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# Assessment Of The Effectiveness Of Extension Agents In Delta Central Agricultural Zone

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By

**DR. J.F.O. AKPOMEDAYE**

*Department Of Vocational Education,  
Delta State University,  
P.M.B. 1,  
Abraka – Nigeria*

## **Abstract**

*This study assessed the effectiveness of extension agents in Delta Central Agricultural Zone of Delta State. Four research questions were posed and answered to put the paper on focus. The descriptive survey design was employed, with a sample size of 20 extension agents and 2500 farmers selected and participated in the investigation. The questionnaire was the major instrument of data collection after its testing for validity and reliability with reliable indices. The generated data were subjected to statistically analysis using frequency tables and simple percentages. The results indicated that extension agents have attained 25% education level above the secondary school level; and 75% level of education at the degree and postgraduate levels; contact between the farmers and extension agents is limited to scanty number of 0-2 times per month; overall ratings showed that extension agents were not effective on their job but rather prefer to be in administrative duty posts; and major problems facing extension workers include poor funding, poor mobility, insufficient field staff; inaccessibility to farming communities, late arrival of farm inputs, among others. Recommendations include adequate funding of extension services, provision of adequate mobility system, and effective monitoring and supervision of extension programmes backed up with its periodic evaluations, and so on.*

## **Introduction**

Extension services assessment as a concept has been defined to mean a continuous and systematic process of judging the value or potential value of extension programmes. It also refers to the extent of performance of an extension programme (Seepersad & Henderson, 1984; Akpomedaye et al, 2004); while the effectiveness of extension agents connotes the desired effects or impact which the information carried by extension workers have on agricultural production of the farmers. Extension effectiveness also refers to the ability of the organisation to be mobilized to meet the demand in the areas of production, adaptability and feasibility. The extent to which the

extension workers realise their goals determine their effectiveness (Etzion 1970; Mott, 1972; Akpomedaye et al 2007).

In this study, assessment of extension workers effectiveness means the determination of the extent to which the extension agents have attained the goals of the extension services in the area. The extension workers play very important role in the effort of the farmers as well as the overall agricultural development of all nations. It has been the principal work of agricultural extension agents to disseminate agricultural information to rural people. The extension services have positively affected the major means of livelihood of rural area. They not only bridge the gap between the research stations and the farmers but also equip them with knowledge and skills. Knowledge and techniques would remain in the laboratories and experimental farms if they are not extended to the farmers. Extension helps rural farmers by bringing to their door steps useful information which they can use to solve their own problems (Adeniyi, Udegalanya, Abdullahi & Iheukwumere, 1991; Mosher, 1978; Bene, Obinne & Akpehe, 1994). Other importance of agricultural extension workers include getting farmers into a frame of mind and attitude conducive to acceptance of technological change (Akpomedaye et al, 2007; Akpomedaye et al, 2004), provision of support services to farmers such as farm inputs, improving the living standard of the people through increased production, conducting worthwhile and acceptable activities in the spirit of cooperation and mutual respect between the extension workers and the farmers, improvement in health of the people through better nutrition, adequate health care facilities and services, better housing and rural electrification, improved educational and recreational facilities for home and community, links farmers to the outside world (Mosher, 1978; Akpomedaye et al, 2004, Akpomedaye et al, 2007, Bene et al, 1994; Adeniyi et al, 1991; Benor et al, 1984; Obinne & Ozowa, 1997; Akpomedaye et al 2004).

Certain principles guide the extension workers which include: that extension teaching should start at the farmers level of knowledge, understanding, interest, and degrees of readiness; the programmes should start with the felt need of the people and proceed to other needs that are required by them; the farmers should be involved in planning programmes for effective implementation; extension programmes must be attractive and tailored to meet the diverse needs and interest of the various farmers; extension agents should take advantage of any existing local groups to involve the farmers in existing programmes; subject matter covered must have a definite purpose and must make sense and be useful to the farmers within the time available, within the physical economic resource of the clientele and within the social condition and learning ability of the participants (Bene et al 1994; Esenjor, 1992; Akpomedaye et al; 2004). Other principles of extension are: extension should go to members of rural families where they live; extension teaching should equip the farmers with new knowledge and skills; extension should treat all farmers and their wives as being rational adults; each new or changed practice must be both technically sound and financially profitable. It should also be socially desirable; good extension teaching uses a wide variety of teaching methods, among others (Mosher, 1978).

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Currently, extension services in Nigeria is being confronted by a multitude of problems which prospective researchers have identified and enunciated as follows: inadequate staff, weak linkages with agricultural research, poor staff mobility, and weak financial support (Madukwe and Ozor, 2004; Erhabor 1995; Bene, et al, 1994; Coen et al 1992; and Uyanga, 1980). Other problems include little time invested in extension, wide extension staff-farmer ratio of 1: over 3,000, inadequately equipped and poorly trained extension agents and highly illiterate and uneducated farmers, inadequate communication media, poor funding of extension programmes, inadequate mobilization and poor allowance of extension officers/change agents, poor reception by and inaccessibility to many farm communities, late arrival of farm inputs, delay in release of research results, lack of knowledge and understanding of farming systems, insufficient feedback from farmers to research programmes, lack of mechanisms for testing and adapting technology on farmers' fields, and poor supervision of farmers by the extension agents, inadequate subject matter specialists' to handle extension matters, poor monitoring of the activities of extension agents, and lack of periodic evaluation of extension programmes (Gilbert, Norman and Winch, 1980; Johnson III & Kellog, 1984; Madukwe, 2008; Akpomedaye et al 2004; Obinne & Ozowa, 1997; Akpomedaye et al, 2007; Williams, 1981).

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### **Research Questions**

This study was focused on providing answers to the following research questions:

- (1) What is the level of education of extension agents?
- (2) How many times do extension agents visit farmers on their farms monthly?
- (3) How effective are the extension agents?
- (4) What are the paramount problems militating against extension services in the area?

### **Methods**

This study which was centred on the assessment of extension agents' effectiveness in Delta Central Agricultural Zone of Delta State, utilized the descriptive survey design. A total of 20 extension agents and 2,500 farmers were selected and participated in the study. A self developed instrument was used for the study after its due testing for validity and reliability with acceptable indices. The questionnaire which formed the bulk of data collection instrument was divided into four (4) sections of A, B, C and D. Section "A" dealt with the extension agents personal data; while "B" focused on effectiveness of extension agents; section "C" requested for information on the frequency of visits and number of times farmers' are visited on the farms by extension agents; and section "D" was concerned with the problems facing extension agents in carrying out their extension duty.

During data collection, sections A and D of the instrument were given to the extension agents to respond to; while sections B and C of the instrument were administered to the farmers. This means that the farmers were used to assess the

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## Results and Discussion

The data collected were analysed and presented in tables as follows:

**Table 1: Levels of Education of Extension Agents**

S/N	Level of Education	Frequency (f)	Percentage (%)
1	Secondary level	0	0
2	Diploma/NCE	5	25
3	Bachelor degree/HND	10	50
4	Master degree	4	20
5	Ph.D	1	5
	<b>Total</b>	<b>20</b>	<b>100</b>

Presented in Table 1 is the responses of extension agents on their levels of education. The results showed that none of the extension agents is within the secondary level of education (0%); Diploma/NCE (25%); Bachelor degree/HND (50%); Master degree (20%); and Ph.D degree (1%). It is conspicuous that the extension agents who may have been within the Diploma/NCE education level, have upgraded their status to the degree level and even master degree level through various in-service programmes.

**Table 2: Number of Times Extension Agents Visit Farmers on their Farms per Months**

S/N	Number of visits/Month	Frequency (f)	Percentage (%)
1	0-2	1,459	91.19
2	3-5	141	8.81
3	6-8	0	0
4	9 and above	0	0
	<b>Total</b>	<b>1,600</b>	<b>100.00</b>

Data in table 2 indicated the responses of farmers on the frequency of visits and number of times extension agents visit them on their farms per month. It can be seen from the results that 0-2 times (91.19%); 3-5 times (8.81%); 6-8 times (0%); and 9 times and above (0%). This revealed that the extension agents have limited time with the farmers. The high percentage of farmers responses under 0-2 times per month could have emanated from the big farmers consulting with the extension agents in their offices. The researcher has also observed that the extension agents spent most of the times in their offices rather than visiting the farmers.

**Table 3: Effectiveness of Extension Agents**

S/N	Criteria for Effectiveness	Yes		No		Remark
		F	%	F	%	
1.	Extension agent is punctual to meetings.	160	10	1440	90	Rejected
2.	I have not seen extension agents for the past 3 years.	1,320	82.5	280	17.5	Accepted
3.	Each contact period is well planned.	165	10.31	1435	89.69	Rejected
4.	Agent encourages farmers to ask questions.	130	8.13	1470	91.87	Accepted
5.	Agents treat farmers with respect.	1,250	78.13	350	21.87	Rejected
6.	Teaching encouraged skill acquisition.	170	10.62	1430	89.38	Rejected
7.	Agent uses variety of teaching methods.	155	9.69	1445	90.31	Rejected
8.	Agent communicates effectively.	152	9.50	1448	90.50	Rejected
9.	Agent gives clear explanations.	154	9.62	1446	90.38	Rejected
10.	Agent maintains good rapport with clientele.	480	30	1120	70	Rejected
11.	Agent give feed back to farmers.	157	9.81	1443	90.19	Rejected
12.	On the whole, agent is effective.	125	7.81	1475	92.19	Rejected
13.	On the whole, agent is not effective.	1465	91.56	135	8.44	Accepted

**KEY:**

F = frequency

% = percentage

In table 3, the data from the responses of farmers on the effectiveness of extension agents are presented. The results indicated that the farmers accepted the points that they have not seen extension agents for the past 3 years (Yes = 82.5%; No =17.5%); agent treat farmers with respect (Yes = 78.13%; No = 21.87%); and on the whole, extension agent is not effective (Yes = 91.56%; No = 8.44%). The farmers rejected the facts that extension agent is punctual to meetings (Yes = 10%; No = 90%); each contact period is well planned (Yes = 10.31%; No = 89.69%); agent encourage farmers to ask questions (Yes = 8.13%; No = 91.87%); teaching encouraged skill acquisition (Yes = 10.62%; No = 89.38%); agents uses variety of teaching methods (Yes = 9.69%; No = 90.31%); agent communicate effectively (Yes = 9.50%; No = 90.50%); agent gives clear explanations (Yes = 9.62%; No = 90.38%); agent maintains good rapport with clientele (Yes = 30%; No 70%); agent gives feedback to farmers (Yes = 9.81%; No = 90.19%); and on the whole, agent is effective (Yes = 7.81%; No = 92.19%). It is easily seen that the farmers rejected almost all the criteria selected for the

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effectiveness of the extension agents. This is to say that the extension agents do not visit the farmers except on special consultations by few farmers that can afford to pay for such special consultations.

**Table 4: Problems Facing Extension Agents**

S/N	Problems	Yes		No		Remark
		F	%	F	%	
1.	Poor funding.	19	95	1	5	Accepted
2.	Poor mobilization.	16	80	4	20	Accepted
3.	Insufficient field staff.	18	90	2	10	Accepted
4.	Short time for extension work.	5	25	15	75	Rejected
5.	Illiteracy of farmers.	3	15	17	85	Rejected
6.	Inaccessibility to farm communities.	12	60	8	40	Accepted
7.	Late arrival of farm inputs.	14	70	6	30	Accepted
8.	Delay in releasing research results.	7	35	13	65	Rejected
9.	Poor supervision & monitoring of extension work.	15	75	5	25	Accepted
10.	Lack of periodic evaluation of extension work.	17	85	3	15	Accepted

### KEY

F = frequency

% = percentage

Table 4 contained data showing the problems confronting extension agents. The results indicated that the extension agents accepted most of the items selected as problems; and these include; poor funding (Yes = 95%; No = 5%); Poor mobilization (Yes = 80%; No = 20%); insufficient field staff (Yes = 90%; No = 10%); inaccessibility to farm communities (Yes = 60%; No = 40%); late arrival of farm inputs (Yes = 70%; No = 30%); poor supervision and monitoring of extension work (Yes = 75%; No = 25%); and lack of periodic evaluation of extension work (Yes = 85%; No = 15%). The extension agents rejected: short time for extension work (Yes = 25%; No = 75%); illiteracy of farmers (Yes = 15%; No = 85%); and delay in release of research results (Yes = 35%; No = 65%).

Extension agents in particular and the entire extension programme in general requires adequate funding. Poor motivation in terms of funding and other incentives to the extension agents put them in difficult situation not to put in their best. Thus, restricting their communication with farmers and limiting the scope of operation of the extension workers. Inadequate finances also create the inability to maintain broken down vehicles and non-acquisition of certain basic materials needed for effective extension work. Poor mobility and inadequate transport facilities are also major hindrances to effective extension delivery. The extension services currently, is characterized by inadequate field vehicles. Problem of insufficient field staff is also

paramount. Extension workers are too few to work with many farmers. In most cases, the high ratio of about 1 extension agent to 3,000 farmers is an outstanding problem. The effect is that the very few extension agents cannot reach the farmers who need them. Most farming communities especially in the rural areas are inaccessible. This is sometimes worsen by lack of mobility for extension workers as some farmers reside in the creeks of riverine areas and or waterlogs areas with inaccessible road networks. It has been noted that inadequate farm inputs and late arrivals of farm inputs retard the pace of extension work. Sometimes, farm inputs arrived when they are not needed.

The lack of effective monitoring and supervision of extension agents by the ministry is also a major problem. The result is that most agents abandoned their primary assignment for their personal businesses. Many of the extension programmes are hardly evaluated to check for effectiveness, as most extension agents are more interested in administrative schedule of duty. On the other hand, the extension agents rejected short time for extension work, illiteracy of farmers, and delay in the release of research results. This can be attributed to the fact that time allotment can be made by the agents themselves; and that farmers have improved considerably on their literacy level coupled with the use of interpreters and demonstration teaching method including that visually all aspects of farming have been researched upon with results made available and documented.

### **Conclusions & Recommendations**

Arising from the investigation, the following conclusions were made:

- (1) Extension agents have attained 25% level of education above the secondary school level; and 75% level of education at the degree and post graduate levels;
- (2) The contact between the farmers and extension agents is highly limited to 0-2 times monthly;
- (3) From the totality of the farmers rating the extension agents are not effective; and
- (4) The major problems facing the extension agents include: poor funding, poor mobilization, insufficient field staff, inaccessibility to farm communities, late arrival of farm inputs, poor supervision and monitoring of extension work, and lack of periodic evaluation of extension work.

Recommendations that emanated from the research are as follows:

1. There should be maximum improvement in the contact between the extension agents and the farmers beyond the scanty level of 0-2 times monthly to about 6-8 times per month;
2. As a matter of urgency, the various factors that make the extension agents ineffective should be investigated;
3. The extension services should be adequately funded, ensuring effective mobilization and massive recruitment of extension agents; and
4. The rural communities be made accessible by the construction of motorable roads, ensuring adequate and early supply of farm inputs, effective monitoring and supervision, including periodic evaluation of extension work.

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### **References**

- Adeniyi, M.O.; Udegalanya, A.C.C.; Abdullahi, Y. & Iheukwumere, C.A. (1991). *Countdown to senior secondary certificate examination agricultural science*. Ibadan: Evans Publishers.
- Akpomedaye, J.F.O. & Iyase, N. (2004). Assessment of the effectiveness of the extension agencies in agricultural production in Aniocha North L.G.A of Delta State. *Unpublished B.Sc (Ed) Dissertation*, Department of Vocational Education, Delta State University, Abraka.
- Akpomedaye, J.F.O. & Jegbefume, O. (2007). Effectiveness of farmers extension linkage in the ADP extension strategy in Ika South L.G.A of Delta State. *Unpublished B.Sc (Ed) dissertation*. Dept. of vocational education, Delta State University, Abraka.
- Akpomedaye, J.F.O. & Obiakor, L.U. (2004). The strategies to improve the impact of extension services on farmers productivity in Ihiala L.G.A. of Anambra State. *Unpublished B.Sc (Ed) Dissertation*, Dept. of Vocational Education, Delta State University, Abraka.
- Akpomedaye, J.F.O. & Osabuohien E.S. (2007). The effectiveness of agricultural extension agents in information dissemination in Delta Central District. *Unpublished B.Sc (Ed) Dissertation*, Dept. of Vocational Education, Delta State University, Abraka.
- Bene, J.R.; Obinne, C.P. & Akpehe, A.A. (1994). *Agricultural extension in rural development*. Makurdi: Almond.
- Benor, D.; Harrison, J.Q & Baxter (1984). *Agricultural extension: The training and visit system*. Washington. World Bank.
- Coen, R, Bertus, H. & Ann, W. (1992). *Farming for future: An introduction to low-external input and sustainable agriculture*. London & Basingstroke: Macmillian.
- Erhabor, P.O. (1995). *Evaluation of the impact of agricultural extension delivery system of Edo agricultural development programme (EDADP) on Edo State agriculture*. Edo: EDADP.
- Esenjor, A.F. (1992). *Nuts & bolts of community development for students and practitioners*. Agbor – Delta State: Esenkin.



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Gilbeert, E.H.; Norman, D.W. & Winch, F.E. (1980). *Farming systems research: A critical appraisal*. (MSU rural development paper No. 6). East Lansing, Mich: Department of Agricultural Economics, Michigan State University.

Johnson III, S.H. & Kellogg, E.D. (1984). Extension role in adapting and evaluating new technology for farmers. In Swanson, B.E. (1984). *Agricultural extension – A reference manual (2<sup>nd</sup> Ed)*. Rome: Food and Agriculture Organisation of the United Nations.

Madukwe, M.C. (2008). *Practice without policy: The Nigerian agricultural extension service*. A lecture of the University of Nigeria, Nsukka: Senate Ceremonials Committee.

Madukwe, M.C. & Ozor, N. (2004). Emerging approaches and strategies in the delivery of agricultural extension services to farmers. *Journal of Agricultural Management and Rural Development*. 1 (1), 50 – 63.

Mosher, A.T. (1978). *An Introduction to Agricultural Extension*. New York: American Agricultural Development Council (AADC).

Obinne, C.P.J & Ozowa, V.N. (1997). Disseminating agricultural information to rural people: Integrating indigenous knowledge and communication. In Heribert, H. and Sambrowski, M. (eds). *Adult education and development*. Institute for International Cooperation of the German Adult Association, Vol. 48.

Seepersade, J. & Henderson, T.H. (1984). Evaluating extension programmes. In Swanson, B.E. (1984). *Agricultural extension – A reference manual (2<sup>nd</sup> Ed)*. Rome. Food & Agricultural Organisation of the United Nations.

Uyanga, J.T. (1980). *The geography of Rural development in Nigeria*. Washington: African University Press.

Williams, S.K.T. (1981). *Rural development in Nigeria*. Ife University. Ile-Ife: University Press.