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Rural Farmers Access to Agricultural Information in Ido Local Government Areas of Oyo State

Gbadebo Lukman Adebisi[1*], Gafar Abiodun Akinosho[2], Esther Olufunmilayo Owolade[1], Seun Patrick Ayobioloja[2], Bolanle Olufunmilayo Jatto[1]

[1]Department of Agricultural Extension, Federal College of Animal Health and Production Technology, Moor Plantation, Ibadan, Nigeria
[2]Department of Computer Science, Federal College of Animal Health and Production Technology, Moor Plantation, Ibadan, Nigeria
Email: *adebisigbadebo2014@gmail.com

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Abstract

This research was conducted to determine rural farmers' access to agricultural information in ido local government area of Oyo state. A multi-stage sampling procedure was used to select 120 respondents for the study. Primary data were collected using an interview schedule and were analyzed using descriptive and inferential statistics. Results revealed that majority (70.0%) of the respondents were male, married (62.5%) and aspect of agriculture they engaged with was crop farming (83.3%). The most popular source of information among the respondents was radio (72.5%) and agricultural information they have access to were market information, storage information and fertilizer application. Chi-square results at 0.05 level of significance indicated that there was significant relationship between rural farmers' sex (X^2 = 8.265, p = 0.004), marital status (X^2 = 16.420, p = 0.003) and correlation analysis of the result revealed that there existed a correlation between income (r = 0.229, p = 0.012), sources of agricultural information (r = 0.582, p = 0.000) and access to agricultural information. Therefore, the research study recommended that rural farmers should be educated and public awareness of agricultural information should be emphasized and created by the information providers.

Keywords

Rural Farmers, Access, Agricultural Information

Subject Areas: **Agricultural Science**

*Corresponding author.

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1. Introduction

In an era of knowledge economy, information plays an indispensable role in every aspect of economic development process which has been described as data that have been put into a meaningful and useful context which is communicated to recipient who use it to make necessary decisions. The ability to easily access and share information which stimulates the creation of new ideas is viewed as essential to maintaining nation's economy and enhancing the quality of life of every citizen in all nations of the world. Information is the first and most important step in the process of adoption of newly innovated ideas by farmers, to achieve a steady flow of accurate, understandable and factual agricultural development, farmers must know, and act in accordance to agricultural information Adefuye and Adedoyin [1].

Rural farmers in Nigeria are not known for producing enough food, which is due to some constraints that can be traced to lack of access to timely and up-date information which will enable them to make necessary decisions that will assist them to attain optimal productivity. Access to accurate, reliable and efficient agricultural information by farmers is an important factor that can inform desired improvement required in Nigeria agricultural sector, promoting access to agricultural information that will support farmers in rural areas plays an important role in social and economic development of the country.

Agricultural information consists of all innovations, ideas, published, unpublished knowledge on every aspect of agriculture and technologies of agricultural policies which creates awareness among farmers about new agricultural practices and technologies for adoption. Agbamu [2] classified agricultural information into four categories as technical, commercial, socio-cultural and legal information. Agricultural information is highly desired by the farmers in the rural area and information needed by the rural farmer could be according to their needs and where they are poorly disseminated as a result of some constraints; the community agricultural development is highly impeded Munyua [3]. Information and knowledge are vitals in agricultural development of any community and where they are poorly disseminated as a result of some constraints; the community agricultural development is highly impeded.

Agricultural information needed by the rural farmers could be according to their needs and is still remain largely unmet which could be attributed to neglect of rural communities of the country. Information accessibility and utilization are unequally distributed between the rural communities of Nigeria, this is because information available to them is either not reliable or is distorted in the process of transmission and this unhealthy situation constitutes a major impediment, which keeps the rural communities from the development indicators Harande [4]. Therefore this research seeks to examine the rural farmers' access to agricultural information in Ido local government areas of Oyo State, Nigeria.

1.1. Objectives of the Study

The general objective of this study is to determine rural farmers' access to agricultural information in the study area while the specific objectives of the study were to:

1. Describe the socio-economic characteristics of the respondents.
2. Examine the enterprise characteristics of the respondents.
3. Identify respondents' sources of agricultural information.
4. Ascertain the respondents' access to agricultural information.
5. Identify the respondents' constraints in accessing agricultural information.

1.2. Hypotheses of the Study

The following hypotheses stated in the null form were tested in this study:

Ho1: There is no significant relationship between socio-economic characteristics of the respondents and their access to agricultural information.

Ho2: There is no significant relationship between respondents' sources of agricultural information and frequency of access.

2. Methodology

2.1. Area of Study

This study was carried out in Ido Local government area of Oyo State between 12th March and 25th June 2013.

The Local government happens to be the largest in the state with 14 prominent communities. It has land area of 986 km^2 and a population of 104,261 as at 2006 population census NPC [5]. The strategic location of the local government within the deciduous forest in the central part of Oyo State makes it one of the most viable areas for agriculture in the state. The climate of this area is tropical in nature and the vegetation is essentially of the rain-forest type. The inhabitants of Ido-local government area are predominantly farmer cultivating both food and cash crops.

2.2. Sampling Procedure and Sample Size

Simple random sampling technique was used for this study. The first stage involved the selection of 10 communities from the 14 communities in Ido-local government using simple random sampling technique. The second stage involved the selection of 12 rural farmers from each of the selected communities from the list of rural farmers in Ido local government area through extension workers using simple random sampling technique which gives a total sample size of 120 rural farmers for the study.

2.3. Method of Data Collection

The data for this study were collected through both primary and secondary sources. The primary data were collected through interview schedule while secondary data entails the review of relevant literature to the study.

2.4. Measurement of Variables

The variables for this study include rural farmers socio-economic characteristics (age, sex, marital status, level of education etc), enterprise characteristics which was elicited by asking the respondents to indicate their source of labour, source of finance from the options presented, farm size was measured by asking the respondents to estimate the farm size cultivated, aspects of farming respondents engaged with, farming experience etc.

Sources of Agricultural Information was measured by asking the respondents to state their source of Agricultural Information from a list of sources listed and frequency of use of those sources using a 3 point Likert-type scale of regularly, sometimes, never which were scored 3, 2, 1.

Access to Agricultural Information was captured by asking the respondents to indicate their access to various Agricultural Information listed using a 3 point Likert-type scale of regularly, sometimes, never with the score of 3, 2, 1 assigned to them respectively.

Constraints to access Agricultural information was measured by asking the respondents to response to the constraints they faced from the options stated which were classified as major, minor , not a constraint and score of 3, 2, 1 were assigned to them respectively.

2.5. Data Analysis

Data collected was analysed using descriptive and inferential statistics. Descriptive statistics involved the use of frequency and percentages and inferential statistics involved the use of Pearson product moment correlation and chi-square. Hypothesis 1 was tested with chi-square and PPMC at 0.05 level of significance while Hypothesis 2 was tested using PPMC at 0.05 level of significance.

3. Results and Discussion

3.1. Respondents Socio-Economic Characteristics

Table 1 shows that most of the respondents were within the age range of less than 30 years (31.7%), an indication of active and very young rural farmers were more involved in accessing agricultural information than middle and old ages rural farmers. Majority of the rural farmers (70%) were male, married (62.5%) and Christian religion (55.8%) was the popular religion among the respondents. Also, majority of the respondents (91.7%), (60.0%) were into farming as their secondary occupation and primary occupation respectively which has signified that farming is the major activity that is more pronounced among rural settlers. Further results shows that majority of the respondents (73.3%) had a family size of between 4 - 6 persons and 45.8% of them had adult education and earned income of less or equal to N10,000 which could be as a result of lack of rural farmers access to pertinent agricultural information that may assist them to increase their productivity.

Table 1. Distribution of respondents by socio-economic characteristics.

Variables	Frequency	Percentage
Age		
Less or equal 30	38	31.7
31 - 35	26	21.7
36 - 40	26	21.7
41 - 45	13	10.8
Above 45	17	14.1
Sex		
Male	84	70.0
Female	36	30.0
Marital statu		
Single	32	26.7
Married	75	62.5
Divorced	4	3.3
Widow	2	1.7
Widower	7	5.8
Religion		
Islam	50	41.7
Christianity	67	55.8
Traditional	3	2.
Household size		
1 - 3	16	13.3
4 - 6	88	73.3
7 - 9	11	9.2
10 - 12	5	4.2
Level of education		
Adult education	55	45.8
Primary education	42	35.0
Secondary education	15	12.5
Tertiary education	8	6.7
Primary occupation		
Teaching	10	8.3
Farming	72	60.0
Trading	9	7.5
Civil service	8	6.7
Artisan	21	17.5
Secondary occupation		
Farming	110	91.7
Trading	5	4.2
Artisan	1	0.8
None	4	3.3
Income		
Less or equal 10000	55	45.8
₦10,001 - ₦20,000	49	40.8
₦20,001 - ₦30,000	5	4.2
₦30,001 - ₦40,000	11	9.2

3.2. Enterprise Characteristics of the Respondents

Result of the findings presented in **Table 2** indicated that the respondents (42.5%) depends on paid labour as their source of labour, 47.5% of them depend on association members as their source of finance and majority of

Table 2. Distribution of respondents by enterprise characteristics.

Variables	Frequency	Percentage
Sources of labour		
Family members	30	25.0
Paid labour	51	42.5
Friends	5	4.2
Association members	–	–
Self	34	28.3
Sources of finance		
Self	35	29.2
Family members	5	4.2
Friends	3	2.5
Association members	57	47.5
Banks	20	16.1
Aspect of farming		
Crop farming	100	83.3
Livestock farming	11	9.2
Fishery	9	7.5
Farm size(hectares)		
Not indicated	8	6.7
1 - 5	35	29.2
6 - 10	52	43.3
11 - 15	15	12.5
16 - 20	10	8.3
Pond size		
Less 100 square meters	15	12.5
100 - 500 square meters	75	62.5
101 - 1000 square meters	30	25.0

the respondents (83.3%) were involved in crop farming which determined the aspect of agricultural information rural farmers have access with. Findings also show that rural farmers (43.3%) of them had between 6 - 10 hectares of farmland, 62.5% of them had pond size of 100 - 500 meters square and 58.4% of them had between 6 - 10 years of farming experience which could have influenced rural farmers accessibility to agricultural information.

Respondents available sources of agricultural information and their frequency of use.

The sources of agricultural information available to farmers in the study area and the frequency of use is shown in **Table 3** as majority (72.5%) of the rural farmers depend on the use of radio to access agricultural information regularly, 32.5% of the respondents use television regularly, 45.0% of the rural farmers depend on the use of their association to access agricultural information regularly while 2.5% of the rural farmers depend on their friends to access agricultural information regularly. The implication of this result shows that radio is the most popular, preferred and frequently used organs in accessing agricultural information by the rural farmers in this study area. This is in line with the work of Munyua [6] who stated that majority of farmers use radio as their major source of agricultural information, probably because it is portable and can be operated by anybody, and the cost of maintenance is very cheap as it was expressed in the work of Ozowa [7] that radio programmes are most efficient in communicating agricultural information to towns and villages.

3.3. Respondents According to the Frequency of Access to Agricultural Information

The result of the study in **Table 4** shows that 79.2% of the respondents access agricultural information on market regularly, 76.7% of the respondents access agricultural information on fertilizer application regularly, 72.5% of the respondents indicated their regular access on agricultural information on storage, 69.2% indicated their regular access on spacing and planting date, 68.3% of the respondents indicated their regular access on an im-

Table 3. Distribution of respondents according to their sources of agricultural information and their frequency of use.

Sources of agricultural information	Regularly F (%)	Sometimes F (%)	Never F (%)	Weighted score	Mean	Rank
Radio	87 (72.5)	32 (26.7)	1 (0.8)	326	2.7	1st
Television	39 (32.5)	78 (65.0)	3 (2.5)	276	2.3	3rd
Extension agent	2 (1.7)	72 (60.0)	46 (38.3)	196	1.6	6th
Farmers association	54 (45.0)	53 (44.2)	13 (10.8)	281	2.3	2nd
Newspaper	_____	20 (16.7)	100 (83.3)	140	1.2	9th
Friends	3 (2.5)	87 (72.5)	30 (25.0)	210	1.8	4th
Neighbours	_____	86 (71.7)	34 (28.3)	206	1.7	5th
Bulletins	1 (0.8)	26 (21.7)	93 (77.5)	148	1.2	8th
Seminars	10 (8.3)	15 (12.5)	95 (79.2)	155	1.2	7th

Table 4. Distribution of respondents according to frequency of access of agricultural information.

Agricultural information.	Regularly F (%)	Sometimes F (%)	Never F (%)	Weighted Score	Mean	Rank
Improved method of weed control	61 (50.8)	46 (38.3)	13 (10.8)	288	2.40	6th
Improved seed varieties	61 (50.8)	46 (38.3)	13 (10.8)	288	2.40	6th
Introduction of new animal vaccines and drugs	27 (22.5)	23 (19.2)	70 (58.3)	197	1.64	15th
Soil test	32 (26.7)	65 (54.2)	23 (19.2)	249	2.08	12th
Fertilizer application	92 (76.7)	15 (12.5)	13 (10.8)	319	2.66	3rd
Mechanized system of farming	4 (3.3)	10 (8.3)	106 (88.3)	138	1.15	17th
Spacing and planting dates	83 (69.2)	25 (20.8)	12 (10.0)	311	2.59	4th
Introduction of new herbicides	37 (30.8)	78 (65.0)	5 (4.2)	272	2.27	8th
New method of crop preservation	26 (21.7)	82 (68.3)	12 (10.0)	254	2.12	11th
Hygienic standard	40 (33.3)	37 (30.8)	43 (35.8)	237	1.98	14th
Improved method of controlling pest and diseases	36 (30.0)	77 (64.2)	7 (5.8)	269	2.24	9th
Weather information	2 (1.6)	26 (21.7)	92 (76.7)	150	1.25	16th
Information on irrigation	-	5 (4.2)	115 (95.8)	125	1.04	18th
Market information	95 (79.2)	25 (20.8)	-	335	2.79	1st
Storage information	93 (77.5)	22 (18.3)	5 (4.2)	328	2.73	2nd
Information on new feeds and feeding techniques	29 (24.2)	78 (65.0)	13 (10.8)	256	2.13	10th
Information on improved drying techniques	82 (68.3)	26 (21.7)	12 (10.0)	310	2.58	5th
Information on modern cultivation system	27 (22.5)	70 (58.3)	23 (19.2)	244	2.03	13th

proved drying techniques, 50.8% indicated their regular access on improved method of weed control and seed varieties respectively.

3.4. Respondents According to Their Constraints in Accessing Agricultural Information

Table 5 revealed that rural farmers (87.5%) opined that feedback problem was the major constraint in accessing agricultural information which implies that there is a gap between the rural farmers, extension officers and researchers in the process of accessing agricultural information. This is in line with the work of Idowu who asserted that there is a wide gap between farmers, extension workers and researcher.

Also, illiteracy was among the constraints the respondents were facing in accessing agricultural information

Table 5. Distribution of respondents according to constraints in accessing agricultural information.

Constraints	Major constraint F (%)	Minor constraint F (%)	Not a constraint F (%)	Weighted score	Mean	Rank
Illiteracy	65 (54.2)	18 (15.0)	37 (30.8)	268	2.23	4th
Poor public relation of the extension workers	13 (10.8)	64 (53.3)	43 (35.8)	210	1.80	7th
Improper awareness	49 (40.8)	59 (49.2)	12 (10.0)	277	2.31	3rd
Language barrier	7 (5.8)	28 (23.3)	85 (70.8)	162	1.40	9th
Lack of rural electrification	41 (34.2)	44 (36.7)	35 (29.2)	246	2.10	5th
Lack of access road for easy community visit of extension workers	14 (11.7)	75 (62.5)	31 (25.8)	223	1.90	6th
Lack of money to purchase newsletters, leaflets on agricultural information	6 (5.0)	49 (40.8)	65 (54.2)	181	1.51	8th
Feedback problem	105 (87.5)	9 (7.5)	6 (5.0)	339	2.83	1st
Inconsistency of agricultural information	58 (48.3)	49 (40.8)	13 (10.8)	285	2.40	2nd

with 54.2% as major constraint which could be as a result of low level of education the rural farmers attained. Further result revealed that inconsistent in agricultural information was among the constraints the respondents were facing in accessing agricultural information with 48.3% as major constraint which could be attributed to poor extension services among the extension workers.

3.5. Relationship between Respondents Socio Economic Characteristics and Their Access to Agricultural Information

The result of the chi-square analysis in **Table 6** shows that there was significant relationship between rural farmers' sex, marital status, and their access to agricultural information ($X^2 = 8.265$, $p = 0.004$; $X^2 = 16.420$, $p = 0.003$; respectively). The implication is that sex of the farmer is related to their access to agricultural information but male farmers have more access to information than female farmers. With respects to marital status, married farmers have more access to agricultural information compared to other farmers in their category. Further result of chi-square analysis revealed that there was no significant relationship between rural farmers' religion, level of education and access to agricultural information ($X^2 = 0.657$, $p = 0.720$; $X^2 = 0.564$, $p = 0.605$) (**Table 7**). Therefore, the null hypothesis was rejected with respect to sex, marital status but the hypothesis was accepted with respect to religion and level of education.

Further result of socio-economic characteristics of the respondents using PPMC revealed that age, household size were not significant ($r = 0.113$, $p = 0.221$; $r = 0.023$, $p = 0.800$ respectively) but the income of the rural farmers was significant ($r = 0.229$, $p = 0.012$) which implies that rural farmers with higher level of income will have better access to agricultural information when compared with farmers with low level of income.

Further result in **Table 8** revealed that there was a correlation between respondents' sources of agricultural information and access to agricultural information ($r = 0.582$, $p = 0.000$).

The implication of this is that rural farmers with various sources of agricultural information will have more access to agricultural information when compared it with respondents that were restricted with different sources of agricultural information.

4. Conclusion

Based on the empirical evidence of the study, it could be concluded that majority of the rural farmers in the study area were male, married and aspect of agriculture they were engaged with was crop farming with radio as the most used source of agricultural information. The prevalent agricultural information they have access to was market information, storage information, fertilizer application, spacing and planting dates; however, the major constraints in accessing agricultural information among the rural farmers include illiteracy of the respondents, feedback problem and inconsistency of agricultural information. Significant relationship exist between sex,

Table 6. Correlation between the respondents socio economic characteristics and access to agricultural information**.**

Variables	r-value	p-value	Decision
Age	**0.113**	**0.221**	**NS**
Household size	**0.023**	**0.800**	**NS**
Income	**0.229**	**0.012**	**S**

Table 7. Chi-square result of socio economic characteristics of the respondents and access to agricultural information.

Variable	X^2-value	DF	p-value	Decision
Sex	8.265	1	0.004	S
Marital status	16.420	4	0.003	S
Religion	0.657	2	0.720	NS
Level of education	0.564	3	0.605	NS

Table 8. Correlation between respondents sources of agricultural information and access to agricultural information.

Variables	r-value	p-value	Decision
Sources of agricultural information.	**0.582**	**0.000**	**Significant**

marital status, income, sources of agricultural information and access to agricultural information.

5. Recommendations

Based on the result of the study, it was recommended that:

- Public awareness should be created on agricultural information.
- Consistency of agricultural information should be planned for by the government and information providers.
- Rural farmers should be educated in order to have access to agricultural information.

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