

## Determining the Socio-Economic Factors Affecting Farmer's Use of Communication Methods for Information Sourcing in Oluyole Local Government Area of Oyo State, Nigeria

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**Abstract:** The study examined the socio-economic factors affecting farmer's use of communication methods for information sourcing in Oluyole Local Government Area of Oyo State, Nigeria. One hundred and eight farmers were proportionately sampled from the 10 wards constitute the respondents. Frequency counts and percentages were used to describe the data while chi-square was used to test hypothesis. The findings revealed that 18.52% of the farmers have no formal education, while 81.48% were literate and more than half of the respondents (58.33%) realizes between N13, 000-N16, 999 as their average income per year. Majority (63.89%) belongs to two different social organizations, while only 29.93% belongs to more different social organization. However the majority of the farmers in the study complained about the severe constraint of the high cost of mass media form of communication and readability problem. The majority of the farmers in the study confirmed that indigenous methods of communication were very effective and the best at the study area. There were significant relationship between age, level of education, farmers' income, membership of social organization and the use of communication methods in sourcing information by farmers. Sequel to the findings from the study, it is recommended that the change agent should use local language to communicate with the farmers. It is equally important for researchers, extension agents, rural development experts and policy maker to recognize the role of indigenous methods of communication in agricultural information dissemination. The farmers should equally be motivated to practice modern methods of communication as source of information by providing necessary incentives to them.

**Key words:** Determining, socio-economic factors, communication methods, indigenous, modern, information sourcing

### INTRODUCTION

Evidence abounds that on many occasions, the Village Extension Agents (VEAs), the print and the electronic media through their coverage, have disseminated agricultural information on latest technologies but still have not brought about any meaningful and significant impact in the lives of the masses of the rural farmers

A wide range of technologies have been developed by various Agricultural Research Institutes and Universities which ranges from breeding, agronomy, disease and pest control to post-harvest technologies. It is still sad, therefore, to observe that the channels through which these technologies are being communicated to farmers are grossly inefficient and thus led to the ineffectiveness in the adoption of the recent agricultural technologies (Ahmed-Akinola, 2004).

Sourcing and effective dissemination of information is a highly recognized factor which aids adoption of improved farm practices. The change agents, rural development experts as well as policy makers however, need to identify those sources of information that farmers use most, considering their socio-economic situations. This will in essence however, help us in appraising farmers' preference for a particular agricultural extension method of communication (indigenous or modern as the case may be). Socio-economic measures the position that an individual or families occupy with respect to the prevailing average standards or families possession, effective income, material possession and completely satisfactory in measure of socio-economic situation. The socio-economic characteristics of farmer determine his or her status in the community (Oladoja *et al.*, 2005) opined that farmers of high socio-economic status have more contacts with extension personnels than those of low

socio-economic status. He stressed further that those having higher status may also have the means as well as desire for contact with the formalized source of information.

A socio-economic gap exists between subsistence and commercial farmers in the less developed nations. The large scale farmers are in the advantageous economic and social position to adopt agricultural innovation relatively earlier than subsistence farmers. Also to buttress this view, Karunwi (1992) stressed that the commercial farmers have a greater degree of contact with agricultural change agents, they have more ready available resources to invest in agricultural innovations and they have a more favourable attitudes towards new ideas. According to Oladoja (2000) the farmer plays a vital role in the process of change; he is not only a receiver of agricultural information but also act as a source of, as well as a channel relaying the information to get to others.

However, an understanding of the influence of the socio-economic variables enables the communicator to identify the audience's perception of his messages and show why the audience perceive what they perceive. Peoples need and sources of information differ, for instance, urban dwellers have different sources and uses of information they receive in contrast with the illiterate rural dwellers (Ahmed-Akintola, 2004). As such, it therefore, follows that innovations for adoption must be packaged and channeled in such a manner that the target audience comprehend the message and uses it effectively. Agbaje (1998) also shares the view that for the farmer (receiver) to understand the intended meaning of the message, the senders (extension agents) has to put it in a form which the receiver can easily decipher (decode).

Brouwers (1993) submitted that this knowledge is generated and transformed through a systematic process of observing local conditions, experimenting with solutions and re-adapting previously identified solutions to modified environmental, socio-economic and technological situations. Appleton and Hill (1994) were of the view that peoples ability to access and pass on information varies according to the available time, the degree of literacy, access to written materials, ability to travel and control over household media instruments (such as radios or televisions) which are themselves closely bound up with social, economic and political context of the people.

Mundy and Crompton (1992) asserted that most students have concentrated on the spread of modern/western method of communication rather than of locally generated information. While Warren (1991) opined that solutions offered by a development project may fail because they do not fit with the local knowledge. Therefore, a blend of approaches methods from various systems may be appropriate.

It is therefore pertinent to determine the socio-economic factors affecting farmers' use of communication methods for information sourcing.

Consequently, the following objectives were addressed in this study:

- Identified the socio-economic factors affecting the farmers
- Accessed the constraints encountered by farmers using mass media for information sourcing
- Determined the use of communication methods by the farmers and their socio-economic factors that affect this.

## MATERIALS AND METHODS

The study area is Oluyole Local Government Area of Oyo State, Nigeria. It comprises of four hundred villages with the headquarters in Idi-Aymre. The area is divided into ten administrative wards (Table 1) and it is situated at the southern part of Oyo State, bordered by Ijebu-North Local Government Area of Ogun State. It has a population of 91,020 based on the 1991 census figures (NPC, 1991).

Three wards (3,4 and 5) were purposively selected for the study based on their involvement in cocoa production. For the sample to be statistically representative of the number of farmers in each of the selected wards recorded, the sample were proportional based on the following percentages 12, 10 and 13% for ward 3,4 and 5, respectively. This however, makes a total of 105 farmers selected for the study (Table 2).

A validated structured interview schedule was administered in the sampled farmers to elicit the primary data for the study. The data collected from the administration of structured interview schedule were subjected to both descriptive and inferential statistical analysis using frequencies, percentages and chi-square analysis.

Measurement of variables-Variables for the study were measured thus:

**Age:** Age of respondents was measured by asking them to provide their actual age in years. Age less than 45 years were considered young while those above 45 years were considered as old.

**Educational background:** The respondents were asked to indicate the highest level of education they have attained from a list of options provided. Respondents with an educational level above primary education were considered as having a high level of education while those with primary education were considered as having low level of education and others were considered as having no formal education.

**Table 1: Oluyole Local Government Area (Number of wards, villages and farmers)**

Ward	No. of villages	No. of registered farmers/wards
1	87	435
2	34	204
3	39	351
4	50	450
5	27	162
6	68	408
7	28	112
8	27	108
9	10	60
10	30	120

Source: Community Development Unit Oluyole Local Government Area

**Table 2: Sampling of Respondent Oluyole Local Government Area**

Ward No.	No of farmers per ward	Selected farmers at (%)	Sampled farmers/ward
3	351	12	42
4	450	10	45
5	162	13	21
Total	963		108

Source: Field survey, 2005

- Income level: Figure of the amount of income earned, the figures were later classified.
- Awareness: Based on a 2-point scale of 1 point of being aware and 0 for not being aware of extension agents. This gave the extent or level of awareness.
- Participation was also measured in the same way as awareness
- Constraint: A 3-point scale of: not a constraint (1), not a severe constraint (2) and severe constraint (3) was used to assess the constraints encountered by the respondents

## RESULTS AND DISCUSSION

**Socio-economic factors of respondents:** This study presents information such as age, educational status, marital status, income level, membership of social organization, farming years of experience, household size and sources of fund. As shown in Table 3, 91.67% of the respondents interviewed during the study were married. Marriage is an important factor in the livelihood of individuals as it is perceived to confer responsibility on individuals.

Data in Table 3 showed that many of the respondents are in the age range of 31-50 years while 14.84% were above 50 years. The finding indicates that age is an important factor in farm work and that majority 76.85% are in their active age. Level of education, the Table 3 further revealed that 18.52% of the farmers had no formal education, 81.48% were literate and their educational attainment varies from primary to post primary. Observation revealed that the respondents with primary

**Table 3: Socio-economic characteristics of the respondents n = 108**

Characteristics	Operationalised	Frequency	(%)
Age group (years)	21-30	9	8.33
	31-40	49	45.37
	41-50	34	31.48
	51-60	12	11.11
	61-70	4	3.71
Educational status	No formal education	20	18.52
	Primary education	79	73.15
	Secondary education	9	8.33
Marital status	Single	6	5.56
	Married	99	91.67
	Widowed	3	2.77
Farmers income level	N9,000-N12,999	40	37.04
	N13,000-N16,999	63	58.33
	> N17,000	5	4.63
Membership of social organization	< 2 societies	11	10.18
	2 societies	69	63.89
	> 3 societies	28	29.93
Farming years of experience	Less than 10 years	67	62.04
	11-20 years	36	33.33
	Above 20 years	5	4.63
Household size (persons)	Less than 4	60	55.56
	4-8	46	42.59
	9-12	2	1.85

Source: Field survey, 2005

education are 73.15% while of 8.33% attained secondary education. This result however, confirmed the rural settlement as the domain for the educationally disadvantaged while the urban is on a relative basis for the privilege that are educated. The introduction and adoption of innovations might be somehow difficult with this category of farmers because according to Warren (1991) farmers' education either formal or informal will influence the use of methods of communication. This is because education enables farmers to easily comprehend and adopt innovations that are being introduced to them. Data in Table 3 shows that majority (58.33%) of the respondents realized between N13,000 and N16,999 as their average income per year and 37.04% realized between N9,000-N12,999 average income per year while 4.63% of the respondents realized over N17,000 as their average income per year. The result revealed that the majority of the respondents in this study earned an average monthly income of N1249.95. This corroborates the views of International Bank for Economic Reconstruction and Development (IBRD), (1996) which stated that Nigeria with per capital income of N1254.60 was ranked one of the poorest nations in the world. The implication of this however, is that majority of the respondents are poor. The result in Table 3 revealed that 63.89% of the farmers belong to 2 different social organizations and 29.93% belongs to 3 different social organizations while only 10.18% of the respondent belongs to only one social organization. This study has shown that reasonable number of respondents belong to a number of formal and informal organizations. This will

however tends to favour farmers level of participation in community life. Farmers' membership of three or more social organizations might influence the farmers reasoning and disposition to various communication methods as well as belonging to a well integrated system in their localities. Table 3 further revealed that 62.04% of the respondents had less than 10 years farming experience while 33.33% had less than 11-20 years farming experience. Data on Table 3 also indicated that majority of the respondents (55.50%) have less than 4 households, also 45.59% have between 4-8 households while 1.85% have between 9-12 households. These findings indicate that the farmers may have large household in order to get enough labour force on the farm. Although people who have large households are likely to participate more in farming activities may be as a result of the need to provide the basis.

**Awareness and participation of respondents in use of communication methods:** This section reveals the respondents' level of awareness and participation in the use of the selected communication methods (indigenous and modern). The results in Table 4 show that 87.5% of the farmers affirmed their awareness of community elders while 79.87% of the respondents indicated practicing the method for information sourcing. About 91% of the respondents indicated being aware of folk tales while 55.65% of the respondent indicated practicing the method for information sourcing. As for town criers, 97.50% of the respondents indicated awareness while only 88.50% only used the method for information sourcing. About 99% of the respondents indicated awareness of religious centre while 93.45% only used the method for information sourcing. All the respondents were aware of fellow farmers/Neighbour and family/relatives while 90.50 and 97.60% of the respondents used fellow farmers and family methods, respectively for information sourcing. Collectively, the awareness of the indigenous method of the information sourcing by the respondents was very high with about 91.4% of the respondents claiming awareness. However, the level of participant or practicing was as high with about 80.70%. For each method, there is a sharp fall from level of awareness to practice (Table 4).

On the other hand, Table 4 further revealed the modern methods of information sourcing. The table revealed that 95.70% of the respondents indicated awareness of radio while 90.54% only use radio method for information sourcing. The results also show that 99.70 and 85.65% of the respondents indicated awareness for village Extension Agents and Agricultural Information units', respectively while 97.50 and 81.75% of the respondents indicated practicing the 2 methods for

information and sourcing. As for field trips and demonstration, 57.50 and 53.70% of the respondents indicated awareness while 40.65 and 47.50%, respectively affirmed practicing the two methods of information sourcing. In consonance with the results obtained in Table 4 which identified the indigenous method of communication being highly aware and practiced when compared with modern method of communication. This study agreed with finding of Alao (1980), Torimiro (1995) that indigenous methods of communication is the best at village level where most social amenities are not available and majority of the farmers are illiterate.

**Attitudes towards the use of communication methods:** Attitude has been described as the predisposition to act in a particular way while displaying ones feeling towards an idea. Farmers attitude toward a method is expected to influence the practice of such methods with respect to communication methods (indigenous and modern), attitude was categorized as favourable, neutral and unfavourable. By a favourable attitude, it means the farmers had a positive tendency towards the methods while a negative inclination leads to unfavourable attitude. Neutral attitude means the disposition or being undecided toward the methods.

Table 4 shows the result of the respondents' attitude with most respondents being favourable, unfavourable and other neutral in their responses to the use of communication methods (indigenous and modern). In all, 60.25% of the farmers were favourable, 35.15% were neutral while 4.75% were neutral in disposition towards the use of communication methods.

**Problems/constraints encountered by respondents on the use of communication methods for information sourcing:** The results in Table 5 revealed high cost of mass media is considered a severe constraint as it is felt by 87.04% of the respondents. The ability of respondents to source for credit that will be used in acquiring mass media to boost their information sourcing is therefore limited by their low access to credit. Effort to remove this constraint will therefore assist in improving their information sourcing. In the same vain, the readability problem is complained a severe constraint by 74.07% of respondents. Non technician to repair the rural areas as well as too technical to operate are severe constraints limiting the use of communication methods of respondents. About 55.56% of the respondents also complained that they had severe constraint in the inadequacy of mass media. Table 5 further revealed that 46.29% of respondents indicated that the use of communication method is considered severe constraints because it encourages deviant behaviours.

Table 4: Percentage response of awareness, practice and attitude to use of communication methods

Communication method	Variables		Attitude to practice		
	Awareness	Participation	Favourable	Neutral	Unfavourable
	%	%			
<b>Indigenous</b>					
Community elders	87.50	79.67	85.00	15.00	-
Folktales	90.70	85.65	76.00	24.00	-
Fellow farmers/neighbour	100.00	90.50	86.00	14.00	-
Family/relatives	100.00	97.60	79.50	20.50	-
Town criers	97.50	88.50	85.00	15.00	-
Cultural Activities/Festival	95.60	75.60	57.60	42.40	-
Religious centres	98.70	93.45	79.50	20.50	-
Village square meeting	85.75	85.65	67.75	32.25	-
Drama	77.50	57.50	52.50	47.50	-
Community Game Centres	75.70	50.35	50.50	39.50	10.00
<b>Modern</b>					
Radio	95.70	90.54	88.50	11.50	-
Television	35.65	10.75	10.00	90.00	-
Newspaper	45.75	36.50	29.00	65.40	5.60
Extension publications	55.80	45.70	40.00	45.00	15.00
Agric Information Units	85.65	81.75	63.00	17.00	20.00
Village Extension Agents	99.70	97.50	95.00	5.00	-
Field Trips	57.50	40.65	37.50	50.40	12.10
Demonstrations	53.70	47.50	42.00	53.00	5.00
Elites	47.50	40.75	45.00	39.00	16.00
Educational campaign	49.35	35.57	31.60	57.00	11.40

Source: Field survey, 2005

Table 5: Problems/constraints encountered by respondents on the use of communication methods

Problems/constraints	Not a constraint		Not a severe constraint		Severe constraint	
	Frequency	(%)	Frequency	(%)	Frequency	(%)
High cost of mass media	4	3.70	10	9.26	94	87.04
Too technical to operate	20	18.52	26	24.00	62	57.41
Maintenance and repair not easy	41	37.96	37	34.26	30	27.78
Alternative source of power i. e batteries too costly	36	33.33	30	27.78	42	38.89
It encourages deviant behaviours	13	27.78	28	25.93	50	46.29
Non-availability of spare part in rural areas	21	19.44	47	43.52	40	37.04
No technician to repair in rural areas	19	17.59	26	24.00	63	58.34
Distraction and noise highly encouraged	40	37.04	58	53.70	10	9.26
Readability problem	8	7.41	20	18.52	80	74.07
Inadequacy of mass media	14	12.96	34	31.48	60	55.56

Source: Field survey, 2005

Table 6: Relationship between some selected socio-economic factors and the use of communication methods

Variables	df	X <sup>2</sup> cal	X <sup>2</sup> tab	Decision
Age	3	23.467	7.815	S
Level of education	2	78.440	5.991	S
Farmers' income	2	8.227	5.991	S
Membership of societies	1	38.620	3.841	S

Significant at 0.05 level, NS = Non significant, S = Significant

**Relationship between variables in the study:** Data of Table 6 revealed that all the selected personal socio-economic factors have significant relationship with the use of communication methods by farmers in the study area. By implication, the age, level of education, farmers' income and membership of social organizations have significant relationship with the usage of communication methods by farmers in the study area. Their preference for indigenous communication methods were based on the above variables. The above findings agreed with the

assertion made by Adedoyin and Adesanya (1996); Torimiro (1997) that some socio-economic characteristics influences the preferences for choice of agricultural communication method for information.

## CONCLUSION AND RECOMMENDATIONS

The findings revealed that majority of the farmers received agricultural information through indigenous methods of communication. A large number of respondents also affirmed that the indigenous methods of communication is very effective and is the best in comparison to modern methods of communication. However, attitude towards the indigenous technical knowledge of communication is thus seen to be a very practical resource for use within the extension system especially within a changing environment. About 60.25%

of the respondents being favourably disposed. The result also showed that significant relationship exist between age, income, level of education, membership of social organization and use of communication methods as source of information to improve farmers access to formal education.

In view of the above findings, it is hence recommended that change agent should use local language to communicate with the farmers. It is equally important for researchers, extension agents, rural development experts and policy matters to recognize the role of indigenous method of communication in agricultural information dissemination and improve upon it. The farmers should equally be motivated to practice modern method of communication as source of information by providing necessary incentives to them.

### REFERENCES

- Adedoyin, S.F. and F.A. Adesanya, 1996. Mass Media Agencies and Information Programme for Sustainable Agricultural Development in Ogun State, Nigeria. In: Adedoyin, S.F. and J.O.Y. Aihonsu (Eds.), Sustainable Development in Rural Nigeria by Nigerian Rural Sociological Association, pp: 56-64.
- Agbaje, H.A., 1998. Survey of communication methods used in relationship of farmers with Innovation in Rice growing areas of Lagos State. Unpublished Post Graduate Diploma Thesis. Submitted to Department of Agricultural and Rural Sociology Olabisi Onabanjo University Ago Iwoye, pp: 2-6.
- Ahmed-Akinola, A.A., 2004. Comparative Study of Indigenous and Modern method of Communication available to cocoa farmers in Oluyole Local Government Area of Oyo State. Unpublished MSC Thesis. Submitted to Department of Agricultural Extension and Rural Sociology Olabisi Onabanjo University; Ago Iwoye, pp: 1-71.
- Alao, J.A., 1980. Understanding Small Farmers Adoption Behaviour. The Nigerian Experience Inauguration Lecture Series 44. University of Ife Unife Press Limited Nigeria, pp: 32-40.
- Appleton, H.E. and C.L.M. Hill, 1994. Gender and Indigenous Knowledge in various Organization. Indigenous Knowledge and Development Monitors, 2: 6-12.
- Brouwers, J.H.A.M., 1993. Rural Peoples Response to Soil Fertility Decline. The Adja Case of Benin. Wagennigan Agricultural Paper, pp: 93-94.
- International Bank for Rural Development (IBRD), 1996. Nigeria Poverty in the midst of Plenty. The challenge of growth with discussion A World Bank Poverty Alleviation Population Human Resources Division: West African Department African Regional Report pp: 17.
- Karunwi, A.A., 1992. Tradition Media of Communication and their Implication for Extension Services. A Case of Obafemi Owode Local Government Area of Ogun State. An Unpublished B.S.C. Project submitted to Department of Agricultural Extension and Rural Sociology Olabisi Onabanjo University, pp: 33-35.
- Mundy, P. and L. Crompton, 1992. Indigenous Communication and Indigenous Knowledge. Indigenous Knowledge System. The Cultural Dimension of Development. Warren David, D.M. Brokensha and Ijan Slikkerver (Ed.), London, pp: 291-312.
- Oladoja, M.A., 2000. Poverty Alleviation Strategies By Fishermen and Women in Lagos and Ogun States Nigeria. An Unpublished Ph.D Thesis submitted to the Department of Agricultural Extension and Rural Development University of Ibadan, pp: 20-56.
- Oladoja, M.A., B.O. Adisa and O.A. Adeokun, 2005. The use of indigenous farm practices. Effects on rice productivity among rice farmers in lagos state, Nigeria. *J. Agric. Manag. Rural Dev.*, 2: 309-317.
- Torimiro, D.O., 1995. Evaluation of Forms of Communication on Adoption of Improved Agricultural Technologies by farmers under the Ogun State Agricultural Development (OGADEP). Unpublished M.Sc Thesis Department of Agricultural Extension and Rural Sociology Obafemi Awolowo University Ile-Ife, pp: 68-76.
- Torimiro, D.O., 1997. The Relationship Between Socio-economic Characteristics of Farmers and Adoption of Improved Agricultural Technologies in Ogun State, Nigeria. *The Rural Sociologist*, 2: 22-28.
- Warren, M.D., 1991. Using Indigenous Knowledge in Agricultural Development. World Bank Discussion Paper Rome Italy, pp: 2-18.