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**Challenges in Accessing Agricultural Information Sources and Services by
Farmers in Edu Local Government Area of Kwara State**

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Abstract

Agriculture play significant role towards sustainability of developing nations' economy particularly Nigeria by providing abundant raw materials required by the industry, as well as ensures food security and a healthy nation. This study examines the challenges of accessing agricultural information sources and services by farmers in Edu Local Government Area of Kwara State. Survey method was adopted for the study. The population of the study comprise of 16066 from which 78 farmers of the study area were selected using stratified random sampling and purposive sampling procedure. From the copies of questionnaires administered only 60 were duly completed and returned. Frequency and percentages were used in analyzing data collected. The findings from the study showed that information needs of farmers among others include application of improve techniques, irrigation management, seeds prices, farm wild fire management and prevention, purchase and use of fertilizer, government blueprint on agriculture, and meteorology information need of farmers in Edu Local Government . The findings further revealed that poor communication system, absence of library and information centre, absence of extension agents, insufficient knowledge on marketing of farm produce , insufficient credit facilities, insufficient information on government policies, insufficient fund were the challenges faced by farmers in accessing agricultural information sources and services. The study recommended among others that central facility providing and disseminating information on agricultural related services should be created in the study area that would be accessible to all farmers in order to meet their information needs.

Keywords: *Agricultural information, information needs, Farmers, information services, Nigeria*

Introduction

Information has become an essential part of everyone's daily activities. Information is the basic management tool for national planning. It is vital to modern research in science and technology. It also plays a major role in the socio-economic progress of a country. Information is becoming a vital raw material in our rapidly changing highly cost-oriented society. All our economic and social progress depends on the transfer of scientific and technical information. Individuals in various circumstances require information on a subject in different forms and with different emphasis and different depths of explanation. Information utilization in agricultural sector improves farm productivity in several ways. Thereby, making available information on weather trends, best practice in farming, prompt access to market information assist farmer make appropriate choice about what crops to plants and where to sell their farm produce and buy inputs (Bachhav,2012).

Information is anything that adds to our existing knowledge consciously or unconsciously. It can be positive or negative. It is defined by Adio et al (2016) as a processed and coordinated data for significant which could be in various structures or sources. Farmers need information on various agricultural sources and services for sustainable food production. Olawoye, (1996) as cited by Uwandu, Thomas and Okoro (2018) observed that agricultural information is needed for general development of agriculture for the improvement of expectation for everyday comforts of farmers. The goals of agricultural information can hardly be realized if farmers have no access to information. Agricultural information, as suggested by Adio et. al (2016) is refers to agriculture related information that is alludes to horticulture related information which are changed into significant and helpful settings or structures for viable dynamic in agribusiness or cultivating related activities. Agriculture is seen as one of the a chief support of the Nigerian economy because it allow for provision of many raw materials required by the industry, provides employment and also guarantee food security and a healthy nation. Agriculture has throughout the long term remained exceptionally critical activity in the socio-economic advancement of many non-industrial nations and sub –Saharan Africa is traditional illustration of the extraordinary potential that can be realized from the improvement of the sector to ensure realization of Millennium Development Goals (MDG's) through guaranteeing food security, and increased job opportunities (Chisita and Mataranyika, 2013).

Olaniyi and Ogunkunle (2018) reported that the capacity of farmers to accomplish a definitive objective of optimal production depends to a great extent on their effective use of available agricultural information. Agricultural information creates awareness among farmers about advertising openings, plants and, plant diseases, presence of credit facilities, agricultural innovation, crops species inventive practices. Mashroofa and Senevirathne (2014) identified the information needs of farmers as storage, use, assortments of recently presented seeds, pesticides, the expense and climate to get maximum yields and best production. In the same vein, there are different kinds of information on agriculture related activities. They cover information for crop production and assurance, domesticated animals production, agro-range service, pest and diseases control, manure availability and application, agricultural credit facilities, market prices, improved seeds varieties, precipitation check etc. To have option to fulfill these needs, information should be accommodated for the farmers in an arrangement generally engaging and complete to them. (Ukachi and Ayiah, 2017).

Agricultural information services contribute fundamentally horticultural production. Through agricultural information farmers can receive new innovations or cultivating frameworks, realize when to plant and procure, which harvest to produce and which animal to raise and where to sell. It is moreover through agricultural information that farmers can realize where to get bank credits and other cultivating contributions just as how to control pests and diseases. Such information will therefore increase agricultural production and work on the way of life of farmers. In a study conducted by Sanusi et. al (2010), The results showed that the agricultural productivity depend on dissemination of agriculture information as a platform through which new innovations are learnt as well as farmers productivity are improved. Lawaliro et. al (2014) pointed out that for agricultural production and productivity to improve there is need for well planned, need structure for farmers where they can easily access relevant information as regards to proper agricultural information which would in turn be enhanced their productivity.

However, the study conducted by Benard , et.al.(2014) in Tanzania, the findings showed that the impediments to accessing agricultural information were linked with absence of awareness of information sources, absence of information services, insufficient number of extension agents, and funding problem. In a similar study, carried out by Kelil, Girma and Hiruy (2020) in Africa, observed that insufficient rural information access is a key factor that has incredibly restricted farming headway in Africa.

Objectives of the Study

The objectives of the study were to:

- i. determine the information needs of farmers for improve productivity in Edu Local Government Area of Kwara State;
- ii. identify the challenges for accessing agricultural information sources for improve productivity in Edu Local Government Area of Kwara State.

Review of Related Literatures

Oduwole and Okorie (2009) stated that information need of farmers generally require information on improved seed, fertilizers, sowing, irrigation, soil-testing and conservation, pest and disease control, harvest technology and marketing of surplus produce. Their source for the above information include extension workers; farm broadcasting through radio and television,

field demonstrations; films and audio-visual/means; extension publication, popular journal and magazines. Farmers need information in order to boost their output and make profit. Information need of small scale farmers arise from the need to solve problems such as pest hazard, weed control, moisture insufficiency, soil fertility, farm credit, labor shortage and soil erosion etc. Similarly, Marcel and Minten (2012) farmer need information to solve challenges like pest hazard, weed control, moisture insufficiency, soil fertility, farm credit, labor shortage and soil erosion etc. Mtega, Ngoepe, and Dube, (2016) in Tanzania, the authors findings revealed that agricultural information on land preparation, seed selection, and rice plantation; however, few acquired knowledge on agricultural markets which are the information need of smallholder farmers in Kilombero district of Tanzania.

The various agricultural related information sources of the rural people were identified by Ekoja (2000), Oduwole and Ikhizam (2003) as varied in the field of agriculture. Classes of agricultural related information sources include: Information on pest and disease control, on services available from government / private organizations, on marketing of farm produce, on credit and loan facilities available to farmers, on fertilizer availability and use, on new findings on varieties of crops and animals, on new techniques and farm implements, on weed control and management, on disease resistant varieties of crops and animals, Information on cropping system, on food storage and processing, on food ration and supplements for animals, on organic management, Women in Agriculture, Fishing, Animal Husbandry/ Livestock, Agro forestry, Labour availability, Land tenure Laws, Agricultural cooperative, Investment of Agricultural returns, and Agricultural insurance.

Ozowa (1995) summarize their needs into five groups namely; agricultural input, extension education, agricultural technology, agricultural credit and marketing. Modern farm inputs are needed to raise small farm productivity. These inputs include: fertilizer, improved varieties of seeds and seedlings, feeds, herbicides and pesticides, agricultural machinery and water. Also, Ogunbeni, Ogungbo and Adeleke (2013) in Lagos, outlined that agricultural information needs of farmers include diseases and pest control, irrigation, crop storage, recent cultivation method, information on weather, information on where to buy and sell the farm produce, techniques on post harvest, manure and fertilizer management. In a similar work carried out by Salau, Saingbe and Garba (2013) in Nasarawa, the reported that promoting information on agricultural product,

animal husbandry and crop, pest and disease management, practices on water/soil preservation, land preparation for growing crops, better storage and processing strategy were the agricultural information needs utilize by farmers. In addition Gundu (2009) observed that majority of the farmers in developing countries including Nigeria need information on farming systems, pest and diseases, cropping, education, management, livestock management, marketing and pricing, harvest management, health and nutrition, farm security, finance and credit. It is evident from the studies reviewed above that information need of extension workers in Nigeria and other developing countries are similar. Most of their information needs revolve around technical (Disease and pest outbreak), administrative, harvest management, finance and micro-credit, and market prices among others. In another contribution, organizations like World Bank (2011) noted that extension workers need a variety of agricultural information such as availability of agricultural support services, Government guidelines, production of crop and managements, disease outbreaks, adaptation of innovations by different farmers, wages rates, and so on. The organizations further argued that agricultural information must be available and accessible to all farmers in order to bring the desired development.

Ajayi (2005) observed that despite the tremendous achievements of the agricultural sector in Nigeria, the ADPs have been beseeched by a myriad of problems, especially with the terminal end of the counterpart funding by the World Bank. These constraints include non availability of necessary facilities and poor motivation for effective functioning of extension workers, bringing about low morale, low degree of job insight and poor performance. According to Assefa (2016) the challenges farmers in Ethiopia faced in accessing agricultural information include lengthy distance to institutions and exorbitant cost of ICTs tools, inadequate support of DAs in conveying information of extension services, absence of access to irrigation scheme, low level of technology adoption, insufficient information sources. World Bank (2007) noted that budgetary allocation in most developing countries remains a major problem, hindering the agricultural extension service in its efforts to transfer information to farmers with a view to increase agricultural production. Government budgetary allocations on agriculture continue to increase but in reality the agricultural production has increased as expected. While Farooq et al (2010) pointed out that extension services in developing countries like Nigeria are associated with; lack of teaching tools, helpless linkages between research and extension organizations,

and dispersion among the actual farmers themselves in hampering extension worker's performance. Also, studies by Matovelo (2008) and Austine et al. (2018) showed that, high analphabetism levels, language constraints, absence of cooperation from farmers colleague in exchanging agricultural information, Poor information infrastructure, low income, and expensive ICTs costs are the barriers faced by farmers in accessing Agricultural information. Ngomane et al (2002) opines that the challenges confronting public segment are agricultural expansion in African nations are established throughout the entire existence of Africans smallholder cultivating, institutional plans, underlying change programs, the approach structure, new customers, and the reorientation of the farming augmentation framework. In the same vein, study conducted by Odini (2014) Kenya and Igwe (2012) Nigeria, respectively revealed that the main challenges facing farmers in accessing information were Language barriers, Illiteracy, Geographical Distance, and absence of Infrastructure. In Tanzania, Mtega, Ngoepe, and Dube, (2016) averred that insufficient number of exhibition plots, untimely of information services delivery, inadequate number of agricultural extension agents, and helpless information and communication technologies infrastructure affect access to agricultural information among rice farmers in the district.

Methodology

The survey method was used for the study. The population was made of 16,066 from which 78 farmers of Edu Local Government Area of Kwara State were selected using stratified random sampling and purposive sampling procedure. Questionnaire was used to generate data, which were descriptively analyzed to answer the research questions. This table below shows a breakdown of the population.

Table I: Study Population and Sample Size

S/N	LGA	CROP FARMERS	NON CROP FARMERS	TOTAL	SAMPLE POPULATION $n=N/1+N(e)^2$	20% OF THE POPULATION SAMPLED
1	Edu	15,761	305	16,066	390	78

Source: Kwara State Ministry of Agriculture (2010): Report of Kwara State Farmers Census May 2009-2010

Findings/Results and Discussion

Response Rate

Table 2: Response Rate of Farmers in Edu Local Government Area

S/N	Local Government Areas	Sample population	20% of the population	Total Returned	Percentage
1	Edu	390	78	60	76.9
	Total	2,975	447	403	90.2

Table 2, shows that a good response rate was obtained in Edu Local Government Area covered by the study. As indicated in the table, the least response rate was obtained from farmers in Edu whose total was 78 and 60 were able to fill and returned the questionnaire thus constituting 76.9% of the total issued to them.

Table 3: Farmers Rating of the Information Sources and Services Needed for Sustainable for Production

Information needs of farmers	Highly needed		Needed		Rarely needed		Not needed		Total
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Total %
Procurement and use of fertilizer	43	71.7	9	15	7	11.7	1	1.6	100
Management of Pest and disease	23	38.3	19	31.7	10	16.7	8	13.3	100
Higher yield/agricultural production	39	65	2	3.3	11	18.4	8	13.3	100
Planting at the right time	25	41.7	20	33.3	10	16.7	5	8.3	100
Current tillage methods	5	8.3	10	16.7	10	16.7	35	58.3	100
Improved seeds	15	25	10	16.7	20	33.3	15	25	100
Post-harvest loss and preservation	21	35	29	48.4	5	8.3	5	8.3	100
Agricultural loan	10	16.7	35	58.3	10	16.7	5	8.3	100
Agricultural cooperative	38	63.4	12	20	5	8.3	5	8.3	100
Investment of agricultural returns	33	55	20	33.3	3	5	7	11.7	100
Marketing agricultural produce	36	60	15	25	8	13.3	1	1.6	100
General welfare	35	58.3	17	28.4	3	5	5	8.3	100
Land tenure laws	10	16.7	40	66.7	8	13.3	2	3.3	100
Management and prevention of farm wild fire	46	76.7	7	11.7	4	6.7	3	5	100
Seeds costs	47	78.3	3	5	7	11.7	3	5	100
Application on improve techniques	51	85	7	11.7	2	3.3			100
Animal husbandry and livestock production	35	58.3	15	25	2	3.3	8	13.3	100
Irrigation management	49	81.7	7	11.7	1	1.6	3	5	100
Meteorology information	42	70	10	16.7	3	5	5	8.3	100
Government blueprint on agriculture.	41	68.3	9	15	6	10	4	6.7	100

Table 3 indicated that at Edu Local Government Area of Kwara State, the following agricultural information needs were highly needed by farmer. These information needs include application of

improve techniques with 51 (85%), irrigation management with 49(81.7%) seeds prices with 47 (78.3%) Management and prevention of farm wild fire with 46(76.7%) Procurement and use of fertilizer with 43(71.7%) meteorology information with 42(70%) government blueprint on agriculture with 41 (68.3%) on the other hand, current tillage methods 5(8.3%) and agricultural loan 10 (16.7%) respectively were found not highly needed information need of farmers in Edu Local Government. This could be as a result of cumbersome process involved and attached to the agricultural loan facilities. These findings agree with Gundu (2009), Ozowa (1995) and Ekoja (2000) who observed that majority of the farmers in developing countries including Nigeria need information on farming systems, pest and diseases, cropping, education, management, livestock management, marketing and pricing, harvest management, health and nutrition, farm security, finance and credit.

Table 4: the Farmers’ Responses on the Challenges Militating against access to Information Sources and Services for Sustainable Food Production

Challenges to needed information	Agree		Disagree		Total%
	Freq.	%	Freq.	%	
Absence of extension agents	51	85	9	15	100
Insufficient knowledge on marketing of farm produce	50	83.3	10	16.7	100
Insufficient information on Government policies	46	76.7	14	23.3	100
High proficiency level of farmers	42	70	18	30	100
Poor communication system	57	95	3	5	100
Insufficient land	40	66.7	20	33.7	100
Diseases and pests control	44	73.3	16	26.7	100
Insufficient credit facilities	47	78.3	13	21.7	100
Absence of library and information centre	55	91.7	5	8.3	100
Insufficient fund	45	75	15	25	100

In respect to the challenges associated with access to information sources and services by farmers for improve productivity, table 4, showed that majority of the respondents agreed that poor communication system (95%), absence of library and information centre (91.7%), absence

of extension agents (85%), insufficient knowledge on marketing of farm produce (83.3%), insufficient credit facilities (78.3%), insufficient information on government policies (76.7%), diseases and pests control (73.3%), high proficiency level of farmers (70%), insufficient land (66.7%) are the challenges encountered in the utilization of available information sources and services by farmers in Edu Local Government Area of Kwara State. This finding is in agreement with that of Matovelo (2008) and Austine et al. (2018) who found out that, high analphabetism levels, language constraints, absence of cooperation from farmers colleague in exchanging agricultural information, Poor information infrastructure, low income, and expensive ICTs costs are the barriers faced by farmers in accessing Agricultural information. However, the present result differs from the findings of Kelil, Girma and Hiruy (2020) that identified deficiency in agricultural information access as a key factor that has incredibly restricted agricultural headway in Africa.

Summary of Major Findings

The major findings of the study were:

1. The information needs of farmers in the study area cover application of improve techniques, irrigation management, seed price, farm wild fire management and prevention, procurement and fertilizer use, meteorology information, government systematic plan on agriculture. Farmers require these agricultural information need in order to enhance farmer productivity as well as for better yield.
2. The challenges which hampered farmers agricultural information sources and services accessibility were poor communication system, absence of library and information centre, absence of extension agents, insufficient credit facilities, insufficient information on farm produce, high proficiency level of farmers, insufficient information on government policies.

Conclusion

It is pertinent to note that farmers in Edu local government area need agricultural information on management of pest and disease, application of improve agricultural techniques, seed costs, better seed sources, weather information, procurement and use of fertilizer, irrigation management, control of animals in farm yards, animal husbandry and livestock production, planting at the right time and management of post-harvest loss, better storage facilities and

processing strategy, presentation along with general welfare and moisture level required. Hence, dissemination of agricultural information has not been effective due to some challenges encountered by extension workers. This includes insufficient fund, poor collaboration between government and extension agents, insufficient credit facilities and poor communication system etc.

Recommendations

The following recommendations are made based on the findings and conclusions reached in this study:

1. Central facility providing and disseminating information on agricultural related services should be created in the study area that would be accessible to all farmers in order to meet their information needs.
2. Poor communication system should be improved through ensuring that the information get to the farmers at the right time and frequent monitoring of disseminated agricultural information by extension officers. There is also need for information literacy training for farmers on new technology and agricultural information sources. This would enhance farmers literacy level in area studied.

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