Farmers' Perceived Agricultural Information Needs in Paikoro LGA of Niger State

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ABSTRACT
This study evaluated the perceived agricultural information needs of farmers in Paikoro Local Government Area of Niger State, Nigeria. It provided insight into the demographic information of the 150 respondents, determined the perceived agricultural information needs of the farmers, and evaluated the relationship between farmers' demographic information and their agricultural information needs. The results of the study revealed that the respondents were still in their active and productive age, mean age was 40 years, majority (72.0%) were married with a mean household of seven persons. Also, majority (73.3%) had one form of formal education or the other with an average farming experience of 16 years. The study showed that the information needs of the farmers were: credit facilities (100%), method of fertilizer application (91.33%), disease/pest controls (77.33%), improved variety (76%), pesticides (68.67%), equipment/tools (67.33%), soil management/planting techniques (64.67%), transportation (51.33) government agricultural intervention (44%), and market information (40%). The Pearson correlation analysis revealed that education, level and farming experience had significant effect on agricultural information needs of farmers in the study area. It was hence recommended that government agencies and other organizations that provide agricultural extension and advisory services should identify and build the capacity of Community Based Advisors (CBAs) in communities so that these CBAs can then serve as contact farmers for information dissemination in their various communities.

Keywords: Agricultural Information Needs, Community Based Advisors, Nigeria

INTRODUCTION

Agriculture is the mainstay of most African economics and occupies a vital position in the continent's development (Munyna, 2000). The agricultural sector of Nigeria has from time undergone different phases since her independence in 1960. The agriculture sector in the 1960s was contributing 85% of Nigeria foreign exchange earning, 90% employment generation, and about 80% to Gross Domestic Product (GDP) (FAO, 2013). Agriculture is critical to achieving global poverty reduction targets and it is still the single most important productive sector in most low income countries, often in terms of its share of GDP and almost always in terms of the number of people it employs (IDA, 2009). In countries where the share of agriculture in overall employment is large, broad-based growth in agricultural incomes is essential to stimulate growth in the overall economy, including the non-farm sectors selling to rural people. Hence, the ability of agriculture to generate overall GDP growth and its comparative advantage in reducing poverty will vary from country to country (FAO, 2012).

A nation cannot attain a state of food sufficiency without the development of her farmers. It is therefore important for farmers, who are producers of food, to be well equipped for them to perform at optimal capacity. One of the key ingredients for farmers to yield good output is information (Tologbonse et al., 2008). Information such as weather forecast has always been crucial to the success of a farmer. However, in the present information age, a farmer needs a lot of information to be successful. Olayinka and Ogunkunle (2018) cited that information need is the lack of appropriate information on which to base choices that could lead to benefits or services that may improve people's well-being. According to the definition of information need, it could be assumed that information is a mean to an end and not end in itself.

In agriculture, the role of information in enhancing agricultural development cannot be over emphasized. Fadairo et al. (2015) stated that, the use of information in agriculture sector is enhancing farming productivity in a number of ways. Providing information on weather trends, best practice in farming, timely access to market information helps farmer make correct decisions about what crops to plants and where to sell their product and buy inputs. However, information needs by individual varies, and their current expressed need for and potential access to information may also be different. Different people have different level of access to individuals and institutions which mediate these flows of information. If we can identify those to which people have most access or regard as the most reliable, external agencies can use them as channels for getting new agricultural information into the communities or to specific categories of people and obtaining feedback on information needs. Availability of adequate information on production techniques and the application of technologies are indispensable to improving the production and productivity of farmers. This is because information and technology are the most important inputs for agricultural development (Dulle, 2000). Therefore, the purpose of the study was to assess the information needs of farmers in Paikoro Local Government Area of Niger State.

METHODOLOGY

The study was conducted in Paikoro Local Government Area of Niger State, Nigeria. It is located between latitude 9° 58′25″ North and longitude 6°50′6″ East with a population of 187, 490 as estimated in 2011. It is made up of two districts namely Kafin Koro and Paiko. The dominant ethnic groups are Gbagi and Hausa. There are two distinct climate seasons, rainy (April to October) and dry (November to March). Common arable crops grown include yam, millet, rice, maize, melon, and cowpea. Livestock raised include cattle, sheep and goats. Primary data were used for this study, it was collected through the administration of questionnaires and structured interview schedule. Multi-stage sampling technique was adopted for this study. The first stage involved purposive selection of Paikoro LGA, based on the predominance of farmers. In the second stage, three villages, namely, Kwakuti, Paiko and Jedna were selected randomly. The third stage involved random selection of 50 farmers from each of the selected villages. Thus a total of 150 respondents were used for this study. Data were analysed through the use of descriptive statistics such as frequency counts, percentages and means. The relationship between farmers'

socio-economic characteristics and information needs were determined using Pearson Correlation.

RESULTS AND DISCUSSION

The socio-economic characteristics of the respondents are shown in Table 1.

Age: Age variation is significantly associated to farmer's behaviour in accepting new techniques. The results in Table 1 revealed that majority (66.00%) of the respondents were between the ages of 21 and 40 years. The mean was 40 years. This implied that majority of the respondents in the study area were within the youthful age group regarded as economically active, innovative, productive and are still energetic to carry on with yam production. This is in line with the findings of Akinbile and Odebode, (2012) who stated that farmers in the study area with mean age of 34 years were still at their active workforce age with the chance of having more years to practice agriculture.

Table 1: Socio-economic Characteristics of Yam Farmers (n = 150)

Variable	Frequency	Percentage	Mean
Age (Years)			
21-30	41	27.33	
31-40	58	38.67	
41-50	25	16.67	
51-60	20	13.33	
Above 60	6	4.00	40
Total	150	100.0	
Marital Status			
Single	19	12.67	
Married	108	72.00	
Widow	16	10.67	
Divorce	7	4.67	
Total	150	100.0	
Household size (no)			
1-5	58	38.67	
6-10	77	51.33	
Above 10	15	10.00	7
Total	150	100.0	
Educational level			
Non formal	40	26.67	
Primary education	65	43.33	
Secondary education	35	23.33	
Tertiary education	10	6.67	
Total	150	100.0	
Farming experience (Years)			
1-10	61	40.67	
11-20	53	35.33	
21-30	16	10.67	
Above 30	20	13.33	
Total	150	100.0	

Source: Field Survey, 2019

Marital status: Marital status as indicated in Table 1 shows that majority (72.0%) of the respondents were married, 12.67% of the respondents were single, while 10.67% and 4.67% of the respondents were widowed and divorced, respectively. This corroborate with the findings of Adebo (2014) who reported that high proportion of married people enhance the supply of farm labour and commitment in working to enhance their productivity.

Household size: The result in Table 1 shows the household size with a mean of 7 people. It was observed that majority (90.00%) of the respondents had family size of between 1and 10 individuals, while 10.00% had family size of above 10. This implied that large family size enables the farmers to use family labour especially when labour intensive is required. This agrees with the findings of Izekor and Olumese (2010) who reported that households in Nigeria are characterized by large family size.

Educational level: The result in Table 1 revealed that majority (73.33%) of the respondents had one form of formal education or the other while 26.67% of the respondents had no formal education. This implied that considerable number of the respondents had formal education which could enhance adoption of new agricultural technology to enhance production. This corroborate with the findings of Izekor and Olumese (2010).

Farming experience: Farming experience as indicated in Table 1 revealed that 40.67% of the respondent had 1-10 years of experience, while 35.33% had 11-20 years of farming experience. The mean years of farming experience was 16 years. This implies that the more the years of farming experience the more the practical knowledge acquired and the ability to efficiently utilize farm inputs and also handle production problems and thus increase in output. This finding is in consonance with the reports of Augustine and Emmanuel (2011) and Godson-Ibeji *et al.,* (2016).

Agricultural Information Needs of the Farmers
Presented in Table 2 is the agricultural information needs of the respondents. Farmers expressed strong desire for more information on credit facilities (100.00%), followed by the method of fertilizer application (91.33%), disease and pest control (77.33%), improved varieties (76.00%), pesticides (68.67%), weather, equipment/tools (67.33%), and soil management/planting techniques (64.67%). The agricultural information needs of the respondents were majorly those that improved their production such as credit facilities, improved varieties, weather forecast, diseases and pest control. This implied that the information needs of respondents were majorly technical agricultural information. Similar findings were reported by Mittal *et al.* (2010); Salau *et al.* (2013), who reported that farmer's information needs were of mostly technical agricultural information that centred on production. Furthermore, the table revealed other agricultural information needs of respondents which include: credit facilities (100%), fertilizer application (91.33%), improved varieties (76.00%), pesticides (68.67%), equipment/tools (67.33%), soil management/planting techniques (64.67%), government agricultural intervention (44.00%) and market information/prices (40.0%). Okwu and Daudu (2011) also asserted that market information is highly essential and highly needed for rational decision making among the farming households.

Table 2: Distribution of respondents according to agricultural information needs

Information needs	*Frequency	%
Credit facilities	150	100.00
Fertilizer application	137	91.33
Disease/pest control	116	77.33
Improved varieties	114	76.00
Pesticides	103	68.67
Equipment/tools	101	67.33
Weather	101	67.33
Soil management/planting techniques	97	64.67
Transportation	77	51.33
Government agricultural intervention	66	44.00
Market information/prices	60	40.00

Source: Field Survey, 2019. *Multiple Response

The relationship between farmers personal characteristics and agricultural information needs is presented in Table 3. Correlation analysis showed that educational level of farmers (r = 0.7321) had a significant relationship with agricultural information needs of the respondents. Education is

generally believed to increase farmers' ability to obtain, process and analyse information disseminated by different sources and helps them to make appropriate decision to utilize agricultural information through reading and analysing in a better way. The educational level of a farmer usually affects individual's enthusiasm to learn about new things and to use them. Similar result was obtained by Rehman *et al.* (2013) who found out that education of respondent had a significant relationship with agricultural information needs by the respondents. Furthermore, farming experience (r = 0.8318) also showed a positive significant relationship with agricultural information needs of the farmers. This implied that the more the years of farming experience the more the practical knowledge acquired, hence the more information the farmers will seek in order to have the ability to efficiently utilize farm inputs and also handle production problems and thus increase in output. This finding is in consonance with the reports of Augustine and Emmanuel (2011) and Godson-Ibeji *et al.,* (2016).

Table 3: Respondents relationship between farmers' personal characteristics and agricultural information needs

Variable	R (α = 0.05)
Age	0.0354
Educational level	0.7321*
Farming experience	0.8318*
Farm size	- 0.0415
Income	-0.0638

Source: Field Survey, 2019

CONCLUSIONS, IMPLICATIONS & RECOMMENDATION
Most of the respondents in the study area were young and married, and their information needs were mostly on technical agricultural information such as credit facilities, method of fertilizer application, disease/pest control and soil management/ planting techniques. The information needs of farmers change from time to time due to changing agricultural technologies, environmental changes, agricultural policies, and the emergence of agricultural innovations. The findings of this study have implications for improving farmers' productivity, as knowing the types of information needs, its availability and application are indispensable to improving the production and productivity of farmers.

Service providers should have a frequent face-to-face interaction with the farmers which could be done through farmer field schools, rallies, farm demonstrations among others, government agencies responsible for extension services and other non-state organizations that are into the provision of agricultural information should offer training programs for Community Based Advisors (CBAs) in the communities. These CBAs will then serve as contact farmers in their various communities. Additionally, routine training of input dealers in the various communities should be undertaken to improve upon their knowledge levels since they are a regular source of agricultural information. It is also recommended that the dissemination of information by service providers should be done using the predominant language in the area. This will make the farmers have a sense of belonging.

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