

Assessment of the Information Sources, Preferences and Perception of Agricultural Extension Personnel in Edo State, Nigeria

¹Idiako-Ochei, O, ¹E.A. Onemolease and ²G. Ikoyo-Eweto

¹Department of Agricultural Economics & Extension, Ambrose Alli University, Ekpoma, Edo State, Nigeria.

²Nigerian Institute for Oceanography and Marine Research, Victoria Island, Lagos state Nigeria.

Abstract: *The study assessed the information sources of extension personnel in Edo state. Specifically, it examined the information frequently sought and preferred by the extension personnel, their perceived reliability of the different sources, as well as the constraints associated with accessing information. Data, retrieved from 137 respondents from the three agricultural zones in the State, were subjected to descriptive statistics and Friedman test. Results showed that extension personnel sought agricultural information from different sources, categorized into institutional, print and internet/ media sources. Among the institutional sources, fortnight training (FNT) meetings (mean= 4.19) was the most frequently sought by the respondents. Text books (mean= 3.56) and journals/ conference papers (mean= 3.36) were the most frequently sought print sources, while television (mean= 3.42) was the most frequently sought internet/media source. The most preferred category of information sources by the respondents was the institutional sources (grand mean=3.31). Lack of sponsorship to conference/ workshops (mean= 3.56) was the most serious constraints limiting the personnel access to institutional information sources, inadequate funds (3.41) was the most limiting factor to their access to print sources while poor electricity (3.49) was the most serious limitation to the internet/ media based information sources. Significant differences ($\chi^2 = 135.722$; $P < 0.050$) existed in the extension personnel perception of the reliability of the different information sources, with research institutes (mean = 8.17) considered the most reliable. Significant differences ($\chi^2 = 95.62$; $P < 0.050$) also existed among the constraints faced by extension personnel in accessing agricultural information, with lack of sponsorship to conference/ workshop (mean= 8.14) being the most significant. Sponsorship of extension personnel to conferences and workshops was highly recommended, among others, by the researcher.*

Keywords: *information, information sources, extension personnel, ADP, Edo state and Nigeria.*

I. Introduction

The importance of agriculture in the economy of Nigeria is profound. Despite the growth of industries, oil and commerce, it continues to be the principal economic activity of the people of Nigeria. Daudu *et al.*, (2009) reported that 70% of Nigerians are engaged in agriculture, of which 70% operate at subsistence level. Despite the involvement of large percentage of the population in agriculture, the country continues to experience perpetual food shortage and continue to spend the lean foreign reserve on importation of food (Adesoji and Aratunde, 2012). Adesoji *et al.*, (2006) asserted that for the agricultural system to be transformed, there is urgent need for farmers to imbibe the culture of innovativeness and utilization of modern system of farming that are not only cost efficient in the long run, but are also effective in meeting the farm family goals of increased productivity, income and a better living standard.

Over the years, agricultural extension has been at the fore-front in the delivery of relevant information to farmers for increased agricultural productivity. According to Agbamu (2005), agricultural extension service delivery all over the world has been concerned with communicating research findings and improved agricultural practices to farmers. The efficiency with which these information and practices are conveyed to farmers, to a large extent would determine the level of agricultural productivity. In recent times however, there has been concern as to how those charged with the responsibility of delivering the information to farmers, also acquire the information, type of information they have, how and where they get such information (Asiabaka, 2009).

Information flow thus becomes a very critical input in the agricultural development process in the country, as one of the main challenges affecting the adoption of new technologies by farmers is lack of information (Chema *et al.*, 2003). This is because the information flow process delivers to farmers the required knowledge needed to implement modern systems of farming. In the Nigeria system and in Edo state in particular, the ADP is largely responsible for communicating information on relevant production technique to farmers (Koyenikan, 2011). The ADP is therefore a crucial partner in the development process, since it delivers information to farmers. The type of information the agency gets and communicates to farmers, to a great extent,

is influenced by where it gets the information from, how it got the information, how timely the information is and how relevant the information is to the farmers. The information that the extension workers deliver to farmers are information produced by other institutions involved in the agricultural development process, such as research institutes and universities. In Nigeria, there are various agencies, research institutes, agricultural universities/colleges and non-governmental organizations that generate innovations and improved farm practices or technologies (Daudu *et al.*, 2009).

In the past decade, some African countries have experienced slow agricultural development. In particular, the performance of the Nigeria agricultural sector in the economy of Nigeria is evidently unsatisfactory (Onemolease, 2015). The agricultural sector has not grown as fast as the population. Decline in agricultural development is attributed to a number of constraints that include inappropriate national agricultural development policies, lack of adequate information provision, low adoption of agricultural technologies and ineffective institutional frameworks (Asiabaka, 2009). However, inadequate provision of relevant, reliable and comprehensive information support to stakeholders (farmers) in agricultural production has been identified as a major constraint (Kiplangat, 2003). Also, the agricultural extension system in some developing countries is experiencing challenges largely to do with inadequate access to information by extension staff in dealing with farmers' information needs. There is also concern about information access and how lack of technical information on farming affects extension officers and leads to their failure to effectively tackle farmers' farm challenges (Anon. 2014).

Objectives of the study

The study aimed at assessing the information sources of extension personnel in Edo state. Specifically the study sought to:

1. Examine the most frequently sought information sources by extension personnel in the state,
2. determine the preferred information sources by the extension personnel,
3. examine the importance the extension personnel attach to the different sources in terms of reliability of information.
4. assessed the constraints associated with accessing information by the respondents.

Hypotheses of the study

The null hypotheses that were tested are as follows;

Ho₁: There is no significant difference among the information sources in the extension personnel perception of its reliability.

Ho₂: There is no significant difference among the constraints faced by extension personnel in accessing agricultural information from the different sources.

II. Methodology

The study was conducted in Edo State. Edo State lies between latitude 05⁰44' and 07⁰34' North of the equator and longitude 06⁰04' and 06⁰43' East of the meridian. Edo State is an inland state in south-south geopolitical zone of Nigeria. The area is approximately 17,802km². The topography of the state is generally low-lying rising gradually towards the North with the Somorica hill at 600metres being the highest point. There are 18 Local Governments areas in the State. The State has three Agricultural zones; these are Edo South, Edo Central and Edo North with a temperature ranging from 21-25^{0c} during cold weather to about 26-34^{0c} in hot weather of the region.

The research was carried out using survey method. Given the small population size of extension personnel in the state, which was 144, comprising of 57 in Edo South, 46 in Edo Central and 41 in Edo North agricultural zones, all of them were selected for the study. Validated questionnaire was used to obtain data from the agricultural personnel, while frequencies, mean, standard deviation were used to analyze the objectives of the study while Friedman test was used to test the hypothesis formulated.

Friedman test is a non-parametric statistical test which is used to detect differences in variables/ factors measured as ordinal value (treatments across multiple test attempts) (Boartz, 2000).

Variable Operationalization

- i. Frequency of information-seeking: This was measured by asking the respondents to indicate whether they get their information from libraries, Research institutes, Universities, seminars/ symposiums, journals/ bulletins and any other. Frequency of sourcing information was used to analyse their response, by employing a 5 point Likert scale. The scale range was measured as follows: Very frequently (i.e. weekly) coded 5, Frequently (i.e. bi-weekly) coded 4, Sometimes (i.e. bi-monthly) coded 3, Rarely (a quarter i.e. once in 3 or more months) code 2, Not at all, coded 1. To determine extension personnel frequency of seeking information from the different sources, the benchmark of 3.00 was used. The benchmark score

(3.00) was obtained as follows: $(5+4+3+2+1)/5 = 3.00$; where 1-5 represents the values or weight attached to the different codes/ response. Information sources with values of 3.00 and above was considered as being frequently sought as an information source, or otherwise if less than 3.00.

- ii. Preferred Information Sources: Respondents were asked to indicate their preferred information sources on a 4 point Likert scale, ranging from highly preferred (4), preferred (3), little preferred (2) and not preferred (1). The weighted mean score (2.50) was used to determine which information source is preferred or not. The weighted mean (2.50) was obtained as follows: $(4+3+2+1)/4 = 2.50$. Preferences with values of 2.50 and above were considered as preferred sources or otherwise when less than 2.50.
- iii. Perceived Importance of Information Sources: Respondents were asked to indicate their perceived importance of the information sources in terms of the reliability of the information obtained from the sources on a 4 point Likert scale, ranging from very important (4), important (3), not too important (2), not important at all (1). The weighted mean score of 2.50 was used to determine which information source is important or not. The weighted mean score (2.50) was obtained as follows: $(4+3+2+1)/4 = 2.50$. Information sources with values of 2.50 and above were considered as important or otherwise when less than 2.50.
- iv. Barriers to Information Access: Respondents were asked to indicate the barriers to information access from the different sources on a 4 point Likert scale, ranging from very serious (4), serious (3), not serious (3), undecided (4). The weighted mean score of 2.50 was used to determine which barriers are serious or not. The weighted mean score (2.50) was obtained as follows: $(4+3+2+1)/4 = 2.50$. Barriers with values of 2.50 and above were considered as serious or otherwise when less than 2.50.

III. Results And Discussion

Information Sources of Respondents

Table 1 shows the different information sources accessed by the extension personnel and their frequency of seeking information from these sources. The pooled results (Table 1) reveal that extension personnel in the study area sought agricultural information from three major sources namely, institutional sources (e.g. fortnightly meetings, Research institutes, conferences and universities), print sources (e.g. text books, journals/ conference papers and bulletins/ pamphlets) and internet/ media sources (television, radio, internet websites and GSM).

Institutional sources represent information obtained from colleagues within the organization or other organizations like Universities, research institutes by way of communication contact. Print sources, as the name implies, represents information from published documents. Internet/ media sources represent information transmitted or published electronically by information providers.

A mean of 3.00 and above was used as a benchmark to judge how frequently the respondents sought information from the different sources. The result reveals that the respondents sought information from the different sources frequently. However, the pooled results reveal that they sought information more from institutional sources (grand mean=3.72), followed by the print sources (grand mean=3.42), while the least frequently sought was the internet/ media sources (grand mean=3.33). Anon (2014) reveal that books i.e. print sources, were the most frequently sought information source by extension workers in Mashonaland Central Province of Zimbabwe. Manir (2013) also revealed that the top information sources extension workers in Nigeria seek information from were books, agricultural magazines and newspapers, which are all print sources. It thus, appears that print sources constitute important information source for extension personnel. However, this study suggests that institutional sources were the major source of information for extension personnel in Edo state, given their higher grand mean.

Among the institutional sources, FNT meetings (mean= 4.19) was the most frequently sought information sources by the extension personnel. An explanation for this could be that, FNT meetings are held bi-weekly, and provides a forum for the extension personnel to interact with the subject matter specialist (SMS) and also there could be a closer interaction among colleagues. Text books (mean= 3.56) and journals/ conference papers (mean= 3.36) were the most frequently sought print sources by the respondents. Respondents explained that the institution sometimes make available textbooks and journal in their library unit. Television (mean= 3.42) was the most frequently sought internet/ media source. Respondents noted that they tend to listen to agricultural related programmes to learn of new developments in the agricultural sector.

Table 1: Information Sources of Respondents

Sources	Edo South		Edo Central		Edo North		Pooled	
	Mean*	SD	Mean*	SD	Mean*	SD	Mean*	SD
Institutional Sources								
FNT meetings	4.67	0.58	3.58	1.34	4.2	1.02	4.19	1.09
Research institutes	3.89	1.33	3.98	0.89	3.34	1.35	3.78	1.23
Conferences	3.6	1.03	3.58	1.25	2.94	1.21	3.42	1.18

Universities	3.49	1.38	3.51	1.24	2.29	1.43	3.19	1.44
Institutional sources (average)	3.97		3.78		3.25		3.72	
Print Sources								
Text books	3.11	0.79	4.24	0.88	3.43	1.44	3.56	1.13
Journals/Conference papers	3.26	0.7	3.89	1.01	2.86	1.22	3.36	1.03
Bulletins/Pamphlets	3.16	0.59	3.98	1.1	2.77	1.06	3.33	1.02
Print sources (average)	3.18		4.04		3.02		3.42	
Internet/Media Sources								
Television	2.74	0.9	4	1.22	3.77	1.37	3.42	1.28
Radio	2.72	0.96	3.93	1.36	3.6	1.26	3.34	1.29
Internet (websites)	3.05	1.2	3.67	1.31	3.34	1.57	3.33	1.36
GSM	2.93	0.92	3.6	1.47	3.23	1.42	3.23	1.28
Internet/media Sources (average)	2.86		3.80		3.49		3.33	

Preferred Information Sources by Respondents

Table 2 shows the preferred information sources by the agricultural extension personnel in the study area. A mean of 2.50 and above was used as benchmark to judge respondent’s preference for the different information sources. The result reveals that the respondents preferred all the different information sources, since the mean scores exceeded 2.50. However, the pooled result shows a higher preference for institutional sources (category mean=3.31) by the respondents relative to print and internet/ media sources (grand mean=2.98). Reasons for the respondents’ higher preference for institutional source could be that such sources are considered more reliable (Koneyenikan, 2011) and/ or they have easier access to such sources. Access to information sources have been identified as an important variable in the preference and use of information sources (Manir, 2013).

Across the three agricultural zones in the study area, respondents in Edo south zone showed greater preference for institutional sources (grand mean=3.68) as a source of information. This finding is against the findings by Anon (2014) who revealed that majority of extension workers in Mashonaland Central Province of Zimbabwe preferred print sources as their source of information. The extension personnel in Edo central showed greater preference for print sources (pooled mean= 3.32) as well as for internet/ media sources (mean=3.33) relative to extension personnel from other agricultural zones.

The major institutional sources the respondents preferred to seek information from include research institutes (mean= 3.69) and universities (mean=3.34). This might be due to the fact that these institutions are into continuous research, and also information disseminated from such sources are screened or scrutinized for conformity with global standard and appropriateness. The major print sources the respondents preferred to seek information from include text books (mean= 3.23) and journals/ conference papers (mean=2.88). This might be due to the fact that research findings from researchers are published in text books and journals or presented in conference papers. The major internet/ media sources the respondents preferred to seek information from was GSM (mean= 3.13). The possible explanation for GSM may be because the technology is portable simpler to use and accessible.

Table 2: Preferred Information Sources by Respondents

Sources	Edo South		Edo Central		Edo North		Pooled	
	Mean*	SD	Mean*	SD	Mean*	SD	Mean*	SD
Institutional Sources								
Research institutes	3.95	0.23	3.76	0.48	3.17	1.15	3.69	0.73
Universities	3.81	0.52	3.24	0.8	2.71	1.2	3.34	0.93
Conferences	3.37	0.72	2.67	1.07	2.69	1.11	2.96	1
FNT meetings	3.6	0.68	2.62	1.13	3.51	0.89	3.26	1
Average	3.68		3.07		3.02		3.31	
Print Sources								
Text books	3	0.82	3.56	0.76	3.2	1.16	3.23	0.93
Journals/Conference papers	2.79	0.77	3.2	0.76	2.63	1	2.88	0.86
Bulletins/Pamphlets	2.63	0.79	3.2	0.87	2.63	1.14	2.82	0.95
Average	2.81		3.32		2.82		2.98	
Internet/Media Sources								
Internet (websites)	2.61	0.82	3.04	1.13	3.26	1.17	2.92	1.05
Television	2.44	0.78	3.51	0.76	3.09	1.04	2.96	0.96
Radio	2.4	0.8	3.36	1.05	3.09	1.04	2.89	1.03
GSM	3.02	0.79	3.4	0.84	2.97	1.1	3.13	0.91
Average	2.62		3.33		3.10		2.98	

*Preferred (mean > 2.50)

Respondents' Perception of the Reliability of Information Sources

Table 3 shows the importance the respondents attach to the different information sources, in terms of its reliability. The mean 2.50 and above was used as a benchmark to judge the respondents' perception of the reliability of the information sources. The result shows that all the information sources were perceived to be reliable. The pooled result reveals that institutional sources, with an aggregate mean of 3.34, were perceived to be a more reliable source of information. This suggests that extension personnel in the study area rely heavily on information generated from this source. Among the institutional sources, research institutes (mean= 3.76) was perceived to be the most reliable. This might be because, information from such institutes are a product of empirical investigation, and therefore tend to be more dependable. The findings agree with that of Devi and Lahiri (1997), who reported that extension officers in the Manipur state relied heavily on the Department of Agriculture (an institutional source) for current information on farm practices. The next reliable source of information for the personnel was print media, with a pooled mean of 3.08, while the least was internet/ media sources (mean= 3.05). A possible explanation for the low perception of internet or electronic based sources could be that information disseminated through such channels may not be scrutinized or screened for conformity with standard, appropriateness or correctness. Although, the internet provides access to the most current information, particularly research publications and online journals (Gamage, 2006). Text books (3.24) were considered as the most reliable print source of information. Anon (2014), in his/ her study, reported that books and other print sources were considered to be a very important source of information for researchers in Zimbabwe. Also, Gamage (2006) noted that, scientific information is communicated by scientists through print sources such as textbooks. Internet (3.13) was considered as the most reliable internet/ media source of information. Gamage (2006) also noted that the continued evolution of ICTs and the internet has also enhanced the availability of information in scientific disciplines. The internet provides access to the most current information, particularly research publications and online journals. This explains why the internet was perceived as being the most reliable internet/media source of information for extension personnel in Edo state.

Zonal comparism reveal that, respondents in Edo South agricultural zone considered institutional sources (mean= 3.57) as being the most reliable source of information, while those in Edo Central and Edo North zones perceived the internet/ media sources (mean= 3.23 and 3.28 respectively) as being most reliable. Some respondents explained that these sources remain the quickest way of disseminating new findings by information providers. The result therefore shows that the respondents hold different perception of the reliability of the different information sources.

Table 3: Perception of the Reliability of Information Sources

Sources	Edo South		Edo Central		Edo North		Pooled	
	Mean*	SD	Mean*	SD	Mean*	SD	Mean*	SD
Institutional Sources								
Research institutes	3.82	0.5	3.89	0.32	3.49	0.92	3.76	0.61
Universities	3.72	0.56	3.42	0.72	2.71	0.99	3.36	0.84
Conferences	3.21	0.77	2.8	0.79	2.83	0.95	2.98	0.84
FNT meetings	3.54	0.66	2.7	0.98	3.46	1.01	3.25	0.94
Average	3.57		3.20		3.12		3.34	
Print Sources								
Text books	2.98	0.83	3.38	1.01	3.49	0.95	3.24	0.94
Journals/Conference papers	3.02	0.74	3.02	0.81	2.97	0.95	3.01	0.82
Bulletins/Pamphlets	2.82	0.8	3.02	0.87	3.17	0.86	2.98	0.84
Average	2.94		3.14		3.21		3.08	
Internet/Media Sources								
Internet (websites)	3	0.8	3.13	1.01	3.34	1.06	3.13	0.95
Television	2.61	0.73	3.36	0.93	3.4	0.88	3.06	0.91
Radio	2.67	0.72	3.24	1	3.23	1.03	3.00	0.94
GSM	2.77	0.87	3.2	1.08	3.14	1	3.01	0.99
Average	2.76		3.23		3.28		3.05	

*Reliable (mean ≥ 2.50)

Barriers to Information Access

Table 4 shows the barriers or constraints to accessing agricultural from different sources information by the respondents in the study area. Based on the mean benchmark of 2.50, the result of Table 4. reveal that all the constraints were serious except the unwillingness of institutions to share information. The pooled result for institutional sources reveal that lack of sponsorship to conference/ workshops (mean= 3.56) was the most serious constraint while unwillingness of institutions to share information (mean = 1.55) was not serious. This suggests that institutions such as research institutes and universities are willing to share information to extension personnel in the study area. Result by Ehilenboadiaye *et al.*, (2012) confirms that lack of funds for sponsorship was a major constraint faced by extension agents. The pooled result for print sources reveals that lack of funds to get current textbooks/ journals (3.41) was the most serious constraint. For internet/ media sources, poor

electricity (3.49) was the most serious constraint. The respondents explained that, they needed electricity to power the computers, television and internet facilities to enable them access information from those sources.

The results also reveal a variation in the seriousness of internet/ media constraints across the three agro-ecological zones of the state. For example, poor electricity (mean= 3.47) was the most serious for respondents in Edo south zone, low skill in use of internet (3.71) was the most serious for the respondents in Edo central zone while lack of computers (3.69) was the most serious for Edo north zone respondents. For the print sources, inadequate funds to get current textbooks was the most serious constraints among respondents in the three agro-ecological zones. For the institutional sources, lack of sponsorship to conferences/ workshops was the most serious constraint among respondents in the three agro-ecological zones.

Table 4: Barriers to Information Access

Barriers	Edo South		Edo Central		Edo North		Pooled	
	Mean*	SD	Mean*	SD	Mean*	SD	Mean*	SD
Institutional Sources								
Lack of sponsorship to conferences/workshops	3.68	.63	3.69	.63	3.20	.99	3.56	.77
Unwillingness of institutions (research institutes/ universities) to share information	1.30	.20	1.44	.29	2.11	0.21	1.55	.44
Long bureaucratic process in getting information	3.58	.65	3.51	.84	3.03	.92	3.42	.82
Lack of in-service training	3.56	.76	3.20	.99	3.09	1.01	3.32	.92
Print Sources								
Lack of funds to get textbooks/journal	3.33	.69	3.62	.72	3.26	.98	3.41	.79
Obsolescence of available textbooks	3.30	.89	3.36	.80	3.09	.82	3.26	.84
Do not have current textbooks/journal	3.25	.87	3.40	.81	3.03	.95	3.24	.88
Distance in getting textbooks/journals	3.00	.93	3.24	.83	2.66	.87	2.99	.90
Internet/Media Sources								
Poor electricity	3.47	.63	3.60	.69	3.37	1.03	3.49	.77
Lack computers	3.18	.73	3.62	.68	3.69	.68	3.45	.74
Low skill in use of internet	3.28	.67	3.71	.73	2.97	1.20	3.34	.89
Poor internet network	3.32	.76	3.31	.76	3.09	.85	3.26	.79
High cost of internet browsing	3.16	.73	3.33	.83	2.86	.97	3.14	.84

*serious (mean ≥ 2.50)

Test of difference in perceived reliability of information sources

The hypothesis tested states that, there is no significant difference in extension personnel perception of the reliability of the different information sources. Friedman test was used to determine the significance of the observed difference. Friedman test result ($\chi^2 = 135.722$) is significant at the 5% level, which means that there is a significant difference in the perceived reliability of the different information sources by the extension personnel. The post-hoc test reveals that the extension personnel considered information from the research institutes (mean = 8.17) to be significantly more reliable than information they get from all other sources. However, information obtained from universities (mean = 6.76) and textbooks (mean = 6.44) were considered to be significantly more reliable than the information obtained from bulletins/ pamphlets. A possible explanation as to why information from research institutes and universities can be relied upon is that, information disseminated via such channels are scrutinized or screened for conformity with standard, appropriateness and correctness before being published or disseminated. Anwar and Eisenhitz (2000) noted that most Malaysian agricultural scientists preferred using information published in journals and research review reports by these institutions as their primary source of information.

The result also reveal that there was no statistical difference in extension personnel perception of the reliability of information obtained from FNT meetings (6.32), internet (5.85), television (5.60), GSM (5.50), conferences (5.47), radio (5.46) and journals/ conference papers (5.33), which suggest that the reliability of information obtained from these were perceived the same or similar.

Table 5: Test of difference in the perceived reliability of information sources (Friedman Test)

Sources	Mean Rank
Research institutes	8.17 ^a
Universities	6.76 ^b
Text books	6.44 ^{bc}
FNT meetings	6.32 ^{bcd}
Internet (websites)	5.85 ^{bcd}
Television	5.60 ^{bcd}
GSM	5.50 ^{bcd}
Conferences	5.47 ^{bcd}
Radio	5.46 ^{bcd}
Journals/Conference papers	5.33 ^{cd}
Bulletins/Pamphlets	5.10 ^d

$\chi^2 = 135.722$; $df = 10$; $P < 0.050$ (critical $\chi^2 = 18.31$)

Test of difference among constraints to information access by Respondents

The hypothesis tested states that, “there is no significant difference among the constraints faced by extension personnel in accessing agricultural information”. Friedman test was used to determine the significance of the difference. Friedman test result ($\chi^2 = 95.62$) is significant at the 5% level, which means that there is a significant difference among the constraints faced by the extension personnel in accessing agricultural information from the different information sources in the study area. The post-hoc test reveals that lack of sponsorship to conference/ workshop (mean= 8.14) was significantly more serious relative to internet network (6.44), internet cost (5.90) and distance to access points for text books (5.46). Ehilenboadiaye, *et al.*, (2012) confirms that lack of funds for sponsorship was a major constraint faced by extension agents. The result also reveal that poor electricity (mean = 7.69) was significantly a more serious constraint than high cost of internet browsing (mean = 5.90) and distance in getting textbooks/ journals (mean= 5.46).

Such constraints as lack of sponsorship to conferences/ workshop (8.14), erratic power supply (7.69), bureaucratic process in accessing information (7.48), lack of computers (7.32), and funds to purchase printed materials up to lack of ownership of current textbooks/ journals (6.61) were not statistically different. Unwillingness of institution to share information was the least significant constraint.

Table 6: Test of difference among constraints to information access

Constraints	Mean Rank
Lack of sponsorship to conferences/workshops	8.14 ^a
Poor electricity	7.69 ^{ab}
Long bureaucratic process in getting information	7.48 ^{abc}
Lack computers	7.32 ^{abc}
Lack of funds to get textbooks/journal	7.29 ^{abc}
Lack of in-service training	7.10 ^{abc}
Low skill in use of internet	7.09 ^{abc}
Obsolescence of available textbooks	6.65 ^{abcd}
Do not have current textbooks/journal	6.61 ^{abcd}
Poor internet network	6.44 ^{bcd}
High cost of internet browsing	5.90 ^{cd}
Distance in getting textbooks/journals	5.46 ^d
Unwillingness of institutions (research institutes/universities) to share information	4.15 ^e

$\chi^2 = 95.62$; $df = 12$; $P < 0.050$ (critical $\chi^2 = 21.03$)

IV. Conclusion And Recommendation

The study has shown that Extension personnel in the study area sought agricultural information from different sources, categorized into institutional sources, print sources and internet/ media sources. Institutional sources were the major sources of agricultural information for the respondents with FNT meetings being the most frequently sought information sources. Institutional sources of agricultural information equally were the most preferred by the extension personnel possibly because it was considered the most reliable. Lack of sponsorship to conference/ workshops was the most serious constraint faced by extension personnel in accessing information from institutional sources while lack of funds to get text books/ journal was the most serious factor limiting access to print sources. Erratic power supply was the most serious constraint faced by the extension personnel in accessing information from internet/ media sources.

It is therefore recommended that;

- a. Adequate funding or sponsorship of extension personnel to conferences and workshops. These conferences and workshops provide a forum where the personnel can learn of new development or research findings relating to agriculture.
- b. The extension personnel should be trained on how to surf or use the internet as the internet is now the quickest and fastest way of accessing information. An ICT unit with internet facilities should be made available and staff can have access to it in the office.
- c. The ADP management should work toward providing quality internet network services in the offices, computers and a standard library with current literatures. This will facilitate the personnel access to adequate and quality information relating to agriculture.
- d. The extension or ADP management should provide an alternative power (electricity) supply in the institution. This will facilitate the personnel use of electronic media sources.

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