Information Needs and Information Seeking Behaviour of Farmers for Sustainable Agricultural Development in Benue State, Nigeria

Lughlugh, Joseph

University Library and Information Services, Benue State University, Makurdi-Nigeria

Abstract: - The study investigated Information needs and Information Seeking behaviour of farmers in Benue State for sustainable agricultural development. Three purposes with corresponding research questions and two hypotheses guided the study. The study adopted a descriptive research design. The population of the study comprised of 4200 registered farmers with Benue State Agricultural and Rural Development Authority (BNARDA). The sample size for the study was 365 farmers who were selected using multi-stage sampling procedure. The instrument employed for data collection was a self-developed questionnaire titled 'Questionnaire on Information Need and Information Seeking Behaviour of Farmers in Benue State" (QINISBFBS) which was validated by three experts. The reliability of the questionnaire was established using Cronbach Alpha method and a reliability coefficient of 0.72 was obtained which showed that the instrument was highly reliable. Data collected for the study were analyzed using mean, standard deviation, frequency and percentages to answer research questions and chi-square statistics to test the hypotheses at 0.05 level of significance. The findings of the study revealed some information needs of farmers for Sustainable agricultural development in Benue to include; fertilizer and agrochemicals, pest and diseases control, agricultural finance, improved seedling, post-harvest technology, control of weeds, modern technology application among others. It also revealed that Information needs of farmers significantly leads to sustainable agricultural development in Benue State. Recommendations were made based on the findings of the study.

I. INTRODUCTION

The importance of Agriculture in the economy of Nigeria cannot be over emphasized; despite the growth of industries, oil and commerce it had continued to be the principal economic activity carried out by most Nigerians. According to the recent report of the Nigerian National Bureau of Statistics, in 2016 agriculture Contributed (26%) to the Gross Domestic Product (GDP) followed by industries (20%) (NBS, 2017). The contribution of Agriculture to the overall GDP in real term was 25.49% in the 4th quarter of 2016, which in contrast to the economy as a whole for full year 2016 grew by 4.11% (NBS, 2017). These analogies suggest that agriculture occupies a very prominent position in the growth and development of Nigerian economy.

Agricultural practices such as farming of crops and rearing of animals leads to production of food, raw materials, and serve various economic purposes which contribute to national growth and development. Progress in Agriculture is clearly linked to several key and often interrelated factors such as research, extension; farm inputs, rural credit facility; price policy and marketing (Ekoja 2010) as well as agricultural information provision for modern scientific ways of farming for farmer's accessibility. The provision of these services should lead to self-sufficiency in food and Sustainable Agricultural development.

Sustainable Agricultural development cannot occur without modern knowledge, skills and technologies. This modern ways of agricultural practices are only possible with adequate information about improved farming practices, this is in line with Muhammad, Anwar and Surraya (2012) who opined that for consistent growth in agricultural production, it is essential to equip rural farmers with need-based, accurate, reliable, and timely information. The dream of advancement in agricultural production cannot come true until timely access to the information required by the farmers is assured.

Agricultural information, according to Ofuoku (2008), is all published knowledge in all aspects of agriculture, and that the quality of such information depends on three attributes which are accuracy, timeliness and relevance. Therefore, consideration of farmers' information seeking is very vital in the provision of need-based and relevant information (Anwar, 2007). Agricultural information is found in agricultural research institutes libraries as well as academic libraries where agriculture is also studies. These libraries support agricultural research by enhancing access to information through effective management of its resources and provision of wide range of information services to researchers, scientists and policy maker in agriculture sector as well as farmers (Rhoe, Oboh & Shelton, 2010).

It is very difficult, if not impossible to identify common information seeking behaviour for all people most especially in the developing regions of the world (Ekoja, 2010). This implies that Information acquisition depends on needs of individuals involved in special activities such as rural farming and home management. However, it is worrisome the behavior of farmers in seeking this information. Information seeking behaviour is helpful because it tells how average citizens go about obtaining information that is optimally useful to their day to day life. According to Emmanuel (2012) it is the process in which one goes about seeking information that will meet his or her need. Information seeking behaviour varies considerably from one individual to another according to age, gender, level of education, occupation, location and culture. This implies that as the farmers are different in terms of age, gender, level of education, location and culture, the behavior they put on while seeking for information also varies based on their information needs. It is based on this fact that, this study sought to;

- 1. Identify the information needs of farmers for sustainable Agricultural Development.
- 2. Find out why farmers seek for information for sustainable Agricultural Development.
- 3. Find out how the farmers seek for information for sustainable agricultural development

Research Questions

The following research questions guided the study

- 1. What are the information needs of farmers for sustainable Agricultural development?
- 2. Why do farmers need information for sustainable development?
- 3. What are the ways by which farmers seeks the needed information for sustainable agricultural development in Benue State?

Hypotheses

The following hypotheses are formulated to be tested at 0.05 level of significance

- 1. Information need of Farmers does not significantly leads to sustainable agricultural development in Benue State.
- 2. Ways in which famers seek information does not significantly leads to sustainable agricultural development.

II. METHODOLOGY

The study adopted a survey research design. The population of the study comprised of 4200 registered farmers with Benue state Agricultural and Rural Development Authority (BNARDA). The sample size for the study was 365 farmers who were selected using multi-stage sampling procedure where different sampling techniques were employed to arrive at the final sample. The instrument employed for data collection was a self-structured questionnaire titled 'Ouestionnaire on Information Need and Information Seeking Behaviour of Farmers in Benue State" (QINISBFBS) which was validated by three experts. The reliability of the questionnaire was established using Cronbach Alpha method and a reliability coefficient of 0.72 was obtained which showed that the instrument was highly reliable. Data collected for the study was analyzed using mean, standard deviation, frequency and percentages to answer research questions and chi-square statistics to test the hypotheses at 0.05 level of significance.

III. RESULTS

The results are presented and analyzed based on the research questions raised and hypotheses formulated for the study.

Research question 1:

What are the information needs of farmers for sustainable Agricultural development?

 Table 1: Frequency and Percentage Counts of Information Needs of Farmers for Sustainable Agriculture in Benue State

S/N	Item	Yes	%	No	%	Decision
1	Fertilizer	361	(98.9)	4	(1.1)	Needed
2	pest and diseases control	350	(96.9)	15	(4.1)	Needed
3	Agricultural finance	352	(96.4)	13	(3.6)	Needed
4	Improved seedling	348	(96.3)	17	(4.7)	Needed
5	Control of weeds	334	(91.5)	31	(8.5)	Needed
6	Advance livestock production	256	(69.9)	110	(30.1)	Needed
7	Modern technology Application	261	(71.5)	104	(28.5)	Needed
8	Post-harvest Technology	259	(71.0)	106	(29.0)	Needed
9	Agricultural cooperative	297	(81.4)	68	(18.6)	Needed
10	Preservation techniques	317	(86.8)	48	(13.2)	Needed
11	Right time of planting seed	350	(95.9)	15	(4.1)	Needed
	Overall total		86.8		13.2	Needed

Table 1 revealed that all the 11 items presented are needed by farmers with the overall Yes of 86.8 % and NO of 13.2 %. This shows that different kinds of information are needed by famers.

Research questions 2:

Why do farmers need information for sustainable agricultural development?

Table 2: Mean and Standard Deviation of Respondents on why Farmers Need Information

S/NO	Information is required for	\overline{x}	SD	Decision
1	Farming practice	3.42	.57	
2	Boosting agricultural produce	3.30	.67	
3	Securing agricultural credits	3.05	.65	
4	Prediction of rainfall	3.00	.77	
5	Disease control	3.21	.67	
6	Use of fertilizer	3.35	.54	
7	Right time for planting	3.21	.62	
8	Weed control	3.30	.60	

9	Improved seed	3.19	.59	
10	Prevention of post-harvest loses	3.15	.71	
11	Preservation techniques	3.20	.59	
12	Agricultural cooperatives	3.21	.65	
	Grand mean	3.21	0.53	Agreed

Table 2 revealed that all the 12 items had mean ranges from 3.00-3.42 and S.D 0.54-0.77 with a grand mean of 3.21 and S.D 0.53. This result indicated that all the information needs were required by farmers.

Research question 3:

What are the ways by which farmers seeks the needed information for sustainable agricultural development in Benue State?

Table 3: Frequency and Percentage Count of respondents on ways by which farmers seeks the needed information in Benue State

S/N	Farmer sources of information	Yes	%	No	%	Decision
1	Newspaper	272	(74.5)	93	(25.5)	
2	Magazine	140	(38.4)	225	61.6)	
3	Libraries	71	(19.5)	294	80.5)	
4	Information Centre	220	(60.3)	145	(39.7)	
5	Internet	176	(48.2)	189	(51.8)	
6	Radio	309	(84.7)	56	(15.3)	
7	Workshop	290	(79.5)	75	(20.5)	
8	Lectures organized by extension worker	320	(87.7)	45	(12.3)	
9	Within farmers	332	(91.0)	33	(9.0)	
10	Television	269	(73.7)	96	(26.3)	
	Overall total		65.7		34.3	Yes

Table 3: revealed that items 1, 4- 10 were ways by which farmers sought for information while items 2 and 3 were not utilized.

Test of Research Hypothesis

The hypotheses formulated for the study were tested at 0.05 level of significance and presented as follows;

Hypothesis one:

Information need of Farmers does not significantly leads to Sustainable Agricultural development in Benue State.

Table 4: Chi-square Table of Information Needs of Farmers and Sustainable
Agricultural Development in Benue State

	df	Р	Sig level	Decision
Chi-square	10	0.00	0.05	Rejected
No valid Cases	365			

(P<0.05)

Table 4 showed that the P-(sig), 0.00 was less than alphavalue of 0.05 (P<0.05) at df 10. Therefore the null hypothesis which states that Information needs of Farmers do not significantly lead to sustainable agricultural development in Benue State was rejected

Hypothesis two:

Ways in which famers seek information does not significantly leads to Sustainable Agricultural Development

Table 5 Chi-square Table of way Famers Seek Information for Sustainable Agricultural Development in Benue State

	df	Р	Level of sig.	Decision
Chi-square	9	0.02	0.05	Rejected
No valid Cases	365			

(P<0.05)

Result on Table 5 showed that the p-(sig) value, 0.02 was less than alpha-value of 0.05 (P<0.05) at df =9. Therefore the null hypothesis which states that Ways in which famers seek information does not significantly lead to sustainable agricultural development was rejected.

IV. DISCUSSION OF FINDINGS

Based on the findings of the study, the following discussions were made:

Research questions one revealed the different kind of information needed by famers with an average percentage of 86.8. This was buttressed by the result of the hypothesis one which showed that P<.05 at df of 10. This result is in consonance with the findings of Emmanuel (2012) who found out information needs of the rural farmers ranged from farm inputs to implements such as fertilizers, improved variety seeds, loan/credit facilities, marketing strategies. This result is also in agreement with the study of Njoku (2008) who found out that Information needs of the fishermen included avenue for credit facilities and lack of awareness of modern fishing technology. The finding is so because, the farmers lack all facilities that would have afford information to improve on their farming system in the study area. They lack libraries, only few farming extension workers have information facilities. Their situation worsen for the fact that majority of them are illiterate and ignorant of modern facilities of getting agricultural information, no wonder they accepted all the items captured by the instrument on information needs.

Analysis of question two in Table 2 revealed all the various reason why farmers need information with a mean of 3.21 and S.D of 0.53. The findings support the findings of Oladele (2008) that rural community need information on agriculture, health, politics, education and employment. Also the study also agree with the study of Okwu and Daudu (2011) whose findings revealed that farmer need information to improved farming techniques. This is so because for agriculture to be sustained in a growing population like ours, all the system of farming cannot cope since every farmer needs to improve his/her production through variety of crops, effective application of fertilizer and agricultural loans since it can be seen that the farmers desperately have need to acquire information on how to improve their farming activities.

Research question threes shows the various ways by which farmers seek information with a percentage for yes = 65.97and No=34.03. Also the result is buttress by the hypothesis on Table 5 which states that the ways in which famers seek information does not significantly lead to sustainable agricultural development is rejected; This implies there is a significant result. This result is in agreement with works of Okwu and Daudu (2011) whose findings revealed that interpersonal communication channels were available, accessible and used by farmers than mass media to improved farming techniques. Relatives, friends, neighbors were regularly available, accessible and used interpersonal channels while extension agents and television were mentioned as the most preferred interpersonal channel. This is so because as the farmers are desperate about information need for their agricultural farming, they make use of every opportunity of information available at their disposal that is why the tendencies of their information seeking behavior are highly rated.

V. CONCLUSION

It could be concluded based on the finding of the study that farmers need different information for sustainable agricultural development and information need of farmers significantly leads to sustainable agricultural development in Benue State.

VI. RECOMMENDATIONS

On the basis of the findings of this study, the following recommendations are put forward:

1. Government at various levels should ensure adequate provision of fertilizer and agrochemicals, pest and diseases control, agricultural finance, improved seedling, post-harvest technology, control of weeds and modern technology application for farmers in order to meet up with their needs for sustainable agricultural development.

- 2. Well-equipped libraries/information centers should be made available and accessible to farmers.
- 3. There should be provision of Radio / Television broadcast in local dialect in order to enhance accurate and timely dissemination of needed information to the farmers at the grass roots.

REFERENCES

- Anwar, M. A. (2007). Research on information seeking and use: An assessment. *Pakistan Journal of Library and Information Science*, 8, 15–32.
- [2] Ekoja, I.I. (2010). Personal variables affecting the adoption of Agricultural Innovations by Nigeria Farmers.Forthcoming in the *South Africa Journal of Agricultural extension*
- [3] Emmanuel H. (2012). Information needs and information seeking behaviour of rural Farmers in okpokwu local government area of Benue state of Nigeria. Master's thesis submitted to department of library and Information Science University of Nigeria, Nsukkaretrieved from (http://www.unn.edu.ng/publications/files/images/HELEN%20EM MANUEL.pdf) on October 27, 2017.
- [4] Muhammad A. N., Anwar M.A., and Surraya B. (2012) Information seeking by Pakistani farmers: A review of published research. *Pakistan Journal of Library & Information Science*, 13, 2
- [5] National Bureau of Statistics (NBS) (2017). Retrieved from (http://www.nigerianstat.gov.ng/download/518) on October 28, 2017.
- [6] Njoku, I.F. (2004). Information Needs and Information Seeking Behaviour of Fishermen in Lagos State; Nigeria International Information and Library Review 36 (4), 123-130.
- [7] Ofuoku, G.N. (2008). Information Utilization among Rural Fish Farmers in central, Agricultural Zone of Delta State, Nigeria.In Emmanuel (2012).
- [8] Oladele (2008).Information Society in Nigeria: The role of Government and Private sector.
- [9] Rhoe, V., Oboh, V. and Shelton, P. (2010) The Role of Libraries in Supporting Agricultural Policy Research- Evidence from Selected University and Research Institute Libraries in Nigeria. Nigeria Strategy Support Program (NSSP). Paper No 0014. Retrieved from http://iasir.net/AIJRHASSpapers/AIJRHASS14-523.pdf on October 31, 2017