

Access to Agricultural Information among Rural Farmers –A Case of Ido Local Government Area Ibadan, Oyo State, Nigeria

Akanni O.F. *, Ojedokun C.A., Olumide- Ojo O., Kolade R.I and Tokede A.M.

Forestry Research Institute of Nigeria, P.M.B 5040, Jericho hills, Ibadan, Nigeria.

*Corresponding Author: barbrajo2012@gmail.com

Abstract— The study examined the level of access to agricultural technology information among rural farmers in Ido Local Government, Ibadan, Nigeria. Primary data were collected with the aid of pre-tested questionnaires and 100 respondents were selected through a two stage sampling procedure. The data was analyzed using descriptive statistics and chi-square was used to test the hypothesis. The result of the analyses indicated that (29.1%) falls within the active age bracket of 40-60years, more than half (61.6%) had no formal education, 70.9% were male and 68.6% were indigene of the study area. Majority (58.1%) of the respondents had a little information about weather and climate, 48.8% had no information about tillage while (50%) had a lot of information about weed control and fertilizer. Most of the farmers had little information about government related information (4.7%), market related (7%) and harvesting techniques (8.1%). 50% of the respondents in the study area strongly agreed that source of information is constraint in agricultural production while 3.5% strongly disagreed about the source of information being a constraint. The hypothesis test revealed that there is significant relationship between marital status (< 0.05), education level (< 0.05) and the level of access to agricultural information in the study area. Based on the result, the study recommends that information should be disseminated to the farmers in the language that they understand and also, adult education should be encouraged in the study area to keep farmers informed towards on agricultural production practices.

Keywords— Access, Agricultural information, Climate, rural farmers, Production.

I. INTRODUCTION

Information is considered a vital resource alongside land, labour, capital, skills. It is facts or knowledge provided or learned as a result of research or study (Smith, 2001). Information is knowledge needed to answer some questions faced by people in their day to day activities.

The concept of information was coined by an American scientist called Robert Taylor. He stated that information is the process of asking questions. No one can categorically claim to know all the information needs especially in information relied sector like agriculture where there are new and rather complex problem facing farmers every day. It is safe to assert that the information need of farmers revolve around the resolution of problems such as pest hazard, weed control, soil fertility, farm credit, labour shortage soil erosion among others.

Obidike (2011), Petros *et al.*, (2018) maintains that the greatest challenge facing agricultural sector is the delivery of

useful information for rural communities. In most developing countries agriculture is the most important economic activity providing food, employment, foreign exchange and raw materials to industries. A significant proportion especially in the developing world has been suffering from hunger and malnutrition.

Rural farmers account for the greater part of the population of any developing country such as Nigeria. The government of a developing country have a major responsibility of ensuring that there is adequate development in their various communities and local government which could lead to effective and efficient agricultural systems that will not only supply food and animal protein but also foster the utilization of natural resources in a sustainable manner (CGIAR, 1995). When the rural farmers lack access to knowledge and information that would help them achieve maximum agricultural yield; they are not only in the grope of the dark but are driven to the urban centres in search of formal

employment, as the only option for survival (Munyua, 2000). Blait (1996) pointed out that the less expensive input for improved rural agriculture development is adequate access to knowledge and information in areas of new agricultural technologies, early warning system (drought, pest, diseases) improved seedlings, fertilizer, credit, market prices.

The general lack of awareness among farmers can be attributed to their high illiteracy (Mgbenka and Mbah, 2016), this contribute to the low level of agricultural findings. Farmers need information on production technology that involves cultivating, fertilizing, pest control, weeding and harvesting, they also need information relating to loan such as names of lenders, location and types of existing credit to reap greater profit. Grass root organs such as village heads and local officials are used to diffuse information because of their personal touch with the small scale farmers.

The gap between theory and practice can only be reduced if correct methods of communication are implemented. These methods includes both direct and indirect communication. By direct communication reference is made to situation where feedback can be provided instantly. Methods such as meetings and farmers' day are some examples of this mode of communication. Access to information is necessary for improving rural people livelihood (Mbagwuet *al.*, 2018). Despite its key role in socio economic development, very few people in developing countries have access to adequate information. The information environment of the rural areas is distinct from that of the urban environment due to obvious differences. The rural areas are mostly inhabited by people with low economic potentials, illiterates, semi- illiterates, social amenities including agencies for the information dissemination. The factor of illiteracy or low level of illiteracy, school dropouts among others who have limited or no access to social amenities including agencies for the information dissemination. The factor of illiteracy or low level of illiteracy acts as a great inhibitor to information access and assimilation in rural communities in Nigeria.

Information that can help solve a problem in a development process has been a topic of extensive debate. According to Gaal (2017), the lack of adequate and relevant information as impacted negatively on any development process although academics and researchers are aware of the value of information in development, there are some concern that information is still not perceived as being as important as other resources. Meanwhile, the choice of information sources varies in individual traits, among agricultural information seekers variables such as farm size, years in

farming, age, level of education, and level of income influence the choice of information sources (Riesenberg et al., 1999). If this factors can be noted it would be easier to improve access of information in rural areas. Most information services are focused in the urban areas rather than in the rural areas where help is really needed and there is a large population that lives there. Limited infrastructures, low level of illiteracy, lack of suitable information services and lack of technical competence as among the barriers to delivery of information services in rural areas in developing countries (Kamba 2009). The messages carried are not tailored to the information needs of rural populations. Even when the information is relevant, it is seldom aimed at the proper time and so does not get to the targeted audience. Another major constraint is the use of print media, leaflet and newsletters as message carries are of limited use in reaching illiterates farmers technical language used in communicating information is incomprehensible to farmers.

The objective of the study is to determine the access of information among rural farmers, identify the type of information available to them as well as the constraints encountered towards their access to agricultural information by rural farmer.

II. METHODOLOGY

Study area

Oyo state is one of the South Western zone of Nigeria. Oyo state is covered by Oyo-State Agricultural Development Programme (ADP) with four zones namely; Saki, Ogbomosho, Oyo and Ibadan/Ibarapa zones. Ido local government falls within the Ibadan/ Ibarapa agricultural zone. The annual rainfall ranges from 1,200 – 1,300 mm. The area lies within the rainforest region of Nigeria and has two distinct seasons, the raining season from April to October with an August break and dry season from November to March. The temperatures vary from a minimum of 21°C in July to a maximum of 39°C in February. A good percentage of the populace are engaged in agriculture; producing staple crops. The state is divided into three agro ecological zones which are: the rainforest, the savannah and the derived savannah. The vegetation of the zone is evergreen forest found in the southern part. Ido local Government is located between 3°39'E and 3°45'E and latitude of 7°47'N rainforest.

Sampling procedure

A two stage sampling technique was used for this study. The first stage involve a purposive selection of Ido local government because it is an agrarian community. The second stage involve a random selection of eleven villages. The third

stage involve a random selection of 10 respondents from each village except Apesan and Gedegbe where we have few farmers and just 5 respondents were selected from each village making it a total of one hundred in the study area. The selected villages are ;Apesan, Gedegbe, FenwaAdelakun,

AkindeleEgbarin, Ojuloge, Bako, AbaTesan, Alagbede, Fafunwon and Gedegbe;

Method of data Analysis

The objectives were analyzed using descriptive statistics such as tables, frequencies and percentages and chi-square as appropriate.

III. RESULT AND DISCUSSION

Table 1: Socio Economic Characteristics of respondents

Variable	Frequency	Percentage
Gender		
Male	61	70
Female	25	29.1
Total	86	100
Age		
Below 20	15	17.4
21-40	22	25.6
41-60	25	29.1
Above 62	24	27.9
Total	86	100
Education		
No formal education	53	61.6
Primary education		
Secondary education	22	25.6
Diploma		
Bsc	8	9.3
Marital status	2	2.3
Single	1	1.2
Married	44	51.2
Divorced	4	4.7
Widowed	20	23.3
Total	86	100
Household size		
1-5	49	57
5-10	36	42
Above 10	1.0	1.0
Total	86	100
Religion		
Christianity	28	32.6
Islamic	54	62.8
Traditional	4	4.7
Total	86	100

Source: Field Survey

Table 1 shows that 70.9% of the respondents are male and 20.9% are females. This implies that more males engage in farming than females. Also 17.4% of the respondents were aged below 20 years, 25.6% were aged between 21-40 years,

29.1% were aged between 41-60 years while 27.9% are above 62 years. This result is similar to that of Hoping (2004) who reported that farmers are of an average of 40 years. Majority (61.9%) had no formal education, this is line

with the findings of Sawio(1999) that majority of farmers had no formal education, 25.6% had primary education, 9.3% had secondary education, 2.3% had diploma while just 1.2% are degree holders.

The table also revealed that 62.8 % practice Islam , 32.6% are Christians while 4.75 were of the traditional belief . Also,

51.2% were married, 23.3% were widowed, 20.9% are single while just 4.7% were divorced. The findings also shows that 57% of the respondents have a household size of 0-5 members, 42% had household members of between 5-10, just 1% had above 10 members.

Table 2: Access to information among sampled respondents

Agric information	Very much(frequency)	%	A little	Percentage	Unsure	Percentage	Not at all	Percentage
Weed control	43	50	28	32.6	2	2.3	13	15.1
Farm Mechanisation	20	23	32	37.2	2	2.3	32	37.2
Pest control	46	53.5	10	11.6	8	9.3	22	25.6
Weather and Climate	12	14.0	21	24.4	3	3.5	50	58.1
fertilizer	61	70.9	25	29.1	0	0	0	0
Tillage	10	11.6	27	31.4	7	8.1	42	48.8
Seed varieties	16	18.6	22	25.6	5	5.8	43	50
Land preparation	8	9.3	19	22.1	1	1.2	58	67.4
Planting method	11	12.8	16	12.8	1	1.2	58	67.4

Source: Field survey

Table 2 shows that 50% of the respondents had “very much” information on weed control, 32.6% had a little information on weed control, 2.3% were unsure and 15.1% did not get any information at all. 23% of the respondents had very much information about mechanization while 37.2% had a little information on farm mechanization, 2.3% were unsure and 37.2 did not get information. Also 53.5% of the respondents had very much information about pest control, 11.6% had a little information, 9.35 % were unsure if they had information or not while 25.6% did not have information

pertaining to pest control, this result shows that more of the respondents had information about pest control. Also 14% of the respondents in the study area had very much information about weather and climate, 24.4% had little information, 3.5% were unsure, majority (58.1%) did not have access to any information at all. 70% of the respondents had very much information about fertilizers, 29.1% had a little information, none of the respondents were unsure and none of the respondents

Table 3: Production Related Information Level of Access

Production related	Very much		A little		Unsure		Not at all	
	frequency	percentage	frequency	percentage	Frequency	percentage	Frequency	percentage
Storage	23	26.7	55	64.0	3	3.5	5	5.8
Processing	29	33.7	49	57.0	4	4.7	4	4.7
Tools and equipment	17	19.8	54	62.8	3	3.5	12	14.0

Source: field survey

NOTE: All figures in parenthesis are measured percentage

Table 3 shows the level of access of respondents to production related information. 23.3 % of the respondents attested that they had very much information about storage of their products 64.0% had a little; 3.5% said they were unsure and just 5.8% of them did not have access to any information at all. Also, 33.7% of the respondents in the study area had very much information about processing of their produce,

57.0% had a little information, 4.7% were unsure and 4.7% did not have access to any information at all. However, 19.8% of the respondents had very much information about tools and equipment for processing and storing their goods, 62.8% had a little information, 3.5% were unsure and 14% of them did not have access to any information at all.

Table 4: Level of Access to Government Related Information

Government Related	Very much		A little		Unsure		Not at all	
	Frequency	Percentage	frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Government Policy	4	4.7	36	41.9	6	7.0	40	46.5
Infrastructure	10	11.6	37	43.0	6	7.0	33	38.4
Programme	20	23.3	35	40.7	6	7.0	33	38.4

Source : field survey

NOTE: All figures in parenthesis are measured in percentage.

From table 4 above, 4.7% of the respondents attested that they had very much information about government policy, 41.9% had a little, a while 3.0% were unsure and 46.5% did not have access to any information at all. Also 11.6% of the respondents had very much information about government infrastructures, 43% had a little information, 7.05% were

unsure and 38.4% of them did not have access to any information at all. 23.3% of the respondents in the study area had very much information, 40.7% had a little information, 7.0% were unsure and 29.1% did not have access to any information at all.

Table 5: Level of access to market related information among sample respondents

Market related	Very much		A little		unsure		Not at all	
	frequency	Percentage	frequency	Percentage	frequency	percentage	Frequency	Percentage
Market price	6	7.0	50	58.1	1	12	29	33.7
A variable market	6	7.0	59	68.6	3	3.5	18	20.9

Source: field survey

NOTE: All figure in parenthesis are in percentage

Table 5 shows that 7% of the respondents had very much information about market price at which to sell their goods, 58.1% had a little, 1.2% were unsure and 33.7% did not have access to any information which shows that most of the respondents did not have access to any information about

market price. Also 8.1% of the respondents got very much information about available market price, 60.5% had a little information about available market, 3.5% were unsure and 27.9% did not have access at any information at all.

Table 6: Level of access to harvesting related information among sampled respondents

Harvesting related	Very much		A little		unsure		Not at all	
	Frequency	Percentage	Frequency	percentage	frequency	Percentage	frequency	Percentage
Method	7	8.1	52	60.5	3	3.5	24	27.9
Tools	4	4.7	52	60.5	2	2.3	28	32.6

NOTE: All figures in parenthesis are in percentage

Table 6 reveals that 8.1% of the farmers had very much information about harvesting methods, 60.5% had little information 3.5% were unsure and 27.9% did not have access

to any information at all. Also 4.7% of the respondents had very much information, 60.5% had a little, 3.5% were unsure and 32.6% did not have access to any information at all.

Table 7: Constraints to access of information among respondents

Constraints	Strongly agree		Indifferent		disagree		Strongly disagree	
	Frequency	Percentage	Frequency	Percentage	frequency	percentage	frequency	Percentage
Source	43	50.0	4	4.7	36	41.9	3	3.5
Cost of getting information	59	68.6	4	4.7	18	20.9	5	5.8
Availability	56	65.6	7	8.1	12	14.0	11	12.8
Cost of utilization	68	79.1	13	15.1	3	3.5	2	2.3
Government policy	74	86.0	9	10.5	1	1.2	2	2.3
Others	73	84.9	10	11.6	1	1.2	2	2.3

Source: Field Survey.

Table 7 shows the constraints to access and usage of agriculture information. 50% of the respondents in the study area strongly agreed that source of information is constraint, 4.7% were indifferent, and 41.9% disagreed and 3.5% strongly disagreed about the source of information being a constraint. Also 68.6% of the respondents agreed that the cost of getting information is a constraint to access and usage of agricultural information, 4.7% were indifferent, 20.95% disagreed and just 5.8% of the strongly disagreed about it. 65.1% of the respondents agreed that availability of information is a constraint, 8.1% were indifferent, 14 disagreed and 12.8 strongly disagreed, 79.1% of the respondents strongly agreed that cost of utilization is a constraint, 15.1% were indifferent, 3.5% disagreed and 2.3%

strongly disagreed. 86% agreed that government policy is a constraint, 10.5% were indifferent, 1.2% disagreed and 2.3% strongly disagreed. Other constraints mentioned by the respondents were, access to loan, collateral problems, language barrier etc. 84.6% of the respondents agreed that the other constraints were greater, 11.6% were indifferent, 1.2% disagreed and 2.0% strongly disagreed.

Hypothesis of the study

Chi-square was used to analyze the hypothesis, since it is measured at a nominal level. H01: There is no significant relationship between the socio economic characteristics of the respondents and access to agricultural information.

VARIABLES	X2	DF	P-VALUE	REMARK
Age	2.088	3	0.554	Non significant
Gender	2.229	1	0.135	Non significant
Marital status	11.307	3	0.010	Significant
Household size	1,835	2	0.400	Non significant
Religion	3.103	2	0.212	Non significant
education	9.920	4	0.042	Significant

The result from the table above revealed that there is a relationship between the socio economical characteristics and access to agricultural information. From the table the marital status has a significant relationship with the access to agricultural information (0.010) in the study area and also the

level of education also shows a positive significant relationship (0.042), and thus the h01 hypothesis which states that there is no significant relationship between socio economical characteristics and access to agricultural information is rejected and a new hypothesis which states

that there is a significant relationship between socio economical characteristics and access to agricultural information is accepted.

IV. CONCLUSION

The study examined the level of access to agricultural information of rural farmers in Ido local government, Nigeria. From the results of the study most of the farmers in the study area had no formal education (61.6), (70.9) the highest percentage of the respondents were male and (29.1) were within the active age bracket of 41-60 year, also 68.6% of the respondent were indigenes of the study area. Most of the respondents in the study area had a little information about weather and climate, machines, tillage seed varieties, land preparation and planting information while a large percentage had a lot of information about weed and fertilizer due to the actions of profit oriented organizations who give the farmers this information so as to be able to sell their goods. Most of the farmers had little information about production of goods, government related information, market related and harvesting techniques. From the result, it can be observed that the respondents in the study area have an inadequate level of information. However there is a significant relationship between educational level, marital status and the access to agricultural information which means that the household size and marital status had a positive effect on the level of access to agricultural information in the study area.

V. RECOMMENDATION

The following are the recommendation made based on the findings of the study.

- * Agricultural information should be extended to remote villages.
- * Agricultural information should be explained in the simple and understandable language to the rural farmers
- * Loans with little or no collateral should be given to farmers.
- * Farmers input band machinery should be sold to farmers at subsidized rate
- * Installment payment for inputs and machinery should be accepted.
- * Adult education should be encouraged

REFERENCES

- [1] Balit, S., Calvelo Rios, M. & Masias, L. (1996). Communication for development for Latin America: a regional experience. FAO, Rome, Italy
- [2] CGIAR (1995). Renewal of the CGIAR: sustainable agriculture for food security in developing countries. Ministerial-level Meeting, Lucerne, Switzerland, CGIAR, Washington, D.C. USA. Pp. 133.
- [3] Gaal H.O. (2017). Lack of Infrastructure: The Impact on Economic Development as a case of Benadir region and Hir-shabelle, Somalia. *Developing Country Studies*. Vol.7, No.1.
- [4] Mbagwu C.F., Benson V., and Onuoha O. (2018). Challenges of Meeting Information Needs of Rural Farmers through Internet-Based Services: Experiences from Developing Countries in Africa. Retrieved from <http://library.ifla.org/2195/1/166-mbagwu-en.pdf> on August 27th, 2019.
- [5] Mgbenka R. N. and Mbah E.N. (2016). A Review of Smallholder Farming in Nigeria: Need for Transformation. *International Journal of Agricultural Extension and Rural Development Studies*. Vol.3, No.2, pp.43 - 54.
- [6] Munyua, H. (2000). Application of information communication technologies in the agricultural sector in Africa: a gender perspective. In: Rathgeber, E., & Adera, E.O. (Eds.) *Gender and information Revolution in Africa* IDRC/ECA. Pp. 85-123
- [7] Obidike N. A. (2011). Rural Farmers' Problems Accessing Agricultural Information: A Case Study of Nsukka Local Government Area of Enugu State, Nigeria. *Library Philosophy and Practice – Electronic Journal*, ISSN 1522 – 0222.
- [8] Petros .T., Nachimuthu .K., Atinikut .H., Mohammed (2018) Agricultural Extension: Challenges of Extension service for rural poor and youth in Amhara Region, North Western Ethiopia. The Case of North Gondar Zone. *International Journal of Scientific Research and Management*. Vol 6, No 2, Page No.: AH-2018-05-14.
- [9] Riesenber, Luo .E. and Christopher. O. Gor. "Farmers' Preferences for Methods of Receiving Information: New or Innovative Farming Practices." *American Association for Agricultural Education* 30.3 (1999).
- [10] Smith, T. Concise Oxford English Dictionary (COD10). Oxford: Oxford University Press, 2001. Print