

## Comparative Analysis of the Constraints to Effective Extension Services in Abia and Akwa Ibom States

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**Abstract:** The study compared the constraints to effective extension services of Agricultural Development Programmes (ADPs) in Abia and Akwa Ibom States. Data were collected from 20 Block Extension Supervisors (BESs) and 60 Extension Agents (EAs). Lack of adequate mobility for both EAs and BESs were ranked as the first and second major problems limiting effective extension services of ADPs by EAs in Abia and Akwa Ibom State ADPs. However, these problems were more pressing in Akwa Ibom State ADP compared with Abia State ADP. Inadequate in-service training courses for EAs and BESs were also ranked as the second major problem by EAs in Akwa Ibom State ADP. Lack of appropriate mobility for both BESs and EAs as well as inadequate number of EAs were the first three major problems constraining effective extension services of Abia State ADP respectively as ranked by BESs in Abia State ADP. In comparison, the first three major problems hindering effective extension services as ranked by BESs in Akwa Ibom State ADP were lack of appropriate mobility for EAs, lack of appropriate mobility for BESs and disrupted and delayed payment of salaries to EAs and BESs respectively. Inadequate field allowances to EAs and BESs was also ranked as third major problem by BESs in Akwa Ibom state ADP.

**Key words:** Comparative analysis, effective extension, ADPs, BESs, EAs, Nigeria

### INTRODUCTION

Agricultural extension activities in Nigeria in the pre-1970 era were solely the responsibility of regional/state ministries of agriculture and their concentration was on export crops to the utter neglect of food crops, livestock and fisheries. Nigeria entered a second era of extension approaches through the intervention of the federal government in the 1970's. Several institutions or projects such as National Accelerated Food Production Project (NAFPP) were introduced to perform agricultural extension functions. The Agricultural Development Projects (ADPs) were introduced in the mid-seventies to replace the ineffective extension services of the erstwhile ministries of agriculture (Atala *et al.*, 1992; Mijindadi, 1992; Obiechina, 1999). Currently ADPs cover all the states of the federation (36 states) and the federal capital territory Abuja.

The Training and Visit (T and V) system of extension was formally introduced into the ADPs in 1986. Before the formal introduction of the T and V system of extension in Nigeria a major constraint to the performance of the agricultural sector was the ineffective agricultural

extension services (Atakla *et al.*, 1992). The National Council for Agriculture (NCA) which is the highest agricultural policy body in Nigeria directed states to adopt the Unified Agricultural Extension Services (UAES) approach in their extension service delivery system in 1990. The concept of UAES implies the phasing out of paralld extension services as originally implemented by the ADP, state and federal ministries of agriculture including specialized agricultural development schemes. The parallel system was then replaced by an extension service provided by the ADP through a single line of command and a well structured administration system to embrace all the agricultural sub-sectors, namely crops, fisheries, land management, agroforestry and livestock (Mijindadi, 1993; Obiechina, 1999).

Successive governments in Nigeria and their relevant agencies have been making efforts to improve agricultural extension service in the country. Some methods or strategies that were found useful and workable in other countries were introduced to improve the effectiveness of extension services in Nigeria. In spite of these efforts, the capacity/performance of extension services has been generally low and unsatisfactory in the country (Akinsorotah and Adah, 1997).

A thorough study of the constraints to effective extension services is required to improve the effectiveness or performance of agricultural extension services in Nigeria. A constraint to effective extension services of ADPs apparently varies from state to another. Available data show that a comparative study of constraints to effective extension services of ADPs in Abia and Akwa Ibom states has not been formally documented. This study will therefore help to illuminate and compare the constraints to effective extension services of ADPs in both states.

**Objective of the study:** The main objective of this study was to compare the constraints to effective extension services of ADPs in Abia and Akwa Ibom State. Specifically, the study was designed to:

- ascertain and compare perceived constraints to effective extension services of ADPs in Abia and Akwa Ibom States, by extension agents.
- Ascertain and compare perceived constraints to effective extension services of ADPs in Abia and Akwa Ibom States, by block extension supervisors.
- Make recommendations for consideration in making policies for effective agricultural extension services in Abia and Akwa Ibom States.

## **MATERIALS AND METHODS**

The study was carried out in Abia and Akwa Ibom States of Nigeria. Abia and Akwa Ibom states are situated in the southeast agricultural zone.

The target population for this study was all the Block Extension Supervisors (BESs) and Extension Agents (EAs) in Abia and Akwa Ibom states ADPs. Multi-stage random sampling procedure was used in the selection of agricultural zones, blocks and circles. The first stage involved simple random selection of 2 agricultural zones per state ADP. Aba and Umuahia zones were selected from Abia state while Ikot Ekpene and Uyo zones were selected from Akwa Ibom state. The second stage involved simple random selection of seven blocks from each of the agricultural zones. The BESs whose blocks were selected served as respondents. The third stage involved simple random sampling of three circles from each of the blocks. The EAs whose circles were selected served as respondents. This gave a total of 14 BESs and 42 EAs per state ADP. On the whole, 102 respondents made up the sample size for the study. However, only 80 of them (20 BESs and 60 EAs) were finally involved in the study. Data were collected in 2001 through the use of two sets of structure questionnaire for BESs and EAs.

A four-point Likert-type scale was used to determine the magnitude of the constraints to effective extension services as perceived by the EAs and BESs. Four points on the scale were graded as follows: 1= very little extent, 2 = little extent, 3 = Great extent and 4 = Very great extent. The statistical tools used for data analysis were mean scores, ranking and t-test. The level of probability that was accepted as indication of a statistically significant relationship for t-test analysis is at the 0.5.

## **RESULTS AND DISCUSSION**

Comparison of constraints to Effective Extension Services of ADPs in Abia and Akwa Ibom States as perceived by Extension Agents.

Data in (Table 1) show the extension agents views on constraints to effective extension services of ADPs in Abia and Akwa Ibom States. Lack of adequate mobility for both EAs and BESs were ranked first and second by the EAs in Abia and Akwa Ibom States ADPs. Although lack of appropriate mobility for EAs and BESs were ranked first and second by the EAs, these problems were more pressing in Akwa Ibom state ADP ( $X = 3.8$  and  $X = 3.7$ ) compared with Abia state ADP ( $X = 3.6$  and  $X = 3.5$ ). Lack of adequate mobility for both EAs and BESs tend to hinder the actualization of the goals of extension organization. This is because it frustrates realistic and effective extension contact with farm families. On the part of the BESs, lack of adequate mobility makes it difficult for the BESs to cover 6 to 8 circles effectively within a fortnight. It makes BESs to rarely supervise EAs in farmers' field. This does not make for improvement in the ability and commitment of staff thereby defeating the purpose of block extension supervision (Benor *et al.*, 1984; Unamma and Sreekantiah, 1991). Inadequate in-service training courses for EAs and BESs was also ranked second ( $X = 33.7$ ) most pressing problem by EAs in Akwa Ibom state ADP compared with their counterparts from Abia State who ranked the problem seventh ( $X = 2.5$ ). In other words, inadequate in-service training courses for EAs and BESs was more of a pressing problem limiting effective extension services of Akwa Ibom State ADP (AKADEP) when compared with its effect on that of Abia State ADP (BIADEP).

Lack of adequate opportunity for promotion for EAs and BESs was ranked as the third most pressing problem by EAs in ABIADep. In comparison, lack of in-service training courses for EAs and BESs and disputed and delayed payment of salaries to EAs and BESs were ranked as the third most pressing problems by EAs in AKADEP.

**Table 1: Comparison of constraints to effective extension services of ADPs in Abia and Akwa Ibom states as perceived by extension agents**

| Constraints to effective services                                                                                 | Abia State  |      | Akwa Ibom State |      | T-test |
|-------------------------------------------------------------------------------------------------------------------|-------------|------|-----------------|------|--------|
|                                                                                                                   | Mean        | Rank | Mean            | Rank |        |
| Lack of appropriate mobility for EAs                                                                              | 3.60 (0.81) | 1    | 3.80 (0.40)     | 1    | -1.20  |
| Lack of appropriate mobility for BESS                                                                             | 3.53 (0.81) | 2    | 3.73 (0.58)     | 2    | -1.08  |
| Inadequate number of extension agents                                                                             | 2.93 (1.01) | 5    | 2.26 (0.86)     | 11   | 2.73*  |
| Inadequate funding and difficulty in designing and implementing OFR, OF OFAR and SPAT for fisheries and livestock | 2.93 (0.86) | 5    | 2.73 (0.86)     | 9    | 0.89   |
| Weak commitment of some EAs because they are not pensionable staff of government                                  | 2.40 (1.32) | 8    | 1.46(0.89)      | 18   | 3.18*  |
| Dwindling availability of transferable technologies                                                               | 1.60 (0.81) | 11   | 1.60 (0.72)     | 17   | 0.00   |
| Altering or modifying MTRM to quarterly and fortnightly training                                                  | 1.46 (0.73) | 12   | 1.46 (0.89)     | 18   | 0.00   |
| High and unsustainable cost of operating MTRM and FNT                                                             | 1.73 (1.08) | 10   | 1.93 (0.86)     | 15   | -0.79  |
| Disrupted and delayed payment of salaries to EAs and BESS                                                         | 2.53 (1.27) | 7    | 3.33 (0.88)     | 3    | -2.81* |
| Disrupted and delayed payment of field allowances to EAs and BESS                                                 | 3.13 (1.04) | 4    | 3.20 (1.06)     | 4    | -0.24  |
| Scarcity of well-trained and experienced field level extension staff                                              | 2.20 (1.18) | 9    | 1.66 (0.88)     | 16   | 1.97   |
| The number of technologies to be transferred by EAs as annual targets it too many                                 | 1.33 (0.47) | 14   | 2.13 (0.97)     | 13   | -4.03* |
| Irregularity of EAs visits to farmers                                                                             | 1.40 (0.67) | 13   | 2.13 (1.22)     | 10   | -2.87* |
| Irregularity of BESS visits to EAs in the field                                                                   | 1.53 (0.73) | 12   | 2.86 (0.97)     | 7    | -6.00* |
| Lack of in-service training courses for EAs and BESS                                                              | 2.73 (1.25) | 6    | 3.00 (1.05)     | 3    | -0.89  |
| Inadequate in-service training courses for EAs and BESS                                                           | 2.46 (1.27) | 7    | 2.53 (1.16)     | 2    | -0.21  |
| Use of lowly educated persons by ADP in extension                                                                 | 2.20 (1.12) | 9    | 2.00 (1.05)     | 14   | 0.71   |
| Lack of adequate opportunity for promotion for EAs and BESS                                                       | 3.26 (0.78) | 3    | 2.80 (0.99)     | 8    | 2.01*  |
| Inadequate present salary of EAs and BESS                                                                         | 2.80 (1.18) | 5    | 3.13 (0.73)     | 5    | -1.31  |
| Inadequate field allowances to EAs and BESS                                                                       | 3.13 (1.22) | 4    | 3.00 (0.98)     | 6    | 0.46   |
| Lack of institutionalized training courses for farmers                                                            | 1.80 (1.06) | 10   | 2.20 (1.12)     | 12   | -1.41  |

\*,  $p < 0.05$ ;  $df = 58$  + The figures in parenthesis indicate standard deviation, \*\*: Rank: The ranking is in order of importance; Rank 1 is considered major while Rank, 22 is considered minor, Note: Multiple responses were recorded

Poor agricultural extension service has been blamed on lack of adequate pre-service, induction and in-service training for extension staff (Iwueke, 1987; Agumagu, 1996). Lack of adequate opportunity for promotion for EAs and BESS make the field extension workers opt for other jobs in search of higher wages and better conditions of service. This is a drain in the manpower of extension services. This problem is also responsible for a considerable number of graduates of agricultural extension who are adequately trained for the challenges inherent in field extension work opting on graduation for jobs that will offer them adequate opportunity for promotion and improvement. Similarly, disrupted and delayed payment of salaries to facilitate the drain in the manpower of extension service.

To determine the variations in the rating of the constraints to effective extension services of ADPs by EAs in Abia State ADP and their colleagues in Akwa Ibom State ADP, t-test analysis was carried out. According to (Table 1), across the 22 problems constraining the effectiveness of extension services, EAs in Abia State ADP differed significantly ( $P < 0.05$ ) in just seven. The table indicates that differences exist between the EAs in ABIADep and their counterparts in AKADEP in the following areas: inadequate number of EAs ( $t = 2.73$ ), weak commitment of some EAs because they are not pensionable staff of government ( $t = 3.18$ ), disrupted and delayed payment of salaries to EAs and BESS ( $t = -2.81$ ), the number of technologies to be

transfer by EAs as annual targets in too many ( $t = -4.03$ ), irregularity of EAs visits to farmers ( $t = -2.87$ ), irregularity of BESS visits to EAs in the field ( $t = -6.00$ ) and lack of adequate opportunity for promotion for EAs and BESS ( $t = 2.01$ ).

The data indicate that inadequate EAs was more of a problem to effective extension services of ABIADep ( $X = 2.26$ ). Weak commitment of some EAs because they are not pensionable staff of government was a problem that had more serious effect on the effectiveness of extension services of ABIADep ( $X = 2.40$ ) compared with its effect on the effectiveness of extension services of AKADEP ( $X = 1.46$ ). On the other hand, disrupted and delayed payment of salaries to EAs and BESS had serious effect on the effectiveness of extension services of ABIADep ( $X = 3.33$ ) more than the effectiveness of extension services of AKADEP ( $X = 2.53$ ). The analysis further indicates that too many technologies to be transferred by EAs as annual targets, irregularity of EAs visits to farmers and irregularity of BESS visits to EAs in the field limited effective extension services of AKADEP more than that of ABIADep. Lack of adequate opportunity for promotion for EAs and BESS was more of a problem to effectiveness of extension services of ABIADep ( $X = 3.26$ ) than that of AKADEP ( $X = 2.80$ ).

Comparison of Constraints to Effective Extension Services of ADPs in Abia and Akwa Ibom States as perceived by Block Extension Supervisors.

Table 2: Comparison of constraints to effective extension services of ADPs in Abia and Akwa Ibom States as perceived by block extension supervisors

| Constraints to effective services                                                                                                  | Abia State  |      | Akwa Ibom State |      | T-test (t-cal) |
|------------------------------------------------------------------------------------------------------------------------------------|-------------|------|-----------------|------|----------------|
|                                                                                                                                    | Mean        | Rank | Mean            | Rank |                |
| Lack of appropriate mobility for EAs                                                                                               | 3.70 (0.48) | 2    | 3.90 (0.31)     | 1    | -1.09          |
| Lack of appropriate mobility for BESs                                                                                              | 3.90 (0.31) | 1    | 3.90 (0.31)     | 2    | 0.00           |
| Inadequate number of extension agent                                                                                               | 3.30 (0.67) | 3    | 1.80 (0.91)     | 11   | 4.16*          |
| Inadequate funding and difficulty in designing and implementing OFR, OFRA AND spat fr fisheries and livestock                      | 2.70 (0.82) | 5    | 2.80 (1.03)     | 9    | -0.23          |
| Weak commitment of some EAs because they are not pensionable staff of government Dwindling availability of transferable technology | 1.90 (0.99) | 11   | 1.30 (0.67)     | 14   | 1.57           |
| Altering or modifying MTRM to quarterly and fortnightly training                                                                   | 1.70 (0.82) | 13   | 1.30 (0.48)     | 14   | 1.32           |
| High and unsustainable cost of operating MTRM and FNT                                                                              | 1.70 (1.05) | 13   | 1.60 (0.84)     | 13   | 0.23           |
| Disrupted and delayed payment of salaries to EAs and BESs                                                                          | 2.50 (1.17) | 7    | 3.40 (1.07)     | 3    | -1.78          |
| Scarcity of well-trained and experienced field level extension staff                                                               | 2.40 (0.96) | 8    | 1.70 (1.05)     | 13   | 1.54           |
| The number of technologies to be transferred by EAs as annual targets is too many                                                  | 1.50 (0.52) | 14   | 1.80 (0.78)     | 13   | -1.00          |
| Irregularity of EAs visits to farmers                                                                                              | 1.80 (0.63) | 12   | 2.90 (1.19)     | 8    | -2.56*         |
| Irregularity of BESs visits to EAs in the field                                                                                    | 2.00 (0.47) | 10   | 2.40 (0.84)     | 10   | -1.30          |
| Lack of in-service training courses for EAs and BESs                                                                               | 2.50 (1.43) | 7    | 3.20 (1.13)     | 5    | -1.21          |
| Inadequate in-service training courses for EAs and BESs                                                                            | 2.30 (1.25) | 9    | 3.10 (0.87)     | 7    | -1.65          |
| Use of many female EA's in field extension work.                                                                                   | 1.50 (0.84) | 14   | 1.80 (0.78)     | 12   | -0.81          |
| Use of lowly educated persons by ADP in extension                                                                                  | 2.60 (1.17) | 6    | 1.80 (1.22)     | 11   | 1.78           |
| Lack of adequate opportunity for promotion for EAs and BESs                                                                        | 2.60 (1.17) | 5    | 2.70 (1.15)     | 9    | -0.19          |
| Inadequate present salary of EAs and BESs                                                                                          | 2.40 (0.96) | 8    | 3.40 (0.51)     | 6    | -2.88          |
| Inadequate field allowances to EAs and BESs                                                                                        | 3.10 (1.19) | 4    | 3.50 (0.97)     | 3    | -0.82          |
| Lack of institutionalized training courses for farmers                                                                             | 1.70 (0.94) | 13   | 2.60 (1.17)     | 9    | -1.88          |

\*:p<0.05; df= 18, The figures in parenthesis indicate standard deviation, \*\*: Rank: The ranking is in order of importance; Rank 1 is considered major while Rank 22 is considered minor, Note: multiple responses were recorded

Table 2 presents the block extension supervisors perception on constraints to effective extension services of ADPs in Abia State ADP ranked lack of appropriate mobility for BESs as the first most pressing problem hindering effective extension services in their state. In comparison, lack of appropriate mobility for EAs was ranked as the first major problem constraining effective extension services by BESs in Akwa Ibom State ADP. The seriousness of lack of appropriate mobility for BESs as a problem was the same Abia and Akwa Ibom States because it had the same mean value of 3.9 in both states. Lack of appropriate mobility for EAs was more of a problem to effective extension services of ADP in Akwa Ibom State (X = 3.90) compared with that of Abia state ADP (X = 3.70). Previous studies by Asiabaka and Ekumankama (2000) identified lack of means of transport for EAs and BESs as the most pressing problem of field-level extension workers. Lack of adequate mobility hinders rge actualization of the aims and objectives of extension service (Benor *et al.*, 1984; Farouk and Okpkpo, 1997).

Disrupted and delayed payment of salaries to EAS and BESs was ranked third major problem militating against effective extension services by BESs in Akwa Ibom State ADP. On the other hand, this problem was ranked seventh by the BESs in Abia state ADP. Inadequate field allowances to EAs and BESs was also ranked third most pressing problem by BESs in Akwa Ibom state ADP compared with their counterparts in Abia state who ranked the problem fourth. Disrupted and

delayed payment of field allowances to EAs and BESs was ranked as the fourth major problem limiting effective extension services of ADPs by BESs in both states. However, this problem had serious effect on the effectiveness of extension services of AKADEP (X = 3.40) more than effectiveness of extension services of ABIADep (X = 3.10). Inadequate remuneration as well as disrupted and delayed payment of remunerations to EAs and BESs contribute immensely to the unsatisfactory performance of the extension service. This is because poor monetary reward makes the standard of living of extension workers to remain low thereby frustrating them. Frustration from a no-success career after many years in service will make EAs and BESs to lose interest and commitment leading to low productivity (Bonar *et al.*, 1984).

Inadequate number of EAs was ranked as the third most pressing problem by BESs in Abia State ADP while their colleagues in Akwa Ibom State ranked it as the eleventh problem militating against effective extension services. The dearth of qualified EAs to work with farm families has necessitated the use of contact farmers. Contact farmers are farmers formally selected and regularly trained by EAs in the use of improved technologies in the hope that they would share their experiences with other farmers (Ekumankama and Ajala, 2001). Ekumankama (1997) reported that considerable success has not been made by contact farmers in the bid to disseminate appropriate technologies to non contact

farmers in Abia State. Inadequate number of EAs has therefore resulted in many farmers not being exposed to proven agricultural technologies.

Lack of in-service training courses for EAs and BESs was ranked as the seventh major problem by BESs in Abia State ADP while the BESs in Akwa Ibom State ADP ranked it the fifth most pressing problem. Inadequate in-service training courses for EAs and BESs was ranked as the ninth problem by BESs in Abia State ADP unlike their counterparts in Akwa Ibom state ADP who ranked the problem as the seventh major one. Lack of in-service training makes it difficult for frontline extension workers to cope with the constant changes in the problems of farming in given localities.

Data in Table 2 also shows significant differences between BESs in ABIADep and their colleagues in AKADEP on the following constraints: inadequate number of extension agents ( $t = 4.16$ ), weak commitment of some EAs because they are not pensionable staff of government ( $t = 5.42$ ), irregularity of EAs visits to farmers ( $t = -2.56$ ) and inadequate present salary of EAs and BESs ( $t = -2.88$ ). The analysis reveals that inadequate number of EAs had more serious effect on the effectiveness of extension services of ABIADep ( $X = 3.30$ ) compared with its effect on the effectiveness of extension services of AKADEP ( $X = 1.80$ ). Weak commitment of some EAs because they are not pensionable staff of government was more of a problem to effective extension services of ABIADep ( $X = 2.60$ ) in comparison with AKADEP ( $X = 1.20$ ). On the other hand, irregularity of EAs visits to farmers had more serious effect on the effectiveness of extension services of AKADEP ( $X = 2.90$ ) than the effectiveness of extension services of ABIADep ( $X = 1.80$ ). Inadequate present salary of EAs and BESs was more of a problem to effective extension services of AKADEP ( $X = 3.40$ ) in comparison with effective extension services of ABIADep ( $X = 2.40$ ).

### CONCLUSION

The first three major problems limiting effective extension services of ABIADep as ranked by EAs in ABIADep were lack of appropriate mobility for EAs, lack of appropriate mobility for BESs and lack of adequate opportunity for promotion for EAs and BESs, respectively. In comparison, lack of appropriate mobility for EAs, lack of appropriate mobility for BESs and disrupted and delayed payment of salaries to EAs and BESs were ranked as the first three most pressing problems hindering effective extension services of AKADEP, respectively by EAs in Akwa Ibom state ADP. Lack of in-service training courses for EAs and BESs was also ranked as the third major problem to effective extension services by EAs in AKADEP.

Lack of appropriate mobility for BESs, lack of appropriate mobility EAs and inadequate number of EAs were the first 3 most pressing problems militating against effective extension services of ABIADep respectively as ranked by BESs in ABIADep. The first three major problems constraining effective extension services as ranked by BESs in AKADEP were lack of appropriate mobility for EAs, lack of appropriate mobility for BESs and disrupted and delayed payment of salaries to EAs and BESs respectively. Inadequate field allowances to EAs and BESs was also ranked as the third most pressing problem by BESs in Akwa Ibom state ADP.

### RECOMMENDATIONS

Relevant sources of mobility should be provided for EAs and BESs since lack of mobility for EAs and BESs were found to be the major problems limiting effective extension services of ADPs in Abia and Akwa Ibom states. Policies therefore should be designed to improve transportation facilities for field extension workers. This will ensure realistic extension contacts with many farmers. Adequate allowance enough to service the motorcycles or the other source(s) of mobility provided for the EAs and BESs should be given to the frontline extension workers in order to ease their transportation problem.

Policies should be designed to ensure that salaries and field allowances to EAs and BESs are increased appropriately and paid promptly as inadequate, disrupted and delayed payment of salaries and field allowances were found to be major problems militating against effective extension services of ADPs.

Appropriate and regular in-service training geared towards helping the EAs and BESs improved their abilities in extension communication and methods, supervision, technical aspect of agriculture as well as cope with other challenges inherent in field-level extension work should be provided for EAs and BESs. This is because inadequate in-service training courses for EAs and BESs were found to be major problems hindering effective extension services of ADPs. Policy makers should therefore design policies that will ensure greater participation of EAs and BESs in in-service training courses. This will update and up-grade the knowledge, attitude and skills of these extension workers thereby making them remain competent and confident.

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