AGRICULTURAL INFORMATION NEEDS AND SEEKING BEHAVIOUR OF FARMERS IN ANINRI LOCAL GOVERNMENT AREA OF ENUGU STATE, NIGERIA

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Abstract
This paper investigated agricultural information needs and seeking behaviour of farmers in Aninri Local Government Area of Enugu State. Descriptive survey research design was adopted for the study. The population of the study was 101,559 farmers in the five communities of Aninri L.G.A. The sample size of 1,188 was used for the study which was selected through multistage sampling procedure. Questionnaire was used as the instrument for data collection. The instrument was validated by three experts; the reliability of the instrument was established using test re-test method for research question 1, 3 and 4 which yielded 0.95, 0.78 and 0.7 respectively, Cronbach alpha was used for research question 2 and 5 which yielded 0.87 and 0.88 respectively. Data was analyzed using frequency counts and mean. Frequency counts was used to answer research questions 1, 3 and 4 while mean was used to answer research question 2 and 5. Items to the values of 2.5 and above were agreed or accepted while below 2.5 were rejected. The study found out that farmers in Aninri needed agricultural information on improved seed/seedling, disease control, and weed control. Farmer's sources for agricultural information through neighbours, fellow farmers; while farmers align to information obtain from oral discussion, neighbours/friends as their information seeking behaviour. Furthermore, illiteracy is the major hindrance farmers face in sourcing agricultural information, government at various levels should ensure

adequate provision of fertilizer, improved seedlings, weed/disease control mechanism and modern technology application for farmers and the establishment of telecentres were recommended.

Keywords: Agricultural Information Needs, Information Seeking Behaviour, Farmers Information Needs, Aninri Local Government Area.

Introduction

Information is recognized as a vital indispensable source for the development of individual and the society. Exponential growth of information and its availability in various channels and formats has brought about challenges in retrieval and dissemination (Daniel, 2013). The information flow on all sides brought changes in the user's information needs and seeking behaviour which exerts pressure in information dissemination process. It is a common belief that we live in information age, and that man depends on information to meet up with his needs. Information is a vital factor that influences all persons in spite of location, age and level of literacy. Information is also seen as a strategic resource in every organization or establishment whether public or private. Information is valued as much as human resources, financial resources, material and plant resources for it have become the fifth factor of production (Hellen, 2012). Information has received a widespread acceptance as the world is in an era where the source of wealth and power is more from information and human mental creativity than physical resources.

To understand information need, it is necessary to understand the context of human needs that created the need for information. Information users need information for problem solving, awareness creation, recreational purposes and for updating of their knowledge. Information need is construed in the sense of data or knowledge needed to answer some question faced by

people in their daily life (Mtega, 2016). Kuhlthau as cited in Hellen, (2012) opined that information need is often understood as a vague awareness of something missing and usually culminating in locating information that will contribute to understanding and meaning. This work is concerned with the agricultural information needs of farmers. However, information need of any person or group of persons, farmers inclusive, is characterized mostly by the information seeking behaviour of the person or group in need of information (Oluwatoyin & Folasade, 2014; Udem & Obiamalu, 2017).

Information seeking is a basic activity indulged in by all people and manifested through a particular way of behaviour. It is also an aspect of scholarly work most interesting to academic librarians who strive to develop collections, services, and organizational structures that facilitate seeking of information. There is a universal assumption that man was born innocent and should actively seek knowledge. Information seeking is thus a natural and necessary mechanism of human existence (Marchionini, as cited in Adetola, Simeon, Adebowale, & Anyim 2016). In the course of seeking, the individual may interact with people, face to face, through their books or electronically. Thus, the individual recognizes an inadequacy in his/her knowledge that needs to be resolved in order to deal with a problem, which then results in information seeking behaviour.

Information seeking behaviour (ISB) is the purposive seeking of information as a consequence of a need to satisfy some goals. In the course of seeking, the individual may interact with manual information systems such as a newspaper or a library, or with computer-based systems such as the Web. Thus it includes face to face and online communication with others as well as the passive reception of information. Information and its importance cannot be over emphasis, in agriculture information and

knowledge fuel innovations and increase productivity and competitiveness. It is necessary for farmers to have access to information as it will contribute to both in food security and economic growth. Information is a crucial tool for a professional group, such as farming, as it enables farmers to understand, learn and be able to cope with new trends (Maltez, Matias & Artimisias, 2020). Agriculture is the main stay of mankind; therefore nations all over the globe give it a priority by developing and exploiting this sector for the upkeep of their teeming populations through the earning of revenue for development purposes as well as employment (Oluwatoyin & Folashade, 2014). The importance of agriculture in the economy of Nigeria cannot be over emphasized, despite the growth of industries, oil and commerce agriculture has continued to be the principal economic activity carried out by most Nigerians (Lughlugh, 2020).

Nigeria is a predominantly agrarian economy. Majority of Nigerian population indulge in agriculture. Before independence, agriculture was the back bone of Nigerian economy. Today, the reverse is the case as a result of low agricultural output despite the country's fertile land mass. Currently, Nigeria has 75% of its landmass suitable for agriculture but only about 40% of it is being cultivated (Ayodele, Obafemi & Ebong, 2013). Now the sector is identified with low agricultural output despite the country's fertile landmass. Low agricultural development could be as a result of improper dissemination of agricultural information. Poor agricultural information dissemination to the stakeholders has caused more harm than good.

Agricultural information is all the information either published or unpublished that is capable of informing or misinforming the receiver regarding farming activities directly or indirectly. Adio et al (2016) pointed

out that agricultural information is all the published and unpublished knowledge in all aspect of agriculture. Farmers are known as people that engage in the business of farming operations, which include production, selling, and storage of farm produce like yam, rice, beans, tomatoes, cassava, cattle and others (Agpalo, as cited in Gerber, 2011). For enhanced productivity and efficient farm practices, it is pertinent that farmers should be informed on agricultural activities.

Furthermore, rural farmers do not only lack access to quality and timely information but are also deprived of social amenities that can make them meet their daily agricultural information needs; hence their information seeking behaviour grossly differ from that of those in the urban area, given the limitations evident in their environment and the constrained scope of their information search capacity (Samuel & Amanze, 2011). Farmers especially those in rural areas need an avalanche of information to improve their business but often could not because of the remote area of their location.

Rural farmers need information to improve their farming practices and these information needs may include the use of fertilizer, pest and disease control, high yield/agricultural production, planting at the right time, weed control improved seeds, post-harvest losses/preservation techniques, agricultural credits, agricultural cooperation, etc. Agricultural information needs of farmers specifically include information about fertilizer, herbicides, weather, and new species of crops, both crude and mechanized farm implements, soil fertility, and labour hiring Hellen (2012). Farmers also need information about banks and other agencies that provide credit loan for agriculture. Information on agro- chemical agents, agro industries, guaranteed markets, agro- chemicals and pesticides are also required by

farmers (Lwoga, Ngulube, & Stilwell, 2010). Since agricultural information is essential, as it provides and keeps farmers abreast with new knowledge and newer discoveries in their occupation, it is imperative that farmers especially those in rural areas be well informed.

Farmers, especially those in the rural areas also need to know what and how their counterparts are doing in advanced countries and this can improve their harvest and productivity. Previous researches like (Lwoga, Ngulube & Stilwell, 2010; Mtega, 2016) indicate that most farmers especially in rural areas have no access to relevant information that will help them in decision making and to accept new innovation in farming. For this reason, it is necessary that rural farmers are provided with agricultural information that will be suitable for them in their environment, which will help improve their production. Although, the researcher observed that many research have been conducted to investigate the agricultural information needs and information seeking behaviour of farmers, none has determined empirically the agricultural information needs and information seeking behaviour of farmers in Aninri Local Government Area of Enugu State Nigeria. This is the gap this research sets to fill. Hence the question: what is the agricultural information needs and seeking behaviour of farmers in Aninri Local Government Area of Enugu State Nigeria?

Statement of the Problem

Information is an important factor in achieving sustainable development of any society because it reduces uncertainty and broadens the scope of options to take in solving problem. Information is essential for facilitating rural development and bringing about social and economic change. Agricultural development can only be effective if rural farmers have access to timely, relevant and current information for their farming

activities. Information is the life-wire of any society and vital to the activities of both the government and private sectors. Therefore, effective and efficient information service delivery method to farmers will not only bring about increase in productivity but it will expose the farmers to better ways of farming. If information is not properly and effectively delivered to farmers it will result to poor performance, low productivity and decline in the standard of living. Lacks of agricultural information to farmers have caused severe damage to the general performance of the farmers especially those in rural areas. Low performance of rural farmers over the years is linked heavily to the poor dissemination of relevant agricultural information to the farmers. In recent years deliberate efforts have been made by institutions and governmental organizations to ensure that farmers understand and adopt new agricultural innovations relevant to their environment, such institution like Food and Agriculture Organization (FAO) of the United Nation, Operation Feed the Nation (OFN), Agricultural Programs Development (ADPS), Agricultural Transformation Agenda (ATA) among others.

Observation has shown that some researchers have carried out studies on information needs and seeking behaviour of farmers but none of these covered agricultural information needs and seeking behaviour of farmers in Aninri Local Government Area of Enugu State. Despite the importance and benefits attached to knowing the agricultural information needs and seeking behaviour of farmers in Aninri local government area. It appears that very little efforts are being made to find out the agricultural information needs and seeking behaviour of farmers in rural areas of which Aninri Local Government Area of Enugu State is one of them as a result of some problems. This shows that there is a gap which need be filled. Hence, there is need for this study which is designed to investigate the agricultural

information needs and seeking behaviour of farmers in Aninri Local Government Area of Enugu State Nigeria.

Purpose of the study

This study was designed to:

1. Identify the types of agricultural information needed by farmers in Aninri Local Government Area of Enugu State.
2. Find out the reason farmers in Aninri Local Government Area of Enugu State seek for agricultural information.
3. Ascertain sources of agricultural information used by farmers in Aninri Local Government Area of Enugu State.
4. Determine the information seeking behaviour of farmers in Aninri Local Government Area of Enugu State.
5. Find out the hindrances to sourcing information by farmers in Aninri Local Government Area of Enugu State.

Research Questions

The following research questions will guide this study:

1. What are the types of agricultural information needed by farmers in Aninri Local Government Area of Enugu State?
2. What are the reason(s) farmers seek for agricultural information in Aninri Local Government Area of Enugu State?
3. What are the sources of agricultural information used by the farmers in Aninri Local Government Area of Enugu State?
4. What are the information seeking behaviours of farmers in Aninri Local Government Area of Enugu State?
5. What are the hindrances to sourcing agricultural information by farmers in Aninri Local Government area of Enugu State?

Review of Related Literature

Agricultural Information Needs of Farmers

Even though scholars defined agricultural information differently, they have many things in common and all of them emphasized on the importance of information in agriculture (Deribe, 2020). He said that several studies highlighted the importance of information in agricultural development and its potentials in improving the efficiency of rural development in general. Agricultural information has been defined as all published or unpublished knowledge on all aspect of agriculture (Adio et al., 2016), this is very similar to the idea of Agbamu (2006), who defined agricultural information as all published or unpublished knowledge in all aspects of agriculture. He further classified agricultural information into four (4) categories namely technical, commercial, social-cultural and legal information. However, to enhance agricultural productivity, farmers should have access to well organized and relevant information because proper and sufficient utilization of agricultural information will result to high produce. The question now is how can farmers have access to this vital information that could help increase their agricultural productivity?

Farmers get information through certain groups which according to Ofuoku (2008) include other farmers, non-governmental organizations, agricultural research institutions, and universities. Farmers need information to improve their farming practice and these information needs includes the use of fertilizer, pest and disease control, higher yield/agricultural production, planning at the right time, weed control, improved seeds, post-harvest losses/preservation techniques, agricultural credits, agricultural cooperation, etc. Farmers need information on production technology that involves cultivating, fertilizer, pest control, weeding and harvest. This sort of information is at the moment being

diffused by extension workers, other farmers, government parastatals and agricultural equipment dealers.

Agricultural information 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. Accuracy implies that information is free from bias, timeliness means that recipient can get the information when they need it and relevance implies whether the piece of information specifically answers user's question of what, why, when, who and how (Ofuoku, 2008). According to Opeyemi, (2014) although studies in farmers' information needs have taken various pattern such as gender, farmers' group and development area, like men's, women's farmers, their information needs revolve around the solution of problems such as income generation, best farming practice, method of fertilizer application, agricultural input, market prices, transportation, food processing and preservation and new agricultural technologies.

Similarly, Meitei and Devi (2009), noted that farmers' information needs are not uniform amongst all rural areas. The needs are different according to the state of development of the concerned rural areas. Meitei and Devi (2009) further identify six groups of information needs of farmers namely: Field Acquisition: farmers are required to know the different type of schemes, subsidies, purchasing of agricultural lands; Agricultural Inputs: Farmers need information about improved variety of seeds, pesticides, agricultural equipment, weather conditions, harvest and post-harvest technology; Agricultural Technology: Farmers should be fed with information about innovative technology in their farming; Agricultural Credit: Farmers need information about credit facilities, terms of loans, etc.; Agricultural Marketing: Day to day marketing trend on price of

different variety of crops are necessary for farmers; Food technology: information on post-harvest food technology is needed by the farmers to get optimum benefit out of their crops. When farmers are educated or exposed to the right method of carrying out their activities through agricultural extension service this will not only make them better farmers but improve the people's livelihood and economy.

Reason(s) Farmers Seek For Agricultural Information

As observed by Hawkins (2004), information has become the most important currency for productivity, competence and increased wealth and prosperity around the world and will go on to lead the way provided man continues to aspire for greater height in all direction information must be sought for even farmers

Hellen (2012) observed that farmers seek for information to boost their productivity, it is a tool that drive development and reduces uncertainty and broadens the scope of options to take in solving problems. Seek doesn't stand alone without the presence of need, it is the gap in human life that caused reason for seeking redress as such the following can be some reasons farmers seek for agricultural information according to Visakhi (2002).Field acquisition is a serious issue to farmers. Farmers are always eager to know the type of schemes and subsidies for acquiring agricultural land. Information has transformed many other aspect of human endeavour and has helped create systems for responding to a wide range of societal needs. Indeed, transportation, communication, national security and health systems are completely reliant on information to perform even basic functions. However, information, and its automated technological embodiment, has not impacted agriculture to the same level like other sector. Mitra (2015), explained that adapting and making use of

information will help improve agricultural progress, which is one of the reasons farmers seek for information, when this is done everyone will benefit from the union. The indirect benefits of information in empowering farmers are significant and remain to be exploited. In view of the above mentioned reasons farmers seek for information, farmers urgently requires timely and reliable sources of information inputs for taking decision.

At present, farmers depend on trickling down of decision inputs from conventional sources which are slow and unreliable. The changing environment faced by farmers makes information not merely useful, but necessary to remain competitive. According to Mitra (2015) today society is benefiting from agricultural advancements and live sustainable lives by improving the production, harvest methods, and distribution of agricultural goods. All of these effects and more are possible through the successful merge of information and agriculture which is why farmers are getting more and more encouraged to take part in this positive change as the following are also considered reasons farmers seek for information: Improving decision making, Better planning, Community involvement, Agricultural breakthroughs and Agriculture for everyone.

It is understandable that every effort that is geared towards boosting agricultural productivity is reasons farmers seek for information. Jones (2015) listed and explained the following as ways of boosting agricultural productivity which is the core reasons farmers seek for information. Develop high-yield crops, Boosting irrigation, Increase the use of fertilizers, Improve market access, regulations and governance, Make better use of information technology etc.

Sources of Agricultural Information used by Farmers

The success in many farming enterprise is largely determined by the amount of information provided and used by the farmers. In Nigeria agricultural information come from research institute of agriculture, university of agriculture, government legislation, service institutions, agro-based industries and agriculture departments in conventional universities. Hard research-based sources such as reports from research institutes, learned journals, students theses and dissertations, as well as text books, monographs and conference proceedings, all these constitutes sources from which policy makers and others could extract science and technological information (Djenchuraev as cited by Opeyemi, 2014). Meta sources such as abstracts, indexes, subject specialist or authorities also provide information that could guide policy makers. Some of these sources could be obtained from the institutional libraries, in the ministries of science and technology, institutes and agencies (Opeyemi, 2014).

Farmers consult a wide range of information sources in order to thrive in their business. Generally, these information sources are classified into two categories: traditional and modern information sources. Examples of the traditional information sources used by farmers are: farmers' personal experience, family members and neighbours farmers. On the other hand, the modern information sources include the public extension services, agricultural faculties, farmers unions and associations, input dealers, mass media and the internet (Demiryurek as cited by Opeyemi, 2014). Mtega (2016), found that farmers source for information from their village leaders, demonstration plots, mobile phones, farmers association, TV sets, printed resources, radio sets, fellow farmers and agricultural extension/agents. Abraham (2009) identified several channels and sources used to bring information to the audience such as the media, Internet,

institutions, social functions, town criers, but in the traditional African settings, where most residence are illiterate, the mode of information communication to such people is through, "town criers". Ofuoku (2008), said sources of information among rural farmers include other farmers, farmers group, extension agents, research institutes, universities and NGOs. Information if, effectively communicated, plays a big role in getting farmers to accept and adopt new technologies and innovations. This implies that the inability to manage and coordinate agricultural information is one of the major constraints facing agricultural development in the country.

Information Seeking Behaviours of Famers

Information seeking behaviour is a way of acting, conducting oneself, manner (good or bad) treatment shown or displayed when seeking/searching for information to meet your needs (Uhegbu, 2007). Information seeking behaviour is a key concept in library and information science profession. Seeking behaviour varies considerably from individual to another according to need, age, level of education, culture, religion, enlightenment. Information seeking behaviour is expressed in various forms from reading printed materials to research and experimentation, listening to radio, watching television, oral discussion, asking friends and colleagues.

Information seeking behaviour is important because it tells how average citizens go about finding information that are crucial to their everyday life/needs (Lughlugh, 2020). Peoples' ability to seek for information depends on the sources that are accessible to them. It can also be influenced by the source of information content, medium and language of communication, time and nature of the information (Uhegbu, 2007). It is a

function of recognition of one's information needs as perceived by him, which propels him to make use of information services and resources to satisfy such perceived needs. That means one can understand that information seeking behaviour is purposive in nature and is a consequence of the need to satisfy some goals. Since farmers are those that engage in the business of farming operations, that include production, selling and storage of farm produce like rice, yam, cassava, beans, tomatoes, their information seeking behaviour relate to their work activities, individual personalities, attitude, value, system behaviour and level of socialization (Ukachi, 2007).

Several farmers' characteristics have been found to be significantly related to radio listening habits, knowledge of improved agricultural practices. In other words information seeking behaviour is the way people search for and utilize information and it is purposive in nature and farmers may express it through oral discussions, radios, televisions, reading printed materials, conferences and workshops (Yusuf, Masika & Ighodaro, 2013).

Hindrances to Agricultural Information Sourcing

Various factors are known to hinder information sourcing in the society especially by farmers. According to Ellen as cited by Siyao (2012) some of the factors are: societal, institutional, psychological and intellectual. Lwoga, Ngulube and Stilwell (2010) identified the following as the constraints to information sourcing by farmers (a) unavailability of public extension officers (b) lack of awareness of information sources (c) location (d) socio-economic and social factor (e) resistance to change (f) inability of some experts to solve problems (g) selfishness (h) nature of small-scale farming (i) lack of record keeping culture for future reference.

According to Ellen as cited by Siyao (2012) societal factors are responsible for blocking the availability of the resources necessary for satisfying the information needs within society, whereas institutional barriers are due to the unwillingness of the information providers to share information. Furthermore, Siyao (2012) states that physical barriers to information accessibility are caused by poor information infrastructure or poor communication facilities. Cogburn and Adeya as by Siyao (20012) pointed out that the information and communication infrastructure is considered as an indispensable condition for widespread socio-economic development in this age of globalization and information age. However, information and communication infrastructure in most African countries are weak. Unavailability of public extension officers could pose major setback to farmers' ability to obtain needed information as at when due following the fact that lack of awareness of information sources have always being a barrier to information users.

According to Williamson as cited by Siyao (2012) other factors include the cost of information and fear of accessing information by the community. In addition, lack of education remains the primary obstacle to meet information needs of the working poor in developing countries (Dutta, 2009). Illiteracy has been cited as a major barrier by Maltez, Matias and Artimisia, (2020). Furthermore, Aina (2006) pointed out that farmers in Africa are largely illiterate, so they cannot use the printed materials as a vehicle for disseminating agricultural information. Television and radio are good sources of information. However, they are expensive, rural areas lack of electrification, batteries are expensive, the timing of the programmes is sometimes not helpful, the messages are of poor quality and use of wrong language (Kalusopa, 2005, Dutta, 2009).

Another hindrance to information access is gender related attitudes and practices (Materu-Behtsa as cited by Siyao, 2012). Ozowa as cited by Mtega (2016) has the same views that the dual domestic and production roles take up rural women's whole day and so they are too exhausted to listen to the radio and that prevents them from participating in extension services. Having little opportunity to go to school, women are dependent on word-of-mouth or local radio information and have little say in what the information is about (Siyao, 2012). Women's access to agricultural information is based mainly on their everyday interactions with whom they regularly come in contact (Achia as cited by Siyao, 2012). Durutan as cited by Siyao (2012) noted that, although there is a growing awareness of the need to reach women farmers, agricultural extension services are generally geared to male farmers. Aina as cited by Zamai, Okwu,Dawang and Nankat (2014) adds that, even when extension agents visit farmers, they usually focus their activities on the male farmers, hardly reaching out to the women, who constitute a substantial proportion of farmers in Africa. Another hindrance in accessing agricultural information is the lack of agricultural libraries in the farmers' vicinity (Aina and Dulle, as cited by Siyao, 2012).

Methodology

Descriptive survey research design was used for this study. The study was carried out in Aninri local government area of Enugu State Nigeria. The population of the study consists of 101,559 farmers from the five communities in Aninri local government area of Enugu state. The sample size of this study consists of 1,188 farmers from the five (5) communities that made up of Aninri local government. Multistage sampling procedure was employed in selecting the sample for the study. At the first stage the farmers in the local government were classified into the

already existing five communities within the local government. At the second stage simple random sampling was used to sample two of the five communities, the two communities are Okpanku and Ndeabor. The third stage entailed using simple random sampling to draw 5% of farmers in the two communities sampled. This resulted to 1,188. Questionnaire was used as the instrument for data collection. The instrument was validated by three experts; the reliability of the instrument was established using test re-test method for research question 1, 3 and 4 which yielded 0.95, 0.78 and 0.7, Cronbach alpha was used for research question 2 and 5 which yielded0.87 and 0.88 respectively. Data obtained from the study was analysed using frequency counts and mean. Research questions 1, 3 and 4 were answered using frequency counts/percentages while mean was used to answer research questions 2 and 5 Items to the values of 2.5 and above were agreed or accepted while below 2.5 were rejected.

Presentation and discussion of findings

The findings of the study were presented and discussed in tables with the aid of their research questions as seen below:

Research Question 1: What are the agricultural information needed by farmers in Aninri Local Government Area of Enugu State?

Table 1: Frequency and Percentage responses on Agricultural Information Needed by Farmers in Aninri Local Government Area of Enugu State N=987

	Yes		No	
	Freq	**%**	**Freq**	**%**
Improved seed/seedling	880	89.2	107	10.8
Land acquisition	740	75.0	93	9.4
Disease control	847	85.8	140	14.2
Weed control	894	90.6	117	11.9
Credit facility	848	85.9	139	14.1
Fertilizer application	870	88.1	247	25.0
Weather condition	817	82.8	170	17.2
Best market	834	84.5	153	15.5
Preservative methods	708	71.7	279	28.3
New Machinery	741	75.1	246	24.9
Irrigation	764	77.4	223	22.6
On government schemes on agriculture	773	78.3	214	21.7
Soil and water conservation	797	80.7	190	19.3
Post-harvest technique	848	85.9	89	9.0
Security of agricultural produce	898	91.0	89	9.0

Table 1 shows the frequency and percentages of agricultural information needed by farmers in Aninri Local Government Area of Enugu State. The analysis indicates that the respondents agree to all the 15 listed items as the agricultural information needed by famers. This is shown that the

respondents information needs are: information onimproved seed/seedlings, land acquisition, disease control, weed control, credit facility, fertilizer application, weather condition, best market, preservative methods, new machinery, irrigation, government scheme on agriculture, soil and water conservation, post-harvest technique and security of agricultural produce.

Research Question 2: For what reason(s) do farmers in Aninri seek agricultural information?

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	Mean	SD	Decision
To help improve productivity	3.24	.61	Agree
To make progress in agricultural activities	3.15	.63	Agree
To enable them be at par with colleagues in developed climes	3.11	.66	Agree
To make better use of agricultural technology	3.16	.60	Agree
To help educate them on security of agricultural produce and disease control	3.11	.58	Agree
For better engagement in agricultural enterprise	3.25	.67	Agree
To help in prompt management of emergencies	3.16	.68	Agree
To help in knowing prospective buyers and better market	3.06	.80	Agree
To enable them obtain improved seedlings	2.98	.75	Agree
To be aware of government policies and scheme on agriculture that will help in improving business as a famer	2.96	.75	Agree

The analysis in Table 2 shows that the respondents agree to the 10 listed items as reasons farmers in Aninri seek agricultural information. They include: to help improve their productivity, make progress in agricultural activities, be at par with their colleagues in developed climes, make better use of agricultural technology, educate them on security of agricultural produce and disease control, for better engagement in agricultural enterprise, prompt management of emergencies, knowing prospective buyers and better market, obtaining improved seedlings and in being aware of government policies and scheme on agriculture that will help them improve their business as famers. The mean ratings for all the items ranged from 2.96 to 3.25.

Research Question 3: What are the sources of agricultural information used by farmers in Aninri?

Table 3: Frequency and Percentage responses on the Sources of Agricultural Information Used by Farmers in Aninri N=987

	Yes		No	
	Freq	**%**	**Freq**	**%**
Neighbours/ friends	792	80.2	228	23.1
Farmers' association/groups	862	87.3	451	45.7
Personal experience	807	81.8	475	48.1
Radio	607	61.5	380	38.5
Fellow farmers	772	78.2	215	21.8
Ministry of agriculture	770	78.0	217	22.0
Village head/village meeting, town criers	837	84.8	439	44.5
Agricultural extension services	846	85.7	453	45.9
Libraries	536	54.3	125	12.7
Universities, research institutes, agricultural faculties	544	55.1	443	44.9
Family Member	759	76.9	459	46.5
Hearsay	389	39.4	598	60.6
Newspaper and Magazines	534	54.1	141	14.3
Internet and online sites	528	53.5	195	19.8
Where I buy agricultural inputs	888	90.0	115	11.7
TV	607	61.5	380	38.5
Cell phone	603	61.1	384	38.9
Conferences, Seminars and workshops	872	88.3	99	10.0
Government Representative	871	88.2	116	11.8
Textbooks and monographs	512	51.3	180	18.2

The analysis displayed in Table 3 shows the frequency and percentages on sources of agricultural information used by farmers in Aninri Local Government Area of Enugu State. The analysis shows that the respondents agree to 19 of the 20 listed items as sources of agricultural information used by farmers. The 19 sources are: neighbours and friends, farmers' association/groups, personal experience, radio, fellow farmers, Ministry of agriculture, village head & village meeting, town criers, agricultural extension services, libraries, universities, research institutes, agricultural faculties, family members, newspaper and magazines, internet and online sites, where I buy agricultural inputs, TV, cell phone, conferences, seminars and workshops, government representative and textbooks and monographs. The farmers however disagree with the item on Hearsay as a source of agricultural information used by farmers.

Research Question 4: What is the information seeking behaviour of farmers in Aninri?

Table 4: Frequency and Percentage Responses on Information Seeking Behaviour of Farmers in Aninri N=987

	Yes		No	
	Freq	**%**	**Freq**	**%**
I align more to information obtained from friends	792	80.2	195	19.8
I align to information obtained from oral discussion with age grade members	751	76.1	236	23.9
I am more disposed to information obtained from elders who are the custodians of information stored in their brains	765	77.5	222	22.5
I regard information obtained from neighbours	800	81.1	187	18.9
I prefer information obtained from farmers groups	835	84.6	394	39.9
I appreciate information obtained from sometimes retirees	656	66.5	331	33.5
I regard information obtained from extension workers for update in current trends in agriculture	603	61.1	384	38.9
I am more disposed to information obtained from FADAMA workers for update in current trends in agriculture	770	78.0	217	22.0
I align to information obtained from printed media	593	60.1	152	15.4
I prefer information obtained from information centres to read newspapers, books, manual/handbooks, pamphlets etc to meet their needs.	536	54.3	125	12.7

Table 4 shows the frequency and percentages on the information seeking behaviour of farmers in Aninri Local Government Area of Enugu State. The respondents agree to the 10 listed items as their information seeking behaviour. This shown that the respondents information seeking behaviour includes: aligning to information obtained from oral discussion with age grade members, being more disposed to information obtained from elders who are the custodians of information stored in their brains, regarding information obtained from neighbours, appreciating information obtained from sometimes retirees, aligning more to information obtained from friends, prefer information obtain from farmers groups, regarding information obtained from extension workers for update in current trends in agriculture, being more disposed to information obtained from FADAMA workers for update in current trends in agriculture, aligning to information obtained from printed media and preferring information obtained from information centres by reading newspapers, books, manual/handbooks, pamphlets and others to meet their needs.

Question 5: What are the hindrances to sourcing agricultural information by Aninri farmers?

Table 5: Mean Ratings on the Hindrance to Sourcing Agricultural Information by Aninri Farmers N=987

	Mean	SD	Remark
High rate of illiteracy	3.84	.37	Agree
Agricultural information on radio and TV are always aired at odd hours	3.77	.42	Agree
Inadequate market information	3.79	.41	Agree
High cost of accessing information	3.65	.48	Agree
Religious/gender barriers	3.62	.49	Agree
Inability to access formal channel of information	3.74	.45	Agree
Lack of awareness of sources of information	3.68	.47	Agree
Most of the farmers do not have phone, radio and TV	3.63	.51	Agree
Inadequate contact to extension agents	3.79	.42	Agree
Location/ environment lived by famers	3.77	.45	Agree
Lack of personal interest and special knowledge	3.59	.54	Agree
Government inability to provide electricity across board	3.61	.57	Agree
Lack of transportation facility	3.38	.71	Agree
Low level of income	3.24	.74	Agree
Lack of extension officers	3.28	.86	Agree
Lack of farmers association	3.17	.77	Agree
Nature of job	3.09	.83	Agree
Lack of time/chance	3.38	.80	Agree
Non establishment of libraries	3.35	.79	Agree

Table 5 shows that the respondents agree to the 19 listed items as hindrance to sourcing agricultural information by Aninri farmers. They include: high rate of illiteracy, agricultural information on radio and TV are always aired at odd hours, inadequate market information, high cost of accessing information, religious/gender barriers, inability to access formal channel of information, lack of awareness of sources of information, most of the farmers do not have phone, radio and TV, inadequate contact to extension agents, location/ environment lived by famers, lack of personal interest and special knowledge, government inability to provide electricity across board, lack of transportation facility, low level of income, lack of extension officers, lack of farmers association, nature of job, lack of time/chance and non-establishment of libraries. The mean ratings for all the items ranged from 3.09 to 3.84.

Discussions of Results

Agricultural information needed by farmers.

The result of the research question one revealed the agricultural information needed by farmers in Aninri. The result shows that farmers needed information on improved seed/seedlings, disease control, weed control, fertilizer application, credit facility and security of agricultural produce. A finding here implies that farmers in Aninri still lack adequate supply of agricultural information that is required to improve their level of productivity. As Aninri farmers experience insufficient supply of agricultural information, this might force them into sticking to traditional or old method of agricultural practices which will hamper their produce. Farmers in Aninri need adequate supply of agricultural information to enable them compete favourably with other farmers in developed clime. Performance of any farmer(s) is dependent on the quantity and quality of information provided and used by such farmers. Agricultural information

as a matter of fact enhances farming decision to sustain growth of agricultural activities as it provides and keep farmers abreast with new knowledge and newer discoveries in their occupation. This is founded on the definition of agricultural information by Opeyemi (2014) that agricultural information is information passed on to farmers through extension services primarily to help improve economic yield from farm produce, facilitate poverty alleviation among farmers and by extension the farmers living condition. Result of this study is in line with of Lughlugh (2020) who found out the difference kind of information needed by farmers ranging from fertilizer application, disease control, improved seedling, weed control, credit facility, preservation technique, post-harvest technique. Also findings of this study are related to the findings of (Opeyemi 2014 & Hellen 2012) who found that rural farmers needed agricultural information for the purpose of improving their productivity. These information needs includes; fertilizer application, improved variety seeds, loan/credit facility, income generation, best market, preservation technique. Therefore, the result of the agricultural information needed by farmers in this study is valid.

Reason(s) farmers seek agricultural information

The result of research question two reveals the reasons farmers in Aninri seek for agricultural information. The result shows that farmers in Aninri seek agricultural information for the following reasons; to help them improve their productivity, to help make progress in agricultural activities, to be at par with colleagues in developed climes, to help make better use of agricultural technology, to help educate farmers on security of agricultural produce and disease control, to help them for better engagement in agricultural enterprise, to help in prompt management of emergencies, to help in knowing prospective buyers and better market, to help in obtaining

improved seedlings and to help them be aware of government policies and scheme on agriculture that will help them improve their business as farmers. The information needs of farmers often revolve around the resolution of problems related to various agricultural activities, these needs forms the reason to search for the needed information. Findings here imply that there is willingness in the farmers to thrive in their agricultural activities. Base on their stated reason(s) for searching for agricultural information, it can be clearly seen that there is positivity in their line of thought towards their occupation as they strive for growth and advancement in their efforts. What this means is that information acquisition depend on the needs of individuals involved. It is important that these farmers are supported vigorously so that whenever they seek for any information that will help them, such information should be available to them; reasonable progress can only be made in agriculture through availability and accessibility of information. This followed the observation made by Hellen (2012) that farmers reason to seek for agricultural information is to boost their productivity, information is a tool that drives development and reduces uncertainty and broadens the scope of option to make in solving problems. The findings of this study is related to the findings of Chizoba (2012) who found out that the reason individuals, farmers inclusive seek for information is to solve problems, decision making, self-improvement, national development and international relationship. This findings is also similar to the findings of Mitra (2015) who found that the reason farmers seek for agricultural information are to; help improve agricultural progress, help improve production, harvest methods and distribution of agricultural goods. Because of the above, the result on the reason(s) farmers seek for agricultural information is not misleading.

Sources of agricultural information used by farmers

The result of the research question three revealed the sources of agricultural information used by farmers in Aninri. The result shows that farmers have many sources through which they can source for their agricultural information to meet their needs such as; neighbours/friends, farmers association/group, personal experience, radio, fellow farmers, ministry of agriculture, village head/village meeting, town criers, agricultural extension services, family members, where they buy agricultural inputs, TV, cell phone, conferences, seminars/workshops and government representatives This is founded on the definition of information sources by Okoh and Ijiekhuamhen (2014) that information sources are the materials or means through which information can be found to meet a particular need. This implies that there are lots of means farmers can access information of their choice without much challenging. It is true that farmers have a wide range of information sources available to them, then if properly utilized it is possible to have an improved farming or agricultural practice such that farmers business or enterprise increases and in turn development or improved socio-economic status of such farmers. Although, farmers may not be said to be a homogeneous group, they thus need different types of information from different information sources. The result indicate that farmers source for more information from agric input dealers in the study area and conferences/seminars and workshops as the second most sourced information source. Thirdly government representatives and farmers association followed respectively as their sources of information. Acheampong*, et. al* (2017) found similar information sources report for farmers. This implies that most of the farmers in Aninri expressed their consultation through interpersonal or oral sources, this suggest that farmers mainly depended on informal network of friends/neighbours, input dealers, farmers union, village head, extension agents as their sources of

information rather than on explicit source of information. The findings of this study is in agreement with past studies such as (Deribe 2020 and Opeyemi, 2014) who discovered that farmers union, input dealers, friends/neighbours, agric extension officers, husbands were the major sources of agricultural information consulted by rural farmers. Unfortunately, few expressed their use of recent ICT based sources like library, internet, newspapers, agricultural institutions. These sources unfortunately should have served as major sources for communicating agricultural information to these farmers. This has supported the challenges given by (Ofuoku, 2008) that research institutions and universities are not giving enough attention to carry out their responsibilities of information generation and delivery to farmers. Therefore, the result of the study on the sources of agricultural information used by farmers in Aninri stands, and is not misleading.

Information seeking behaviour of farmers

The result of research question four shows the information seeking behaviour of farmers. Result of this study shows how Aniniri farmers tries to look for ways to solve their agricultural information related problems by aligning to information from friends, oral discussion with age grade members, interacting with elders who are custodians of knowledge, neighbours, farmers group, retirees ,extension workers and FADAMA workers. This is related to the definition of information seeking behaviour by Uhegbu (2007) that information seeking behaviour is a way of acting, conducting oneself, manner (good or bad) treatment shown or displayed when seeking/searching for information to meet your needs. Information seeking behaviour is helpful because it tells how average citizens go about obtaining information that is optimally useful to their day to life (Lughlugh, 2020). This implies that information seeking behaviour is purposive in

nature, is a function of recognition of one's information needs as perceived by him which propels him to make use of information service and resources to satisfy such needs. Farmers in Aninri sought for their information needs based on the way they perceived it through friends, oral discussion with age grade members, interacting with elders who are custodians of knowledge, neighbours, farmers group, retirees ,extension workers and FADAMA workers. Findings of this study is similar to the findings of (Lwoga, Ngulube & Stilwell 2010; Opeyemi 2014; Maltez, Matias &Artimisia 2020; Deribe 2020; Lughlugh 2020), they found that rural farmers information seeking behaviour are through friends, extension officers, farmers union, TV, cell phone, book, library. Thus, the major way through which the farmers seek for their information needs is by asking friends/neighbours, age grade members, extension workers, other ways includes book, newspapers, manuals, elders, FADAMA workers, farmers group. This implies that as farmers are different in terms of age, gender, level of education, location and culture, the behaviour they put on while seeking for information also varies based on their information needs. This bring to the notice a systematic way of searching for information which implies that people seek or search for their information needs by asking questions to friends/neighbours, age grade colleagues, libraries. Therefore, the result of the study on information seeking behaviour of farmers is not deceptive.

Hindrances to sourcing agricultural information by farmers

The result of research question five reveals the hindrances to sourcing agricultural information by farmers in Aninri LAG. This result shows the setbacks Aninri farmers are facing that have prevented them from sourcing agricultural information which have adversely affected their performances negatively before, during and after planting season. This implies that poor

performance of farmers in Aninri is directly linked to the hindrances experienced in sourcing for agricultural information. From the data gathered, the findings emerged that a number of factors hinders the information sourcing of farmers in Aninri LGA. The major factor affecting information sourcing of farmers are illiteracy. This is followed by inadequate contact to extension agents; location/environment lived by farmers, agric information on radio and television always aired at odd hours. This tallies with the findings of Aina as cited by Zamai, Okwu, Dawang and Nankat(2014) that farmers in Africa are largely illiterates, so they cannot use the printed materials as a vehicle for disseminating agricultural information. It also shows that beside illiteracy, there are other factors affecting information dissemination and sourcing in the study area. This therefore means that if the environment is conducive and farmers are active, it will create culture which will in turn enhance the performance of farmers in their farming business, economic growth and food security will be ensured. The finding of the study is related to that of (Aina as cited by Zamai, Okwu, Dawang & Nankat2014; Bilonkwamanagara 2008; Matovelo 2008; Dutta 2009; Masuki*, et. al* 2010; Siyao 2012; Deribe 2020) who found that illiteracy, inadequate number of agricultural extension officers, lack of infrastructure, poor association leadership, location/environment lived by farmers, lack of awareness of sources of information, low level income, government inability to provide electricity across board are the major barriers in accessing agricultural information in rural areas by farmers. For this the findings of this study on hindrances to sourcing agricultural information by farmers in Aninri is correct.

Conclusions

The study has revealed the real situation of agricultural information needs and seeking behaviour of farmers in Aninri LGA of Enugu state. The

result of the study shows that the agricultural information needs of farmers in Aninri include: improved seedling, disease control, weed control, land acquisition, credit facility, fertilizer application, security of agricultural produce, best market, weather condition, preservative method, new machinery, irrigation, government scheme on agriculture and soil and water conservation.

The study also revealed reasons farmers seek for agricultural information to include, improve productivity, to help make progress in agricultural activities, to help be at par with other farmers in developed clime, to help make better use of agric technology, to help in prompt management of emergencies, to help in educating farmers on security of agricultural produce and disease control, help in obtaining improved seedlings, to help farmers be aware of government policies and scheme on agriculture that will help farmers improve their business as a farmer, to help farmer know prospective buyers. It shows the sources of agricultural information used by farmers to be neighbours, friends, farmers association, personal experience, fellow farmers, family members, extension officers, town criers, village head and ministry of agriculture. The information seeking behaviour of farmer were through friends, oral discussion, farmers groups, retirees, extension workers, FADAMA workers, age grade members and elders that are custodians of knowledge.

Finally, the hindrances to sources agricultural information by farmers to include illiteracy, low level of income, lack of extension workers, lack of transportation facilities, no electricity. poor news delivery on radio and TV, lack of awareness of sources of information, some of the farmers do not have cell phone, radio, TV, environment/location of the farmers, inadequate contact with extension workers, inability to access formal

channel of information.

Recommendations

Based on the findings of this study, the researcher wishes to make the following recommendations.Government at various levels should ensure adequate provision of fertilizer, improved seedlings, post-harvest technology, herbicides and agrochemicals, diseases control mechanism, agricultural finance, and modern technology application for farmers in order to meet up with their needs for sustainable agricultural development.

There is need to have strong farmers group/association, the existence of strong farmers association will definitely help farmers within a local government or community this will make information dissemination easy because there will be channel of communication among them, with the existence of effective method of disseminating information to farmers it may help them to improve their productivity, enable them be at par with colleagues in developed climes and even help them make better use of agricultural technology.

In most cases information users who have information needs suffer because they are not aware of any source to get information of their choice to solve their problems farmers inclusive, for this reason government and her agencies should know the best source of making information available and accessible to farmers especially illiterate farmers, their language of understanding should be greatly considered. There should be adequate number of extension officers to enable the farmers have access to relevant up-to-date information. Agricultural sector is a sector that can experience changes at any time, it is important that there is enough extension officers

on ground that will always be ready to help farmers with any current trend in the sector. Government should employ enough competent and motivated rural-based agricultural extension officers who should primarily aim at meeting the requirements of farmers in rural areas. This will help facilitate the accessibility and availability of extension services in rural areas. Seminars, workshop, conferences, symposium and training programmes as a source/ channel of delivering agricultural information should be directed to and provided to all rural farmers and not only to the agricultural extension officers and government officers based in urban areas.

There is need for the education of illiterate farmers to enable them cope with the challenges of reading printed materials, since the world is turning to a global village with the advent of ICT, there is need to train the farmers. Education they said is power and educated farmer stand a chance of doing better in farming than uneducated. Telecentres and rural libraries should be built around to help farmers access information, audio visual section can be created for those that cannot read and write. It is important that such library and information centres should contain simple agricultural reading materials such as leaflets, agricultural magazine, books, and research reports that are written in non-technical language. These telecentres should serve as a place where information services can be provided to the communities. Mtega (2016) points out that telecentre is an information centre which provides Information Communication and Technologies and other information services to rural and marginalised communities.

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