Identification of Communcation Needs of Extension Agents in Ondo State Nigeria.

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Abstract: *The study identified the communication needs of extensions agents in Ondo State, Nigeria. Specifically the study examined personal characteristics of extension agents, their perceived communication needs, frequency of training and factors that contract these needs. Data were obtained from 80 respondents randomly selected in a 2-stage sampling technique and were analysed using frequency counts, means, percentages and PPMC. Results show that majority (52.5%) and (58.8%) of the respondents were between 41 and 50years, and females respectively with mean working experience of 10 years. Respondents training was most frequent on internet websites (M=3.64) which was also their most perceived communication need (M=2.81). Inadequate funds for proper communication (M=4.33) was a major constraint. Regular in-service training of extension agents on extension teaching methods/process and conflict management was recommended.*
Keywords: *Identification, communication needs, extension agents*

I. Introduction

Agricultural extension is an essential institutional component in the process of agricultural development which aims at providing farmers with necessary education, skills and technical information to enable them make effective farm management decisions to enhance their daily practices. Swanson (1984) described it as "an educational process, which has goals of communication of useful information to people, then helping them to learn how to use it to build a better life for themselves, their families, and their communities.'' The role of extension agents in bringing agricultural innovation to farmers as well as farmers' problem to scientists, by implication, makes communication needs of extension agents an issue of research. This was why the Federal Government of Nigeria in collaboration with the World Bank initiated Agricultural Development Programmes (ADPs) across the country. The ADPs thus become the extension arms of state ministries of agriculture and rely on extension agents (EA's) as a vehicle for achieving its objectives (Fatunbi 1994). The needs of extension agents within an ADP as an organization include: adequate role clarity; favourable perception routine duties; and effective time budgeting. Therefore, the effect of extension work depends to a large extent on the professional competence of extension agents. The need, burden and development of agriculture depend on agricultural extension service.

Agriculture with its positive impact on the Nigerian populace is faced with myriad of problems among which is low utilization of technologies. The non-use of technologies by the farmers may be ascribed to inadequacy of information, which is a pointer to the new technologies resulting from poor communication approaches. The purpose of communication is to bring about changes in attitude, knowledge and skills of the receivers. Johnson and Johnson (1991) stated that effective communication is a prerequisite to every aspect of group functioning. The major challenge of agriculture in this new millennium is how to cope with information and trends in technology transfer. Aboyade (1987) observed that farmers were neither adequately nor appropriately informed about innovations meant to be applied by them to achieve improved agricultural productivity and enhanced standards of living. This inability to adequately inform the farmer could be blamed on inefficient communication from extension agents.

Agriculture is perhaps the most interdisciplinary of all spheres of human activities drawing as it were, from Biology, Medicine, Chemistry, Soil science, various branches of Engineering climatology, food technology, environment science, economics management and host of their field. This interdisciplinary attribute brings with it some special problem in the provision of effective library and information services. Yet extension agents are expected to meet both farmer and researcher needs by communicating valuable information to them.

Omokhudu (1999) identified ADPs and research institutes as neighbours, as major sources of information to farmers on farming technologies and noted that though valuable research results have been obtained from most of the agricultural research institutions in Nigeria, most of these improved agricultural practice do not get to the farmers thus creating a wide gap between research and utilization of the research results. To bridge this gap between the farmer and researchers effective communication is essential. Different researchers in their studies identified sources frequently and regularly used by farmers in obtaining agricultural information on new farming practices and they include extension officers, radio and fellow farmers. Ideally

extension workers should be linked to the transfer process. They need the technical skills in using information, understanding scientific recommendations, interpreting and simplifying knowledge in addition to skills in communication. If farmers are going to accept new technologies, it means that recommendation must be specific to their farming requirement.

The Ondo State ADP was established by Edict on 3rd February 1976 of the former Western State of Nigeria as one of the Multi-State Agricultural Development Projects MSAPP-1 with the objectives of Facilitating incremental food production of small-scale farmers and promoting infrastructural development of rural areas in term of rural road and water supplies, Federal Ministry of Agriculture and Rural Development (FMARD, 1976). Major activities of extension agents in Ondo state ADP include: teaching of production recommendation to farmers, and participating in adhoc duties such as sensitization of farmers on agricultural policies, agricultural campaign, health campaigns, linkage of farmers to credit facilities, and sourcing of credit. They are also known to assist subject matter specialist (SMS) in research and are also involved in conducting surveys.

The evolution of extension services began as sufficient research knowledge was accumulated to permit effective production-enhancing educational programmes to keep framers abreast of the new technologies (Swanson, 1984). This information is used by the management of the extension organization to instruct extension agents what they should tell farmers in the expectation that such messages will bring about changes in farm management (Van den Ban and Hawkins, 1998). There has been realization on the part of government that the accomplishment of wide-range agricultural objectives would dependent to an appreciable degree, on the systemic delivery of research-based technical information to farmers through extension (Lukhele, 1994).

The World Bank (1990) recognizes the challenges for extension organizations based on the complex processes involved in changing human behaviour through communication. It was this realization that led to the development of the concept of Agricultural Knowledge Information System (AKIS). Without a continual flow of new technologies and tested recommendations from research, extension can run out of technology to extend; and without close links with extension to provide feedback from farmers, researchers' work can lose much of its relevance (Shaner et al, 1982). The competent extension agent will usually use a combination of two or more channels, which may give him a better opportunity to impact knowledge, make it more appealing and increase motivation of both farmers and researchers. Hence what extension agent needs for effective communication of agricultural technologies based on both basic and adoptive research is the crux of this study.

The general objective of this study was to identify the communication needs of extension agents in Ondo State, Nigeria. The specific objectives were to: examine the personal characteristics of extension agents; identify their perceived communication needs; ascertain how frequently extension agents receive training on communication; and identify factors to constraint communication. A null hypothesis formulated for the study is there is no significant relationship between personal characteristics of respondent and perceived communication needs

II.   Methodology

The state has two agricultural zones namely, Owo and Ondo zones with eight and 10 blocks respectively. Both blocks have a total of 110 extension agents, and 18 block extension agents. Also Fadama project in the state has 40 facilitators, and 18 block extension agents. 50% of the extension agents and 30% of block extensions were randomly selected for the study. Hence 75 extension agents and 5 block extension agents gave a total of 80 respondents selected for the study. A well structured questionnaire validated by expert judgement was used to gather data from the respondents. Frequency of training received by the respondents was measured in a 4 point rating scale of frequently (every 3 months) coded 4, sometimes (every 6 months) coded 3, rarely (once a year) coded 2, and not at all code 1. A mean score of 2.50 and above was taken to mean that respondents received training regularly on a particular area of communication needs. Perceived importance of areas of communication needs was also measured in a 4-point rating scale of very important coded 4; important code 3, fairly important code 2 and not important coded 1. A mean score of 2.50 and above was translated that a particular areas of communication needs was important. Communication needs constraints of respondents was measured on a 6-point rating scale of very serious coded 5, serious coded 4, fairly serious coded 3, not a problem coded 2, and undecided coded 1. A mean score of 3.0 and above was taken that a particular constraint was serious. Data were analysed using percentage and mean statistic. Hypothesis was tested with Pearson Product Moment Correlation.

III.   Results and Discussion
Socio-Economic Characteristics of respondents

Entries in Table 1 show that majority (52.5%) of the respondents were between 41 and 50 years, it means that most of the extension agents are in their active years. This finding corroborates Fatunbi (1994) in a study of village extension workers, that majority were 44 years. Majority (58.8%) of the respondents were

females, agreeing with Bhatt (1998) who reported more female than male employees. Most (92.5%) of extension agents were permanent staff implying that they will be disposed to perform their duties hence would appreciate communication needs to source proven technologies from researchers and disseminate same to farmers. This finding is similar to Ajayi (2001) who reported a higher percentage of permanent employees. All the extension workers had formal education and most (68.8%) are HND/BSc degree holders, this education status no doubt will enhance respondents' appreciation of communication needs in agricultural extension delivery. The result agrees with Ajayi (2001) that a greater proportion of extension agents had acquired B.Agric, and or MSc qualifications. Majority (53.8%) of the respondents have working experience of 15 years and above, an indication that they are well experienced in the job and implies that they should be able to identify important areas of communication needs. Most (93.8%) of the respondents are extension agents this means they are field staff who would frequently relate with clients on proven technologies and practice and will therefore be knowledgeable in areas of communication needs

Table 1. Distribution of Respondents by Personal Characteristics

Age (years)	Frequency	Percentage	Mean
>30	4	8.0	
31-40	32	40.0	
41-50	42	52.5	39
>60	2	2.5	
Total	80	100.0	
Gender			
Male	33	41.2	
Female	47	58.8	
Total	80	100.0	
Working status			
Permanent staff	74.00	92.5	
Temporary staff	6	7.5	
Total	80	100.0	
Educational qualification			
Post graduate	6	7.5	
B.Sc/HND	55	68.8	
OND	18	22.5	
JSS/SSCE	1	1.2	
Total	80	100.0	
Years of experience			
1-5	4	5.0	
6 -10	24	30.0	
11-15	43	5.3.8	10
>15	9	11.2	
Total	80	100.0	
Rank/position			
Block extension agent	75	93.8	
Extension agents	5	6.2	
Total	80	100.0	
Grade level			
10	15	18.8	
12	21	26.3	
13	16	20.0	
14	14	17.3	
15	7	8.8	
16	7	8.8	
Total	80	100.0	

Source Field survey data

Respondents' Frequency of Training

Table 2 shows the frequency of respondents' training in the different areas of perceived communication needs. For technical needs, training was more frequent on internet website (M 3.64) followed by GSM phones with internet access (M = 3.45), operational communication linkage (M = 3.29) laptop (M = 3.28), seminar (M= 3.08) and E-mail address (M = 2.96). This means that training was mainly focused on modern ICTs; this might be as a result of the present trend in communication through modern ICTs which are wireless information handling tools UNDP et al (2001). The fact that training on the ICTs were frequent should be as a result of its usefulness as asserted by CTA (2003) that the potentials of ICTs in agricultural extension and agricultural development in Nigeria would only be realized if agricultural extension service adopts the use of modern ICTs in their day-to-day operations. For communicative interaction needs, support organizational development and capacity binding (M = 3.41) and rural sociology (M = 3.34) and personal effectiveness (M = 3.38) had the highest frequency of training. This means respondent may improve on the level of service they render to their clientele or farmers on behalf of their organization. Training on rural sociology will assist extension agents

understand farmers better. Personal effectiveness will assist respondents improve on their skills and competences in extension service delivery. This training will help extension agents achieve understanding of basic rural life by application of systematic body of knowledge scientifically to rural society, its organization, structure, social process, basic social systems, institutions and dynamics. This result is expected as it will assist in the realization of Ondo State's ADP objectives of facilitating incremental food production for small scale farmers and promoting infrastructural development of rural areas. For information needs, frequency of training for information needs was highest with proven agricultural technologies (M = 3.27) and general laws governing citizens (M = 3.15). These training will assist respondents to be versatile in agricultural technology and to conduct themselves properly and responsibly in the conduct of communication to farmers. Other frequent training areas were sustainable environment (M= 3.02), home economics (M= 3.00), information on other discipline (M = 2.79), and climate change (M= 2.55).

Respondents' Perceived Communication Needs
Table 2 showed that internet website (M = 2.81) was the most desirable communication need of the respondents. Others were GSM (phones with internet access (M 2.74), operational communication Linkage (M = 2.57) laptop (M = 2.52) and seminars (M = 2.51) Respondents may have desired the above communication needs as a result of willingness to seek technological information on research findings from online access. For communicative interaction needs, only extension teaching methods/process (M = 2.54) and supporting organizational development on capacity building (M = 2.54) were desired by the respondents. The implication is that extension agents may desire the best methods of teaching as they are likely to reach clientele of different socio-economic groups with proven technologies and thereby seek appropriate methods for different categories of farmers e.g. different age brackets, scale of farming and individual situation of farmers. It is evident from the result that respondent did not perceived any of the information needs desirable for communication, showing that these information are already available to them, for instance proven agricultural technologies (M = 2.46). This result agrees with the finding of Omokhudu (1999) that valuable research results have been obtained from most of the agricultural research institutes in Nigeria; and Swanson (1984) that evolution of extension begins as sufficient research knowledge is accumulated to permit effective production education programmes to keep farmers abreast of the new technologies.

Table 2 Distribution of Respondents by Frequency of Training and Perceived Communication Needs

Communication Needs	Frequency of training		Perceived Communication Needs	
	Mean	SD	Mean	SD
TECHNICAL NEEDS				
Internet website	3.64*	0.557	2.81**	0.506
GSM/phones with internet access	3.45*	1.078	2.74**	0.670
Operational communication linkage	3.29*	0.830	2.57**	0.776
Laptop	3.28*	1.169	2.52**	0.871
Seminars	3.08*	1.111	2.51**	0.914
Email address	2.96*	0.538	2.21	1.052
Cd+rom	2.92*	0.978	2.41	1.121
Workshop	2.82*	1.230	2.36	1.034
Radio/TV airtime with stations	2.49	1.222	2.21	1.064
Chatroom	2.44	1.210	2.40	1.121
Journals	2.23	1.340	2.31	1.086
Bulletins	2.09	1.285	2.14	1.076
Newspapers	2.09	1.171	2.26	1.052
COMMUNICATIVE INTERVENTION NEEDS				
Rural sociology	3.34*	0.856	2.18	0.868
Community development	3.29*	0.860	2.31	0.936
Mass communication	3.19*	0.995	2.45	0.884
Organizing farmers association through cooperatives	3.13*	1.129	2.37	0.973
Use and competence in computers	3.02*	1.067	2.42	0.839
Extension teaching methods/process	2.46	1.292	2.54**	0.913
Supporting organization development on capacity building	3.41*	0.867	2.54**	0.856
Personal effectiveness	3.38*	0.848	1.95	0.953
Facilitating farmer-farmer communication	3.29*	0.830	1.94	0.932
Adversary communication	3.00*	0.886	1.86	0.910
Process of technologies innovation	2.80*	1.247	1.80	0.960
Conflict management	1.63	0.644	1.28	0.93

INFORMATION NEEDS				
Proven agric technologies	3.27*	1.006	2.49	0.871
General laws governing citizens	3.15*	0.901	2.22	0.871
Sustainable environment	3.02*	0.968	2.35	0.901
Home economics	3.00*	0.871	1.95	0.855
Information on other discipline	2.79*	0.964	2.15	0.901
Climate change	2.55*	0.810	2.17	0.911
Marketing and export prices	2.19	1.313	2.36	0.971

Source: Field Survey data   * Frequent (M≥ 2.50)   ** Needed (M ≥ 2.50)

Communication Constraints of Respondents

Table 3 shows the constraints to respondents' communication. Inadequate funds for proper communication (M= 4.33) was the most serious constraint, followed by infrastructure e.g. roads (M = 4.26). Inadequate materials for demonstration (M = 3.56). Inadequate training programme was not a problem (M= 1.80) this can be explained by the fact that the respondents were frequently exposed to training (table 2)

Table 3 Respondents Constraints to Communication

Constraints	Mean	SD
Inadequate fund for proper communication	4.33*	0.99
Infrastructure-Access Roads	4.26*	0.91
Inadequate material for Demonstration	3.56*	1.12
Inadequate training programme	1.80	0.89

Source: field survey data   *serious (M ≥ 3.0)

Hypothesis
Relationship between Personal Characteristics of Respondents and their Communication Needs

Table 4 shows that none of the variables had significant relationship with communication needs of extension agents, implying that irrespective of personal characteristics, respondents are conscious of communication needs. Age had a negative correlation (r = -0.027) this means that the younger extension agents are more likely to desire communication needs than the older ones. The implication is that younger people are more willing to accept technological changes e.g. internet website, GSM/phones with internet access, laptops, E-mail address, CD-ROM, Radio and television airtime with stations etc as technical need than the older ones. This is in agreement with the assertion of Bertolim (2006) that older people are limited in the use of ICTs by their assumed lower income and social interaction. Working status in this research means permanent or temporary staff. The negative correlation (r = -0.083) indicates that temporary staff are more likely to desire communication needs. A possible explanation for this situation is that temporary staff would thrive for perfection on the job so that they can be elevated to permanent status, as temporary status is likely to be a probation period on the job. The positive correlation (r = .027) for present rank/position means that extension agents with higher rank/position (blocks extension agents) will desire communication needs more than the cell/communities extension agents. A possible explanation is that extension agents with higher ranks have more communication administration responsibilities than those with lower ranks. The positive correlation (r = 0.029) for education means that extension agents with higher education will desire communication needs more than the extension agents with low educational qualification meaning that extension agents with higher education needs more communication skills than those with low education. The positive correlation (r = 0.027) for sex means that the female needs more communication skills than the male. This means that female extension agents require more communication ability to enable them communicate effectively to the female farmers because according to Onugu (2002) in principle, female workers interact with only female farmers while male workers interact with male farmers. The negative correlation (r = -0.013) with working experience means that the extension agents with short time working experience need more of communication than the extension agents with long time working experiences. This implies that extension agents with short years of working experience desire more communication needs to ensure they meet the required communication skills need from them by the farmers, as those with fewer years of working experience are more of cell extension agent i.e. starting from the bottom position. The negative correlation (r = 0.150) with grade level means that the extension agents with lower Grade level desire more communication needs that the extension agents with higher grade. The implication of these means that extension agents with low grade level need communication skills to help them work hard enough to achieve promotion to higher levels

Table 4 Relationship between personal characteristics of respondents and their communication needs (correlations)

Variables	Pearson correlation (r)	Probability levels (p)
Age	-0.027	0.811
Working status	-0.083	0.464
Present Rank/Position	0.027	0.811

Education	0.029	0.798
Gender	0.096	0.395
Working Experience	-0.013	0.906
Grade level	-0.150	0.185

Source: Computed from field survey data   * Significant at 0.05 level (5%)

IV.   Conclusion

From findings, the study concludes that extension agents in Ondo State ADP desire communication needs with frequency of training highest on internet website, supporting organization development on capacity building, and proven agricultural technologies, in technical, communicative interaction and information needs respectively. Extension teaching methods/process and supporting organizational development on capacity building was perceived as most important communicative interaction needs. The respondents were majorly constrained by inadequate fund for proper communication, access roads and inadequate materials for demonstration.

V.   Recommendations

The Ondo State ADP should focus on areas where training of extension agents are presently not frequent i.e. radio/TV airtime with stations, chatroom, journals, bulletin and newspapers, extension teaching methods/ process and conflict management.

Special funds should be made available as endowments for extension agent to check the constraint of inadequate fund for communication. This can take the form of incentive to encourage them in areas of E-mail address, seminars and workshop attendance to address their areas of technical and communicative interaction needs

The Ondo State ADP should organize regular seminars and workshops to education extension agents of technical, communication interaction which they presently do not perceived can influence their communication with both researchers and farmers

The Ondo State ADP and Ministry of Agriculture should operate a realistic calendar for providing materials for demonstration prior to extension agents' visit to farmers

The Ondo State ADP in corroboration with local government authorities should provide and maintain access roads to rural areas and farming communities for reaching farmers to actualize their responsibilities of reaching farmers with proven agricultural technologies and practice.

Acknowledgement

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