

Full Length Research Paper

Assessment of Agricultural Extension Agents (AEA) Usage of Extension Delivery Methods and their Challenges in Benue-Nigeria

¹Omale, P.I., ¹Demenongu, T.S. and ²Tor, L. G.

¹Department of Agricultural Extension and Communication, Federal University of Agriculture, Makurdi- Benue State, Nigeria.

²Department of Agricultural Technology, Federal College of Forestry Mechanization, Afaka- Kaduna, Nigeria.

Corresponding Author's E-mail: luvlypat83@gmail.com

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The study was conducted to ascertain Agricultural Extension Agent (AEA) usage of various Extension Delivery methods and their challenges in Benue State- Nigeria. 50 were drawn as respondents for the study through simple sampling techniques across 3 Local Government Areas of the State namely; Konshisha, Tarkaa and Otukpo. Structured Questionnaire was employed for the collection of data from the respondents. Data collected analyzed using simple descriptive statistics of frequency, percentages and mean. Result obtained revealed that most of the respondents were male (78.0%), married (78.0%), aged 41-50 years (36.0%), have post secondary education (88.0%), have 11-20 years work experience (48.0%) and have annual earnings of up to N1 million (44.0%). Result also revealed that most of the respondents made use of interpersonal channels such as farm visit (82.0%), group discussion (68.0%), demonstration (82.0%) and training & visit (70.0%) to deliver extension messages. The study identified low number of AEA (2.78), poor logistic for AEA work (2.30), weak Research Extension Linkage (2.12) and poor wages (2.06) as some of the constraint faced by AEA in the study area.

Keywords: Agriculture, Extension, Agent, Usage and Constrains.

INTRODUCTION

Issahaku (2014) defined Agricultural extension as the entire set of organizations that support and facilitate people engaged in agricultural production to solve problems and to obtain information, skills, and technologies to improve their livelihoods and well-being. According to the author this is aimed at providing farmers with necessary education, skills and technical information to enable them to make effective farm management decisions to enhance their daily practices. In Nigeria, the quest to achieve these core mandates of Agricultural Extension within the past decades led to introduction of different development programs in the Agricultural sector and employing of

various extension delivery methods to reach farmers, teach new methods, improve farmers' knowledge and ultimately increase food production. The extension delivery methods employed fall generally under individual, group and mass contact and communicated using vertical and horizontal means or intrapersonal, interpersonal, and mass communication and at other times combined to deliver the intended scientific research and new knowledge to farmer (Age, 2015).

Extension services are essentially communicative according to Agwu and Adeniran (2009) hence the right communication link need to be

forged for sharing of knowledge to intended clients so as to bring about change of attitude, knowledge, skills and aspiration to the receivers. The use of appropriate delivery method along side good packaging of the communication technique is therefore required to create the desired impact to clients. Okwu&Daudu, (2011) reported that the use of interpersonal channels for delivery of extension messages was found to be more available, accessible and used by the farmers than the mass media to obtain information on improved farm technologies. This shows that the farmers were more receptive to these channels and rely on them more for information. Ahmad, Mohammad& Hussein (2016) collaborated in their study that farm visit, meeting groups of farmers, result demonstrations and farm tours were observed to be the most preferred methods while the use of information and communications technology (ICT) such as electronic methods of communication (mobiles/sms), electronic media (CDs... diskettes...) and internet to provide extension were low rated among farmers. This therefore suggests that among farmers in rural and tropical zones use of interpersonal contacts seem to be a more effective means of extension delivery. This could however be met by setbacks where extension is not adequately funded as collaborated by Alethea(2014) that RSKs Extension services had no significant impact on the farmers' yield level due to problem expressed by the extension personnel such as inadequate transport facility for farm visits which resulted in the farmers suffering from poor information due to irregular visit of field official.

While farmers preference of extension delivery methods is known especially for rural and tropical extension worker have to continually adapt and improvise due to administrative limitations even with fast changes in communication technologies introduced over the years (Umar, *et al*, 2015). This has resulted to generally poor performance for the AEA especially with coping with trends and delivering properly on their jobs. Most recently many methods of engaging and communicating change across the world have been advocated by communication experts with better promising results such as the Communication for Development (C4D) promoted by the world bank (Nwachukwu, 2018) little is known of its application by AEA in Nigeria. What then are the extension delivery methods currently used by AEA to reach farmer in Benue State? This forms the basis of this research hence the following objectives were pursued and achieved; to describe the socio-economic characteristics of the extension agents in the study area, to ascertain the method of agricultural extension service delivery they use to reach farmers and to identify their constraints in agricultural extension service delivery in Benue State.

METHODOLOGY

The study was carried out in Benue state, Nigeria. Benue state is located in the middle belt region of Nigeria and it lies in between Longitude 8° and 9° E, Latitude 7° and 8° N with an estimated population of 4,219,244 (NPC, 2006).

The State lies within the lower river Benue trough in the middle belt region of Nigeria. Its geographic coordinates are longitude $7^{\circ} 47'$ and $10^{\circ} 0'$ East. Latitude $6^{\circ} 25'$ and $8^{\circ} 8'$ North; and shares boundaries with five other states namely; Nasarawa states to the north, Taraba state to the east, Cross-river state to the south, Enugu state to the south-west and Kogi state to the west. The state also shares a common boundary with the republic of Cameroon on the south-east. Benue occupies a landmass of 34,059 square kilometres (Wikipedia, 2017).

The population of this study consisted of all the Extension agents in Benue state, Nigeria. For this study, data was collected from extension agents in Konshisha in Zone A, Tarka in Zone B and Otukpo in Zone C of Benue state. Simple random sampling technique was used to select 50 extension agents from these three zones.

The data for this study was collected from primary source, with the use of a well-structured questionnaire which was used to interview the respondents (extension agents) within the study area.

Data collected were analysed using descriptive and inferential statistics. The descriptive statistics such as means, frequencies and percentages was used to analyse objectives 1, 2, and 3. While inferential statistic like Pearson's product moment correlation co-efficient (PPMC) was used to analyse (test) for the hypothesis H_0 which states that the selected socioeconomic characteristics of the extension agents (age, sex, extension work experience, educational qualification, household size, estimated annual income and marital status) have no significant relationship with their choice of method of extension service delivery used.

DISCUSSION

Result of table 1 reveal that majority of the Extension agents interviewed were male (78.0%) implying that very few female took up the occupation likely due to the huge task of moving around villages and combining it with family life. The dominant age group was 41-50 years of age (36.0%) which shows that job provided good satisfaction enabling middle aged people to settle for it. The result also revealed that most of the respondents had post secondary education (88.0%) implying that the job of extension agent gave them opportunity to improve themselves and become

Table 1: Socio-Economic Characteristics of the Respondents (n=50)

Characteristics	Frequency	Percentage
Sex		
Male	39	78.0
Female	11	22.0
Total	50	100.0
Age (yrs)		
21-30	01	2.0
31-40	05	10.0
41-50	18	36.0
51-60	16	32.0
>60	10	20.0
Total	50	100.0
Level of Education		
Non formal education	00	00
Primary education	00	00
Secondary education	06	12.0
Post-secondary education	44	88.0
Total	50	100.0
Marital Status		
Single	02	4.0
Married	39	78.0
Divorced	1	2.0
Widowed	08	16.0
Total	50	100
Household Size		
1-5	21	42.0
6-10	22	44.0
11-15	07	14.0
Total	50	100
Extension work experience (years)		
1-10	19	38.0
11-20	24	48.0
21-30	04	8.0
>30	03	6.0
Total	50	100.0
Estimated annual income (₦)		
<100,000	00	00
100,000-399,999	01	2.0
400,000-699,999	08	16.0
700,000-999,999	19	38.0
≥1,000,000	22	44.0
Total	50	100.0

Source: Field survey 2018

specialized in their fields as Subject Matter Specialist (SMS). Result further reveal that a higher number of the respondents were married (78.0%) an indication that they could easily combine the job with family life while the dominant household size was 6-10 persons (44.0%) meaning they could carter for large number of household with their earnings. A larger portion of the respondents have years of experience ranging 11-20 years (48.0%) with annual earnings of N1,000,000 (44.0%) an implication that the job had a poor earnings for a person with large family size who receives \$225 monthly which translate to \$7.50 per day and have put up to 20 years in service.

The above result conforms to findings of Umaret al (2015) and Ijeoma&Adesope (2015) especially in the area of dominant gender, age, marital

status, educational attainment and household sizes of the Extension agents. One could therefore infer that the job of AEA is tasking, taken up by those with passion for agriculture and ready to incorporate it into their family lives. These persons go ahead to pursue further education to become Subject Matter Specialist (SMS) in their chosen agricultural fields even though not properly motivated as their wages remain poor. This has huge implication for agricultural development as ensuring proper welfare for these main drivers of the agricultural sector would go a long way to boost their morale and ultimately make them double their efforts to deliver best on the job.

The result of table 2 shows the most used methods of Agricultural Extension service delivery by the Agricultural Extension Agents (AEA).

Table 2: Distribution Of Respondents According to the Method of Agricultural Extension Service Delivery Used (n=50)

Variables	Frequency*	Percentage
Method of extension delivery service		
Farm/home visit	41	82.0
Training and visit	35	70.0
Discussion groups	34	68.0
Radio	41	82.0
Television	15	30.0
Newspapers	16	32.0
Demonstration	41	82.0

*Multiple response recorded

Source: Field survey 2018

Farm/home visit, radio and demonstration methods are reported to be the most used extension methods among AEA having 82.0% each. This is followed by training and visit method (70.0%), group discussion method (68.0%), newspaper method (32.0%) and television method being the least (30.0%) used method by AEA. This shows a combination of methods by the extension agents which include use of individual, group and mass media extension methods for reaching of farmers.

It is worthy of note that the AEA showed more preference for interpersonal methods of Extension deliveries such as farm visit, demonstration methods, training & visit and group discussions over radio, television and ICT confirming the reports of Okwu &

Daudu, (2011) and Mohammad & Hussein (2016) that farmers preferred interpersonal channels to access information. This is equally in line with the assertion by Age (2015) of the effectiveness of interpersonal channels of extension delivery in persuading audience to embrace new changes. It could therefore be suggested that adopting Communication for Development (C4D) in extension work would help internalize, gain confidence, better transform and serve as a more friendly mechanism for extension delivery to drive the intended change.

The result of table 3 shows constraints encountered by extension agents in service delivery using the methods available to them in the study area.

Table 3: Distribution Of Respondents According to the Perceived Restrictions to Effective Extension Deliveries (n=50)

Restrictions	Mean (π)
Inadequate number of extension agents	2.78*
Untimely supply/inadequate extension equipments needed to deliver services	2.68*
Poor Research Extension Linkage	2.12*
Poor training of extension agents	2.04*
Inadequate financial resources	2.64*
Poor logistics for AEA work	2.30*
Lack of effective communication	2.36*
Poor wages	2.06*
Poor access to multiple communication channels	1.78
Farmers level of education	2.30*

Source: Field Survey 2018

The result reveals that inadequate number of extension agents was the major constraint faced with a mean of 2.78. This implies that there is shortage of AEA even though interpersonal channels of extension service delivery is most preferred. The result also reveals that untimely supply of extension innovation by the agency is also a constraint with a mean of 2.68.

This is followed by inadequate financial resources (2.64), lack of effective communication (2.36), poor logistic for AEA work (2.30), weak Research Extension Linkage (2.12), difficulty accessing farmers scattered in difficult terrains (2.12), poor wages (2.06), poor training of extension agents (2.04) and poor access to modern extension communication channels (1.78).

The above result collaborates some of the problems highlighted by Umaret al, (2015) as challenges for AEA in the use of ICT. The implication is that a larger portion of the farmers will not be covered by these few number of AEA, there will be late and uneven delivery of intended innovation, poor contact with farmers, weak Research-Extension-Farmers Linkage, poorly motivated extension agents cumulating to ineffectiveness of the extension in delivering on its core mandate. This paints a gloomy picture for such a system meaning urgent intervention is needed in terms of funding to revive and save it from total collapse. At this juncture the use of mass media channels along sides interpersonal extension delivery channels would therefore help bridge this gap as suggested by Anonguku, Naswem and Obinne (2013) to help disseminate agricultural information to farmers as for sustainable development. The use of ICT channels therefore becomes imperative hence training AEA and farmers to acquire skills of communicating through them will go a long way.

CONCLUSION

The Extension Service Delivery methods used by Agricultural Extension Agents in Benue State-Nigeria are more of interpersonal channels which are most preferred by the farmers. Mass media channels such as radio and television are also being put to use while ICT usage seem to be low. The AEA are faced with several challenges in their quest to deliver on their job ranging from low number of personnel, poor training, poor logistic support and poor wages. This has being identified as being capable of making them ineffective on their job and capable of crippling the entire agricultural system of the country.

RECOMMENDATION

Based on the research findings the following suggestions are made;

1. Combination of interpersonal and mass media channels be used in extension service delivery to mitigate the challenges faced by the field workers.
2. Donor agencies should channel their resources in training and stimulating interest in both AEA and farmers to embrace the use of ICT to send and acquire agricultural information.
3. Communication for Development (C4D) should be use by Agricultural Extension Agencies as techniques toward bringing about change to farmers.

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