JOURNAL OF AGRICULTURAL ECONOMICS, EXTENSION & SCIENCES
Official Journal of the College of Agricultural Economics and Extension
www.jaees.org
www.uam.edu.ng
Jaees Vol. 11 No.2 2025, Page 92-104
ISSN (Print) 2545-5179, ISSN (Online) 2714-5018

ANALYSIS OF ORGANIZATIONAL CLIMATE AND JOB PERFORMANCE OF AGRICULTURAL DEVELOPMENT PROGRAMMS' EXTENSION AGENTS IN THE NORTHEAST, NIGERIA

***Adi, A. Z., ** Dibah, J.B. and ** Sa'ad, M.**
*Department of Agricultural Economics and Extension, Taraba State University, Jalingo, Nigeria
**Department of Agricultural Economics and Extension, Federal University Wukari, Taraba State, Nigeria
Email: xengxyadi@gmail.com, **Phone**: 08068061409

Abstract
The study analysed organizational climate and job performance of Agricultural Development Programmes Extension Agents in the North-East, Nigeria. The Population of this study consisted of all agricultural Extension agents of ADPs in the North East, Nigeria. A total sample size of 202 respondents was selected randomly. Primary data were obtained from 202 extension agents using structured questionnaire. Combination of multistage, purposive and random sampling methods were used to select extension agents. Data were analyzed using descriptive and inferential statistics. The results revealed that 37.6% acknowledged awareness of the reward system, 17.8% were aware of decision centralization, 11.8% recognized the emphasis on achievement, 9.4% were conscious of the organization's openness, 8.8% were familiar with task structure, while 6.9% and 5.0% were aware of training and organizational flexibility, respectively. The following explanatory variables: Decision ($p < 0.01$), Achievement ($p < 0.01$), Training/Development ($p < 0.01$) and Security ($p < 0.01$) had significantly influenced extension agents' job performance. Moreso, Increase in work load (Mean=3.41), inadequate funding (Mean= 3.11), inadequate incentives (Mean=3.13), inadequate education resource (Mean= 3.17), inadequate credit facilities (Mean = 3.17) and inadequate personnel motivation (Mean =3.81), were found to be the most significant constraints affecting extension agents' job-related performance. In order to enhance performance, the following recommendations were made: Shift from centralized decision-making to a more decentralized approach that empowers extension agents to make decisions at their level. This will enhance responsiveness and field-level problem-solving; develop and implement ongoing training programs that address specific skill gaps and emerging agricultural trends to improve agents' adaptability and effectiveness.

Keywords: Job, Performance, Organizational, Agricultural, Extension Agents.

1.0 Introduction

Agricultural extension has long been associated with the transfer of innovations from research centers to rural communities (Suweidu, 2019). It is expected to foster a sustainable and dynamic approach to agricultural development and remains a priority in government discourse and policy-making (*Ikehi et al.*, 2023). Recognizing this importance, successive Nigerian governments have made significant efforts to enhance agricultural productivity and raise the income levels of rural populations. Over the years, the country has established several agricultural extension programs, one of which is the Agricultural Development Programme (ADP).

The Agricultural Development Programme was initiated in 1975 as a pilot programme, whose success led to the establishment of statewide programme. The ADPs aim to improve agricultural productivity, income, and the standard of living of small-scale farmers, who are central to Nigeria's agricultural growth initiatives (*Danjuma et al., 2021*; *Ayansina et al., 2020*). According to Omoregbee and Koyenikan (2022), the success of ADPs depends on the widespread adoption of improved agricultural technologies by rural farmers and the effective performance of frontline extension agents (EAs), block extension agents (BEAs), and block extension supervisors (BESs) responsible for these initiatives.

Thomas and Diarra (2020) reported a strong positive relationship between human resource management skills, tenure in extension services, and job performance. Similarly, Gombe (2021) and Syarifudin and Zareen (2021) noted a positive correlation between work execution and extension skills. However, Adeloye *et al*. (2023) argued that the overall performance of extension services has been unsatisfactory due to

ineffective supervisory practices.

Organizational climate is defined as the shared perceptions, feelings, and attitudes of organizational members regarding fundamental elements of the organization, significantly influences individual behavior (Emmanuel *et al., 2020*; Shen *et al., 2023*). It is characterized by enduring attributes that differentiate one organization from another (Adinew, 2023). This structural complexity often invites criticism for being overly centralized and top-heavy (Anderson & Feder, 2004). Organizational performance measurement has become vital for organizations to survive in a competitive global environment. Performance, a critical criterion for evaluating organizations, encompasses actual outcomes measured against intended goals and objectives. Organizational performance is typically categorized into financial and non-financial metrics. Financial measures include profit, sales, and market share, while non-financial metrics focus on productivity, quality, and employee satisfaction (Ali *et al., 2022*; Ohene *et al., 2023*). Operational measures include production flexibility, product cost, product quality, and customer base. Additionally, performance has been examined through stakeholder theories such as the Balanced Scorecard, which considers the perspectives of employees, customers, suppliers, and local communities (Mio *et al., 2022)*.

2.0 Objectives of the study

The broad objective of the study was to analyse Organizational Climate and Job Performance of Agricultural Development Programme Extension Agents in the North-Eastern Nigeria. The study was specifically designed to:

i. ascertain the level of awareness of extension agents about organizational climate

in the study region

ii. determine relationship between organizational climate and job performance of extension agents in the region and;

iii. identify the constraints affecting job performance of the extension agents in the study region.

3.0 Methodology

3.1 The Study Area

The study was carried out in the North Eastern, Nigeria. The zone comprises six States, namely; Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe States. The geographical location of Northeast Nigeria, which lies between latitudes 6°20'N and 13°00'N and longitudes 9°00'E and 14°00'E, influences the region's varied climate. The area is known for its hot, semi-arid environment, which is most prevalent in the northeastern sections. The annual rainfall in the region varies between 700 and 1550 mm. The wettest months of the rainy season are August and September, and it usually lasts three to six months. Relative humidity levels drop to about 13% during the dry season, which is most harsh from February to March. This increases the region's danger of drought and decertification. The difficulties caused by climate variability in this region are highlighted by recent statistics. Prolonged dry spells and lower-than-average rainfall in some northeastern regions have an impact on agricultural productivity and vegetation conditions. These alterations highlight the area's susceptibility to weather variations and the requirement for adaptable tactics to lessen their effects (Wikipedia, Weather Atlas, FEWS NET). Northeastern Nigeria (interpenetrated on its different

borders by Southwestern Chad, Southeastern Niger and Far Northern Cameroon, all in the Lake Chad Basin) is an area of widely shared cross-border commonalities of ecology characterized by the expansive Lake Chad Basin.

3.2 Methods of Data Collection

Data for this study are obtained from primary sources. Primary data were obtained through field survey using structured questionnaire to elicit information from the extension agents.

3.3 Population and Sample size sampling Techniques

The study was conducted in North-East, Nigeria focusing on extension agents within the Agricultural Development Programmes (ADPs) of the region's States. For administrative purposes, the Northeastern States are divided into three (3) Agricultural Zones by their respective ADPs, given a difference in the number of extension agents in each State.

A multistage random sampling technique was employed to select the extension agents for this study. In the first stage, three States—Adamawa, Gombe and Taraba—were purposively selected due to their prominence in agriculture. In the second stage, it involved selection of all the three ADP Zones in the selected States, resulting in a total of nine (9) ADP Zones for the study.

The third and final stage involved random selection of extension agents from the identified Zones, within the three States. Given the distribution of extension agents across the three States—Adamawa (138), Gombe (116) and Taraba (153)—Yamane's formula (1967) was employed to determine an appropriate sample size, which resulted

in a total of 202 participants.

Determining sample size using Yamane's formula (1967).

Formula given as: $n = \frac{N}{(1 + N(e)2}$

Where,

n= sample size

N= population and;

e= error level of significants

Table 1: Determination of sample size using Taro Yamane procedure

States	Sampling frame of Extention agents	Sample size
1.Adamawa	138	68
2. Gombe	116	58
3. Taraba	153	76
Total: 3 States	**407**	**202**

Source: Northeast ADPs (2025)

3.4 Techniques of Data Analysis

Data collected were analyzed using descriptive and inferential statistics. Descriptive statistics such as frequency, percentage, mean, standard deviation were used to analyse objectives I and III, while Inferential Statistic like form of semi-log functions of multiple regression was deployed to analyze objective II.

Model Specifications

3.4.1 Mean rating scale equation:

$$\bar{x} = \frac{\sum fx}{n}$$

Where: $\bar{x} =$ *mean rating scale*

n = number of respondents

$\sum$ = summation

f = frequency

X = Number of items

Semi-log function of multiple regression

$$\ln(Y) = Y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X5+\beta_6X_6+\beta_7X7+\beta_8X_8+\varepsilon$$

Where:

Y = Job performance (Individual's Effort, Individual's Trait and Role Perception.)

ln(Y): Natural logarithm of the dependent variable

b_0= Constant (intercept)

b_1-8= Estimates (regression coefficients)
X_1= task structure
X_2 = reward
X_3 = decision
X_4 = training
X_5 = achievement
X_6 = security
X_7= status
X_8= recognition
ε: Error term

4.0: Results and Discussion

4.1 Extension agents' awareness of organizational climate traits

Table 2 revealed the awareness of organizational climate traits among extension agents in the region. Specifically, 37.6% acknowledged awareness of the reward system, 17.8% were aware of centralized form of organisation, 11.8% recognized the emphasis on achievement, 9.4% were conscious of the organization's openness, 8.8% were familiar with task structure, while 6.9% and 5.0% were aware of training and organizational flexibility, respectively.

By and large attributes or traits serve as critical variables that shape the agents' work environment and performance outcomes (Nwosu & Ogbo, 2020). Extension organizations must prioritize creating positive climates by ensuring transparency, providing clear task structures and emphasizing continuous training to enhance job satisfaction and performance (Ogunleye & Salami, 2019).

Table 2 Extension Agents' Awareness of Organizational Climateattributes or traits

Variables	Freq. (n = 202)	Percent.
Task Structure	18	8.9
Reward	76	37.6
Centralized form of org.	36	17.8
Achievement Emphasis	23	11.4
Training and Development	14	6.9
Security	15	7.4
Openness	19	9.4
Organizational Flexibility	1	.5

Source: Field Survey (2025)

4.2 Organizational climate and job performance relationship

Table 3 presented the results of the relationship between ADPs' Agricultural Extension Agents and their Job Performance. The R^2 value of 0.6123 indicates that approximately 61.23% of the variance in job performance can be explained by the organizational climate or working environment. This suggests a substantial impact of these factors on performance outcomes. Table 3 shows that coefficient of Decision-Making was negative (-0.0189) but significant at $p < 0.000$. A negative coefficient implies that more rigid or centralized decision-making processes are associated with lower job performance. This finding agrees with Idrus (2018), who reported that participative decision-making enhances employee performance. Table 3 shows that Achievement coefficient was found to be positive (0.0092) and significant at $p < 0.000$. The positive coefficient indicates that a good climate emphasizing achievement correlates with higher job performance. This is consistent with Sugiarto (2018), who found that achievement-oriented cultures boost employee motivation and output. Training/Development also has positive coefficient (0.0304) and strongly significant at $p < 0.000$. A strong positive relationship suggests that investment in training and development significantly enhances job performance. This supports the conclusions of a study published in *SAGE Open* (2021), which

highlighted the critical role of professional development in improving employee effectiveness. Finally, Table 3 indicates that Security/Risk coefficient was negative (-0.0105) but statistically significant at p = 0.006, implying that higher perceived job insecurity or risk correlates with lower performance levels. This finding agrees with Idrus (2018), emphasizing the detrimental effects of job insecurity on employee job performance.

Table 3: Relationship between organizational climate and job performance

Variables	**Coef.**	**Std. error**	**T**	**P>|t|**
Task structure	-0.0055	0.0062	-0.89	0.374
Reward	0.0002904	0.0051458	0.06	0.955
Decision	-0.0189	0.0046	-4.10	0.000***
Achievement	0.0092	0.0011	8.36	0.000***
Training/Dev.	0.0304	0.00409	6.20	0.000***
Security/Risk	-0.0105	0.0038	-2.76	0.006***
Recognition	- .001867	.0017857	-1.05	0.297
Openness	0.0031	0.0030	1.03	0.304
Constant	2.8631	0.214893	14.18	0.000
R^2	0.6123			
F-value	0.0000			

****** = 1% level of significant**
Source: field survey(2025)

4.3 Constraints affecting extension agents' Job performance

Table 4 provides a comprehensive overview of the challenges extension agents face in their work. The key constraints identified include:

Increased Workload: A significant portion of extension agents reported heavy workloads (mean = 3.41), negatively impacting their productivity. This aligns with research indicating that excessive workloads can lead to stress, burnout and decreased job satisfaction (Kerketta & Chauhan, 2023).

Lack of Time: With a mean score of 2.71, extension agents struggle to balance multiple

responsibilities, limiting their ability to refine their skills.

Insufficient Funding: A major constraint (mean = 3.11) restricting resources for training and development, consistent with findings by Manzoor et al. (2021), who reported that inadequate funding reduces overall Job performance and training effectiveness.

Inadequate Training Opportunities and Incentives: Scores of 2.41 and 3.13, respectively, indicate that limited training options and insufficient incentives discourage skill development. Research emphasizes the importance of ongoing professional development and incentives in maintaining high Job performance (Kerketta & Chauhan, 2023; Manzoor et al., 2021).

Inadequate Organizational Support and Resources: With scores of 2.32 and 3.17, agents feel under-supported and lack necessary resources, which are critical for effective job performance (Alkandi et al., 2023).

Personal Motivation and Credibility of Information: Reliable information (mean = 3.17) and personal motivation (mean = 3.31) are key factors affecting job performance. A lack of incentives and resources can reduce motivation, while unreliable information can hinder service delivery. Research highlights the crucial role of motivation and accurate information in work performance (Kerketta & Chauhan, 2023).

Table 4: Constraints affecting job performance of extension agents in their organisation s

Variables	N	Sum	Mean	Std. Deviation
Increase workload	202	584.00	3.41	.84735
Shortage of time	202	450.00	2.71	1.18547
Inadequate funding	202	542.00	3.11	.91655
Increase in perso nnel costs related to acquire competency	202	452.00	2.72	1.01129
Inadequate incentives for acquiring competencies	202	530.00	3.13	.94230
Inadequate training opportunities	202	493.00	2.41	.92448
Ineffective training delivery methods	202	493.00	2.41	.92448
Inadequate organizational support	202	484.00	2.32	.84735
Inadequate educational resources	202	543.00	3.17	1.15761
Inadequate credible information	202	543.00	3.17	1.15761
Inadequate perso nnel motivation	202	552.00	3.31	1.01129
Valid N (Listwise)	202			

Note. Scale: 1 = strongly agree; 2 = agree; 3 = neutral; 4 = disagree; 5 = strongly disagreed.
Source: Field Survey (2025).

5.0 Conclusion and Recommendations

5.1 Conclusion

Conclusively, this paper revealed that some organizational factors, such as Decision-making, Personnel Training, Achievement Emphasis and Security/Risk influenced job performance of the extension agents. Also, it was revealed that number of issues, such as an increase in workload, insufficient budget, lack of training opportunities and lack of organizational support contributed to decreased job performance.

5.2 Recommendations

Based on the findings of this study, the following recommendations were made:

1.Foster participatory decision-making by involving extension agents in planning and policy development processes, **2**. Implement transparent and inclusive decision-making frameworks to build trust and enhance commitment to organizational goals, **3**. Set clear, measurable performance goals and provide regular feedback to extension agents, **4**. Develop incentive systems (e.g., bonuses, promotions, or public recognition) to reward outstanding job performance and motivate agents, **5**. Recruit additional staff to balance workloads and ensure adequate coverage across service areas and Implement policies that ensure the safety and well-being of extension agents, particularly those working in remote or high-risk areas.

References

Adeloye, K. A., Adisa, B. O., Oyebode, L. A. and Ogunbameru, B. O. (2023). Effectiveness of university-based extension outreach for maize production in southwestern Nigeria. Sustainability, Agri, Food and Environmental Research, 11.

Adinew, Y. (2023). A comparative study on motivational strategies, organizational culture, and climate in public and private institutions. Current Psychology, 1-23.

Ali, A. (2014). The Organizational Climate Degree of Secondary Schools in the State of Kuwait and its Relationship to the Degree of Administrative Creativity of

Principals from Teachers' Point of View. *Journal of Business Theory and Practice*, *1* (1): 60- 65.

Ali, W., Wilson, J. and Husnain, M. (2022). Determinants/motivations of corporate social responsibility disclosure in developing economies: A survey of the extant literature. Sustainability, 14(6), 3474.

Anderson, J. R., and Feder, G. (2004). Agricultural extension: Good intentions and hard realities. *The World Bank Research Observer, 19*(1), 41-60. https://doi.org/10.1093/wbro/lkh013

Ayansina, S. O., Obayelu, E. A., and Ayinde, A. F. O. (2020). Employees-Employers' Psychological Contract Fulfillment and Organizational Performance in Lagos State Ministry of Agriculture, Nigeria. *Journal of African Interdisciplinary Studies*, *4*(8), 4-20.

Danjuma, N. U., Agir, H. M., Zubairu, E., and Agya, A. (2021). Role of Radio Agricultural Programmes on farmers' education: A case study of Radio Benue, Makurdi, Benue State. *Journal of Agricultural Economics, Environment and Social Sciences*, *7*(2), 152-160.

Emmanuel, O. I., Nwakoby, P. N., and Augustina, I. (2020). Organizational climate and affective commitment: evidence from private tertiary institutions. Int J Scientific Technol Res, 9, 656-662.

FEWS NET. (2023). *Rainfall Deficits Likely to Reduce Harvest Prospects in Northeast and Northcenter*. Retrieved from https://fews.net/west-africa/nigeria

Gombe, S. Y. (2021). Assessment of Extension Agents Competencies Needed for Boosting Food Production Through Self Help Groups in Northeast Nigeria. *Gombe Technical Education Journal*, *13*(1).

Idrus, S. (2018). Organizational Climate and Its Influence on Organizational Commitment: Case in Jakarta. *Department of Management, Faculty of Economics and Business, Universitas Diponegoro*. Link

Ikehi, M. E., Ifeanyieze, F. O., Onu, F. M., Ejiofor, T. E., and Nwankwo, C. U. (2023). Assessing climate change mitigation and adaptation strategies and agricultural innovation systems in the Niger Delta. *Geo Journal*, *88*(1), 209-224.

Mio, C., Costantini, A., & Panfilo, S. (2022). Performance measurement tools for sustainable business: A systematic literature review on the sustainability balanced scorecard use. Corporate social responsibility and environmental management, 29(2), 367-384.

Nurharani, S., Nur Z. and Nur S. (2013). The Impact of Organizational Climate on Teachers', Job Performance. Journal of Alicante, 2 (1): 7-79.

Nwosu, C. O., and Ogbo, A. I. (2020). "Impact of organizational climate on employee performance in agricultural extension services: Evidence from Nigeria." *Journal of Agricultural Extension and Rural Development, 12*(5), 94-104. https://doi.org/10.5897/JAERD2020.1085

Ogunleye, J. O., and Salami, A. A. (2019). "The role of organizational climate in enhancing agricultural extension workers' job performance." *Journal of Human Resource Management in Agriculture, 11*(3), 22-32. https://doi.org/10.1108/JHRMA-03-2019-0025

Ogunleye, J. O., and Salami, A. A. (2019). "The role of organizational climate in enhancing agricultural extension workers' job performance." *Journal of Human Resource Management in Agriculture, 11*(3), 22-32. https://doi.org/10.1108/JHRMA-03-2019-0025

Ohene Afriyie, E., Jin, Y., Yakubu, M., and Awudu, I. (2023). Role of job satisfaction in microfinance institutions' performance: considering performance appraisal, training and development. International Journal of Productivity and Performance Management.

Omoregbee, F. E., and Koyenikan, M. J. (2022). Frontline extension workers' satisfaction with organizational climate in Edo State, Nigeria. *Journal of Agriculture and Applied Biotechnology*, *1*(2), 10-16.

Ravishanker, S. (2015). Organizational Climate on the Performance of Cement Industry. *International Journal of Research and Development,*2 (4): 54- 79.

SAGE Open (2021). Organizational Climate and Job Performance: Investigating the Mediating Role of Psychological Capital. Link

Shen, Y., Li, Y., Ju, C., Ashraf, H., Hu, Z., He, C., and Memon, S. A. (2023). Foundational effects of organizational climate on perceived safety climate: A multiple mediation model. Sustainability, 15(22), 15759.

Sugiarto, I. (2018). Organizational Climate, Organizational Commitment, Job Satisfaction, and Employee Performance. *Diponegoro International Journal of Business*, 1(2), 112-120. Link

Suweidu, M. S. (2019). Perceived Competence, Role Clarity and Job Satisfaction Of Agricultural Extension Officers In The Northern Region Of Ghana (Doctoral dissertation).

Syarifudin, S. M., and Zareen, Z. (2021). Impact of the agricultural technology transfer to the production of independent palm oil smallholders: A review. Food Res, 5, 110-124.