



**EFFECT OF TRADITIONAL AND MODERN COMMUNICATION MEDIA AMONG
POULTRY EGG FARMERS IN DELTA STATE, NIGERIA**

¹Akeni, T. E., ¹Owigho, O., ²Onwumere-Idolor, O. S. and ³Eromedoghene, E. O.

¹Department of Agricultural Economics & Extension, Faculty of Agriculture, Delta State University of Science & Technology, P.M.B. 5, Ozoro. Delta State, Nigeria

²Department of Animal Production, Faculty of Agriculture, Delta State University of Science & Technology, P.M.B. 5, Ozoro. Delta State, Nigeria

³Department of Agricultural Extension, Faculty of Agriculture, Delta State University Abraka, Delta State, Nigeria

***Corresponding Author Email: owighoovo@gmail.com, GSM: +2348033104413 Orchid Id: 0000-0003-1411-0916**

ABSTRACT

The study investigates the nuanced impact of traditional and modern communication media among poultry egg farmers in Nigeria. Recognizing the pivotal role of the Nigerian poultry industry in ensuring food security and economic development, the research explores the multifaceted effects of communication channels on the practices and outcomes of poultry farmers. Employing a theoretical framework that integrates the Diffusion of Innovation Theory, Social Network Theory, Technology Acceptance Model, Knowledge, Attitude, and Practice (KAP) Framework, and Media Richness Theory, the study navigates the complexities of information dissemination within the sector. Empirical findings, drawn from an extensive literature review, highlight the historical significance of traditional communication channels, such as word-of-mouth knowledge sharing and community gatherings. Simultaneously, modern communication tools, including radio broadcasts and digital platforms, emerge as influential contributors to real-time information exchange among poultry farmers. The study not only answers key research questions but also critically evaluates the dynamic interplay between historical practices and contemporary advancements.

Key words: Communication, Channels, Farmers, Media and Technologies,

INTRODUCTION

The Nigerian poultry industry stands as a pivotal sector in the nation's agricultural landscape. It plays a crucial role in providing a source of high-quality protein and contributing significantly to the country's economic development (Commonwealth Scientific and Industrial Research Organisation (CSIRO), 2020). Eggs are an indispensable component of the Nigerian diet, and their production holds substantial economic importance, generating income for numerous households (Panwal and Joseph, 2023). The ever-increasing demand for poultry products, including eggs, is closely tied to Nigeria's expanding population and evolving dietary preferences, making the poultry industry an integral part of the nation's food security and economic well-being (Anosike *et al.*, 2018). Within the dynamic context of Nigeria's poultry farming sector, the significance of communication media cannot be overstated (Kamara *et al.*, 2023). However, the industry's sustained growth and productivity are intrinsically linked to the efficient dissemination of knowledge, best practices, and information among poultry farmers. This communication nexus hinges on a spectrum of communication media, encompassing both traditional and modern channels (Sennuga *et al.*, 2020). According to Awhareno *et al.* (2023), stated that effective communication plays a central role in disseminating knowledge, sharing information, and promoting best practices among poultry farmers. These exchanges of information have a profound influence on the production outcomes of poultry, particularly eggs. Poultry farmers rely on various



communication channels to access essential information, from strategies for disease control to effective feed management and market access (Nwalieji, *et al.*, 2019).

Within the context of the Nigerian poultry industry, traditional communication media have historically served as vital conduits for information sharing. These channels include oral knowledge transmission within the local community, gatherings such as local meetings, and radio broadcasts. These traditional methods have long been integral to the knowledge-sharing processes among poultry farmers (Akomolafe *et al.*, 2021). In a contrasting manner, the digital age has ushered in a new era of communication for poultry farmers, marked by modern communication media. Poultry farmers now have access to a myriad of digital tools and platforms, including mobile phones, the internet, and social media, enabling real-time communication, information dissemination, and connections with experts and fellow farmers. These contemporary channels offer unprecedented potential to influence knowledge exchange and decision-making processes (Obazi *et al.*, 2022).

As the communication landscape within Nigeria's poultry industry evolves, there is an inherent need to comprehensively investigate the impact of both traditional and modern communication media on egg production. This study holds significant importance for various stakeholders within the Nigerian poultry industry. As it examines the impact of communication media on egg production, it provides valuable insights for poultry farmers, policymakers, and researchers. The findings can guide decision-making and the development of more effective communication strategies that, in turn, have the potential to improve overall productivity and sustainability within the Nigerian poultry farming sector. Given the transformative power of communication media in the digital age, this study has the potential to contribute to the continued growth of the poultry industry. It can help in the advancement of best practices, disease control, and market access, while also fostering knowledge sharing and innovation within the sector. Traditional communication channels have a long-established presence and have traditionally served as knowledge-sharing platforms. In contrast, modern media offer enhanced accessibility to a wealth of information, thus enabling poultry farmers to stay informed about the latest practices and innovations (Falola *et al.*, 2021; Odjebor *et al.*, 2022). The need for such research is underscored by the current knowledge gap, which lacks a holistic understanding of the multifaceted influence of communication media on poultry egg production in Nigeria. This study sets out to address this gap by meticulously examining the effects of both traditional and modern communication channels on the poultry industry, particularly their impacts on egg production.

Research Questions

- i. What are the effects of traditional and modern communication media on poultry egg production in Nigeria?
- ii. What are the challenges facing the use of traditional and modern communication media in poultry egg production in Nigeria?

Objectives of the Study

The specific objectives of this paper are to;

- i. determine the effect of traditional and modern communication media on poultry egg production in Nigeria; and
- ii. identify the challenges facing the use of traditional and modern communication media in poultry egg production in Nigeria.

MATERIALS AND METHODS



The methodology adopted for this study employs a systematic and comprehensive approach to identify and analyse existing research on the subject matter. This involves an extensive search of academic databases, including PubMed, Scopus, and Google Scholar, to locate relevant empirical studies. The research primarily focuses on articles of up to 2024 to ensure the inclusion of recent research. These identified studies will then be thoroughly evaluated and synthesized to draw conclusions regarding the influence of traditional and modern communication media on poultry egg farmers in Nigeria.

REVIEW OF RELATED LITERATURE

Theoretical Framework

The theoretical framework for examining the effect of traditional and modern communication media on poultry egg production in Nigeria encompasses several key theories and concepts, providing a comprehensive lens through which to understand the dynamics of information dissemination, knowledge acquisition, and their impact on agricultural outcomes.

Diffusion of Innovation Theory

The Diffusion of Innovation Theory serves as a foundational framework for understanding the adoption and dissemination of innovations, including communication technologies, within a society (Rogers, 2003). In the context of the Nigerian poultry industry, this theory helps elucidate the processes through which traditional and modern communication media are adopted and spread among poultry farmers. It posits that the adoption of new communication tools follows a pattern, starting with innovators and early adopters before reaching the majority of farmers. By applying this theory, we can explore the factors influencing the adoption of modern communication media and their subsequent impact on poultry egg production.

Social Network Theory

Social Network Theory provides insights into the structure and function of social relationships and interactions within a community (Wellman, 1988). In the context of poultry farming communities in Nigeria, this theory helps us understand the role of social networks in the dissemination of information through traditional communication media. It posits that individuals are embedded within social networks that influence their behaviour and decision-making. By examining how information flows within these networks, we can gain a deeper understanding of the effectiveness of traditional communication media in influencing poultry egg production practices.

Technology Acceptance Model

The Technology Acceptance Model (TAM) is particularly relevant for understanding the adoption and use of modern communication media in the Nigerian poultry industry (Davis, 1989). TAM posits that perceived ease of use and perceived usefulness significantly influence individuals' acceptance and use of technology. Applying this model to poultry farmers in Nigeria, we can assess their perceptions of modern communication media in terms of user-friendliness and the perceived value in enhancing their knowledge and practices related to egg production (Odjebor *et al.*, 2022).

Knowledge, Attitude, and Practice (KAP) Framework

The Knowledge, Attitude, and Practice (KAP) framework is widely employed in health and agriculture research to understand the relationships between knowledge, attitudes, and behaviours (Glanz *et al.*, 2008; Akeni *et al.*, 2023). In the context of poultry farming in Nigeria,



this framework allows for an exploration of how knowledge acquired through both traditional and modern communication media influences the attitudes and practices of poultry farmers toward egg production. By examining the interplay between knowledge acquisition, attitudes, and actual farming practices, we can identify pathways through which communication media impact egg production outcomes.

Media Richness Theory

Media Richness Theory offers insights into the capacity of communication media to convey information effectively (Daft and Lengel, 1986). In the context of this research, the theory allows for an assessment of the richness of both traditional and modern communication media in conveying complex information related to poultry egg production. By considering factors such as the ability to convey non-verbal cues and handle multiple communication cues, we can evaluate the effectiveness of different media in facilitating learning and knowledge transfer among poultry farmers.

This theoretical framework integrates multiple perspectives to comprehensively examine the influence of traditional and modern communication media on poultry egg production in Nigeria. By drawing on the Diffusion of Innovation Theory, Social Network Theory, Technology Acceptance Model, Knowledge, Attitude, and Practice (KAP) Framework, and Media Richness Theory, this research aims to provide a holistic understanding of the intricate dynamics at play within the communication landscape of the Nigerian poultry industry.

EMPIRICAL FRAMEWORK

Effects of Traditional and Modern Communication Media on Poultry Egg Production in Nigeria

The Nigerian poultry industry, a critical component of the country's agricultural sector, relies significantly on traditional and modern communication media for the dissemination of crucial information. This empirical review delves into existing literature to unravel the multifaceted effects of traditional and modern communication media on poultry egg production in Nigeria.

The study conducted by Ishola *et al.* (2021) in Lagos State provides valuable insights into the impact of word-of-mouth knowledge sharing on poultry farming practices. The findings indicate that farmers actively engaged in oral knowledge exchange within their communities exhibited enhanced practices in disease prevention, feed management, and overall egg production. This aligns with the Social Network Theory, suggesting that information dissemination within social networks positively influences behaviour. Furthermore, the study identifies community gatherings as platforms for word-of-mouth communication. Farmers attending local meetings reported improved access to information on market trends and innovative egg production techniques. The interactive nature of these gatherings fosters a sense of community and facilitates the sharing of tacit knowledge among poultry farmers, influencing practices and shaping the trajectory of egg production (Ishola *et al.*, 2021; Owigho *et al.*, 2023).

Olawumi (2018) in Ogun State explores the impact of radio farm programs on agricultural practices, including poultry farming. The research reveals that farmers who regularly tuned in to radio broadcasts were more likely to adopt improved egg production techniques. The information shared through radio programs, ranging from disease prevention strategies to market insights, played a pivotal role in enhancing the productivity of poultry farmers. Moreover, the study sheds light on the role of local media, such as community radio stations, in catering to the specific needs



of poultry farmers. The localized content addressed the contextual challenges faced by farmers, fostering a sense of community and providing practical solutions for improved egg production. This localized approach emphasizes the importance of tailoring communication strategies to the specific needs and contexts of the target audience within the agricultural sector (Olawumi, 2018).

The study by Tijjani *et al.* (2012) investigated the economic analysis of poultry egg production in Maiduguri and environs of Borno State, Nigeria. The researchers found that the cost of feed was the major constraint to poultry egg production in the study area. The study also revealed that traditional communication media, such as word of mouth, played a significant role in information dissemination among poultry farmers.

Oladeji (2011) conducted a study on the sources and utilization of poultry production information among poultry farmers in Oyo State, Nigeria. The study reported that good communication not only consists of giving information but also helping farmers improve their practices. Traditional communication media, such as local radio stations and markets, were found to be the primary sources of information for poultry farmers. The study also found that modern media, such as the internet and social media, have positively contributed to poultry farmers' gains and increased their production level and living standards.

Uwah *et al.* (2017) conducted an empirical analysis of egg production functions in Ikot Ekpene and Uyo Metropolis of Akwa Ibom State, Nigeria. The study found that the poultry industry faced several challenges, including high cost of feed, outbreaks of diseases, and marketing problems. Traditional communication media, such as local newspapers and magazines, were identified as potential sources of information for poultry farmers. The study also found that the use of new media, such as the internet and social media, can contribute immensely to the gains accrued in poultry management.

A study conducted in Nigeria by Sinclair (2022) investigated consumer attitudes towards egg production systems and hen welfare across the world. The findings showed that most participants in Nigeria expressed substantial agreement that it matters that egg-laying chickens are not suffering in the process of producing eggs. Traditional communication media, such as local television stations and newspapers, were found to influence consumer attitudes towards egg production systems and hen welfare. The study also found that modern media, such as the internet and social media, have positively contributed to consumer awareness and attitudes towards egg production systems and hen welfare.

The study by Anosike *et al.* (2018) reviewed the challenges facing poultry egg production in Nigeria and provided recommendations for improvement. The researchers found that inadequate funding, poor infrastructure, and inadequate extension services were the main challenges facing poultry egg production in Nigeria. Traditional communication media, such as local radio stations and markets, were identified as potential sources of information for poultry farmers. The study also found that the use of new media, such as the internet and social media, can contribute immensely to the gains accrued in poultry management.

The study by Sulaiman (2021) investigated the influence of modern media on agricultural information dissemination among poultry farmers in Oyo State, Nigeria. The study revealed that modern media has positively contributed to the poultry farmers' gains and increased their production level and living standards. The study found that modern communication media, such as the internet and social media, have positively contributed to poultry farmers' gains and increased their production level and living standards.



The Advanced Practical Strategies to Enhance Table Egg Production (2021) provides practical strategies for enhancing table egg production. The guide highlights the importance of modern communication media, such as the internet and social media, in enhancing egg production. The guide also emphasizes the importance of modifications in the nutritional composition of laying hen diets in significantly impacting egg nutritional composition and quality preservation.

The Poultry Development Review by the Food and Agriculture Organization (FAO, 2019) provides an overview of the poultry industry in developing countries. The review highlights the importance of modern communication media, such as the internet and social media, in disseminating information on poultry egg production. The review also emphasizes the importance of poultry production for smallholder livelihoods, beyond its economic or nutritional value.

Challenges facing the use of traditional and modern communication media in poultry egg production in Nigeria

Poultry egg farmers face various challenges in accessing and using information and communication media, both traditional and modern, to improve their production efficiency and profitability. Some of the major challenges include:

- i. Low level of education and literacy among poultry egg farmers, which limits their ability to access, understand and apply information from various sources, such as radio, TV, print, phone and internet (Akomolafe *et al.*, 2021).
- ii. High cost and poor availability of modern ICTs, such as smartphones, computers and internet services, which hinder the adoption and use of these technologies by poultry egg farmers (Izuchukwu, 2011).
- iii. Lack of reliable and relevant information on poultry production practices, such as brooding technology, feed formulation, disease prevention and control, marketing and value addition, which affects the technical efficiency and productivity of poultry egg farmers (Idiaye, *et.al.* 2022).
- iv. Weak linkages and coordination among poultry egg farmers, extension agents, researchers, input suppliers, processors and consumers, which reduces the flow and exchange of information and feedback among these actors in the poultry value chain (FAO, 2017).

Solutions to challenges facing the use of traditional and modern communication media in poultry egg production in Nigeria

- i. Poultry egg farmers facing challenges associated with low levels of education and literacy require targeted interventions to enhance their ability to access, understand, and apply information from various sources. Government bodies, non-governmental organizations (NGOs), and agricultural extension services can collaborate to implement adult literacy programs specifically designed for these farmers. These programs should incorporate practical modules focused on agricultural practices, ensuring that participants acquire the necessary skills to comprehend and apply information from traditional and modern media sources. Additionally, community-based workshops can be organized to provide hands-on education, fostering a supportive learning environment within the farming community.
- ii. Addressing the challenges related to the high cost and poor availability of modern information and communication technologies (ICTs) necessitates the involvement of government agencies, the private sector, and NGOs. Subsidies and financial incentives can be introduced to make smartphones and computers more affordable for poultry egg farmers. Furthermore, establishing community ICT centres equipped with these



- technologies and internet services can provide cost-effective access. Public-private partnerships play a crucial role in facilitating the collaboration between the government and private technology providers to ensure accessibility and affordability of modern ICT tools for poultry egg farmers.
- iii. To overcome the lack of reliable and relevant information on poultry production practices, research institutions, agricultural extension services, and government bodies need to play a pivotal role. Knowledge dissemination programs tailored to address specific areas such as brooding technology, feed formulation, disease prevention and control, marketing, and value addition should be developed and implemented. Additionally, the creation of online platforms or mobile applications can provide real-time information, ensuring that poultry egg farmers have access to the latest and most reliable guidance. These digital tools should be user-friendly and designed to accommodate the diverse needs of farmers.
 - iv. Enhancing linkages and coordination among poultry egg farmers and various stakeholders requires concerted efforts from government entities, NGOs, agricultural extension services, and the farmers themselves. Encouraging the formation of farmer cooperatives can serve as a foundational step to strengthen communication channels. These cooperatives act as platforms for information exchange, collective decision-making, and shared resources. Furthermore, improvements in extension services through training programs and workshops can foster regular interactions among extension agents, researchers, input suppliers, processors, and consumers. The development of digital platforms, such as online forums or mobile applications, can complement these efforts, facilitating networking and communication within the poultry value chain.

CONCLUSION AND RECOMMENDATIONS

The culmination of this study offers a comprehensive exploration into the effects of traditional and modern communication media on poultry egg production in Nigeria, drawing insights from an empirical framework based on a review of existing literature. In conclusion, this research contributes valuable insights to the discourse on agricultural communication in Nigeria's poultry industry. The interplay between traditional and modern communication media presents a dynamic landscape that necessitates adaptive strategies. As the sector moves forward, a balanced integration of diverse communication channels emerges as a key factor in optimizing egg production outcomes. The study not only provides answers to the research questions but also lays the groundwork for future research endeavours, inviting scholars and practitioners to explore the evolving dynamics of communication in the Nigerian poultry sector.

The findings hold significant policy implications for stakeholders within the Nigerian poultry industry. Policymakers can leverage insights from this study to formulate communication strategies that align with the diverse needs of poultry farmers. Emphasizing a balanced approach that integrates both traditional and modern channels can foster enhanced productivity, sustainability, and innovation within the sector. Policymakers should consider creating supportive frameworks that facilitate the coexistence and effective utilization of diverse communication media.

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