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USE OF LOCAL MEDIA APPROACHES IN AGRICULTURE AND RURAL DEVELOPMENT ACTIVITIES IN AKWA IBOM STATE

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ABSTRACT

This study analysed Local media approaches in agricultural and rural development activities in the study area. Multi stage sampling was employed in the study. TaroYamane formula was used to determine the sample size for the study, hence a total of 379 rural farmers randomly selected and interviewed across the six Agricultural Development Programme zones in Akwa Ibom State. Findings show that the most commonly used local communication instrument for communication in agricultural and rural development activities in the study were boundary trees, injunction palm frond and scrotal hernia and were ranked 1st, 2nd and 3rd. Using factor analysis, the patterns of local media approaches and agricultural and rural development activities data sets were collapsed separately for parsimonious factors. The analysis yielded 4 critical factors for local media approach (cultural and festival factor, folk medium factor, social group factor and personal contact factor) while agricultural and rural development activities yielded 5 critical factors (agronomic activity factor, health sensitization factor, infrastructural development factor entrepreneurial development factor and processing development factor). There was a strong and positive relationship between local media approaches used and agricultural and rural development activities .Integration of local media and modern media is advocated.

Keywords: Local Media Approaches**,** Agricultural and Rural Development activities.

INTRODUCTION

Majority of farmers in Nigeria reside in the rural backland where infrastructural facilities are lacking. Most farmers are unable to make adequate use of modern media. These farmers are in need of extension education to increase their productivity. According to Ewuola *et al* (2003), increase in agricultural productivity depends to a large extent on the agricultural extension agent's ability to continuously disseminate useful and practicable agricultural information and packages through sustainable media. Agricultural innovations and rural development programmes are conceived based on the inputs from rural farmers hence, local media has been an integral part of development process of local communities which is one of the reasons for extension services (Nwakwasi, 2013 and Etuk and Adetoro, 2010). Therefore, local communication approaches are interactive and participatory (Etuk and Adetoro, 2010). Local communication approaches also assist farmers to improve farming methods, increase production, efficiency and income (Adedoyin and Dauda, 2006).

The traditional communication approaches seem not to gain ground in extension services compared to modern communication media. The modern information and communication technologies are urban-based and centered primarily on elite groups and consequently has not been successfully used in transferring information to the rural farmers to enhance agricultural and rural development.

Despite the growing concentration on modern media, local media are still patronised in the rural areas but the potentials of local media have not

been fully utilized by extension agents in agricultural and rural development activities (Daudu and Anyanwu, 2009; Daudu, 2009; Okoye, 2003; Kamlongera, 2000). The dominance of western communication has greatly led to a prevailing situation in which local media is ignored and neglected. Hence this paper investigated the efficacy of local media approaches in agricultural and rural development activities in the rural communities of Akwa Ibom State. The specific objectives of the study were to;

i) identity local communication instruments used in dissemination of information on agricultural and rural development activities in the study
ii) examine local media approaches (LMA) used in agricultural and rural development activities in the study area
iii) examine the major agricultural and rural development activities among rural farmers in the study area

Hypothesis of the Study

There is no significant relationship between the local media approaches used and the major rural development activities among rural farmers in the study area.

METHODOLOGY

The study adopted multi stage sampling. The first stage was the stratification of Akwa Ibom State into 6 Agricultural zones, namely, Abak, Eket, Etinan, Ikot Ekpene, Oron and Uyo zones. The second stage was the determination of sample size. According to AKADEP (2005) Akwa Ibom State has a total of 296,000 registered farmers. The 296,000 farmers from the six ADPs zones were used as a basis to determine the sample size using Taro Yamane formula for finite population. Thus, a total of 399 respondents were used the study. Third Stage was the application of proportionate sampling to determine the sample size in each zone (87 in Uyo, 84 in Ikot Ekpene, 78 in Abak, 69 in Eket, 43 in Etinan and 38). In the fourth stage, simple random sampling was employed in the selection of respondents. Interviews were used in the data collection.

Where =the sample size
n=the finite population
e=level of significance
1=unity (constant)

Measurement of Variables

The commonly use local communication instrument was measured using frequency count, local media approaches used were measure on a four point rating scale of highly used (4) moderately used (3) least used (3) and not used (1) and the LMA scores were derived. Agricultural and rural development activities were measured on four point rating scale of strongly agreed (4), agreed (3) disagreed (2) and strongly disagreed (1) agricultural and rural development activities scores were derived.

Statistical methods

Frequency and percentage were used to present the data while factor analysis and step wise multiple regressions were used to analyse the data. The LMA scores and agricultural and rural development activities scores were derived were subjected to factor analysis and the extracted factors obtained from the two sets of variables were further subjected to multiple regression.

Results and discussion

Commonly used Local communication instruments

Table 1 shows the commonly used local communication instrument for communication in the study area. Boundary trees (Okono), injunction palm frond and scrotal hernia (Unwang) were ranked 1st, 2nd and 3rd respectively among the commonly used local communication instrument.

The boundary tree (Okono) has been a major reliable boundary communicator. The finding shows that people in the study are still believed in this tradition communication. It seems that people in the study area have greater faith in "Okono" than the boundary marker (the beacon stone). This maybe traceable to the belief that if tempered with this boundary tress (Okono) it could bring causes on the victim by the spirit of the land and also the durability nature of the tree (Okono).

Table 1: Distribution of respondents by commonly used LCI

Local communication instruments	Frequency& percent	Rank
Wooden drum (Obodom)	169 (42.36)	6
Wooden xylophone (Ikoneto)	150 (37.59)	8
Small Iron gong (Ekere)	50 (12.53)	9
Wooden gong (Nkporo)	151 (37.83)	7
Danger drum (Ibit Ekpo)	37 (9.27)	10
Master drum (Akpan Ibit Idung)	176 (44.11)	5
Injunction palm frond leaves	246 (61.65)	2
Tied palm frond (ekpin)	206 (51.63)	4
Boundary tree (Okono	267 (66.92)	1
Scrotal hernia or hydrocele symbol (Unwang)	210 (52.63)	3

Field survey (2013) Multiple responses were recorded

Local Media Approaches used in agriculture and rural development

From Table 2, factor analysis procedure with varimax rotation applied to the original data obtained, yielded a four-dimensional solution. The communalities were high and this is an indication that all the local media variables used in the study were relevant and appropriate. The four factors which altogether account for 74.3% of the total variance in the 25 original variables may be regarded as composite indicators defining patterns of local media approaches in agricultural and rural development.

Factor 1: Cultural and festival communication factor

Factor 1 accounted for 39.4% of the total variance and is without doubt the most important factor. Of the 25 variables in the analysis, 10 of these variables namely: smoke signal, town crier, traditional drums, traditional flag, traditional symbol, fish festival, water yam festival, hunting festival and corn festival loaded highly and positively on this factor. These variables associated and dominated with cultural and festival communication factors, hence, it was named cultural and festival communication factor.

Factor 2: Folk communication medium factor

Factor 2 accounted for 19.1% of the total variance. It associated with seven variables which loaded positively and significantly. These variables were folk drama, folk songs, puppet, oral literate\ poems, praise singer and folk tales. Based on the fact that this factor was dominated and associated with folk medium communication variables, it was named folk communication medium factor. The findings agree with Olajide (2012) and Dauda and Anyanwu (2009) who reported that folk communication medium was utilized as one of the major sources of agricultural information.

Factor 3: group communication factor

Factor 3 was found to account for 10.8% of the total variation. It was predominantly dominated by

5 variables and which associated with group communication factor. These variables were cooperative societies, age grades clubs, community leaders and social clubs hence it was named group communication factor. This finding is in consonance with Najafabadi and Pybdani (2011) that group communication approaches were effective in extension work

Factor 4: Personal contact factor

Factor 4 was the last factor. It accounted for 5-60% of the total variation. It loaded highly on only two variables (friends and visits). This factor tends to derive variables pertaining to personal contact method of communication hence the factor was identified as personal contact factor.

Table 2: Rotated component matrixes for local media approaches in agriculture and rural development.

Local media approaches	F_1	F_2	F_3	F_4	Communalities
Folk drama		.761			.911
Smoke signal	.612				.908
Town crier	.692				.802
Folk songs		.701			.932
Cooperative societies			.716		.801
Puppet		.741			.718
Traditional drum	.602				.801
Traditional flag	.701				.913
Traditional meeting			.814		.904
Friends				.806	.814
Age grade clubs			.707		.896
Community elder			.891		.897
Oral literate/poem (uto)		.813			.767
Praise singers		.671			.697
Social clubs			.801		.711
Visit				.716	.581
Traditional symbol	.781				.891
Folk tales		.703			.796
New yam festival (usoro usuuk udia)	.861				.787
Folk play		.810			.717
Fish festival (usoro iyak)	.821				.818
Water yam festival (usoro idio)	.802				.716
Hunting festival (usoro ita)	.791				.781
Corn festival (Ekoon Ndara Akpakpa)	.667				.796
Group discussion			.767		.617
Eigen value	9.10	3.01	2.31	1.35	
Percentage variance	39.4	19.1	10.8	5.60	
Cumulative %	39.4	44.1	63.5	74.3	

Agricultural and rural development activities

Table 3 shows that factor analysis procedure applied to the original data set of agricultural and rural development variables yielded a five-dimensional solution. The communalities were high indicating the appropriateness of all the variables used in this study. The five factors altogether accounted for 70.14% of the total variance in the original 27 variables and therefore appropriately indicated agricultural and rural development activities in the study area.

Factor 1: Agronomic activities

This factor was named agronomic activities because of the high positive loading on settlement of communal clashes, settlement of land dispute, planting, clearing, harvesting, weeding, manure application and storing of seeds. This factor accounted for 37.15% of the variation within the agricultural and rural development variables (dependent). This factor was the most important factor among the five factors extracted.

Factor 2: Health sanitization activities

Health sanitization activities were the name given to factor 2. This was because it loaded highly and positively on provision of health centres, provision of recreational, HIV/AIDS enlightenment, family planning enlightenment and capacity building programme. The factor accounted for 18.93% of the total variance.

Factor 3: Infrastructural development activities

Factor 3 accounted for 10% of the total variance. These variables loaded highly on five variables namely: community market shops construction, Road maintenance, building of community town hall, construction of drainage, because of the dominance of infrastructural provision activities was named infrastructural development activities factor.

Factor 4: Entrepreneurial development activities

Factor 4 was found to account for 3.98% of the total variance in the original data matrix. These were variables road maintenance, establishment, contribution and loan services, and provision of rental service. These variables associated with income generating factors hence it was named entrepreneurial development activities factor.

Factor 5

The last factor, was found to load highly on establishment of palm oil processing mill and establishment of cassava processing milland these variables associated with processing of produces hence the factor was named processing development activities.

Table 3: Rotated component matrixes for agricultural and rural development activities

Variables	F_1	F_2	F_3	F_4	F_5	Communalities
Settlement of communal clashes	.887					.91
Settlement of land dispute	.834					.90
Planting	.714					.89
Clearing	.717					.86
Harvesting	.711					.81
Marketing of produce	.761			.819		.82
Road construction						.91
Community market shops construction			.716			.90
Road maintenance			.706			.80
Building of community town hall			.704			.87
Provision of health centres		.617				.88
Building of sign post						.62
Establishment, contribution and loan services				.910		.81
Provision of electricity			.721			.80
Provision of rental service				.810		.86
Construction of drainage			.769			.90
Schools renovation						.68
Establishment of palm oil processing mill					.706	.90
Establishment of cassava processing mill					.717	.98
Provision		.61				.80

Variables	F_1	F_2	F_3	F_4	F_5	Communalities
of recreational		0				
HIV/Aids enlightenment		.810				.79
Family planning enlightenment		.813				.80
Capacity building programme		.617				.80
Weeding	.716					.67
Manure application	.732					.81
Storing of seeds	.713					.71
Enlightenment on other health issues		.716				.76
Eigen value	8.89	4.36	3.21	2.26	1.20	
Percentage variance	37.15	18.93	10.70	3.94	1.01	
Cumulative %	37.15	56.08	66.18	70.14		

Relationship between local communication approaches used and agronomic activities.

Table 4 shows that the coefficient of determination (R^2 value) was .664. This implies that about 66% of the variation in the agronomic activities is accounted for by the joint effect of local communication approaches used. Out of the four independent variables, cultural and festival factor and personal contact factor strongly and positively influenced agronomic development activities. This indicated that cultural and festival communication approaches have a potential of enhancing agronomic development activities in the study area.

Table 4: Relationship between local communication approaches and agronomic activities

local communication pattern	Coefficients	Standard error	T-value	Sign T.
Cultural and festival communication factor (Factor 1)	.796	.605	2.967	.000
Folk media (Factor 2)	.716	.807	0.676	.310
Social Group Communication (Factor 3)	.610	.743	0.705	.246
Personal contact communication (Factor 4)	.564	.560	1.028	.025
R	.781			
R^2	.664			
Adjusted R	6.17			

Relationship between local communication approaches used and health and sanitation development activities

Table 5 shows the relationship between local communication approaches used and health and sanitation development activities. The coefficient of multiple determination (R^2) was 0.619 meaning that local communication approaches used accounted for about 62% in explaining the causal relationship between local communication approaches used and health and sanitation development activities. However, folk media and social group communication strongly and positively affected health and sanitation development activities. This implies that folk media and social group communication have high propensity to sensitizing rural people in health development programme.

Table 5: Relationship between local communication approaches used and health and sanitation development activities

Local communication approaches	Coefficients	Standard error	T-value	Sign T.
Cultural and festival communication factor (Factor 1)	.594	.608	.814	.297
Folk media factor (Factor 2)	.687	.541	1.324	.000
Social group communication (Factor 3)	.476	.461	.868	.021
Personal contact (Factor 4)	.483	.496	1.024	.263
Constant	1.232	.953	2.514	.593
R	.634			
R^2	.619			
Adjusted R	.582			

Relationship between local communication approaches used and infrastructural development activities

As shown in Table 6, shows that there is a relationship between the local communication approaches used and infrastructural development activities. The 60% of the observed variability of the infrastructural development activities can be explained by local communication approaches. Specially, infrastructural development activities were function of social group communication and personal contact communication media. These local communication media were found to have positive value, implying that they have positive effect on infrastructural development activities. Najafabadi and Pybdani (2011) also reported that local communication approaches was effective in mobilizing people for community development activities.

Table 6: Relationship between local communication approaches used and infrastructural development activities

Local communication approaches	Coefficients	Standard error	T-value	Sign T.
Cultural and festival factor (Factor 1)	.394	.489	.267	.214
Folk media factor (Factor 2)	.468	.580	.396	.467
Social group communication factor (Factor 3)	.614	.424	1.124	.014
Personal contact (Factor 4)	.346	.304	.968	.026
R	.629			
R^2	.601			
Adjusted R	.518			

Relationship between local communication approaches used and entrepreneurial development activities

Table 7 shows that the coefficient of determination (R^2) was .556. This shows that the local communication media variables contributed 55% of the variation in the entrepreneurial development activities in the study area. Specially, social group factor was a very good predictor of entrepreneurial development activities. The finding is synonymous with Adedoyin and Duada (2006) that local communication approaches aid in agricultural commence.

Table 7: Relationship between entrepreneurial development activities and local communication approaches in agricultural and rural development

Local communication approaches	Coefficients	Standard error	T-value	Sign T.
Cultural and festival factor	.296	.301	.346	.146

Folk media factor	.207	.496	.246	.130
Social group factor	.608	.519	1.018	.021
Personal contact	.499	.508	.521	.374
Constant	.567	.404	.316	.047
R	.596			
R^2	.554			
Adjusted R	.524			

Relationship between local communication approaches used and processing development activities

Table 8 shows the coefficient of determination (R^2 value) is .561. This shows that the local communication approaches contributed about 56% of the variations in the processing development activities. Personal contact factor was a major predictor of processing development activities. Valbunnena (1993) as cited in Dauda (2009) reported that local media approaches especially personal contact has positive effect on production, storage, preservation and marketing of agricultural goods. This may be traceable to the fact that local communication approaches is easy to assimilate by the rural farmers.

Table 8: Relationship local communication approaches used and between processing development activities

Local communication approaches	**Coefficients**	**Standard error**	**T-value**	**Sign T.**
Cultural and festival factor(Factor 1)	.396	.401	.269	.346
Folk media factor (Factor 2)	.406	.516	.462	.214
Social group factor (Factor 3)	.417	.428	.819	.346
Personal contact (Factor 4)	.476	.368	1.096	.016
R	.586			
R^2	.561			
Adjusted R	.516			

CONCLUSION AND RECOMMENDATION

Based on the finding of the study, it is concluded that local communication approaches are still in use in the agricultural and rural development activities, four major local media pattern usage were identified namely cultural and festival communication factor, folk communication media factor, social group, communication and personal contact communication factors. These four factors had positive effect on agricultural and rural development activities in the study area.

The study therefore recommended that the use of local media should be integrated into the policy framework of agriculture extension and rural development for effective information delivery to rural dwellers.

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