Correlates of Field Extension Workers’ Job Performance and Socio-Economic Variables in Akwa Ibom State, Nigeria

O.O EKUMANKAMA, V.A CHUKWU

Department of Rural Sociology and Extension, Michael Okpara University of Agriculture, Umudike, P.M.P 7267 Umuahia, Abia State, NIGERIA

Abstract: - This study ascertained the correlates of extension workers job performance and socio-economic variables in Akwa Ibom State, Nigeria. The study utilized both primary and secondary data collected using a structured questionnaire. The sample size comprised 86 respondents, which included 56 extension agents, 14 Block Extension Agents, 14 Block Extension Supervisors and 2 Zonal Extension Officers. Data analyses involved descriptive statistics such as frequency counts, percentages, means and inferential statistics such as multiple regression analysis. A null hypothesis was tested at 5% level of significance. The result of the socio-economic characteristics of the respondents show that majority 50%, 35.7% and 44.6% of BESs, BEAs and EAs fall within active economic and productive age bracket of 35-44 years; while the ZEOs were between 45-54 years. Most of the ZEOs (100%), BESs (85.7%) and EAs (48.2%) were males; except among BEAs where majority (80%) were females. Greater proportion of 78.57%, 54.29% and 53.6% of BESs, BEAs and EAs were polytechnics and university graduates; who had worked for between 5-9 years with percentage values of 57.14%, 64.3% and 83.93% respectively. But, ZEOs had higher years of working experience of 15-19 and 20-24 years respectively. From the criteria considered, linear functional form was chosen as the lead equation; from where a high coefficient of multiple determinations R² of 88.8% which showed a variation in the job performance of the extension workers due to their socio-economic characteristics was obtained. All the independent variables regressed where positively signed; while education and working experience where statistically significant at 1% and 5% levels respectively. The null hypothesis tested was rejected; which shows that the socio-economic characteristics of the field extension workers greatly influenced their job performance in the study area. This study had shown that the socio-economic attributes of extension workers greatly influenced their job performance in the study area. Extension Agents in the study area should be encouraged to further education as education was positively related to their job performance. Regular in-service training and short courses should be arranged for extension workers to create better awareness and upgrade their skills and knowledge in extension services delivery. More female extension workers should be employed and trained to improve their job performance in women in Agricultural activities.

Key-Words:- Extension workers, job performance, socio-economic characteristics, Akwa Ibom State, Nigeria.

1 Introduction

The Agricultural Development Programmes (ADPs) are currently responsible for carrying out the bulk of the agricultural extension activities in various states in Nigeria; including Akwa Ibom State. The ADPs are designed to improve the agricultural productivity, income, and general well being of the small scale farmers who are the centre-piece of all agricultural development efforts in Nigeria (Asiabaka, 1991; Madukwe and Akinsorotan and Adah, 1997).

The staffs of ADPs are the life line of the agricultural extension system in Nigeria. They have the primary role of teaching, advising and informing rural farmers quickly about improved technologies that are beneficial to them and quickly bringing feedback to research and other input agencies. They are programmed to demonstrate to the farmers’ technologies that can generate quick and successful tangible and visible results as a way of persuading more farmers to adopt them and improve their productivity.

Towards the realization of the first goal of millennium development goals of eradication of extreme poverty and hunger, farmers need technologies which must be technically viable, economically feasible, socially acceptable and
easily communicable in order to improve their skills so as to enhance their productivity. For obvious reasons, less than 2% of the farmers go to research stations where the technologies abound (Adisa, 2001). They rely on the extension workers on whose shoulders the dissemination of new technologies from research is saddled with other non-farming related problems confronting the farmers and their families. A high level of professional competence on the part of these extension agents is therefore important in order to make an impact on the clientele (Issa, 2008).

The extension agents are the most important factor in the planning and execution of extension programmes. However, they experience decrease in performance due to a number of factors which are either related to the agent himself or his work environment (Nwogu and Obinne, 2016). Most studies focus on evaluation of extension system rather personnel who are responsible for meeting the goals of extension system. There has been less data on the performance evaluation of personnel in Nigeria. Although a lot of scholars had conducted research research on job performance of extension workers in some states in Nigeria. For instance, Okwoche and Asogwa (2012) worked on Analysis of Determinants of Job Performance of Agricultural Extension Worker as a leader to Farmers in Nigeria. Ekumankama and Anyanwu (2007) worked on Assessment of the Job Performance of Extension Staff in Akwa Ibom State of Nigeria. But, little has been done on the influence of extension workers socio-economic attributes on their job performance.

The socio-economic characteristics of extension workers are expected to influence their job performance. But, the extent to which this has happened in Akwa Ibom State, Nigeria is yet to be known. Thus, this study was undertaken to scientifically investigate the extent to which socio-economic characteristics of extension workers can influence their job performance. In order to achieve this, answers where sought on the following research questions: What are the socio-economic characteristics of field extension workers in Akwa Ibom State? What are the relationship between the extension workers socio-economic characteristics and their job performance?

1.1 Objectives of the study

The broad objective of this study was to ascertain the socio-economic determinants of Extension Workers Job Performance in Abia State, Nigeria. Specifically, the objectives sought to:

i. describe the socio-economic characteristics of Extension Workers in Akwa Ibom State

ii. Determine the relationship between the socio-economic characteristics and Job Performance of Extension Workers in Akwa Ibom State.

1.2 Hypothesis

H0: There is no significant relationship between the socio-economic characteristics and job performance of field extension workers in Akwa Ibom State ADP

2 Methodology

Akwa Ibom State has a population of 3,920,208 with males being 2,044,510 and females 1,875,698 (FRN Gazette, 2007). The State has common borders with Cross-River State to the east, Abia State to the North and Rivers State to the West. It is bounded on the south by the Atlantic Ocean (AKADEP, 1986). It is made up of 31 L.G.As with Uyo as the capital city. A purposive sampling method was used to select two agricultural zones from the three zones in Akwa Ibom State. Secondly, a simple random selection was used to select seven blocks from the list of blocks that make up each selected zone. Thirdly, four circles were randomly selected. Two ZEOs, 14 BESs, and 56 EAs were randomly selected for the study. Both primary and secondary data were collected. Primary data was sourced directly from the extension workers through a well structured questionnaire. Secondary data were collected from related literature such as agricultural journals and books. Both descriptive and inferential statistics were employed in data analysis. Descriptive statistics such as frequency counts, means and percentages were used to analyze objective 1; while objective 2 was analyzed using four
functional forms of multiple regression analysis. The null hypothesis was tested at 5% level of significance.

2.1 Model Specification

The job performance index was obtained by aggregating the responses for each of the variables or parameters used to assess the job performance. Each response was assigned value ranging from 1-5. The grades that were obtained for all the responses were summed up and divided by total expected score (TES).

That was then multiplied by 100 to convert job performance index to percent.

\[
\text{Job Performance index (JPI)} = \frac{\sum \text{TAS} \times 100}{\text{TES}}
\]

Where:

- \( \text{TES} \): Total expected sum
- \( \text{TAS} \): Total Actual Sum
- \( n \): Sample size

The regression models are specified thus:

- (Linear functional form)

\[
Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + e
\]

- (Exponential form)

\[
\ln Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + e
\]

- (Double-log functional form)

\[
Y = a + \ln b_1X_1 + \ln b_2X_2 + \ln b_3X_3 + \ln b_4X_4 + \ln b_5X_5 + \ln b_6X_6 + \ln b_7X_7 + e
\]

- (Semi-log form)

\[
\ln Y = a + \ln b_1X_1 + \ln b_2X_2 + \ln b_3X_3 + \ln b_4X_4 + \ln b_5X_5 + \ln b_6X_6 + \ln b_7X_7 + e
\]

Where:

- \( Y \): Job Performance
- \( \ln \): Constant
- \( b \): Slope
- \( X_1 \): Age (Years)
- \( X_2 \): Sex (Male = 1, Female = 2)
- \( X_3 \): Marital Status (Single = 0, Married = 1)
- \( X_4 \): Level of formal education (in years)
- \( X_5 \): Extension experience (in years)
- \( X_6 \): Workers Income (Naira)
- \( X_7 \): Household size (number of persons in each household)
- \( E \): error term.

3 Results and Discussion

3.1 Socio-economic Characteristics of Extension Workers in Akwa Ibom State

The result of the socio-economic characteristics of Extension Workers in Akwa Ibom State is shown in Table 1.

| Variables          | Categories | ZEOs (n=2) | BESs (n=14) | BEAs (n=14) | EAs (n=56) |
|--------------------|------------|------------|-------------|-------------|------------|
| Age (Years)        | 15-24      | -          | 14.3        | 21.43       | 16.1       |
|                    | 25-34      | -          | 28.6        | 42.86       | 46.4       |
|                    | 35-44      | -          | 35.7        | 21.43       | 28.6       |
|                    | 45-54      | -          | 7.1         | 7.14        | 8.9        |
|                    | 55-64      | 100        | 14.3        | 7.14        |            |
| Sex                | Male       | 100        | 71.4        | -           | 58.9       |
|                    | Female     | -          | 28.6        | 100         | 41.1       |
| Marital Status     | Single     | -          | 14.29       | 35.71       | 35.71      |
|                    | Married    | 100        | 85.71       | 64.29       | 64.29      |
| Education (Years)  | SSCE       | -          | -           | -           | -          |
|                    | OND/NCE    | -          | 35.71       | 42.86       | 44.64      |
|          | HND  | BSc. | MSc. | Working Experience (Years) | 0-4 | 10-14 | 15-19 | 20-24 | 25-29 | Total |
|----------|------|------|------|----------------------------|-----|-------|-------|-------|-------|-------|
|          | -    | 35.71| 21.43|                            | 35.71| 21.43 | 3.57  | 50.00 | 50.00 | 100   |
|          | 100  | 14.29| 35.71|                            | -   | -     |       | -     | -     | 100   |
|          | -    | 14.29| -    |                            | -   | -     |       | -     | -     | 100   |

Source: Field Survey, 2009.

Result in Table 1 shows that the two ZEOs sampled in Akwa Ibom State were in the age range of 55-64 years. Further analysis shows that 35.7% of BES in Akwa Ibom State were in the age range of 35-44 years and 28.61% were in the age range of 25-34 years. But, 42.86% sampled BEAs were in the age range of 25-34 years, followed by 21.43% who were in the age range of 15-24 years and 35-44 years respectively. But, 46.4% of the EAs sampled were between the ages of 25-34 years followed by 28.6% who fell in the age range of 35-44 years. It could be inferred from the findings of this study that a greater proportion of EAs, BEAs and BESs were in their economically active and productive years of 24-44 years in Akwa Ibom State, Nigeria. This conforms to previous studies that majority of EAs and BEAs in Akwa Ibom State ADP were aged between 30-49 years (Ekumankama, 1991; Ekumankama, 2000 and Ekumankama, 2008).

Furthermore, out of eighty six respondents sampled in Akwa Ibom State, 100% of the ZEOs, 71.4% of BESs and 58.9% EAs were males. All the BEAs sampled were females because Block Extension Agents deal with Women in Agriculture at the block level. This conforms to NPC (2002) which reported that incidence of economic activities vary markedly by sex. Similarly, Olatunji, Onumadu and Ifenyi-Obi (2015) reported male dominance among extension workers in their studies.

Further analysis depicts that 100% ZEOs, 85.7% BESs, 64.29% BEAs and 64.29% EAs were married. Married people have more responsibilities which could affect their job performance. This conforms to the work of Okwoche, Ezirhe and Agabi (2015) who reported that most extension workers in Benue State ADP were married.

The two sampled ZEOs had Bachelor in Science Degrees, 35.7% BES had HND and another 35.7% had OND. Also, 42.86% BEAs had OND and 44.64% EAs had OND. The result shows that extension workers in the study area are educated and therefore qualified to successfully carry out extension activities. This conforms to Osuji (1983) and Akintola (1986) in their studies found that education has the tendency to create awareness and as such increase job performance. Olatunji, Unamma and Nwachukwu (2014) recorded the same trend for Abia and Akwa Ibom States.

In Akwa Ibom State, 50% of ZEOs sampled had 20-24 years of experience in extension. Also, 64.3% of BES had between 5-9 years of experience; followed by 21.4% who had 1 to 4 years of experience in extension work. About 35.7% EAs had 5-9 years of experience followed by 33.93% who had 10-14 years of experience. This shows that ZEOs were more experienced in extension work than other groups of respondents (BESs, BEAs and EAs). Previous studies by Asiabaka (1992) indicated that the more the number of years put on the job, the higher the job performance of workers.

### 3.2 Relationship Between the Socio-economic Characteristics and Job Performance of Extension Workers in Akwa Ibom State.

This was established using multiple regression analysis as shown in Table 2.
Table 2: Multiple Regression Analysis on the Relationship between Job Performance and Socio-economic Characteristics of Extension Workers in Akwa Ibom State.

| Variables     | Linear     | Exponential | Semi-log  | Double-log |
|---------------|------------|-------------|-----------|------------|
| Constant      | 74.297     | 4.033       | 112.12    | 5.010      |
|               | (3.348)**  | (9.352)**   | (1.273)   | (4.501)*   |
| Age           | 0.569      | 0.002       | 33.422    | 0.470      |
|               | (1.323)    | (0.269)     | (1.292)   | (1.439)    |
| Education     | 0.869      | 0.005       | 1.595     | 0.083      |
|               | (0.587)*** | (0.181)     | (0.052)   | (0.213)    |
| Experience    | 2.628      | 0.034       | 30.881    | 0.438      |
|               | (2.638)**  | (2.396)*    | (2.687)*  | (3.015)*   |
| Household Size| 0.226      | 0.180       | 5.428     | 0.070      |
|               | (0.054)    | (0.637)     | (0.409)   | (0.419)    |
| F-ratio       | 5.955      | 2.633       | 3.434     | 4.131      |
| R²            | 88.80      | 77.80       | 82.10     | 84.60      |
| Adjusted R²²  | 73.90      | 48.30       | 58.20     | 64.10      |

Source: Field Survey, 2009.

*** = Significant at 1%
** = Significant at 5%
* = Significant at 10%

Table 2 shows the relationship between job performance of extension workers and their socio-economic characteristics. Based on the appropriateness of signs, significant variables and magnitude of $R^2$, the linear functional form was chosen as the lead equation. From the result, the value of coefficient of multiple determination ($R^2$) was 88.80%. This shows that about 88.80% of variation in the job performance of the extension workers could be explained by the socio-economic variables in the equation. Only one variable (extension experience) was significantly related to job performance. The Coefficient of multiple determination for extension experience with a t-value of 2.638 was significant at 0.05% levels.

The implication of these findings is that the more the number of years put on the job by extension workers in the state, the higher the performance of the workers. The result agrees with Asiabaka (1992) who found a positive relationship between women extension personnel experience and their job performance. The findings were contrary to Ekumankama (2005) where no significant relationship existed between selected personal characteristics and job performance of extension workers. Therefore, the alternative hypothesis of a significant relationship between the socio-economic characteristics of extension workers was accepted.

4 Conclusion and Recommendations

The study had revealed that the socio-economic attributes of extension workers in Akwa Ibom state are important factors which significantly influenced their job performance. Based on the findings of the study, the following recommendations were made:

i. Extension Agents in the study area should be encouraged to further education as education was positively related to their job performance.

ii. Regular in-service training and short courses should be arranged for extension workers to create better awareness and upgrade their skills and knowledge in extension services delivery.

iii. More female extension workers should be employed and trained to improve their job performance in women in Agricultural activities.
References:

[1] Akinsorotan, A.O and O.C Adah (1997). Determinants of Job Satisfaction of Agricultural Extension Agents in Kogi State Agricultural Development Projects, Nigeria. *Journal of Agricultural Extension*, 1, 28-33.

[2] Asiabaka (1992). An Assessment of Training Needs and Job Performance of Women Agricultural Extension Personnel in Nigeria. *A Nigerian Journal of Agricultural Extension Society* 7 (1 and 2): 2.

[3] Asiabaka, C.C (1991). The role of Imo State Agricultural Development Project in Boosting food production. *The Nigerian Journal of Agricultural Extension*, 1, 28-33.

[4] Ekumanakama, O.O and Anyanwu, A.C (2007). Assessment of the Job Performance of Extension Staff in Akwa Ibom State of Nigeria. *International Journal*, 2 (1): 165-178.

[5] Ekumankama, O.O (1999). Assessing the Efficiency of Extension Agents in Disseminating Innovations to Contact Farmers in Abia State of Nigeria. *Nigerian Journal of Agricultural Teachers Education* VII (1 and 2). Pp: 127-133.

[6] Ekumankama, O.O (2000). Technology Transfer Strategy: A case Study of Abia State Extension Services. *Nigerian Journal of Agricultural Teachers Education* IX (1 and 2): 1-5.

[7] Ekumankama, O.O (2005). Comparative Analysis of Job Performance of Extension Professionals in Abia and Akwa Ibom States Agricultural Development Programmes. Pp 71-84. *Journal of Agricultural Science and Technology* Vol 16-19 (1 and 2) 2006-2009 (Special edition).

[8] Ekumankama, O.O and Anyanwu, A.C (2008). Evaluation of the Job Performance of Extension Professionals in Abia State of Nigeria. *Journal of Agriculture and Food Sciences*. 5 (1): 93-109.

[9] Federal Government of Nigeria (FGN) 1997. Federal Republic of Nigeria (FGN) national position paper, In: *Integrated Agricultural Production in Nigeria: Strategies and Mechanisms for Food Security*, Shaib, B., Adedipe, N.O., Aliyu, A and Jir, M.M (Eds). Proceedings of the National workshop on Nigeria’s position at the World Food Summit, pp: 11-74.

[10] Madukwe, M.C and L.O Obibuaku , 1991. Effects of Personal Factors on the Effectiveness of Extension Supervisors. *The Nigerian Journal of Agricultural Extension*, 6 (1 and 2): 34-39.

[11] Nwogu, C.N and Obinne, C.P.O (2016). Assessment of Job Performance of Field Extension Workers in South Eastern Zone of Nigeria. *International Journal of Innovative Research and Creative Technology* 2 (2): 47-50.

[12] Okwoche, V and Asogwa, B (2012). Analysis of Determinants of Job Performance of Agricultural Extension Worker as a Leader to Farmers in Nigeria. *British Journal of Economics, Finance and Management Sciences*, Vol 5 (2).

[13] Okwoche, V.A.O ; Eziehe, J.C and Agabi, V (2015). Determinants of Job Satisfaction Among Extension Agents in Benue State Agricultural and Rural Development Authority, Benue State, Nigeria. *European Journal of Physical and Agricultural Sciences* 3 (2): 38-48.

[14] Olatunji, S.O; Onumadu, F. N and Ifeanyi-Obi, C.C (2015). Job Performance and Job Satisfaction of Agricultural Extension Agents in Rivers State Agricultural Development Project (ADP). *Journal of Agriculture and Veterinary Science* 8 (1): PP 50-55.

[15] Olatunji, S.O; Unamma, R.P.A and I, Nwachukwu (2014). Agricultural Extension Service in Nigeria: Evaluation of Implementation of Unified Agricultural Extension Service in Abia and Akwa Ibom States. Germany: LAP LAMBERT Academic Publishing (Omni Scriptum GmbH and Co. KG).156 pages.