilization of agricultural information

Constraints	Means	Standard deviation	Rank order
Lack of social amenities	2.18	0.81	1
Lack of education	2.06	0.77	2
Sources of information dissemination are not enough	1.97	0.78	3
Messages are not always timely	1.88	0.80	4
Extension agents lack communication skills	1.84	0.88	5
Language of information is not understandable	1.84	0.90	5
Information is not of relevance	1.77	0.89	6
The information is not interesting	1.76	0.82	7
Extension agents do not use teaching aids	1.75	0.77	8
Extension agents are not always regular	1.74	0.86	9
The information is not practicable	1.74	0.73	9
The messages are too difficult	1.74	0.77	9

The information is rather complex	1.68	0.85	10
Extension agents come around at odd times	1.67	0.84	11
The messages are conflicting	1.63	0.79	12

Scale: High interference =3, Low interference =2, No interference =1

Relationship between the personal characteristics of women farmers and the utilization of agricultural information

Table 6 reveals that there are no significant relationships between women farmers' age (χ^2 =0.02; p> 0.05), educational qualification (χ^2 =0.17; p> 0.05), marital status (χ^2 =0.07; p> 0.05) and the utilisation of agricultural information. This finding is similar to the findings by Olowu and Oyedokun (1999) who reported that there was no significant relationship between farmers' marital status and extension services received.

Table 6: Relationship between women farmers' personal characteristics and the utilization of agricultural information

Variables	χ^2	df	P level	Contingency coefficient	Decision
Age	0.02	1	0.87	0.01	NS
Educational qualification	0.17	1	0.67	0.03	NS
Marital status	0.07	1	0.78	0.02	NS

Relationship between the utilization of agricultural information by women farmers across the agro-ecological zones:

The relationship between the agricultural information utilization patterns across the agro-ecological zones in south western Nigeria is shown in Table 7. There is a significant difference in the utilization of agricultural information by women farmers in the rainforest (M = 66.4) and savannah zones (M =58.2), (t =3.37; p < 0.05) respectively. This is not unexpected because of the difference in agricultural practices in these zones. Moreover, the level of development and social amenities also differ in the zones

Table 7: Relationship between the utilization of agricultural information across the agro-ecological zones.

Sources of variation	Means	Standard deviation	df	t value	P level	Decision
Rainforest	66.45	24.24	345	3.37	0.00	S
Savannah	58.26	20.84				

CONCLUSION AND RECOMMENDATIONS

This study has shown that women farmers are still exposed to their usual media sources of information like radio, extension agents and fellow farmers without any exposure to ICT. Findings also show that women farmers often use technical information bothering on improved seeds/seedlings and crop combination, while information on market locations, cooperative associations and current market prices are the economic information most utilized. Women farmers were also limited in utilizing information due to inadequate social amenities and low education. A significant difference exists in the utilisation pattern across the agro-ecological zones in the study area. Based on the foregoing, it is therefore recommended that

- Women farmers are constituted into formidable groups by assisting them with adult education programmes as they serve as an important source of agricultural information.
- Extension packages directed at women farmers should not only be crop biased but other relevant information necessary for optimum production should be incorporated into the packages directed towards them while they are encouraged to utilize them in their agricultural practices.
- As the world is becoming a global village through the use of information technologies (ICT), extension organizations should assist farmers to establish information centre in each local government area where women farmers can obtain information. This can come through financial assistance from donors as it has been done in some developing countries such as Mexico and Uganda (Munyua, 2000) or by farmers coming together as cooperative societies running the centre.

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