DETERMINANTS OF JOB PERFORMANCE OF AGRICULTURAL DEVELOPMENT PROGRAM (ADP) EXTENSION STAFFS IN TARABA STATE, NIGERIA

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ABSTRACT.

This study assessed the factors influencing job performance of Agricultural Development Program (ADP) extension staff in Taraba State, Nigeria. The specific objectives were to; describe the socio-economic characteristics of the respondents, assess the agricultural extension staff' level of job performance, determine the influences of socioeconomic characteristics of extension staff on their job performance in the study area. A multistage sampling technique was employed to select 200 respondents, and primary data were obtained through structured questionnaires. Descriptive statistics and OLS regression were employed for the analysis. The findings showed that 41.0% of the respondents were aged 41–50 years, with a mean age of 44 years. Males accounted for 54.0%, and 67.0% were married. Educationally, 68.5% held university degrees, the mean years of experience was approximately 11 years and a mean household size of approximately 5 people. Likert scale results showed a high level of job performance in the study area. The regression analysis revealed that age, marital status and grade level were significant 1% and had positive influence on job performance, household size was significant at 1% and had negative influence on job performance and Household size was significant at 5% and had positive influence on job performance. The study concludes that both individual and institutional factors significantly influenced extension staff performance and recommends tailored interventions to improve capacity, mobility, and motivation for more effective extension delivery.

Keywords: *Job Performance, Determinants, Agricultural Development Program, Extension*

INTRODUCTION

The mission of the Agricultural Development Programmes (ADPs) is to help farmers increase food production and farm income through the dissemination of information on the use of improved technology (Njoku, 2017). The ADP system is based on the premise that a combination of factors, comprising the right technology, effective extension, access to physical inputs, adequate market and complementary infrastructural facilities are essential to get improved productivity in order to raise the living standard of the rural dwellers. Agricultural development programme is closely linked with rural development that the development of one sector leads to the development of the other sector (Enyigwe, et al., 2022).

Agriculture and rural development are enhanced through agricultural support services. 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 (Ekumankama and Chukwu, 2019).

Agricultural Extension Services is an organization that facilitate and support people engaged in Agricultural activities to solve problems and obtain information, skills, and technologies to improve their livelihoods and well-being (Davis, Babu, and Ragasa 2019). The agricultural extension as an organization is one of the main pillars of ministry of agriculture which fosters to create development and change the rural family through the operations of extension. In organizational life, the human factor is the main problem that exists in every activity in it (Muis *et al.,* 2018). The organization is a consciously coordinated social unit with reactive boundaries so that it can be identified, working continuously to achieve goals (Yatipai and Kaparang, 2015). All actions taken in each activity are initiated and determined by humans who are members of an institution.

Zhu *et al.* (2016) describe Job performance as the discrete activities an individual performs during a standard unit of time that contributes to the core activities of an organization. Similarly, Job Performance is highly predictive by staff attitude, behavior, motivation, abilities as well as their commitment level which are impacted by Organizational Climate (Semu and Tadesse, 2019). Employee performance is the key factor of organizational success. Performance relates to compensation and job satisfaction and job commitment. Employees who are satisfied with and committed to their jobs will have positive feelings; former researchers used organizational climate variables as a dimension that can affect employee job satisfaction and commitment (Sugiarto, 2018).

Kaveri and Prabakaran (2013) define job performance as a contribution made by employees to increase company productivity. Job performance is the effort given by employees on the job. In an organization, every working employee is expected to perform his or her job in a dependable way. Based on the employment contract, every employee is responsible for performing better on tasks given as well as the duties involved in the job. They should have the feel of sense of responsibility for doing the tasks and duties given to them very well. Job performance includes the activities that can lead to the effectiveness of a company even though those activities are out of the rage of their specific task (Seng and Arumugam, 2017).

The performance of Agricultural Extension staff plays a crucial role in promoting agricultural development, improving farmers' productivity, and advancing rural economies. In Taraba state, were agriculture is the backbone of the economy, the efficiency and effectiveness of extension staffs are pivotal to achieving these goals. However, despite the importance of extension staffs, there are concerns about the effectiveness of their job performance in the region. Various factors may influence their ability to deliver optimal services, including socioeconomic factors, inadequate training, lack of resources, poor infrastructure, ineffective communication channels etc. Agricultural extension workers carry out agricultural extension programs and also serve as facilitators, motivators, innovators, and educators for farmers in agricultural development (Soraya et al., 2021). Therefore, the high performance of agricultural extension workers can help achieve Nigeria's agricultural development goals. Although a lot of scholars had conducted research on job performance evaluation of extension workers in some States of the Federation. 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". Studies concerning the performance evaluation of extension agents in Nigeria are still limited. There is limited study on the factors influencing the performance of Extension Agents in Taraba State. Thus, this study seeks to investigate the factors influencing the job performance of agricultural extension staffs in Taraba state, to provide actionable insights that can inform policy recommendations and strategies to enhance the performance of extension staffs and ultimately improve agricultural productivity in the state. This

study therefore seeks to evaluate the determinants of Job Performance of Agricultural Development Program (ADP) Extension Staffs in Taraba State, Nigeria.

Specifically, this study seeks to:
1. What are the socio-economic characteristics of the ADP extension staff in the study area?
2. What is the level of job performance of the respondents?
3. What are the influences of socioeconomic characteristics ADP of extension staff on their job performance?

This research will contribute to the identification of key areas where interventions are needed to improve the job performance of AEAs. It will provide insights into the challenges and barriers that hinder effective service delivery. . Encourage organizations to increase the level of employee satisfaction and performance. Provide organizations and staff with information on the benefits of having high employee engagement and how engaged staff contribute to success. The findings from this study will fill an existing gap in research on agricultural extension in Nigeria, especially within the context of the study area. Researchers and students who are carrying out study on human resource management will find in the study a companion. It will provide them with fore-knowledge on the subject matter and guide them in their quest.

Materials and Methods.
This study was carried out in Taraba state, Nigeria. Taraba state was created out of the defunct Gongola State on the 27th August, 1991.The state covers a land mass of 59, 400km^2 with 16(sixteen) Local Government Areas. Taraba State lies between latitude 6° 3$^{0'}$ and 9° 36' North and longitude 9° 10' and 11°50' East. It is bounded on the North by Bauchi state and Gombe State in the North-East. It is bounded on the East by Adamawa State and by Plateau State in the North-West. It is further bounded by Benue State in the West and shares an international boundary with the Republic of Cameroon to the south and south-west. Taraba state has a population figure of 2,300,736 people (NPC, 2006).

The Taraba State Agricultural Development Programme (TADP) is a parastatal of the Ministry of Agriculture and food security. It is one of the World Bank Assisted projects that formed part of the phase II Multi-State Agricultural Development Projects (MSADP II) whose loans terminated on 30th June, (1995). There are four (4) Agricultural zones in the state, namely: Zone I comprised of Ardo-Kola, Jalingo, Lau, Karim-Lamido, Yorro and Zing Local Government Areas with headquarters at Zing. Zone II has Wukari, Ibi and Gassol with headquarters at Wukari. Zone III comprised of Takum, Donga, Ussa, Kurmi and Bali, and Yangtu Special Development Area (SDA) with headquarters at Takum. Zone IV has only Sardauna LGA because of its climate with headquarters at Gembu.

A multi-stage sampling procedure was adopted to select the respondents for the study. At first stage, the four agricultural zones were selected. The second stage was to select respondents from each zone using proportionate sampling.
The number of respondents in each zone will be obtained with the help of formula below as shown on table 1.
$$N_i = \frac{n}{N} \times N_i \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(1)$$
Where
N$_i$=sample size in each zone
n=sample size
N$_i$=total population of Agricultural Extension Staff in the zone

Table 1: Sample Frames/Sample Size for the Study

Zone	Population of Staff used in the Study	Sample
Zone 1	145	67
Zone 2	104	48
Zone 3	108	50
Zone 4	78	35
Total	435	200

Source: Field survey, 2025

Once the sample size for each group is determined, a simple random sampling method was used to select the respondents from each group. This approach ensures that each extension staff within a group has an equal chance of being selected, thus minimizing selection bias and enhancing the representativeness of the sample. Primary data, collected with the aid of a well-structured questionnaire were used in the study. Descriptive statistics was used to analyzed objective 1, 5points likert scale was used to analyzed objective 2, a cut off mean

was 3.0. Ordinary least squares Regression Analysis was used to analyzed the influences of socioeconomic characteristics ADP of extension staff on their job performance is expressed as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12} + e \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(2)$$

Where:

Y = Composite score computed from the scores on the job performance scale

B_0 = Intercept

B_{1-12} = Coefficients of the independent variables

x_1 = Age of respondent (years)

x_2 = Sex of the respondents (male=1, female=0)

x_3 = Marital status (married=1, single=2, divorced=3, widowed=4)

x_4 = Educational Level (FSLC=1, NCE/ND=2, DEGREE=3, PGD=4, MASTERS=5, PHD=5)

x_5 = Working experience (years in ADP)

x_6 = Grade level

x_7 = Membership of Professional Association (member=1, non-member=2)

x_8 = Secondary Occupation

x_9 = Household size (number of persons in each household)

x_{10} = Training (number of training attended)

x_{11} = Access to mobility (yes=1, no=0)

x_{12} = Promotion Opportunities ((1=very dissatisfied, 2=dissatisfied, 3=neutral, 4=satisfied, 5=very satisfied)

e = Error Term

RESULTS AND DISCUSSION

Descriptive statistics was employed to analyze the socioeconomic characteristics of the respondents. Table 2 presented the results of socioeconomic characteristics of the respondents in the study area. The age distribution of the Agricultural Development Program (ADP) extension staff in Taraba State reveals that the majority of respondents fall within the age bracket of 41-50 years (41.0%), followed by 31-40 years (25.0%), 51-60 years (23.0%), 21-30 years (10.0%) and 61-70 years (1.0%). The mean age of the respondents is approximately 44 years, indicating that the extension staffs predominantly consist of middle-aged adults. Also, the sex distribution of Agricultural Development Program (ADP) extension staff in Taraba State shows a slightly higher proportion of males (54.0%) compared to females (46.0%). This indicates a relatively balanced gender representation within the extension workforce. The marital status distribution shows that a majority (67.0%) of the respondents are married, while (13.5%) are single, (15.5%) widowed, and (4.0%) divorced. This pattern indicates that most extension workers are in stable marital relationships, which may have implications for their job performance and social responsibilities. The educational qualifications of the Agricultural Development Program (ADP) extension staff in Taraba State reveal that the majority hold a university degree (68.5%), followed by National Diploma (ND) holders at (24.5%). A smaller proportion has attained a master's degree (4.0%) and a PhD (1.0%), while only (2.0%) possess the First School Leaving Certificate (FSLC). This shows high level of formal education among extension staff. The distribution of years of experience among Agricultural Development Program (ADP) extension staff in Taraba State shows that (34.0%) have between 1 to 5 years of experience, (21.0%) have 6 to 10 years, (17.0%) have 11 to 15 years, and (28.0%) have 16 to 20 years. The mean year of experience is approximately 11 years, indicating a moderately experienced workforce.

Table 2: Socio-economic Characteristics of the ADP Extension Staff in Taraba State (n=200)

Socioeconomic	Frequency	Percent	Mean (Standard Deviation)
Age			
21–30	20	10.0	
31–40	50	25.0	
41–50	82	41.0	
51–60	46	23.0	
61–70	2	1.0	44 (9)
Sex			
Female	92	46.0	
Male	108	54.0	
Marital status			
Married	134	67.0	
Single	27	13.5	
Divorced	8	4.0	
Widowed	31	15.5	
Educational qualification			
FSLC	4	2.0	
ND	49	24.5	
DEGREE	137	68.5	
MASTERS	8	4.0	
PHD	2	1.0	
Years of Experience			
1–5	68	34.0	
6–10	42	21.0	
11–15	34	17.0	
16–20	56	28.0	11 (7)
Total	200	100.0	

Source: Field survey data, 2025

Job Performance Perception of ADP Extension Staff in Taraba State

The results from Table 3 indicate a high level of job performance that Agricultural Development Program (ADP) extension staffs in Taraba State generally have a positive perception of their job performance, with most respondents strongly agreeing or agreeing to statements reflecting high commitment, organization, and responsibility in their roles. For instance, all respondents strongly agreed or agreed that they try to achieve organizational goals with a mean of 4.555, plan their work before execution with a mean of 4.385, and work hard in organizing tasks with a mean of 4.670. This demonstrates a strong orientation towards effective job performance and planning among extension staff.

Table 3: Influence of Socioeconomic Characteristics of Agricultural Extension Staff on their Job Performance

Perception of Job Performance	Mean	Remarks
I try to achieve organizational goals	4.5	Strongly agreed
I try to plan my work before the performance	4.3	Strongly agreed
I work hard in organizing the tasks and duties assigned to me	4.6	Strongly agreed
I try to coordinate with others to perform the works	4.2	Strongly agreed
I worried about the level of implementation of the work compared to the plans and programme that are drawn	4.1	Strongly agreed
I do as possible as I can get to achieve the higher level of performance	4.3	Strongly agreed
I own a clear imprint in the processes of development and renewal	4.2	Strongly agreed
The others witnessing to me that I carry the responsibility of the work	3.9	Agreed
I approved of restriction and commitment to the regulations of the work	4.1	Strongly agreed
I participate in making important decision	3.5	Agreed
Difficult to adapt to work in the event of an emergency	4.1	Strongly agreed
I find compatibility between personal qualities that I hold with job that I do	4.2	Strongly agreed
I determine to implement the instructions that are issued by the heads of the work	4.3	Strongly agreed
I have enthusiasm to take care of my workers who are under my responsibility with regards to performance	4.3	Strongly agreed
I try to classify the daily works according to their performance	4.2	Strongly agreed
I call my colleagues to collaborate with co-workers to accomplish the required tasks	3.6	Agreed
The weakness of my ability to communicate with my managers and my workers to implement the work duties	3.9	Agreed
Performance which I perform is always satisfying the officials and rarely errors occur	3.9	agreed
I seek to correct the faults that are caused by my work readily	3.8	Agreed
I need training to develop my skills so that I can perform my work effectively	4.0	Strongly agreed

Source: Field Survey, 2025

Influences of Socioeconomic Characteristics of Extension Staff on Job Performance.

The regression result (table 4) reveals that several socioeconomic characteristics significantly influence the job performance of ADP extension staff in Taraba State, with an R-squared value of 0.9067, indicating that (90.67%) of the variability in job performance is explained by the variables in the model. This suggests a very strong model fit. The F value was significant at 1%, which showed that the model used was adequate in explaining the variable between the socioeconomic characteristics of extension staff on their job performance. The result revealed that age, sex, marital status, household size and grade level significantly influence extension staff's job performance.

Age of the respondents was significant at 1% and a positive effect on job performance. This implies that unit increase in age of the respondents lead to an increase in their job performance and also, the higher the age the better the job performed. This could be as a result older staff members may have accumulated more experience and maturity, enabling them to perform better in their duties. This is in agreement with the findings of Magsi *et al.* (2024), who emphasized that age positively correlated with knowledge acquisition and practical field performance among extension personnel.

Sex of the respondents was significant at 1% and had a negative influence on the extension staff's job performance. This implies that male and female extension agents differ in their performance levels, potentially due to socio-cultural roles or work-related challenges, especially in rural and conservative areas of Taraba. This result was in agreement with the findings by Carian and Johnson, (2022) who found out that gender disparity in mobility and field effectiveness, with female agents facing more constraints.

Marital status of the respondents was significant at 1% and had a positive influence on the respondent's job performance. This implies that marital status of the respondents play a key role in their performance. Married staff may exhibit more stability, responsibility, and community engagement, which enhances their performance. This agrees with Rono, (2023), who found that married extension agents were more committed and less mobile, boosting their continuity and performance in community-based assignments.

Household size of the respondents was significant at 5% and had a positive influence on the respondent job performance. This implies that a unit increase in the household size lead to an increase in the respondent's job performance. The result suggests that larger family responsibility might motivate staff to work harder for career

advancement or income enhancement. This supports Niccolai *et al.* (2022), who argued that family pressure often drives rural professionals to exceed expectations in job delivery.

Grade level of the respondents was significant at 1% level and had a positive influence on the respondent's job performance. This implies that a unit increase in grade level of the respondents will lead to increase in their job performance. This result indicates that higher-ranking officers likely perform better, possibly due to greater responsibilities, experience, and authority. This is consistent with the findings by Babatunde and Iyaji, (2024), who observed that senior-level extension workers had more autonomy and access to resources.

Table 4: OLS Regression Results of the Influences of Socioeconomic Characteristics of Extension Staff on their Job Performance.

Variable	Coefficient	Std. error	t	P>/t/
Age	0.2662049***	0.0468057	5.69	0.000
Sex	-0.1071551***	0.0361075	-2.97	0.003
Marital Status	0.671721***	0.0316044	21.25	0.000
Educational Level	0.0116988	0.0179364	0.65	0.515
Working Experience	0.2613581	0.5247208	0.50	0.619
Grade Level	0.6185377***	0.1798675	3.44	0.001
Professional Association	-0.0903956	0.0751158	-1.20	0.230
Secondary Occupation	-0.4536865	0.280703	-1.62	0.108
Household siz	0.0422234**	0.0195382	2.16	0.032
Training	0.0165025	0.016812	0.98	0.328
Promotion	-0.1733037	0.116581	-1.49	0.139
Mobility	-0.0558365	0.1735797	-0.32	0.748
Constant	7.396185	1.977349	3.74	0.000

*** = Significant at 1% ** = Significant at 5%   **Source**: Field survey, 2025

Conclusion and Recommendations
This study assessed the factors influencing job performance of Agricultural Development Program (ADP) extension staff in Taraba State. The findings indicate that the majority of extension staff are middle-aged, well-educated, and moderately experienced, which positions them favorably to deliver effective agricultural advisory services. Their self-assessment reflected high levels of commitment, job satisfaction, and alignment with organizational goals, suggesting a workforce that is both capable and motivated. The regression analysis further confirmed that certain socio-economic characteristics such as age, marital status, household size, and grade level positively influence job performance. In contrast, gender was found to negatively influence performance, likely due to socio-cultural and mobility-related constraints faced by female staff, particularly in rural settings.

In conclusion, while the ADP extension workforce in Taraba State possesses the foundational qualities required for high performance, institutional and logistical barriers continue to hamper their effectiveness. To fully harness the capacity of this workforce, policy and programmatic interventions must focus on improving working conditions, providing regular and targeted training, addressing gender-related barriers, and ensuring adequate resources and support systems. Strengthening these areas will enhance the efficiency of extension delivery and contribute meaningfully to sustainable agricultural development in the state.

Based on the findings from this research, the following recommendations were drawn; older extension staff should be retained and supported through mentoring roles. Their experience can be harnessed to guide less experienced colleagues and improve service delivery. Gender sensitive policies that address barriers faced by female staff should be promoted to enhance their performance. Support for married staff with family-oriented benefits like housing and health insurance to improve their stability, morale, and job commitment. Introduction of incentive-based schemes to motivate staff with larger households in order to drive greater performance Ensure timely promotions and grade progression to maintain motivation since higher-grade officers tend to perform better due to experience and responsibility.

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