International Journal of Agricultural Science, Research and Technology in Extension and Education Systems (IJASRT in EESs)
Available online on: www.ijasrt.webs.com
ISSN: 2251-7588 Print
ISSN: 2251-7596 Online
2014: 4(4):215-220

Received: 10 September 2014
Reviewed: 16 December 2014
Revised: 22 December2014
Accepted: 24 December 2014

Comparative Study of Interpersonal and Mass Media Usage among Rural Farmers in Kogi State

Adejoh, S. O., Adejo, P.E. and Edoka, M.H.
Department of Agricultural Economics and Extension, Kogi State University Anyigba, Nigeria
e-mail: emmypar2002@yahoo.co.uk

Abstract

This study compared the use of interpersonal and mass media channels of communication among rural farmers in Kogi State, Nigeria. The specific objectives were to describe the socio economic characteristics of the farmers, determine the influence of socioeconomic characteristics on the usage of interpersonal and media channels, ascertain farmers' level of awareness of interpersonal and media channels and compare farmers' preference to interpersonal and media channels in the study area. Primary data was used for the study. Data used were collected from the four agricultural zones (A, B, C and D) in the State. A total of 240 respondents were used for the study. Data collected were analysed using descriptive statistics, logit regression analysis and z-test. Results of the findings showed that majority of the sampled respondents were literate male farmers in their active productive age, with an average household size of 7 members and a mean annual farm income of ₦ 137,756. Number of years spent in school significantly influenced the use of interpersonal and mass media channels of communication at 10% level of significance. The findings further indicated that 94.6% and 77.9% of the respondents were aware of interpersonal and mass media channels of communication respectively. However, farmers in the area mostly preferred mass media channel to interpersonal channel of communication. The study recommends that rural radio booster stations and community rural television stations should be established to feature special programmes targeted at rural farmers in their local languages. To ensure regular availability and accessibility to extension agents, efforts should be made to employ more extension agents.

Keywords: Mass media, Interpersonal, Usage, Communication, Preference

1. Introduction

The relevance of information in the dissemination of agricultural information and farming as a business cannot be overemphasized. Agricultural information is needed for overall development of agriculture and improvement in the standard of living of farmers. The objectives of agricultural production can hardly be realized if farmers have no access to information (Jiggins et al., 1997). Agricultural information creates awareness among farmers about agricultural technologies for adoption. Agbamu (2006) opined that information is the trust and indispensible step of adoption process. Agricultural information has to be communicated to the farmers for optimum agricultural production. Agricultural communication is about exchanging information, sharing ideas and knowledge. It is a two-way process in which information, thoughts, ideas, feelings or opinions are shared through words, actions or signs, in order to reach a mutual understanding. A good agricultural communication implies that farmers are actively involved in the communication process.

Nigeria has many agricultural research institutes that have developed many technologies for the rural farmers to improve their agricultural production. Those technologies are capable of boosting farmer's agricultural production and Nigeria's economy. Unfortunately, most of these technologies do not get to the farmers and this has been attributed to lack of effective agricultural information dissemination machineries (Ozowa, 1995). Small scale farmers in Kogi State have been

involved in mass media usage to receive agricultural messages as well as interpersonal channels such as friends, neighbours and opinion leaders just to mention but a few. However, there is no significant increase in the level of agricultural production vis a vis the available agricultural technologies in the area.

The study compared interpersonal and media usage as channels of communication among small scale farmers in Kogi State, Nigeria. Specifically, the study described the socio-economic characteristics of small scale farmers in Kogi State; determined the influence of socio-economic characteristics on the usage of interpersonal and mass media channels among small scale farmers in the area; ascertained farmers' level of awareness of interpersonal and mass media channel; and compared farmers' preference to interpersonal and mass media channels of communication.

2. Materials and Methods

The study area is Kogi State of Nigeria. Kogi State was created out of Kwara and Benue States on the 27th August, 1991. The State currently has 21 Local Government Areas (LGAs) with Lokoja town as the headquarters. Kogi State is located in the middle-belt of Nigeria. It extends from latitude 6'33 to 8'44 N and longitude 5'40 to 7'49 E. The state has a current population of about 3,278,487 people with an average of 172,000 farming families (FGN, 2006). Kogi State is made up of various ethnic groups, the major ones are; Igala, Ebira, Yoruba and Nupe.

The State has a tropical climate and one of the largest producers of maize in Nigeria (KADP, 2011). The climate is divisible into two major seasons-dry and wet seasons. The wet season begins towards the end of March and ends towards the end of October. In very dry year, rainfall may not start until the month of April. Dry season begins in the month of November and lasts until late February. The harmattan wind is experienced during the dry season for about two months (December and January). The average annual rainfall ranges from 850mm to 2000mm. During the rainy season the daily mean temperature is about 28^0C while in the hot season, the average temperature is about 35^0C. High humidity is also common (KADP, 2011).

Multistage random sampling technique was used to select respondents from the four agricultural zones (A, B, C and D) of the State. In stage one, two Local Government Areas (LGAs) were randomly selected from each of the zones, making a total of eight LGAs. In stage two, two farming communities were randomly selected from each LGA, making a total of sixteen (16) communities. In stage three, fifteen (15) small scale farmers were randomly selected from each community. A total of 240 small scale farmers were used for the study.

Primary data for this study was collected through the use of structured questionnaire administered to the sampled respondents. The data obtained was analyzed using descriptive statistics such as frequency, percentage and mean, logit regression analysis and Z-test.

3. Results and discussion

The distribution of respondents according to age shows that majority (37.5 %) were in the age range of 41-50 years. The mean age was 48 years. The mean age of 48years indicates an ageing farming population in the study area. However, about 60% of the respondents were young and still in their active working age and would probably patronize a wide variety of information source. This finding agrees with Daudu et al., (2009) who confirmed an active productive age range of 21-40 years among rural farmers. Table 1 also shows that majority (60.00%) of the respondents was males and 40% were females. This implies that most of the household heads interviewed were males.

Table 1 further showed that majority (80%) of the respondents were married and 14.6 % were single. 47.1 % of the respondents had a family size of 1-5 persons, 39.2% had a household size of 6-10 members while 13.7 % of the sampled respondents had a household size of above 10 persons. The mean household size recorded in the study area was 7 persons. The larger number of family sizes by farmers could be probably advantageous to farm labour need as well as increasing their access to different mass media channels. This is in line with Adejoh (2014) who said that large household size could help in sourcing for agricultural messages/information thereby increasing their access to mass media channels, which will improve productivity, income and better standard of living. In a contrary view, Orebiyi, et al. (2011) opined that despite the fact that large household size could be advantageous to farm families, economically it may be disadvantageous as more people means high demand for food, clothing, health, and children's school fees among others.

Majority (70.8 %) of the sampled respondents had formal education, while 29.2 % had no formal education, 39.6 % of the respondents had secondary education, 28.7 % had primary education and 2.5 % of the respondents had tertiary education at NCE, HND and B.Sc levels. This finding is in consonance with Apata et al., (2010) who reported a high level of education in rural farming households.

Table 1 also shows that majority (80 %) of the respondents had above 21 years of farming

experience, 15 % had 11-20 years experience in farming, while 5 % had spent between 1-10 years in farm activities. The average years of farming experience in the study area was 27 years. Farming experience is an important factor which determines both the productivity and the production level in farming. Table 1 also indicates that majority (63.8 %) of the sampled respondents had annual farm income of between ₦ 101,000- ₦200,000, while 27.9 % and 8.3 % of the respondents had annual farm income of ₦50,000 - ₦100,000 and above ₦200,000 respectively. The mean annual farm income recorded in the area was ₦ 137,756. The low annual farm income means that, farming in the study area is still at the subsistence level. Mikloda (2006) associated low income with poverty. This finding also corroborates Daudu, et al. (2009) who reported low annual income among rural farmers.

Influence of Socioeconomic Characteristics on the Usage of Interpersonal and Mass Media Channels

Table 2 provides results of the binary logistic regression model to determine the effect of socioeconomic characteristics on the usage of interpersonal channel by the sampled respondents. The model's log likelihood ratio of -91.55 and χ^2 value of 0.016 indicated that education significantly influence the usage of interpersonal channel at 10%.

The result shows that the coefficient of education was negatively signed and significant at 10 %. This implies that the higher the level of education, the lower the usage of interpersonal channel. More educated farmers tend to prefer the mass media channel such as radio, newspaper, television and posters. This can be attributed to the fact that educated farmers could read and write and hence their ability to interpret extension messages from mass media source. This finding corroborates Oto and Shimayohol (2011) who reported a significant relationship between education and the usage of interpersonal channel. Age and household size shows that there were not significant but had positive relationship with usage of interpersonal channel. The positive relationship implies that an increase in these variables will increase preference for the usage of interpersonal channel. Logistic regression in Table 2 further pointed out that the coefficient of gender, farming experience, income and extension visit were negatively signed. This implies that an increase in these variables will reduce the usage of interpersonal channel.

Influence of socioeconomic characteristics on the usage of mass media channel

The logit regression result on the influence of socioeconomic characteristics on the usage of mass media channel is presented in Table 3. The logit regression result in Table 3 indicates that the coefficient of education was positively related to the usage of mass media channel and significant at 10% level of probability. This implies that the more educated an average farmer, the more preference the farmer has for mass media as a source of acquiring agricultural information. This finding agrees with Boz and Ozcatalbas (2010) who reported a significant relationship between education and the usage of mass media channel.

Table 3 further shows that the coefficients of farming experience, income and extension visit were positively related to the usage of mass media channel. The relationships were however not significant. The positive coefficient of these variables implies that an increase in these variables will increase the usage of mass media channel. Also, the coefficient of age and household size were negatively signed. This implies that an increase in the age of farmers and the number of persons in a household will not influence the usage of mass media channel in obtaining agricultural information.

Farmers' Level of Awareness of Interpersonal and Mass Media Channel

Investigation on the level of awareness of interpersonal and mass media channels as sources of obtaining agricultural information is presented in Table 4 and 5 respectively. Table 4 showed the level of awareness of interpersonal channel while Table 5 showed the level of awareness of mass media channel by the sampled respondents. The result shows that, 94.6 % of the sampled respondents were aware of interpersonal channel while 5.4 % were not aware. Furthermore, 88.5% of the respondents that were aware of interpersonal channel used it as means of communication while 11.5 % never used interpersonal channel as means of communication. This finding corroborates Okwu, et al. (2011) who reported a high level of awareness of interpersonal communication channel by rural farmers.

Table 5 shows the level of awareness of mass media as a communication channel among the sampled farmers. The result showed that 77.9% of the respondents were aware of mass media as a channel of communication, while 22.1 % were not aware of mass media as a channel for obtaining agricultural information. Table 5 further shows that 64.7 % of the sampled respondents who were aware of mass media channel used the channel in obtaining agricultural information.

Comparison of Farmers' Preference for Interpersonal and Mass Media Channels

Comparison of farmers' preference for interpersonal and mass media channels is presented in Table 6.

Table 6 showed the comparison of farmers' preference for interpersonal and mass media channels in obtaining agricultural information. The result indicates that the sampled respondents in the study area preferred the mass media channel to the interpersonal communication channel. The t-value of -4.0094 was significant at 1 percent level of significance.

Table 1. Distribution of Respondents According to Socioeconomic Characteristic

Variable	Frequency	Percentage	Mean/mode
Age			
31-40	53	22.1	
41-50	90	37.5	
51-60	71	29.6	
Above 60	26	10.8	
Total	240	100	48 years
Gender			
Male	144	60.0	
Female	96	40.0	
Total	240	100	Male
Marital status			
Single	35	14.6	
Married	192	80.0	
Divorced	13	5.4	Married
Total	240	100	
Household size			
1-5	113	47.1	
6-10	94	39.2	
Above 10	33	13.7	
Total	240	100	7 members
Educational status			
No-formal	70	29.2	
Primary	69	28.7	
Secondary	95	39.6	
Tertiary	6	2.5	
Total	240	100	Secondary
Farming Experience			
1-10	12	5.0	
11-20	36	15.0	
Above 21	192	80.0	
Total	240	100	27 years
Annual Income			
50,000-100,000	67	27.9	
101,000-200,000	153	63.8	
Above 200,000	20	8.3	
Total	240	100	137,756

Table 2. Influence of socioeconomic characteristics on the usage of interpersonal channel

Variables	Coefficient	Std. Error	z	P>/z/
Constant	1.3222	1.4091	0.94	0.348
Age	0.0170	0.0224	0.76	0.448
Gender	-0.5614	0.3569	-1.57	0.116
Marital status	0.0102	0.2438	0.04	0.967
Educational status	-0.0735	0.0419	-1.76	0.079*
Household size	0.0240	0.0404	0.59	0.553
Farming experience	-0.0013	0.0242	-0.05	0.956
Income	-2.2500	1.7800	-1.26	0.206
Extension visit	-0.2245	0.1374	-1.63	0.102

LR $\chi 2$ = 111.74; Prob>$\chi 2$=0.016; Pseudo R^2 =0.0603; Log likelihood = -91.55

*= coefficient significant at 10%

Table 3. Influence of socioeconomic characteristics on the usage of mass media channel

Variables	**Coefficient**	**Std. Error**	**Z**	**P>/z/**
Constant	1.2763	1.6231	0.79	0.432
Age	-0.0059	0.0246	-0.24	0.809
Gender	0.1918	0.3895	0.49	0.622
Marital status	-0.3152	0.2679	-1.18	0.240
Educational status	0.0793	0.0455	1.74	0. 081*
Household size	-0.0431	0.0422	-1.02	0.307
Farming experience	0.0036	0.0260	0.14	0.891
Income	2.6900	2.8400	0.95	0.344
Extension visit	0.0719	0.1528	0.47	0.638

LR $\chi 2$ = 116.92; Prob>$\chi 2$=0.5456; Pseudo R^2 =0.0418; Log likelihood = -79.20
*= coefficient significant at 10%

Table 4. Distribution of Respondents According to Levels of Awareness of Interpersonal Channel

Level of Awareness	Frequency	Percentage (A %)	Actual Sigma Score, Z = 10-Y
Not Aware	13	5.4	4.49
Aware	227	94.6	4.80
Total	240	100	
Aware but never use	26	11.5	5.40
Aware and use	201	88.5	3.62
Total	227	100	

Table 5. Distribution of Respondents According to Levels of Awareness of Mass Media Channel.

Level of Awareness	Frequency	Percentage (A %)	Actual Sigma Score, Z = 10-Y
Not Aware	53	22.1	3.56
Aware	187	77.9	5.44
Total	240	100	
Aware but never use	66	35.3	4.14
Aware and use	121	64.7	6.68
Total	187	100	

Decision Rule: any mean score (Z) less than 5 is considered as low level of awareness.

Table 6. Comparison of preference for interpersonal and mass media channels

Variable	Mean	Std. Error	Std. Dev.	t-value
Interpersonal	1.44	0.0885	1.0836	
Mass media	2.1267	0.1466	1.7960	4.0094***
Combined	1.7833	0.0878	1.5201	

*** = significant at 1%

4. Conclusion and recommendations

The study compared farmers' use of interpersonal and mass media channels in sourcing for agricultural information in Kogi State, Nigeria. It can be deduced from the study that education plays significant roles in influencing the use of both interpersonal and mass media sources of communication. Also, farmers in the area prefer to obtain agricultural information through mass media. Based on the research findings, the following recommendations are made:

1. There is need to improve the socioeconomic status of the farmers especially in the area of education through the promotion and propagation of adult education for those who cannot afford regular school programmes.

2. In order to increase the use of mass media which is the most preferred channel for sourcing agricultural information among small scale farmers, the available mass media outfits should devise ways of reaching out to the rural areas.

3. Extension messages should be communicated to farmers in their local languages depending on the location. This is very important in the use of mass media channel of communication.

References:

1) Adejoh, S. O. (2014). Assessment of Mass Media Usage by Urban and Rural Farmers in Kogi State, Nigeria. A Ph.D research project, Department of Agricultural Economics and Extension, Kogi State University, Anyigba. Pp 41-42.

2) Agbamu, J. U. (2006). Essentials of Agricultural Communication in Nigeria. Lagos: Malthouse Press Limited.

3) Boz, I. and Ozcatalbas, O. (2010). Determining information sources used by crop producers: A case study of Gazientep province in Turkey. African Journal of Agricultural Research 5(10):980-987

4) Daudu, S., Chado, S. S. and Igbashal, A. A. (2009). Agriculture information sources utilized by farmers in Benue State, Nigeria. Patsunk Journal 5:39-48

5) Jiggins, J., Samanta, R. and Olawoye, J. (1997). Improving women farmers' access to extension services, in Swanson, B., Bentz, R. and Sofranko, J. (eds) Improving Agricultural Extension: a reference manual, Rome: FAO.

6) Kogi State Agricultural Development Project (KADP). (2008). Village Listing Survey. An Occasional Paper of the Planning and Evaluation Unit. Lokoja. Pp 3.

7) Mikloda, P. I. (2006). The Effect of Agricultural Credit Guarantee Scheme on Household Income and Consumption in Adamawa state, Nigeria. A PhD thesis, University of Maiduguri, Nigeria. Pp 151.

8) Okwu, O. J. and Daudu, S. (2011). Extension communication and channels' usage and preference by farmers in Benue State Nigeria. Journal of Agric Extension and Rural Development 3:88-94.

9) Orebiyi, J. S., Eze, C. C., Henri-Ukoha, A., Akubude, F. C. and Ibitoye, S. J. (2011) Demand for Institutional Credit from NACRDB by Small Scale Farmers in Imo State, Nigeria. international Journal of Agricultural Science, Research and Technology. 1(2):83-87.

10) Oto, J. O. and Shimayohol D. (2011).Extension communication channels' usage and preference by farmers in Benue State, Nigeria. Journal of Agricultural Extension and Rural Development Vol. 3(5):88-94

11) Ozowa, V. N. (1995). Information needs of small scale farmers in Africa-The Nigerian example. Quarterly Bulletin of International Association of Agricultural Information Specialist, LAALD/CABI 40(1):15-20.