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Factors Affecting use of Print Media among Farmers in Bwari Area Council of Federal Capital Territory, Abuja

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Abstract

The study assessed the use of print media among farmers in Bwari Area council of the Federal Capital Territory. Stratified purposive and simple random sampling technique was used in selecting 150 respondents from five (5) council wards. Data were collected using structured questionnaire, data collected were analyzed using descriptive and inferential were used. The findings revealed that the respondents were age between 21-40 years 58.9%, married 55% had Higher National Diploma/Bachelor degree 28.1%, household size of between 6-10 persons 45.2% with farming experience of less than 10 years 37%, estimated annual income of at least \$50,000.0 35.5% with a farm size of more than 4 hectares. The results further indicated that the type of information available on the print media was prices of agricultural produce 54.1%, type of print media mostly source for was newspapers 88.4%, print media mostly accessed newspapers 92.5%, reason for preference of a particular source easy access 65.8%, constraints faced was low level of education 87.7% and logit regression showed that none of the socio-economic characteristics was significant. It it recommended that adult classes should be organized for the farmers to improve their level of education.

Keywords: Factors, use, print, media, farmers.

INTRODUCTION

It is imperative that the generated information from these sources reach farmers or intended users and ultimately meet their needs. It should be noted that accessibility of agricultural information by farmers differs from locality to locality. Respondents got agricultural information from friends and relatives; this means that once a few of the farmers have access to agricultural information through other sources like the media, extension workers and local leaders, they share the information with their friends and relatives.

Agriculture forms the backbone of many developing economies and serves as the means of revenue of almost 50% of the world's population (Abdullah *et al.*, 2005). Nigeria is predominantly an agrarian country, having sufficient natural resources, suitable climatic conditions, good soils, favourable topography, water and human resources, thus the country has huge potentials for agricultural production (Mallah, 2005 and Khan, 2006). Agriculture has played an important role in generating economic growth for several decades in Nigeria it employs more than 65% of the total work force. However, average per hectare yield of farmers of various crops is far less than that obtained at the research stations (FAO, 2008). This low yield may be attributed to non-adoption of the latest agricultural technologies and

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poor farm management by farmers (Farooq *et al.*, 2007). Abbas *et al.*, (2008) argue that lack of information adapted to local needs and lack of technical knowledge at farm level are the important factors responsible for this low yield.

Information is therefore considered as one of the most important resources in agriculture that assists farmers to make decision and appropriate actions for farming purposes. Agricultural information dissemination is a crucial point in agricultural technology development and transfer. It is crucial because if it is not done properly and through the appropriate channel it would not serve the purpose it was intended to serve. Importance of information in agricultural production can never be over emphasized. Information generally is considered as being an essential production factor in agriculture (Zijp 2002, Dutoit and Mc Connell, 1995). Munyua 2000 observed that scientific and technical information are particularly important in both subsistence and commercial agricultural production system.

Information is one of the basic human needs after air, water, food and shelter (Stanley, 1990). Camble (1992) in agriculture, information is required to manipulate factors of production such as land, labour and capital resources into meaningful and productive use. It is this recognized capacity of information to facilitate and bring about significant changes within an individual, group or a country that makes it so vital in the development process. According to Adedoyin (1990), a steady flow of accurate, understandable and factual information links the scientists with the farmers and for any agricultural progress, farmers must know, understand and act in accordance with information. Therefore, the productivity of farmers depends largely on the availability and access of accurate and reliable information.

Apata (2010) the print media is a printed form of technological apparatus which is capable of reproducing the same message simultaneously for a large number of people over a given period of time appearing in a printed form. This may be through large printing press, broadcasting transmitters, film-camera, bill board exhibitions and audio-visual system of messages. Olowu and Oyedokun (2000) print media such as newspapers, magazines, newsletters, leaflets, pamphlets and posters have been widely used to disseminate information to farmers by governments, non-governmental organizations and other concerned groups. In this regard, the print media like newspapers, magazines, leaflets, etc, can be harnessed to provide information and even make up for shortage of trained extension personnel in a developing country like Nigeria.

Information disseminated through print media tools like newspapers and magazines are mostly made to cover all agricultural innovations which are of importance to farmers. A striking thing about the print media is its detailed nature. Another point of interest is that the print media can easily afford the dissemination of information to illiterate farmers through the interpretation of content into local dialects comprehensible to farmers. The print media is also of significance as information on the printed form can be better handled and documented for futuristic purposes by the users (Apata, 2010).

Nigeria is a nation blessed with plenty of both natural and human resources in the area of agriculture that could have maintained the sustainability of food production. Unfortunately, Nigeria continues to experience poor yield in agricultural production due to poor or non-dissemination of research findings to the end users. According to Ekoja (2003), farmers' decision and other management functions for the farm depend on experience and nature of agricultural information available to them. Agricultural messages to farmers need to be well refined for proper and adequate utilization. This is rarely achieved due to poor agricultural extension system.

According to Hussain (2005); Farooq *et al.* (2007), print media include all forms of printed materials including words, diagrams and pictures that are used to disseminate precise and unambiguous information on a mass scale. Print media consist of newspapers, magazines, newsletter, books/booklets, posters, pamphlets, leaflets, folders, brochures,

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bulletins, circulars, wall newspapers and handbills. The printed word with its properties of transportability and translatability offer the opportunity to quickly disseminate agricultural information among farmers

According to Kashmira (2015), print media is a process that uses ink on paper to show images and text by making use of printing press. The primary use of print media is to spread information daily on events and news; it is the fastest way to reach the public. There are various types of print media which help different people to target a particular segment of people, these includes book, handbill or flyer, pamphlet billboard, banner, newsletter and magazine among others.

The accessibility and utilization of agricultural innovations made available on print media is limited by interest of the farmers, language barrier, literacy level of the farmers and relevance of the information among others. However, print media could be cost effective/inexpensive if magazine or newspaper space is free and writers would be writing a regular column for a newspaper or magazine.

MATERIALS AND METHODS

Bwari is one of the six (6) Areas Councils in the Federal Capital Territory (FCT), Abuja, Nigeria. Bwari area council is located at North East of the FCT Abuja, Nigeria, which is located just north of the confluence of the Rivers Niger and Benue. FCT is bordered by Niger State to the West and North, Kaduna State to the Northeast, Nassarawa State to the East and South and Kogi State to the Southwest. The original inhabitants of Bwari area are the Gbagyi speaking people. The mineral resources in the Area are casseterite, clay, dolomite, gold, lead/zinc, marble and tantalite.

Bwari is made up of several ethnic groups such as Gbagyi, Koro, Fulani and other minority migrants in the area. Bwari area council lies between Longitude 10^0 N and Latitude 8^0 E. Bwari LGA has land mass of about 914km² and a population of 229,274 (NPC2006). Two distinct seasons are observed in the area; the rainy season which kicks off from March to November, and the dry season which commences from November to February. The environment is favoured by climate that permits the cultivation of different food crops such as; yam, banana, groundnut, and maize.

The population of the study consisted of all the rural farmers in Bwari Area Council. Due to the enormity of this population, five (5) council wards were deliberately selected Kuduru, Shere, Ushafa, Usuma and Kawu out of ten (10) council wards based on farmers' use of print media. In each of the council wards selected, 30 (farmers) respondents were selected randomly, thus given a total of 150 respondents.

Data were collected using primary and secondary sources. Primary data were gathered using a well-structured questionnaire, while secondary data were obtained from journals, textbooks government documents and internet.

Data collected were analysed using descriptive statistics such as frequencies, percentages, mean scores while logit regression was used to determine the relationship between variables.

The model specification is as follows:

 $Z = \alpha + b_1 \times_1 + b_2 \times_2 + \dots + b_6 \times_6$

Where z = probability that respondents will use print media (1 = use, 0 = do not use) $\alpha = Constant$

 $b_1 \cdot b_2$ = Coefficients of explanatory changes in Z caused by changes in X

 $X_1 = Age in years$

 X_2 = Education level, number of years spent for education.

 X_3 =Household size 1, 2, 3, etc.

 $X_4 =$ Farming experience in years

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 X_5 =Annual income in Naira 1, 2, 3, etc. X_6 = Farm size in hectares 1, 2, 3, etc.

RESULTS AND DISCUSSION

Table 1: Socio- economic Characteristics of Respondents

| Variables | Frequency | Percentage |
|----------------------------|-----------|------------|
| Age | | |
| 21-40 | 86 | 58.9 |
| 41 - 60 | 49 | 33.6 |
| 60 and above | 10 | 6.8 |
| ≤ 20 | 1 | 0.7 |
| Marital Status | | |
| Married | 81 | 55.5 |
| Single | 41 | 28.1 |
| Separated | 21 | 14.4 |
| Widowed | 3 | 2.0 |
| Educational level | | |
| HND/Bachelor Degree | 41 | 28.1 |
| ND/NCE | 40 | 27.4 |
| Primary | 37 | 25.3 |
| Non-formal | 28 | 19.2 |
| Household size | | |
| 6-10 | 66 | 45.2 |
| At least 5 | 44 | 30.1 |
| 11-15 | 28 | 19.2 |
| 16 and above | 8 | 5.5 |
| Farm size (hectares) | Frequency | Percentage |
| 4 and above | 69 | 47.3 |
| At least 1 | 30 | 20.5 |
| 2 | 27 | 18.5 |
| 3 | 20 | 13.7 |
| Farming experience (Years) | | |
| At least 10 | 54 | 37 |
| 21 and above | 44 | 30.1 |
| 11-15 | 35 | 24 |
| 16-20 | 13 | 8.9 |
| Annual Income (Naira) | | |
| At least 50, 000.0 | 52 | 35.5 |
| 50,001-100,000.0 | 51 | 34.9 |
| 150,000.0 and above | 28 | 19.2 |
| 100,001-150,000.0 | 15 | 10.3 |

Results in Table 1 show age of respondents 21-40 58.9%, 41-60 33.6%, 61 and above 6.8%, and at least 20 0.7%. Majority (58.9%) of the respondents were between 21-40 years of age. This implies that a good number of the respondents were within the active age and therefore needed information to be productive in their agricultural activities. Age plays a significant role in adoption of innovations. Young people are receptive to adoption of innovations and old people are conservatives. Young people could read and write, interact with their peers at different locations using different means all these therefore, predisposes a young person to adoption of innovations. Bembridge (1984) reported that as people get older, they may be more willing to take risk. However, they work fewer hours and this is likely to affect their farm output. Younger farmers are expected to work on a more acreage as they are stronger than older farmers. As farmers get older the farm output decreases (Bembridge, 1984). This could be why farming activity needs a strong healthy person and older farmers are not easily willing to change to new farming practices that may increase farm output (Elias *et al.*, 2013).

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Results in Table 1 indicate that married 55.5%, single 28.1%, separated 14.4% and widow 2.0%. Majority (55.5%) of the respondents were married. Married people have more responsibilities than people who are not married. Farmers with family responsibilities tend to adopt innovations to improve their farm production; this is because adoption of technology leads to increase production of agricultural production and the more the farm produce, the more the resources to cater for the family.

Results in Table 1 reveals that HND/Bachelor degree 28.1%, ND/NCE 27.4%, primary education 25.3%, while non-formal education 19.2%. A small (28.1%) proportion of the respondents acquired HND/Bachelor degree. This is an indication that the literacy level among respondents is reasonable. The literacy level determines the use of print media. The higher the literacy level of the respondents the more the use of the print media. Print media is a source of information that the user does not need assistance from anybody for him/her to make of the information. Like the electronic one, many senses are used for the comprehension of the information.

Results in Table1 shows household size 6-10 45.2%, \leq 5 30.1%, 11-15 19.2%, and>16 5.5%. A reasonable (45.2%) proportion of the respondents had household size of 6-10 persons. In the traditional African culture, having a large family size was an indication that the person is wealthy. However, people are becoming aware of what it cost to maintain a large family and are now conscious that a large family means spending more resources. However, in the villages especially where manual labour is practiced people are resources that are used on the farm for manual labour. Therefore, the larger the family size the more the people is available for manual labour.

Results in Table 1 depicts farming experience in years less than 10 years 37.0 %, more than 21 30.1%, 11-15 24.0%, and 16-20 8.9%. A meagre (37.0%) proportion of respondents had farming experience of at least 10 years. This shows that a good number of the respondents were experienced in farming. Farming experience is a very important factor among farmers as it helps in decision making in different ways including but not limited to the kind of enterprise to practice, where to source for credit, membership in farmers organization among others.

Results in Table 1 show the estimated annual income in Naira at least \$50,000 35.5%, \$50,001-100,000 34.9%, more than \$150001 19.2%, and \$100,000-150000 10.3%. This indicates that a meagre (35.5%) proportion of the respondents had annual income of at least \$50,000. The amount income obtained by a farmer is determined by the level of investment. In Nigeria, majority of the farmers operate at subsistence level. A reasonable number of them do not have resources to acquire agricultural inputs expected to increase their production, therefore the value of what is invested is small, so also the corresponding value of what is obtained.

The Results in Table 1 shows farm size in hectares, more than 4.00 47.3%, less than 1.00 20.5%, 2.00-2.00 18.5%, and 3.00-3.00 13.7%. A reasonable (47.3%) of the respondents had farm size of less than 4 hectares. This is an indication that farmers had large farm size. However the land is usually scattered at different locations making it difficult to mechanize their agricultural production.

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| Table 2: Distribution of Respondents by Types of Agricultural Information Available on Print |
|--|
| Media |

| Type of information | Frequency* | Percentage* |
|--|------------|-------------|
| Prices of agricultural produce | 79 | 54.1 |
| Agricultural innovations | 74 | 50.7 |
| Credit facilities | 73 | 50.0 |
| Land tenure systems | 71 | 48.7 |
| Prices of agricultural inputs | 71 | 48.6 |
| Methods of preservation | 68 | 46.6 |
| Weather and climate reports | 66 | 45.2 |
| Agricultural imports and exports commodities | 59 | 40.4 |
| Sustainable agricultural practices | 58 | 39.7 |
| Organic agriculture | 57 | 39.0 |

*Multiple responses

The results in Table 2 shows that prices of agricultural produce, 54.1%; agricultural innovation, 50.7%; credits facilities, 50.0%; land tenure systems, 48.7%; prices of agricultural inputs, 48.6%; methods of preservation, 46.6%; weather and climate reports, 45.2%; agricultural imports and export commodities, 40.4%; sustainable agricultural practices, 39.7%; organic agriculture, 39.0% and others 3.4%. Majority (54.1%), prices of agricultural produce was one of the agricultural information available on print media. Information on prices of agricultural produce is very important to farmers as they are informed especially on how much agricultural produce are sold at different markets in different locations. The information on prices of agricultural produce is a very important to farmers as with the information, they compare the prices of the same farm produce at other places with how much the same produce is sold in their location and decide where to sale their farm produce and get more profit. The issue of where to sale farm for more money is for profitability, this is because farming is practiced as a business.

Table 3: Distribution of Respondents According to Sources of Information on Print Media

| Sources of information | Frequency* | Percentage* |
|------------------------|------------|-------------|
| Newspapers | 129 | 88.4 |
| Books | 65 | 44.5 |
| Magazines | 55 | 37.7 |
| Pamphlets | 53 | 36.3 |
| Banners/posters | 51 | 34.9 |
| Handbills | 44 | 30.1 |
| Billboards | 42 | 28.8 |
| Journals | 40 | 27.4 |
| Bulletins | 25 | 17.1 |
| Newsletters | 19 | 13.0 |

*Multiple responses

Results in Table 3 indicates sources of information, newspapers, 88.4%; books, 44.5%; magazines, 37.7%; pamphlets, 36.3%; banners/posters, 34.9%; handbills, 30.1%; billboards, 28.8%; journals, 27.4%; bulletins, 17.1% and newsletters, 13.0.%. Majority (88.4%) obtained news on agricultural information through newspapers. This means that newspapers were available and provided the agricultural information required by farmers. Newspapers are common in Nigeria especially within the township; people who are literate make use newspapers as a source of information. This because newspapers are produced in different parts of the country and distributed depending on the type of newspaper used; some of the newspapers are produce on daily basis, weekly basis and monthly basis.

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| Print media mostly accessed | Frequency* | Percentage* |
|-----------------------------|------------|-------------|
| Newspapers | 135 | 92.5 |
| Books | 79 | 54.1 |
| Magazines | 77 | 52.7 |
| Pamphlets | 67 | 45.9 |
| Banners/posters | 66 | 45.2 |
| Billboards | 52 | 35.6 |
| Handbills | 40 | 27.4 |
| Journals | 30 | 20.5 |
| Bulletins | 26 | 17.8 |
| Newsletters | 24 | 16.4 |

| Table 4: Distribution | of Respondents | based on P | rint Media m | ostly accessed by | Respondents |
|------------------------|----------------|-------------|--------------|-------------------|----------------------------------|
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* Multiple responses

Results in Table 4 depict the print media mostly accessed by farmers: newspapers, 92.5%; books, 54.1%; magazines, 52.7%; pamphlets, 45.9%; banners/posters, 45.2%; billboards, 35.6%; handbills, 27.4%; journals, 20.5%; bulletins, 17.8% and newsletters, 16.4%. Majority (92.5%) of the respondents mostly accessed newspapers. This means that newspapers were one of the print media that was available to farmers most of the times. The finding confirms Irfan (2006) who reported that an overwhelming majority was aware and had accessed newspapers, posters, pamphlets books and magazines on agricultural information.

Table 5: Distribution of Respondents by Reasons for Preference to Information Sources

| Reason | Frequency* | Percentage* |
|--------------------------|------------|-------------|
| Easy access | 96 | 65.8 |
| Quality of information | 89 | 61.0 |
| Easy of language used | 82 | 56.2 |
| Low cost | 78 | 53.4 |
| Relevance of information | 66 | 45.2 |
| Timely information | 64 | 43.8 |

*Multiple responses

Results in Table 5 reveal that easy access 65.8%, quality of information 61.0%, easy of language used 56.2%, low cost 53.4%, relevance of information 45.2% and timely information 43.8%. Majority (65.8%) newspapers were easily accessed. The ability to access information with ease could encourage farmers to utilize such information sources. Easy access to agricultural information has made the use of neighbours and relations as one of the frequently used information by farmers in most rural areas in Nigeria. In the case of newspapers, the distribution channels of most functional national newspapers effective and this allows for quick and timely dissemination of information.

Table 6: Distribution of Respondents based on Constraints faced by Respondents inAccessing Agricultural Information on Print Media

| Factor | Frequency* | Percentage* |
|--|------------|-------------|
| Low level of education | 128 | 87.7 |
| High cost of accessing print media | 88 | 60.3 |
| Untimely provision of information | 69 | 47.3 |
| Provision of inadequate information | 66 | 45.2 |
| Non-availability of agricultural information print media | 38 | 26.0 |
| Provision of irrelevant information | 53 | 24.0 |
| * Multiple responses | | |

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Results in Table 6 shows that low level of education 87.7%, high cost of accessing print media 60.3%, untimely provision of information 47.3%, provision of inadequate information 45.2%, non-availability of information on print media 26.0%, and irrelevant information 24.0%. Majority (87.7%) of the respondents had low level of education. This implies that not every farmer in the area can read the information provided in the print media. Level of education determines the ability to read and write. Education is an important aspect that plays a vital role in developing positive attitude among the respondents regarding an innovation. Therefore, it is believed that the higher the level of education of the farmers, the better their ability to read and write. For example, primary school leavers cannot read and understand what a university graduate can read. The result confirms Aroyewun *et al.* (2014) who reported that education is the main and vital weapon for bringing about desirable change in the behaviour of an individual.

Table 7: Logit Regression Showing the Socio-economic Factors affecting the use of Print

| Variable | Coefficient | |
|-------------------------------|---------------|--|
| Age | 0.013(0.132) | |
| Educational level | 0.184(1.509) | |
| Household size | -0.005(0.017) | |
| Farming experience | -0.014(0.300) | |
| Annual income | 0.000(1.558) | |
| Farm size | -0.012(0.745) | |
| Constant | -0.616(0.507) | |
| Chi-square | 6.018 | |
| Homer and Lemeshow chi-square | 10.323 | |
| | | |

The result in Table 7 shows that chi-square (6.018) was not significant at all conventional levels (P> 0.10). This implies that the socio-economic factors included in the model were not significantly related to the level of print media used.

CONCLUSIONS

Access to agricultural information by farmers cannot be overemphasized, farmers require timely and adequate information to increase farm production and ultimately improve their standard of living. Print media provide farm information to farmers especially for those that are able to read the print media. The information accessed by farmers range from prices of agricultural produce, climate change, farmers mostly accessed newspapers and were faced with several constraints including low level of education, untimely provision and and irrelevant information. It is recommended that adult education classes should be organized for the farmers and timely provision information.

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