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# Assessing the effects of social media adoption on poultry farm management practices in Delta state, Nigeria

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**Abstract**

The poultry industry is a vital sector in Nigeria's agricultural landscape, contributing significantly to food security and economic growth. This study investigates the effects of social media adoption on poultry farm management practices in Delta State, Nigeria and also identify its effects on farm productivity. This study employed a mixed method approach such as the Focus Group discussion method and Interview method. Questionnaire were designed to collect data for analysis. Both descriptive statistics, inferential statistics, were used to analyze the generated data. This study investigated the adoption of social media among poultry farmers in the study area. The results show that, 180% of poultry farmers adopted WhatsApp as their primary platform for day-to-day transactions, market information, and communication. The Regression analysis revealed significant positive relationships between social media adoption and educational level (coefficient: 2.7865), Farm size (coefficient: 2.5286), frequency of extension contacts (coefficient: 2.8057), membership in an association (coefficient: 2.1750). Conversely, age showed a negative relationship with social media adoption (coefficient: -2.4646), indicating that younger farmers are more likely to adopt social media technology. The R-squared value (0.5396) suggests approximately 53.96% of the variation in social media adoption and farm productivity can be explained by the included variables.

**Keywords:** Adoption, innovation, management, poultry farmers, social media

## Introduction

The poultry industry is a vital sector of Nigeria's agricultural economy, providing employment, income, and protein-rich food for millions of people. However, poultry farming in Nigeria faces numerous challenges, including disease outbreaks, feed scarcity, and inadequate management practices. In recent years, social media has emerged as a powerful tool for agricultural development, offering opportunities for farmers to access information, share knowledge, and connect with experts.

The evolution of social media (SM) provided a visible solution to this challenge. Social media refers to the internet-based digital tools for sharing and discussing information among people. It refers to the user generated information, opinion, video, audio, and multimedia that is shared and discussed over digital networks (Olayiwola, Umar, Egbeadumah, Kefas, and Alahira, (2023) [14]. Social media enables blogging, tagging, discussion, networking, and so on. The various platforms include; Facebook, Twitter, YouTube, Instagram, Google, WhatsApp, Blog, LinkedIn etc. Social networks are seen as an important mechanism for the spread of information and technology (Kalio, 2020) [10]. It has also been considered to be an effective tool in disseminating agricultural information among farmers and they constitute the most powerful social media for disseminating information quickly-enabling poultry farmers community to make informed decisions regarding their farming activities, especially in the rural areas of Nigeria (Oladipo and Olaniyi,2020) [13]. In Delta State, the use of social media is growing in importance among farmers. As a result of the social media adoption, poultry farmers were able to get real time updates on best practices, disease outbreaks and market trends, farmers were also able to connect with suppliers, buyers and industry experts, (Obriku *et al* 2024) [15].

Despite the potential benefits, there is limited research on the effects of social media adoption on poultry farm management practices in Delta State. Poultry farmers in the study area face significant challenges in accessing timely information, networking with experts, and adopting best practices, hindering productivity (Ridwan *et al*, 2022). Although social media offers opportunities for improved poultry farm management, the extent to which it is adopted and its resulting effect on farm practices in Delta State, Nigeria remain unknown. This knowledge gap necessitates an investigation.

This study aims to bridge this knowledge gap by assessing the effects of social media utilization on poultry farm productivity, efficiency, and sustainability; identify the socio-economic characteristics of poultry farmers in the study area; identify the types of social media platforms used by poultry farmers; determine the frequency of social media usage among poultry farmers; determine factors influencing social media adoption and its effects on farm productivity

and identify constraints faced by poultry farmers in social media management to enhance productivity.

## Review of Literature

### Social Media Adoption in Agriculture

Studies have shown that social media adoption can enhance agricultural productivity and sustainability for instance, studies conducted by Olatunji, Aderinola *et al.*, (2019) [3] found that social networking sites provide a new means of communication for disseminating cutting-edge agricultural technologies. These are unmediated interaction channels that enable a user to communicate their experience with technology and generate negative or positive attitudes that impact technology adoption decisions. they employed a machine learning approach to analyses users' existing semantic predisposition for technology adoption in agriculture at various operational levels. While developing attitudes toward technology adoption, these semantic tendencies become an important aspect of users' cognitive decision making. The study scrapes user comments and conversations about agritech on Twitter through data mining. The research also explains the important characteristics that enhance attitude building on Twitter and are responsible for reinforcing decision making among information seekers using four machine learning models. Based on the results, the research recommends strategies to managers for better communication with agriculturists and enhancement of users' decision making.

Social media platforms provide farmers with access to timely information on best practices, market trends, and disease outbreaks (Mtega, 2017) [11].

A recent study conducted by Ofori & El-Gayar (2021) [12] analyzed the public opinion on precision agriculture (PA) by employing a social media analytics tool based on machine learning, which was trained to identify and-classify posts based on lexicons, emoticons, and emojis to capture the sentiments and emotions of social-media users towards PA. The purpose of this exploratory project is to collect, evaluate, and interpret social media postings across several platforms and situate them within the context of precision agricultural-literature using a mixed-method content analysis methodology. The study provides a descriptive analysis-of the most popular themes, including their semantic and emotional orientation and the country of origin. The narrative that PA will be useful for climate control and food sustainability is supported by the study's findings from sentiment and emotion analysis of online debate about PA. In addition, Ofori & El-Gayar (2021) [12] encourage further study into how information disseminated through social media channels affects causal beliefs that manifest as choices about agricultural practices.

A 2022 study conducted by Umar, Olayiwola, Egbeadumah, Kefas, and Alahira explored the impact of Information and Communication Technology (ICT) on poultry farmers in Taraba State, Nigeria. The researchers used structured questionnaires and statistical analysis to gather insights from 90 randomly selected participants. The study revealed a predominantly male population (84.4%) with 40.5% in their productive age and 53.6% married, and a majority being literate. The result revealed that the most accessible ICT Facilities were the Radio, mobile phones, and television Constraints: High costs, inconvenience, lack of availability, and reliability hindered ICT usage. Farmers in the study area relied majorly on telephone calls, radios, TVs, word of mouth, text messages, and training for information. The major factors affecting the adoption of ICT technology in the study area were; sex, age of farmers, educational status and their sources of income, their study-recommended that policies should prioritize farmers' access to ICT facilities to boost agricultural productivity and

extension workers should enhance farmers ICT knowledge and skills to promote adoption and productivity. To boost agricultural productivity, the study recommended prioritizing farmers' access to ICT facilities and enhancing their ICT knowledge and skills through targeted training programs. This aligns with Oladipo and Olaniyi's (2020) [13] study, which highlighted the need for training programs to improve mobile phone usage for agricultural information among poultry farmers in Oyo State, Nigeria.

Oladipo and Olaniyi's study revealed that the extent of mobile phone usage for agricultural information was surprisingly low among respondents. To address this, they suggested organizing training programs to equip poultry farmers with the skills to maximize mobile phones' potential for accessing poultry-related information.

By understanding the challenges and opportunities surrounding ICT adoption among poultry farmers, policymakers and stakeholders can develop effective strategies to enhance agricultural productivity and sustainability in Nigeria.

Research conducted by Abuta, Agumagu, and Adesope in 2021 investigated how arable crop farmers in Imo State, Nigeria utilize social media to share climate change adaptation strategies. The study revealed that farmers employ social media platforms to gather knowledge on climate change (average score = 2.71), share information with friends (average score = 2.67), seek adaptation strategies (average score = 2.59), and post adaptation strategies to farmer groups (average score = 2.72) [original text]. However, the adoption rate of social media among arable crop farmers remains relatively low.

The study also identified significant factors influencing social media usage among farmers, including sex, educational level, and age. These findings suggest that targeted training and support can enhance farmers' effective utilization of social media for climate change communication. To amplify the impact, farmers should be encouraged to leverage social media platforms to raise awareness, share concerns and experiences related to climate change and to facilitate discussion, engage with peers, stakeholders, and the public on adaptation strategies.

Despite the growing body of research on social media's role in agriculture, a critical gap remains: the effects of social media adoption on poultry farm management practices in Delta State, Nigeria. Existing studies have explored related topics, such as the economic impact of social media on small-scale poultry farmers and the awareness and use of social media among urban poultry farmers. However, none have specifically addressed this crucial issue in Delta State.

Therefore, this study aims to bridge the knowledge gap by investigating the effects of social media adoption on poultry farm management practices in Delta State, Nigeria, providing valuable insights for stakeholders and contributing to the development of sustainable agricultural

practices.

**Poultry Farm Management Practices**

Effective poultry farm management practices are paramount for optimizing productivity and sustainability in the poultry industry. Key components of successful management include;

1. Disease management: Implementing robust bio-security measures, vaccination programs, and health monitoring to prevent and control disease outbreaks.
2. Feed management: Ensuring access to high-quality feed, optimizing feed conversion ratios, and minimizing waste.
3. Marketing: Developing strategic marketing plans to reach target markets, negotiate fair prices, and enhance profitability.
4. Research has consistently emphasized the importance of these management practices. For instance, Oladele (2017) [16] underscored their critical role in enhancing poultry farm productivity and sustainability.

However, studies have also highlighted significant gaps in information dissemination and networking among poultry farmers. Ogbonnaya (2018) [17] noted that limited access to timely and accurate information hinders farmers' ability to adopt best practices, leading to reduced productivity and profitability.

**To address these challenges, it is essential to**

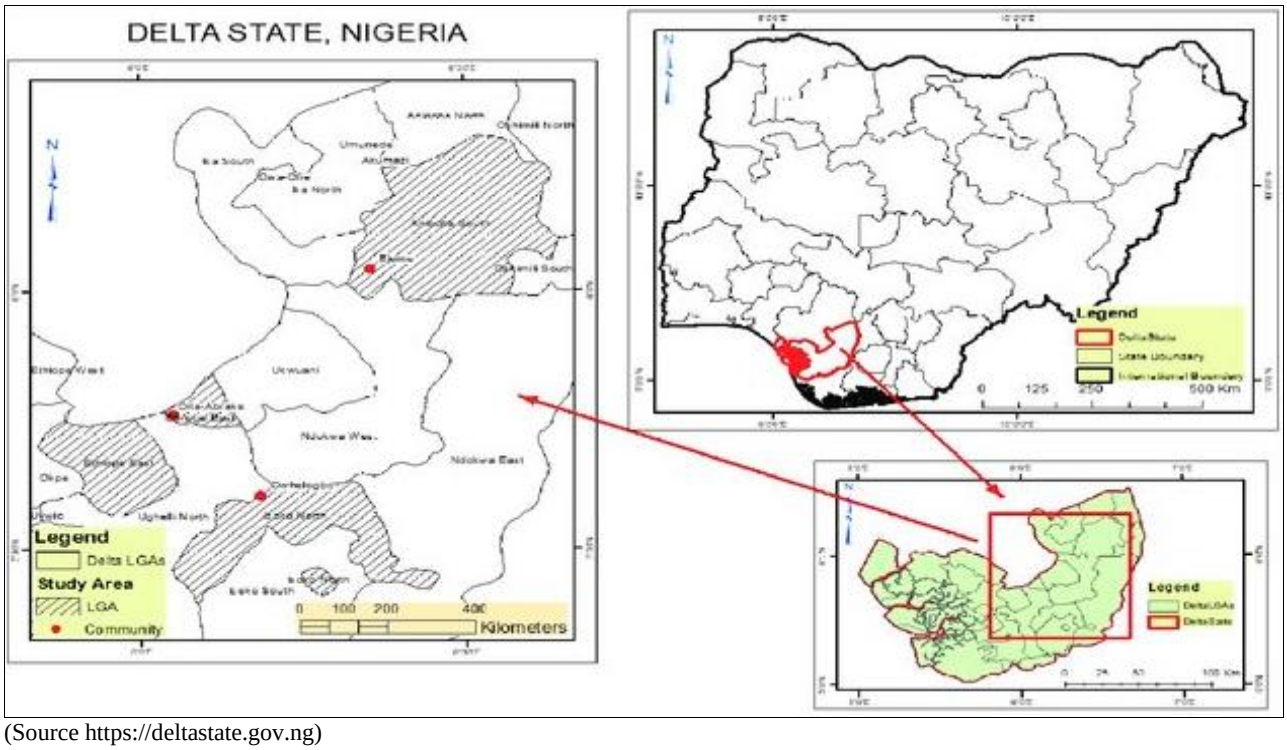
1. Enhance information dissemination channels, such as training programs, workshops, and online platforms.
2. Foster networking opportunities among farmers, researchers, and industry experts.
3. Promote knowledge sharing and peer-to-peer learning.
4. Develop targeted interventions to address specific information gaps and needs.
5. By bridging these knowledge gaps and strengthening networking opportunities, poultry farmers can:
6. Improve disease management and bio-security.
7. Optimize feed utilization and reduce waste.
8. Enhance marketing strategies and profitability.
9. Increase overall productivity and sustainability.

Ultimately, effective poultry farm management practices, coupled with improved information dissemination and networking, are crucial for driving growth, innovation, and resilience in the poultry industry.

**Materials and Methods**

**Study Area**

Delta State, located in the Niger Delta region, was created in 1991 from the former Bendel State. The state's rich cultural heritage dates back to the ancient Kingdom of Nri and the Benin Empire. Delta State's fertile soil, favorable climate, and strategic location make it an ideal hub for poultry farming, planting and cultivation of crops like yam, cassava, plantain and other cash crops like rubber, cocoa etc. Poultry farming has been a vital sector in the state's economy since the 1970s. Key areas where poultry farming is favorable are Warri, Sapele, Ukwuani and Ethiope East, Ndokwa, Oshimili etc. Host numerous poultry farms, contributing significantly to Nigeria's national egg and meat production. The industry has employed thousands of residents, generated substantial revenue and supported food security in the study area. Notably, poultry farms in Delta State include but not limited to Delta State poultry farm Asaba, Okwemu poultry farm, Sapele, Joktion poultry farm in Warri and many others.




(Source https://deltastate.gov.ng)

**Fig 1:** Map of Delta State Showing the selected communities

**Population and Sample Size**

This study targeted poultry farmers in Delta State, Nigeria, focusing on four local government areas (LGAs) known for their thriving poultry industries: Ethiope East, Warri South, Ukwuani, and Udu. A multi-stage sampling approach was employed to select participants. Initially, a purposive sampling method was used to identify these four LGAs due to their high concentration of poultry farms. The second stage also involved a purposively selecting two (2) communities from each of the four (4) LGAs, resulting to eight (8) communities. The final stage involved a random selection of 37 poultry farmers from each of the eight communities. A total of 296 poultry farmers participated in this study providing valuable insights into the poultry industry in Delta State.

Delta State's agricultural advantages, favorable climate, and substantial investment in poultry production make it an ideal location for this study. By targeting areas with high poultry farm concentrations, this research aims to contribute meaningfully to the understanding of poultry farming practices and challenges in Nigeria. A similar research design and methodology was employed by Ajieh (2010) in his study, Poultry Farmers' Response to Agricultural Insurance in Delta State, Nigeria." This study's methodology was carefully replicated to ensure the effective capture of data from the targeted poultry farmers.

**Data Analysis**

Data collected for this study was analyze using both descriptive and inferential statistics. Descriptive such as the mean, frequency distribution and bar charts to analyze objectives i, ii and iv while the inferential statistics such as the multiple regression model was used to analyze objectives iii.

**Model Specification**

$Y= ß_o+ ßiX_i + ß_2X_2+ß_3X_3+……. ßnXn +Ɛ$

Where: Y Dependent variable/ outcome variable

X1X2…… Xn independent variables

ßo = Constant term

Ɛi= error term

Y= Social media adoption measured using a scale

$ßo= ß_1x_1+ ß_2x_2+ ß_3x_3+ ß_4x_4+ß_5x_5+ ß_6x_6+ß_7x_7+ß_8x_8+ß_9x_9+Ɛi$

Where;

X1= Gender

X2= Age

X3= Educational Status

X4= cost of feeds

X5= transportation cost

X6 years of experience

X7= farm size

X8 membership of as association

X9 = Frequency of extension contact

Ɛi = Error term

**Table 1:** Results and Discussion

| Variable | Frequency | Percentage % |
|---|---|---|
| **Age (in years)** | | |
| 20-35 | 40 | 13 |
| 36-51 | 195 | 65.6 |
| 52-67 | 50 | 16.7 |
| Above 67 years | 11 | 3.7 |
| Mean | | 44years |
| **Gender** | | |
| Male | 180 | 60.8 |
| Female | 118 | 39.9 |
| Marital status | | |
| Married | 160 | 54.1 |
| Single | 70 | 23.6 |
| Divorced | 30 | 10.1 |
| Widowed | 36 | 12.2 |
| Mode | | Married |
| **Household Size** | | |
| 1-4 | 42 | 14.2 |
| 5-8 | 185 | 62.5 |
| 9-12 | 55 | 18.6 |
| Above 12 persons | 14 | 4.7 |
| **Educational qualification** | | |
| No formal | 20 | 6.8 |
| primary | 26 | 8.8 |
| Secondary | 178 | 60.1 |
| Tertiary | 72 | 24.3 |
| Mode | | Secondary |

(Source Field survey, 2024)

Table 1 presents the result of the socio-economic characteristics of poultry farmers in the study area. The sample consist of 296 respondents.

**Age of Farmer**

Mean age of fish farmers was 44 years, this implies that fish farmers in the study area were young and in their prime age

which avails them more opportunity to access and adopt social media information regarding farm management and best practices and how to run their fish farm businesses. Age is notably an important factor in agriculture (poultry farming) as it determines to a great extent the productivity of farmers in general (Enwa and Achoja, 2023) [7].

**Gender**

Farmers in the study area were overwhelmingly male (60.8%), suggesting that male poultry farmers outnumbered female poultry farmers in poultry production. Because of this, men in Africa are more likely than women to have access to and ownership of agricultural inputs including improved seedlings, lands, and financing facilities (Issahaku and Abdulai, 2020) [9]. Male farmers are also more equipped than female farmers to adopt new innovation regarding poultry management

**Household size**

The average household size was around 5, suggesting that the fish farmers had relatively large households, some of which may have included extended family members and dependents, etc. This may surely help with poultry production and in responding to social media adoption to improve poultry management. This findings in in agreement with the study conducted by Ebuzoeme, (2015) [6] where fish farmers with larger household were able to increase their production capacity.

**Educational Qualification:**

The result showed the mean number of years spent in school was 12 years (secondary), implying that fish farmers in the study area were literate. Education is seen as a veritable tool in this era of social media adoption among the poultry farmers in the study area and because it helps farmers access practices and technologies that would help them improve their poultry management businesses. By this, fish farmers are properly able to embrace new technologies that will better their poultry business

This demographic information provides valuable context for understanding the characteristics of the sample population, which can inform research findings, policy decisions, or program development.

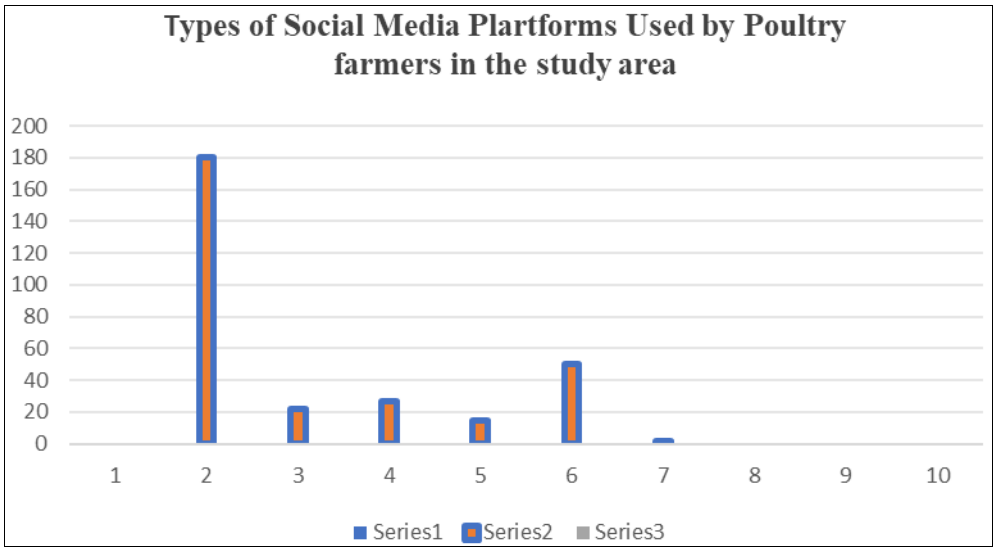



**Fig 1:** Showing Types of social media platforms used by poultry farmers in Delta State

The figure revealed the frequency of social media platform usage among poultry farmers in Delta State. The results showed that what's-app (180) is the most widely used platform by poultry farmers in Delta State. High frequency indicates its popularity among poultry farmers for communication, information sharing, and possibly business transactions. This was followed by google being the second popular platform with a frequency of 50%, Google's moderate frequency suggests farmers use it for searching information, accessing online resources, and seeking expertise. YouTube's relatively low frequency may indicate farmers use it primarily for educational purposes, such as watching videos on poultry management YouTube channel having a frequency of 27%. The study also revealed that Linkedln had the least frequency of just 2 respondents utilizing the platform. LinkedIn's extremely low usage implies farmers perceive it as an academic or professional networking platform, rather than a tool for business transactions or information sharing. By implication, Whats-app's dominance highlights the importance of instant messaging for poultry farmers. The underutilization of LinkedIn suggests a need for awareness campaigns to educate farmers on its potential for business networking and information dissemination. The outcome of this research is in agreement with the study conducted by Almasi *et al* (2023). In their study, they found that what-app level of use (more than 16 times monthly) was more compared to Facebook, Instagram, and YouTube (all at less than 16 times monthly).

**Table 2:** Factors influencing social media adoption and its effects on farm productivity

| Variables | | | |
|---|---|---|---|
| | **Coefficient** | **Standard error** | **t-ratio** |
| Constant | -1.6717 | 0.2013 | -8.3063 |
| Age | -2.4646*** | 0.1865 | -13.213 |
| Educational level | 2.7865** | 1.1841 | 2.4129 |
| Farm Size | 2.5286*** | 0.2015 | -12.5481 |
| Farmers experience | -1.4669 | 0.9760 | -1.5031 |
| Sex | 1.4056 | 1.7160 | 0.8191 |
| Frequency of extension contact | 2.8057** | 1.3147 | 2.1341 |
| Membership of association | 2.1750** | 1.6742 | 1.2991 |
| Transportation cost | 1.3489 | 0.7677 | 1.7569 |
| Cost of Feeds | -2.5703** | 1.0853 | -2.3684 |
| Model summary | $R^2$ | Adj. $R^2$ | F |
| | 0.5396 | 0.5011 | 14.7961 |

Source: (Field Survey, 2024)
Note*** significant at 1% and 5% respectively

Table 2. provides the regression results explaining the relationship between various factors and social media adoption, as well as its effects on farm productivity;

1. **Age:** The coefficient (-2.4646) indicates a negative relationship between age and social media adoption/adaptation to farm productivity. This suggests that younger farmers are more likely to adopt social media and adapt to its benefits for farm productivity.
2. **Educational Level:** A positive coefficient (2.7865) implies that higher education levels are associated with increased social media adoption and improved farm productivity.
3. **Farm Size:** The coefficient (2.5286) shows a positive relationship between farm size and social media adoption/productivity. Larger farms tend to benefit more from social media adoption.
4. Farmers' Experience: The coefficient (-1.4669) suggests a negative relationship, but it's not statistically significant, indicating that experience may not be a determining factor.
5. **Sex:** The coefficient (1.4056) is positive but not statistically significant, suggesting no clear evidence of gender influencing social media adoption and farm productivity.
6. **Frequency of Extension Contact:** A positive coefficient (2.8057) indicates that frequent contact with extension services enhances social media adoption and farm productivity.
7. **Membership of Association:** The coefficient (2.1750) Membership in the association has a statistically significant positive effect on the social media adoption. This implies that for every unit increase in membership (e.g., moving from non-member to member), poultry farmers are willing to embrace social media usage. This implies that social media usage is expected to increase by approximately 2.1750 units. This study's findings align with research by Enwa, Ogisi, and Achoja (2024) [8], which revealed that fish farmers participating in associations are more receptive to adopting new technologies compared to non-members. Therefore, facilitating the formation of associations among farmers can enhance their access to improved technology and promote technological advancement within the industry.
8. **Cost of Feeds:** A negative coefficient (-2.5703) indicates that higher feed costs discourage social media adoption and hinder farm productivity.

**Model Summary**

- **R-squared (R2):** 0.5396 indicates that approximately 53.96% of the variation in social media adoption and farm productivity can be explained by the included variables.
- **Adjusted R-squared (Adj. R2):** 0.5011 provides a more conservative estimate, considering the number of predictors.
- **F-statistic:** 14.7961 indicates that the overall model is statistically significant.

**Table 3:** Constraints faced by poultry farmers in social media management to enhance productivity

| **Constraints faced by poultry farmers in Delta State** | **Frequency** | **Percent %** |
|---|---|---|
| Disease and pest attack | 23 | 7.8 |
| Cost of drugs and vaccination | 84 | 28.4 |
| Market/price fluctuation | 17 | 5.7 |
| Packaging and disposal of poultry droppings | 21 | 7.1 |
| Accessibility of feed | 32 | 10.8 |
| Difficulty in credit and loan procurement processes | 80 | 27 |
| Rate of mortality of the birds | 20 | 6.8 |
| Cost of feeds | 19 | 6.4 |
| Total | 296 | 100% |

Source:(Field Survey, 2024)

The findings in Table 3 revealed the various constraints faced by poultry farmers in Delta State, Nigeria, when it comes to social media management and enhancing productivity.

**Top Constraints**

1. Cost of drugs and vaccination: The cost of drugs and vaccinations emerges as the most pressing concern for farmers, with 28.4% citing it as a major challenge. The financial strain of maintaining their flock's health weighs heavily on them, primarily due to the exorbitant cost of veterinary medications. This significant expense not only threatens their profitability but also compromises their ability to ensure the well-being of their birds, and ultimately affect productivity.

2. Difficulty in credit and loan procurement processes: The findings of this study underscored the pervasive challenge of credit and loan accessibility, with a staggering 27% of poultry farmers in the study area encountering significant obstacles. This critical barrier hampers farmers' capacity to invest in and expand their poultry operations, stifling growth and productivity. To bridge this financial gap, policymakers must prioritize measures to enhance loan accessibility for farmers, empowering them to scale up their businesses and. leverage social media platforms for market expansion
3. Accessibility of feed: Poultry farmers in the study area faced significant hurdles in securing affordable and high-quality feeds, with a notable 10.8% citing this as a major challenge. This critical issue has far-reaching implications for the health, growth, and overall well-being of the poultry. The scarcity of affordable and nutritious feeds can lead to malnutrition and increased susceptibility to disease, stunted growth and reduced productivity and higher mortality rates.

**Other Notable Constraints**

The study revealed series of notable constraints hindering poultry farmers' productivity and profitability in Delta State. Although the prevalence of pest and disease attacks affected only 7.8% of farmers, its impact can be devastating.

**Other significant challenges included**

1. **Waste Management:** Packaging and disposal of poultry droppings posed substantial environmental and health concerns, underscoring the need for effective waste management strategies.7.1%
2. **Mortality Rates:** High mortality rates severely impacted productivity and profitability, emphasizing the importance of improved bio-security measures. 6.8%
3. **Feed Costs:** The financial burden of recurring expenses, particularly feed costs, strained farmers' resources. 6.4%.
4. **Market Fluctuations:** Poultry farmers faced uncertainty due to volatile market prices, making it challenging to maintain a stable income. 5.7%.

These interconnected constraints necessitate comprehensive support and targeted interventions to enhance poultry farming productivity and sustainability in Delta State. Ultimately, targeted interventions will empower poultry farmers to overcome these challenges, optimizing their operations for long-term success. The study's findings align with those of Ogba, Ahaotu, Ihenacho, and Chukwu (2020) [18], which highlighted significant challenges faced by small-scale poultry farmers, in Abia State Nigeria such as the financial constraints, market volatility market fluctuations that affect the sale and profitability of poultry products and high cost of feeds. These constraints not only affect the farmers' productivity and profitability but also impact the overall sustainability of the poultry industry. By acknowledging these challenges, we can work towards developing targeted solutions to support small-scale poultry farmers and enhance their competitiveness in the market.

**Conclusion**

This study investigated the impact of social media adoption on poultry farm management practices in Delta State, Nigeria. The findings revealed that what's-app (180) was the most widely used platform by poultry farmers in Delta State, high frequency indicates its popularity among poultry farmers for communication social media adoption enhances farmers' access to market information, improves disease prevention and control, and facilitates networking with other stakeholders.

The regression results showed that adoption of social media for enhanced farm productivity is influenced by demographic factors, including age, education, and farm size. Specifically, younger farmers and those with higher education levels are more likely to adopt social media and reap its benefits for productivity. Additionally, larger farms tend to derive greater advantages from social media adoption, suggesting economies of scale in digital agriculture. Poultry farmers in the study area faced a lot of constraints such as feed costs, loan accessibility, market fluctuations affecting poultry farm productivity.

**Policy Recommendations**

The study also made the following recommendations:

1. **Digital Literacy Training:** Provide training programs for poultry farmers to improve their social media skills and online market engagement.
2. **Social Media Platforms:** Establish dedicated social media platforms for poultry farmers to share knowledge, best practices, and market information.
3. **Market Information Systems:** Develop and disseminate market information systems to enhance farmers' access to real-time market data.
4. **Loan Schemes:** Implement targeted loan programs with favorable interest rates to support poultry farmers' access to credit.
5. **Agricultural Policy Reforms:** Review and reform existing agricultural policies to support poultry farming development and social media adoption
6. **Disease Prevention Programs:** Strengthen disease prevention and control measures through vaccination programs and veterinary extension services.

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