Information Needs of Sesame Farming Households in Selected Agricultural Zones of Katsina State, Nigeria

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Abstract

The study examined information needs of sesame farming households in selected agricultural zones of Katsina state, Nigeria. A multistage sampling procedure was used in selecting 170 sesame farmers across Katsina state. Data were obtained with the aid of a well-structured interview schedule, and analyzed using percentages, mean, chi-square and PPMC. Results revealed that average age, household size and farm size were 39 ± 11.5 , 9.11 ± 5.7 and 2.00 ± 1.78 respectively. Majority were males (95.0%), married (89.3%) and had Quranic education (64.3%). Sesame farmers got information through personal experience ($\bar{x} = 2.65$), radio/television ($\bar{x} = 2.12$) as well as friends and neighbour ($\bar{x} = 2.09$). The most important information needs of respondents were on improved seed varieties ($\bar{x} = 2.77$), fertilizer and manure application ($\bar{x} = 2.75$), better storage strategies ($\bar{x} = 2.68$) and agricultural insurance ($\bar{x} = 2.67$). The following constraints to accessing information on sesame production were identified, including inadequate extension contact ($\bar{x} = 1.92$), poor communication network ($\bar{x} = 1.87$) and lack of agricultural-based television programmes ($\bar{x} = 1.68$). Farm size ($r = -0.178$, $p = 0.036$) had significant relationship with respondents' information needs. There is the need for extension programme to be revitalized in Katsina State with the aim of addressing the common needs of farmers on economically important crops such as sesame.

Keywords: Information needs, sesame, farmers, constraints

1. Introduction

Sesame or benniseed is a tropical annual plant that is remarkably produced for its seeds and oil. Purseglove, (1996) reported that its original area of domestication is tropical Africa, where greatest genetic diversity exists and from where it spread to India a port of sesame secondary diversity development. Other names of sesame as captured by Abu, Ater and Abah (2012) include: "simsim" in East Africa, "Till" in India and "Gingely" in Sri-Lanka, "Ridi", "Ekuku" and "Isasa" in Hausa, Ibo and Yoruba tribes of Nigeria respectively.

Sesame production at world level is estimated at 3.15 million tonnes per year having risen from 1.4 million tonnes in the early 1960s with Asia and Africa producing 70 and 26% of this estimation respectively (FAO, 2009). In Nigeria, sesame is becoming an important component of Nigeria's agricultural exports given its current rate of cultivation. Today, both the white and brown types are commonly grown by smallholder farmers in Nasarawa, Jigawa and Benue States (Raw Materials Research Development Council (RMRD) 2004). Others are Yobe, Kano, Katsina, Kogi, Gombe and Plateau States.

At global level, exports in year 2000 were put at 657,000 tonnes having risen from 427,000 tonnes in 1988 (USAID 2002). The same report valued the 2000 exports at \$478mn with India recording the single largest exporter with 180,000 tonnes seconded by Sudan's over 138,000 tonnes export per year. Nigeria similarly, enjoys a rising profile on the world market. USAID (2002) and OIAM (2005) valued annual exports from Nigeria at about US\$20 million with Japan dominating the purchasing side of the trade. This may be attributed to the growing importance of sesame oil, especially as a crucial component of Japanese cooking as well as increased consumer concern for healthy eating.

In addition to sesame's economic value, Burden, (2005) found out that beniseed is one of the world's oldest spice and oil seed crops grown for its seeds that contain approximately 50% oil, 25% protein and antioxidants (Sesamun, Sesamolin and Sesamol); a quality Umar (2010) noted makes the oil one of the most stable vegetable oils in the world.

In Nigeria, the crop has remained a popular cash crop among farmers due to its good local and international markets potentials. This made Nasarawa State Government to identify sesame as a major revenue earner and consequently established a sesame seeds cleaning plant (Nasarawa State Government, 2008). Also, in 2007 a pilot project to increase sesame production and utilization for economic empowerment in the northern states of Nigeria was jointly undertaken by the National Sesame Seeds Association and the First Bank of Nigeria (Abdullah 2009). Thus, Mshelia, Sajo and Gungula (2012) revealed that sesame seeds farming can provide one million jobs and earn US\$1.5 billion for the northern states of Nigeria thereby empowering the people of the region economically. This undoubtedly has implication on rural employment generation and development, enhancing rural income and socio-economic well being of farming households. Nigeria was also noted to have earned US\$798,049,000 (Mshelia, *et.al* 2012). The seeds are also demanded in various forms; raw seeds, crushed unrefined and refined oil. This is in addition to its total annual consumption which Mshelia, *et.al* (2012) put at about 65% for oil extraction and 35% for food.

It is important therefore to state that provision of right type of information that revolves around modern agricultural technology, credit, erosion control, soil fertility, improved seeds varieties and seedlings, plant protection chemicals, water, markets, machinery and equipment are germane if the levels of growth and benefits in sesame production are to be improved and sustained. Mshelia, *et.al* (2012) observed that Nigerian farmers are yet to take adequate advantage of the robust market potential sesame commands to improve their economy. Olam (2005) attributed this to the growing gap between demand information and supply of sesame. Also Aina (2004) observed that poor access to information and training has remained the bane of most farm families. Ajayi, Banmeke and Solomon (2010) reiterated that even when farmers are exposed to information, cursory observation has revealed that most disseminated information are usually given without needs assessment and identification and this has implication for capacity building.

This implies that the popular saying that "for lack of knowledge the chicken slept hungry right on top of a bag of grain", is what is happening with our farming households as they cannot make fortune from sesame farming. Information is a basic element in any development activity and useful when appropriately made available and accessible (Judamat, Adekoya & Abu 2010). In agriculture, the role of information in enhancing development is obvious. Adedoyin (1990) posited that a steady flow of accurate, understandable and factual information links scientist with farmers, in which for any true agricultural progress, farmers must know, understand, and act on. Suffice this to mean that how far people progress in whatever they do depends upon the availability and access to accurate and reliable information (Ajayi *et al* 2010). Therefore, identifying the information needs of sesame farming households could help research activities at solving farming households' problems and ensures that those involved in extension services design and disseminate appropriate information to them. This will build competency, improve yield, profit, and improve living standard and sustainable production among sesame farming households. This study therefore aimed at determining information needs of sesame farming households in selected agricultural zones of Katsina State, Nigeria. The specific objectives include:

1. Determine the socio-economic characteristics of the respondents
2. Identify respondents' sources of information
3. Ascertain information needs of the respondents
4. Identify constraints to respondents' access to information

2. Hypothesis

1. There is no significant relationship between the socio-economic characteristics of the respondents and their level of information needs

3. Literature Review

Sesame is a rich oil seed crop with great socio-economic potentials particularly in tropical Africa from where Abu, Ater and Abu (2012) reported it originated and taken to India (Purseglove, 1996). Its cultivation was originally at subsistence level and purpose but has over the years grown to become an important commercially cultivated oil seed crop globally. Sesame's remarkable uniqueness in thriving and yielding well even in poor soil and climatic conditions may be part of the reasons for its wide spread cultivation among farmers in Africa, Europe and Asia.

Chemonics (2003) revealed that the plant has short harvest cycle of 90 –140 days, measuring 60 to 120cm tall, whitish to brown or black seeds depending on the variety with a high oil content of 44-60%, deep rooting and well adapted to withstand dry conditions, poor soils and climates that are generally unsuitable for other crops. This same source maintained that sesame thrives around the dry tropics between the latitudes of 40° N and S.

Today, evidence has shown that the world crop area under sesame is about 6 million hectares (Abu *et.al* 2012).

FIIR (1990) in Abu *et.al* (2012) also reported that 65% and 25% of this estimate is cultivated in Asia and Africa respectively while 8% was from America, Venezuela, Mexico, Gautamala, Columbia and Sudan. Anon, (2008) had also corroborated that of the 3.66 million tons world estimated sesame production, Asia and Africa produce 2.55 and 0.95 million tons respectively. Although, Sudan, Ethiopia, Keya, Egypt, Mali, Burkina Faso, Tanzania and Chad are among the major players in sesame cultivation in Africa; Nigeria is reportedly the 2nd largest producer in Africa (FAO, 2008) and 7th in the world with estimated production figure of 120,000 metric tons annually (Abu *et.al* 2012) on a cultivated area of over 80,000 ha across the Northern States (Umar, Okoye and Mamman 2010). Raw Materials Research and Development Council, (RMRDC) (2004) in Umar *et.al* (2010) noted that Benue and Nasarawa States rank highest with an annual production of not less than 40,000 metric tons. China and India are the world largest producers each with an annual harvest of about 750,000 tons followed by Myanmar (425,000 tons) and Sudan (300,000 tons) (Chemonics 2003).

The increasing rise in sesame production across the world is undoubtedly due to its robust socio-economic values and demand. FAO, (2000) observed that Nigeria earned an estimated US\$20 million from sesame export. FAO (2009) had earlier buttressed that the country's estimated volume of sesame export also hit 150,000 tons in 2008. (Oluwe *et. al* (2009) noted that sesame is enjoying high market rate due to its potential in meeting health requirements for food. Mshelia *et.al* (2012) corroborated that Sesame is rich in natural oil soluble and water soluble anti-oxidants such as sesamin, sesamolin, sesamoniol and sesaminol glucosides. This could be a reason why it is called "Queen of oils or king of oils" (Random Nature 2009). Thus, about 65% of the annual production of sesame is reportedly processed into oil while 35% used as food (Mshelia *et.al* (2012) while about 42% is roasted sesame, 36% washed sesame, 12% ground sesame and 10% sesame roasted seeds with salt (Random Nature, 2009). Falusi, (2008) found out that the oil rich crop can be roasted and sprinkled on pan-cakes, chinchin and donuts as well as used for soup-thickening. On the other hand Chemonics (2003) suggested that since amino acids are missing from a number of other sources of vegetable protein, such as soya, sesame meal or flour can be added to recipes to give a better nutritional balance to health food products. Iwo and Idowu (2007) in Mshelia (2012) also found out that sesame has great values in making candies, cakes, beverages and soap which are hawked by children to serves as a source of income to the farmers' families. Chemonics (2003) also added that the leaves may be eaten in stews while the dried stems may be burnt as fuel with the ash used for local soap making.

It is however, reported that farmers are yet to take advantage of the obvious and robust potentials of sesame. This is evidenced by the report of Falusi (2008) which ascertained that the status of sesame production in Nigeria is relatively low. OLAM (2005) also noted the poor sesame yield and attributed this to low and unstable yield potential of the available production technology, increase in the cost of input such as inorganic fertilizers, lack of technical and extension support, a complex of distinctive agricultural policies, and non- adoption of improved technology for sesame production. The problem of lack of technical and extension support services as identified by OIAM (2005) implies sesame farmers' lack of appropriate information on the right approach to improving the production.

Information as posited by Cample (1992) is germane to man's ability to manipulate factors of production such as land, labor and capital resources into meaningful and productive use. Adedoyin (1990) noted that a steady information flow of accurate, understandable and factual information links the scientist with farmers, in which for any true agricultural progress, farmers must know, understand, and act upon. Suffice this to say that how far people progress in whatever endeavor depends upon the availability and access to accurate and reliable information (Ajayi *et.al* 2010). Also important is information needs identification which Ajayi *et.al* (2010) captured as the first step in the development of any information package. Perhaps this understanding made Moris and Stilwell (2003) to suggest that farmers are always in the best position to determine whether any information is of great value to meet their needs or not. This is in view of the fact that no one can claim to know all the information needs of farmers especially in an information dependent sector like agriculture where there are arrays of new or rather complex problems facing farmers every day.

4. Methodology

The study was carried out in Katsina state. Katsina State is located in the North-Western region of Nigeria. The state, covers an area of 23,938 sq. km and is located between latitudes 11Å°08'N and 13Å°22'N and longitudes 6Å°52'E and 9Å°20'E. The state is bounded by Niger Republic to the north, by Jigawa and Kano States to the east, by Kaduna State to the South and by Zamfara State to the West. Katsina State has rich cultural values with annual rainfall ranging from 800mm to 1000mm.

Katsina has 3 agricultural zones. The zones and the LGAs covered included:

1. Ajiwa Zone: comprises of Kaita, Jibia, Batagarawa, Rimi, Charanchi, Bindawa, Mani, Daura, Maiadua, Sandamu, Baure, Zango, Mashi, Dutsi and Katsina.

2. Funtua zone: comprises of Funtua, Kankara, Faskari, Bakori, Dandume, Malumfashi, Kafur, Danja, Musawa and Matazu
3. Dutsin ma zone: comprises of Dutsin ma, Danmusa, Kurfi, Safana, Kankia, Ingawa, Kusada and Batsari

Two zones were randomly selected from the three zones, and these were Funtua and Dutsin zones. In Funtua, Funtua and Kankara were randomly sampled, while in Dutsin ma, Batsari and Kusada were randomly sampled as well. A list of sesame farmers were obtained and proportionately, samples were drawn from each of the four LGAs sampled. In all, a total of 140 sesame farmers were sampled for the study.

To operationalize information needs of respondents, a list of possible information needs were presented to sesame farmers, from which they indicated their needs based on the level of these needs. This was measured as high (3), moderate (2) and low (1). Weighted mean for each of these information needs was obtained and used to rank respondents needs on the basis of importance. A score of information need was obtained for each of the respondent and used to categorize respondents into high information needs ($\geq$ mean) and low information need ($<$ mean). Constraints to accessing information on sesame production was measured as respondents indicated based on level of severity, ranging from serious = 2, Mild = 1, not a constraint = 0. An index of constraint was therefore obtained and used for hypothesis testing. Access to information sources on sesame production was equally assessed based on frequency of access to such information. This was measured as respondents indicated whether these sources were always, occasionally, rarely or never accessed, with scores of 3, 2, 1 and 0 assigned. Access to information was determined as respondents' scores for each of these sources were summed up and used for hypotheses testing. Frequency counts, percentages, means and SD were the descriptive tools used in the analysis, while chi-square and Pearson Product Moment Correlation (PPMC) were used for testing the hypotheses of the study.

5. Results and Discussions

5.1 Socio-economic characteristics of sesame farmers in the study area

The finding reveals that the mean age (Table 2) was 38 years, as 32.9% and 25.7% were aged 31-40 and 21-30 years respectively. This result implies that most sesame farmers are within their economically active ages and are very agile. This should be able to translate to improved productivity of sesame in the area. The result is line with that of Ikwaakam, Sangotegbe and Akinbile (2013) on the age of rural dwellers of Katsina State. The study further reveals that 95.0% of respondents were males, while only 5.0% were females. This underlines the fact that sesame and other arable farming activities are mostly carried out by men in Northern country. This is unlike what operates in the southern part of the country, where women constitute a large proportion of farming households and are engaged in different activities at the different nodes of agricultural enterprise. Ekong (2003) earlier found more male household heads of active productive age in the rural areas of southwest Nigeria than females. The study further reveals that majority (89.3%) were married, and had Quranic education (64.3%). These findings are peculiar to northern populace as they are known to marry early, and more disposed to the Quranic education than western education. The fact that they had mainly Quranic education suggests that they may have limited access to sources of information, especially those that can be accessed through written and other ICTs sources. However, marriage should be able to offer helping hands especially in the case of innovations that may require additional labour. The study further reveals that majority (87.1%) belonged to the Islamic faith. This finding is not unexpected as Northern Nigeria is known to be dominated by Muslim faithful. Judamat, Abu, Adekoya and Abu (2010) found a contrary situation in the South Western Nigeria where most small ruminant farmers were Muslims, married but with appreciable level of formal education.

On household size (Table 2), the study indicates that the average household size of sesame farmers is 9 members. This means that sesame farmers have enough labour inputs from family members. One would have expected this to translate into large sesame farm sizes. The result is consistent with that of Ironkwe, Asiedu, Chinaka and Ezebuirio (2008) who found household size in Abia State to be large. However, majority (94.3%) had 1-3 ha of sesame farmland. This infers that the farmers did not make most use of the opportunities available to them in terms of large expanse of land and labour which characterize the State. Membership status of sesame farmers in social organization was also investigated and the result reveals that majority (83.6%) do not belong to any social organization. This may make it a bit difficult for agricultural information on improved sesame production to get across to the farmers.

Table 2: Socio-economic characteristics of sesame farmers in the study area

Variables	F	%	Mean	SD
Age			38.66	11.52
less or equal 20	6	4.3		
21-30	36	25.7		
31-40	46	32.9		
41-50	36	25.7		
51-60	9	6.4		
61-70	7	5.0		
Marital status				
Married	125	89.3		
Single	15	10.7		
Level of education				
No formal education	4	2.9		
Quranic education	90	64.3		
Primary education	23	16.4		
Secondary education	20	14.3		
Tertiary education	3	2.1		
Religion				
Christian	17	12.1		
Islam	122	87.1		
Traditional	1	0.7		
Household size			9.12	5.70
1-5	43	30.7		
6-10	58	41.4		
11-15	21	15.0		
16-20	13	9.3		
above 20	5	3.6		
Farm size			2.00	1.78
1-3	132	94.3		
4-6	4	2.9		
7-9	2	1.4		
above 9	2	1.4		
Sex				
Male	133	95.0		
Female	7	5.0		
Membership of organization				
Yes	23	16.4		
No	117	83.6		

Source: Field survey 2015

5.2 Access to agricultural information sources

The study also investigated the various sources of agricultural information that are accessed by sesame farmers in Kastina State (Table 3). The result reveals that of the various sources, personal experience was always used by 81.4%, followed by radio/television (28.6%) and friends (27.9%). The study further reveals that friends (62.1%), radio/television (61.4%) and opinion leaders (55.0%) were occasionally used. This result further buttress less emphasis formal sources have placed on dissemination of sesame related information to farmers, hence farmers' reliance on experience they have built overtime and occasionally from friend and opinion leaders.

The weighted mean score reveals that the most accessed information sources for sesame production include personal experience (2.65), radio/television (2.12), friends (2.09) and opinion leaders (1.91). The use of radio/television, as ranked 2nd further underlines the fact that radio remains an important means by which information are accessed by farmers of different categories. It can also be inferred that the study location had no problem with radio/television signal receptivity as well as the language of broadcasting. This finding agrees with Rezvanfar, Moradnezhai and Vahedi (2007) on friends, community leaders, and Yahaya (2002) on radio, as an acknowledged, cheapest and by far the most effective means of reaching rural targets with agricultural innovations.

Table 3: Respondents access to information on sesame production

Sources	Never	Rarely	Occasionally	Always	Mean
Friends	9.3	0.7	62.1	27.9	2.09
Personal experience	4.3	7.9	6.4	81.4	2.65
Radio/television	6.4	3.6	61.4	28.6	2.12
Extension agents	27.1	10.7	50.0	12.1	1.47
Association	40.0	15.0	40.0	4.3	1.09
Mosque	17.1	52.1	20.0	10.7	1.24
Church	93.6	1.4	5.0	0.0	0.11
Newspaper/newsletters	37.9	25.0	33.6	3.6	1.03
Opinion leaders	6.4	17.1	55.0	21.4	1.91

Source: Field survey 2015

The various constraints to accessing information were also identified in order of severity as shown in Table 4. The study reveals that majority of respondents (94.3%) rated lack of extension agents' contact as serious constraints, just like poor television network (88.6%), lack of power supply (77.1%) and poor radio network (70.7%). This finding implies that, although formal sources such as extension services, television, and radio may not have been effective in the dissemination of sesame related information, farmers still perceive them as good sources of information. Therefore, their inability to access these sources for information was considered serious constraints. It further revealed that 40.0% considered illiteracy as not a constraint and literacy as much of importance in accessing agricultural information. This may be because information sources as radio, television and extension sources most times provide agricultural information in local languages. The result corroborates that of Ozowa (1995) who observed that the apparent constraints in agricultural information dissemination and access in Nigeria include those of inadequate extension agents, poor reception quality and covered and improper airing time which does not get to the targeted audience

Table 4: Constraints to accessing information on sesame production

Constraints	Not a constraint	Mild	Serious constraint	Mean
Lack of extension agents contact	2.1	3.6	94.3	1.92
Illiteracy	40.0	33.6	26.4	0.86
Lack of power supply	5.0	17.9	77.1	1.72
Lack of modern information operational skill	5.7	30.0	64.3	1.59
Poor television communication network	1.4	10.0	88.6	1.87
Poor radio communication network	9.3	20.0	70.7	1.61
Lack of agriculture based television programme	0.7	30.7	68.6	1.68
Lack of agriculture based radio programme	12.9	37.1	50.0	1.37

Source: Field survey 2015

5.3 Information needs of sesame farmers

Table 5 presents the information needs of sesame farmers in Kastina state. The study reveals that respondents rated their needs of use of fertilizer/manure (77.9%), pest and disease management practices as high (74.3%), just like agricultural insurance (72.9%), agricultural credit facilities (72.1%). This revelation suggests that respondents are being faced with challenges that bother on improved productivity, access to financial capital as well as risk management ability. The study further revealed that farmers' information needs for improved sesame seeds ranked first (2.77), followed by better storage devices (2.68), agricultural insurance (2.67) and pest and disease management practices (2.66). The least ranked information needs of the farmers included weather information (2.34), new irrigation method (2.32) and modern sesame processing methods (2.46). This finding suggests that the climatic condition of the area irrespective of the recent seasonal variation, occasioned by climate change has not posed any significant threat to sesame production. Also, there appears to be some level of satisfaction with the current processing practices in use by farmers, as 53.6% relative to other areas of needs rated this high. Okwu and Umore (2008) identified similar areas of information needs among women farmers in Apa LGA of Benue State.

Table 5: Information needs of sesame farmers on sesame production

Information needs	Low	Moderate	High	Mean
Modern production practices	7.1	20.7	72.1	2.65
Improved seeds	0.0	22.9	77.1	2.77
Better storage devices/methods	1.4	29.3	69.3	2.68
Pest and disease management practices	7.9	17.9	74.3	2.66
Fertilizer/manure	2.9	19.3	77.9	2.75
Herbicides	4.3	35.7	60.0	2.56
New irrigation method	14.3	39.3	46.4	2.32
Modern processing method	7.1	39.3	53.6	2.46
Weather information	13.6	38.6	47.9	2.34
Agricultural credit facilities	9.3	18.6	72.1	2.63
Agricultural insurance	5.7	21.4	72.9	2.67
Soil and irrigation movement	7.1	30.7	62.1	2.55
Market channels	5.7	27.1	67.1	2.61

Source: Field survey 2015

A summary of the level of information needs by sesame farmers is presented in Table 6. Respondents have been categorized into two, based on their levels of information needs for sesame production, using their overall mean information need score as the benchmark. The table reveals the maximum information needs score as 39.00, and the minimum as 14.00, while the mean was 33.74. Respondents with scores of 33.73 and below were therefore categorized as low while those with scores of 33.74 and above were categorized as high. The result reveals that majority were categorized to have a high level of information needs. This implies that in order to expand the scope of sesame production and impacting meaningfully on the standard of living of the people, the various needs identified will have to be met.

Table 6: Levels of information needs of sesame farmers

Level of information needs	F	%	Mean	SD	Minimum	Maximum
Low	49	35.0	33.74	4.78	14.00	39.00
High	91	65.0				

Source: Field survey 2015

5.4 Relationship between respondents' socio-economic characteristics, access to information sources, constraints to accessing information and their levels of information needs

Table 7 reveals that only religion ($\chi^2 = 4.833$) showed significant relationship with respondents' level of information needs, while education ($\chi^2 = 4.833$), sex ($\chi^2 = 0.134$) and membership of social organization ($\chi^2 = 1.990$) showed no significant relationship with their information needs. This implies that information needs of sesame farmers do not vary whatsoever across these identified educational, sex and organizational status groups. This may also be due to the fact that sources of information accessed by farmers mostly are from informal sources which do not discriminate by across groups. The finding is in tandem with that of Ajayi and Banmeke & Solomon (2010) on oil palm farmers' information needs in Esan Central Local Government Area of Edo State, Nigeria.

Table 7: Chi-square analysis showing relationship between respondents' socio-economic characteristics and their levels of information needs

Variable	χ^2 -value	Df	P	CC	Decision
Level of education	4.833	4	0.305	0.183	NS
Religion	7.928	2	0.019	0.232	S
Sex	0.134	1	0.714	0.031	NS
Membership of organization	1.990	1	0.158	0.118	NS

5.5 Relationship between respondents' socio-economic characteristics and their levels of information needs

Table 8 also reveals that only farm size ($r = 0.17$) had significant relationship with farmers' level of information needs, revealing that farmers with large farm sizes needed more information compared to others with smaller farm sizes. This may be connected to the risk involved in operating large farms. Also, since farmers with large farms exhibit more levels of commitment as a result of high investment in sesame production, they tend to value information than farmers with smaller farm sizes in the area. However, no significant relationship existed between respondents' household size, access to information sources and respondents level of information needs. This implies that the various information sources to which farmers have access did not significantly correlate with their information needs. No significant relationship was also found between respondents' level of constraints to accessing information and their levels of information needs in the study area.

Table 9: Relationship between respondents' socio-economic characteristics and their levels of information needs

Variable	r-value	P	Decision
Age	-0.026	0.762	NS
Household size	0.025	0.969	NS
Farm size	0.178	0.036	S
Access to information	0.139	0.101	NS
Constraints	-0.048	0.221	NS

6. Conclusion and Recommendations

The study shows that the respondents are young with large family size that requires appropriate information provision to expand their small scale sesame production. Personal experience, radio/television and friends were major sources the respondents accessed relevant information. Access to information by majority was constrained by lack of extension agents' contacts, poor television communication network and lack of power of power supply. Majority had high level of information needs with fertilizer/manure, pest/diseases management practices, agricultural insurance and credit as major areas of information needs. Farm size and religion were significantly related with sesame farmers' level of information needs. Based on the findings, the following recommendations are made:

1. There is the need for extension programme to be revitalized in Katsina State with the aim of addressing the common needs of farmers on economically important crops such as sesame.
2. There is urgent need for the state government to pay attention to rural power infrastructure and provision as well as address the poor rural telecommunication signals that has prevented rural dwellers from enjoying regular television programs

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