

**EXPLORING YOUTH SOCIAL MEDIA USE FOR
ENHANCEMENT OF AGRICULTURAL EXTENSION
SERVICES IN RURAL AREAS OF NIGERIA: A
SYSTEMATIC REVIEW**

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ABSTRACT: This study investigates the role of social media in enhancing agricultural extension services among youths in rural Nigeria, with a focus on its usage, the challenges encountered, and strategies for improvement. A systematic literature review was conducted using Google Scholar as the primary database to identify relevant studies. The search strategy employed Boolean operators to combine keywords such as “‘youth,’ ‘social media,’ ‘agricultural extension services,’ and ‘Nigeria’ or ‘rural areas.’” The inclusion criteria were tailored to select studies focusing on youth in rural areas of Nigeria, the use of social media platforms for agricultural extension, and studies that specifically address the Nigerian context. A total of 66 articles were initially identified 7 of which met the inclusion criteria after thorough screening and quality assessment. The results reveal that while platforms such as WhatsApp and Facebook are utilized by youths for agricultural information exchange, significant barriers, including limited ICT infrastructure, inadequate training, and sociocultural constraints, among others, impede their effectiveness. The study suggests that addressing these challenges through targeted policy interventions and capacity-building initiatives can increase the potential of social media as a tool for agricultural development. These insights can inform stakeholders on the benefits of leveraging social media to promote innovation, improve productivity, and support food security in rural Nigeria.

Keywords: Social Media, Youth, Agricultural Extension, Rural Areas

INTRODUCTION

Social media has revolutionized global connectivity and information sharing. It has revolutionized how people interact and share information, bringing people from all over the world closer together. Globally, innovative social media platforms such as Facebook, Instagram, Twitter, and Whatsapp, among others, are increasingly emerging, providing new ways to engage with stakeholders in agricultural innovation systems (Saravanan, & RajSuchiradipta, 2018). Studies (e.g Plechowski 2014; Khumoetsile, Nkurumwa, & Kyule, 2020) have shown that social media has also been increasingly used in agricultural extension services to meet the challenges of agricultural development and ensure global food security in recent years. Studies (Aghogho & Odjebor, 2022; Alabi & Nnaji, 2021), have shown that social media platforms such as Facebook and WhatsApp can be used to disseminate information on agricultural extension services to farmers in rural Nigeria. As digital natives, youth are especially adept at using social media platforms, making them an ideal target for engagement in agricultural activities. By leveraging the popularity of social media among youth, agricultural extension services can increase their reach and impact in rural areas of Nigeria.

For this work, the Nigeria's 2019 National Youth Policy definition of youth as young people between the ages of 18 and 35 years is adopted. Youth constitutes a productive and more energetic workforce for every nation. Despite the productive potential of young people, the available literature (e.g Afolabi, Danladi, & Ilugbusi, 2022) shows that the level of youth participation in agricultural extension services in Nigeria is poor.

Agricultural extension services refer to channels for disseminating farm technology information, and assisting farmers in enhancing their technical and managerial competencies in agricultural-based economies.

Statement of the Problem

There are studies focusing on social media use among youths in Nigeria. However, there is a paucity of data on the level of social media use among youth in agricultural extension services in rural areas of Nigeria. Research (Aghogho & Odjebor, 2022; Khumoetsile et al, 2020; Indhuja, Vishnuja, & Karthikeyan, 2019; Alabi and Nnaji, 2021) shows that social media can be a powerful tool for engaging young people in agricultural activities, particularly in rural areas, where agriculture is the major source of livelihood for occupants. Despite evidence showing the potential of social media in engaging young people and promoting innovation in the agricultural sector, studies regarding youth social media use for agricultural extension purposes have received inadequate attention from researchers, the government, and other stakeholders in Nigeria, thus leading to a paucity of data, and by extension a lack of necessary support to enable the involvement, innovation, and empowerment of young people in agricultural extension services. This, therefore, suggests a need for more studies of this nature to explore possible ways of harnessing the use of social media by youths in promoting agriculture, particularly extension services that still depend on traditional methods.

Objectives of the study

The broad objective of this study is to explore how youths' social media use can be harnessed to enhance agricultural extension services in rural areas of Nigeria. Specifically, the study examines the following:

- i. level of social media use among youths for agricultural extension services in rural areas of Nigeria.
- ii. challenges encountered by youths in the utilization of social media in rural agricultural extension services in Nigeria
- iii. ways to harness social media use among youths to improve agricultural extension services in rural areas of Nigeria.

LITERATURE REVIEW

Youth engagement with social media in Nigeria

The increasing use of mobile phones and social media among youth in Nigeria presents a great opportunity to harness their online activities to enhance agricultural extension services in rural areas. Social media platforms such as Facebook, Twitter, Instagram, and WhatsApp are increasingly being used to share information, connect with people, and facilitate

communication globally. These platforms have the potential to transform the way agricultural extension services are delivered, enabling innovation and empowerment among stakeholders.

A study conducted by Mbanaso, Dandaura, Ezeh and Iwuchukwu (2015) in select towns in the central part of Nigeria to determine how youths (aged 16 through 25) use social media platforms in terms of frequency and purpose of social networking site usage, revealed that 99% of the respondents had social media accounts 95.2% of whom had access to various social media platforms. Furthermore, among the twelve social media platforms surveyed, it was found that Facebook was the most commonly used social networking channel (91%), followed by WhatsApp (87%) and Tango (1%). Despite these insights, the study did not address whether these platforms were utilized for agricultural extension services, leaving a gap in understanding the practical application of social media in this context.

Overview of Agriculture and Agricultural Extension Services in Nigeria

Agriculture plays an important role in Nigeria's economy. It is the most important sub-sector in the nation, next to petroleum (Manyong et al., 2005). Despite advancements in other industries, agriculture remains a vital sector of the national economy, employing approximately two-thirds of the total labour force and serving as the primary source of income for more than 90% of the rural population (Adekemi, 2021). However, the current performance of agriculture in Nigeria is unsatisfactory due to several factors, including the low level of adoption of modern improved technologies and the increasing aging population that dominates the sector (Senuga, et al., 2020). According to Adekemi (2021), the average age of the agricultural labour force is increasing, as younger individuals in rural areas are seeking alternative and more profitable career opportunities instead of relying on traditional farming practices. This suggests a need to explore new approaches and strategies to attract the younger generation to the sector's extension services.

Agricultural extension services refer to the exchange and means of sharing information, knowledge, technology, and skills for improved livelihoods regardless of their organization (Hamisu, Ardo, Makinta, Garba, & Musa, (2017). In rural areas of Nigeria, agricultural extension services are critical for ensuring sustainable food security and improving livelihoods. However, agricultural extension services are found to be inadequate due to poor funding, inadequate/incompetent staff, methods of training, and apathy among recipients (Kanu & Ezeji, 2017). According to Afolabi, et al., (2022), the traditional method of extension delivery, which was first developed in the early 1970s, is one of the major innovations in the extension system in Nigeria, and this approach has been criticized for its drawbacks. This suggests the need for the adoption of innovative technologies such as social media to meet the challenges of agricultural development and food security. These tools have demonstrated their ability to engage youth in agricultural activities, making them important new tools for agricultural extension services.

Importance of Youth Involvement in Agriculture and Extension Services in Nigeria

Youths constitute the efficient workforce of every nation. In Nigeria, youths undoubtedly hold the potential to catalyse a shift in the pattern of food insecurity challenges, emerging as pivotal players through participation in agriculture (Damilola, 2021; Haruna, Asogwa, & Ezhim, 2019). Naswem, and Ejembi, (2017) observed the need for the younger generation to be involved in agricultural extension as a way of revitalizing the sector. However, current

studies (Afolabi, et al, 2022; Alabi & Nnaji, 2021; Geza, Ngidi, Ojo, Adetoro, Slotow, & Mabhaudhi, 2021; Haruna, et al, 2019; Nwaogwugwu & Obele, 2017) have reported that the level of youth participation in agricultural extension services is low. Akpan, Inimfon, James, and Agom (2015) investigated determinants of the decision and participation of rural youth in agricultural production in the southern region of Nigeria; the study revealed that years of social organization, access to ICT, nature of land ownership, and youth access to state-owned agricultural programme were positive determinants of the decision of youth to engage in agricultural activities in the study area. Encouraging greater participation of young people in agricultural activities can alleviate both the challenges posed by an aging farming population and the issue of rising youth unemployment. Youth participation in agriculture and extension programs is anticipated to increase farm productivity and revenue, decrease poverty, and alleviate food insecurity.

Use of Social Media in Agriculture and Agricultural Extension Services among Youths in Nigeria

Harnessing the power of social media use among youths in agricultural extension services can move beyond merely facilitating information sharing to enabling innovation and empowerment in the sector. This development can have a significant impact on agricultural practices and productivity, particularly in a developing country such as Nigeria, where the majority of the population relies on agriculture for their livelihoods. Studies that focus on social media use among youths in Nigeria exist. For example, Iwuchukwu, Eke, and Nwobodo, (2019) investigated the perceptions of extension personnel regarding the suitability and benefits of using social media in communicating agricultural information in Enugu State, Nigeria. The study confirmed the use of social media for agricultural-related information and revealed that Facebook (82.4%) and WhatsApp (74.2%) were the most commonly used by the respondents. However, no mention of the youth population was found. Babasanya, Akinola, Saddiq, Ojeleye, Usman, Ganiyu, and Olorukooba (2020) investigated the use of social media platforms among extension professionals in Southwest Nigeria and reported that over half (58%) of the respondents had moderate awareness of the use of WhatsApp for extension service delivery. However, the majority of the participants were between 36 and 50 years old, indicating a relatively young population. Furthermore, in a study conducted by Thomas and Ayobami (2015) among extension agents in Oyo State, whose mean age was 38 years, the majority (84.1%) were between 28 and 49 years old. The results, however, revealed inadequate use of social media among extension workers. According to the study, the majority (72.0%) exhibited a high need for training on the use of social media. Alabi and Nnaji (2021) studied the use of social media in engaging youths in agricultural development in the Federal Capital Territory, Abuja, Nigeria, and reported that the youths in the study area used mostly WhatsApp chats (23.7%) as their main platform to search for agricultural information. Ifejika, Asadu, Enibe, Ifejika, and Sule (2019) studied social media mainstreaming in e-extension services delivery by the Agricultural Development Programmes (ADPs) in the North Central Zone of Nigeria. They observed that the ADP extension agents largely used traditional methods instead of social media platforms to disseminate information.

Therefore, studies focusing on the level of use of social media among youths for agricultural extension services in rural areas of Nigeria are still inadequate. This suggests the need for more empirical studies in this sector.

Challenges of Social Media Use in Rural Areas of Nigeria

Research has shown that the utilization of social media networks for rural agricultural extension services faces several challenges. According to Kari (2007), the majority of rural dwellers in Nigeria lack access to new information technology and are thus cut off from the global world. Enwelu et al. (2017) examined factors that militated against extension workers' access to and use of ICTs in the Anambra Agricultural Development Programme (ADP) and reported that poor ICT skills, inadequate support by organizations and the government and high cost of maintenance of ICT tools were the limiting factors. Oluyaire, et al., (2020) identified sociocultural and social media-related factors that limit the use of social media among farm youth in rural communities of the Federal Capital Territory (FCT), Nigeria. They reported that factors such as users' education, culture, and value orientation, as well as the availability, knowledge, and accessibility of social media, determine social media usage in the area. Iwuchukwu et al. (2023) identified challenges in the use of social media among agricultural extension workers of Enugu State, Nigeria, including a lack of access to social media and the complexity of the device.

Strategies for Harnessing Social Media to Improve Agricultural Extension Services in Rural Areas of Nigeria

Harnessing social media to improve agricultural practices in rural areas of Nigeria may require a comprehensive strategy that addresses the specific needs and challenges of the sector. Oluyaire et al. (2020) recommended that the use of social media for agricultural information dissemination should consider users' education, values and culture as well as the availability and accessibility of the media and, the level of knowledge of social media the beneficiaries have for maximum benefit. Iwuchukwu, et al., (2023) suggested the provision of internet and internet-enabled devices as tools for extension work and the incorporation of the use of social media as part of continuous professional development (CPD) for extension agents in the study area.

The integration of platforms such as WhatsApp and Facebook has shown significant potential in improving service delivery among extension agents and farmers.

Theoretical Framework

The paper is anchored on Rogers' diffusion of innovations theory, which suggests that new technologies are most effectively adopted when early adopters, such as young people, are engaged in the process. The diffusion of innovation theory is a framework that explains how new ideas, products, and technologies spread through society. The theory was first proposed by sociologist Everett Rogers in 1962 and has since become widely used in fields such as marketing, public health, and technology adoption.

The theory posits that the spread of innovation occurs through a series of stages, each of which is characterized by different groups of adopters. These adopter groups are defined on the basis of their willingness to try new things and their level of influence in their communities.

Diffusion of innovation theory is the most appropriate method for investigating the adoption of technology in agricultural extension services programs. Drawing on this theory, this study

emphasizes that social media can be effectively used to engage youth in agricultural activities, given that they constitute the highest and fastest adopters of technology in Nigeria as noted by Imiti and Odjebor (2022).

METHODOLOGY

The research employed a systematic literature review approach to gather data. Google Scholar was the only database searched for relevant literature:

Keywords and search strings using Boolean operators include the following:

("Youth" OR "young adults" OR "adolescents") AND ("social media" OR "digital platforms" OR "online networks" OR "social networking sites") AND ("agricultural extension services" OR "agriculture extension" OR "agricultural outreach" OR "farming advisory services") AND ("Nigeria" OR "rural communities" OR "rural areas") AND ("enhancement" OR "improvement" OR "development" OR "impact")

The inclusion criteria used in the study were as follows:

- i. Studies focusing on youth in rural areas of Nigeria.
- ii. Research involving agricultural extension services targeted at or involving young people.
- iii. Studies examining the use of social media platforms (e.g., Facebook, WhatsApp, Twitter, YouTube etc.) for agricultural extension services.
- iv. Research exploring the role of digital communication tools in enhancing agricultural knowledge and practices among youth.
- v. Studies that focused on rural areas of Nigeria.
- vi. Research that specifically addresses the Nigerian context, or includes Nigeria as part of a broader study with disaggregated data for Nigeria.
- vii. Systematic reviews, meta-analyses, and empirical research (quantitative, qualitative, or mixed methods).
- viii. Studies published in peer-reviewed journals, and reputable academic sources.
- ix. Studies published in English.
- x. Studies published within the last 15 years.

Exclusion criteria:

- i. Studies that focused on nonyouth populations or those that do not disaggregate data by age group.
- ii. Research conducted in urban areas or that does not focus on rural contexts.
- iii. Studies that do not involve social media or digital communication tools.
- iv. Research not related to agricultural extension services (e.g. general social media use, unrelated agricultural practices). Studies not conducted in Nigeria or without a specific focus on Nigeria (unless they provide relevant comparative data including Nigeria).
- v. Opinion pieces, editorials, and nonempirical studies.
- vi. Studies with significant methodological flaws or a lack of rigorous analysis.
- vii. Studies published in languages other than English unless a reliable translation is available.

viii. Studies published more than 15 years ago.

Database search:

The initial search was performed via Google Scholar, with the predefined Boolean search string and keywords used to identify relevant studies. The researcher applied filters for publication year, language, and geographical focus to refine the search results.

Initial screening: This involved title and abstract screening:

The search results were managed via an Excel spreadsheet. To achieve this, columns were created for details such as Author(s), Title, Year, Journal Title, Volume/Issue, Pages, DOI/URL, and remarks. The researcher independently screened the titles and abstracts to identify studies that met the inclusion criteria. Studies that did not meet the criteria on the basis of title and abstract were excluded.

Full-Text Review:

The full texts of the studies that passed the initial screening were retrieved. The researcher assessed the full texts against the inclusion and exclusion criteria. In the end, studies that did not meet the criteria were documented with reasons for exclusion.

Quality Assessment:

A subjective assessment of the accuracy and usefulness of the data was performed as part of the quality assessment process. Initial screening of the chosen research articles was performed by the researcher. On the basis of the keywords specified above, the researcher extracted all of the data that were chosen from the database. Reassessments were conducted to check if an article's analysis generated disagreement to reach a consensus.

The quality of the included studies was assessed and rated on the basis of criteria such as study design, sample size, data collection methods, and analysis techniques. Studies with significant methodological flaws that may compromise the validity of the findings were excluded.

Data Extraction: A data extraction form was created to systematically extract relevant information from each study. Relevant data were extracted from the selected studies. The data that were extracted included the study objectives, methods, population, and key findings. The data extraction process was repeated to ensure accuracy in capturing study objectives, methods, population, and key findings.

Data Synthesis:

The data from the included studies were synthesized via a narrative approach. Patterns, themes, and gaps in the literature related to youth social media use in agricultural extension services in rural Nigeria were identified.

Documentation and Reporting:

The study selection process was documented, reporting in detail the number of studies screened, excluded, and included at each stage. The researcher used a PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flow diagram to visually represent the study selection process.

Limitations of the Study

This study is limited by the use of only one database, Google Scholar, and its scope may be limited. This means that other relevant articles that have been published offline as well as grey or unpublished content from other publication platforms may not have been included in the study.

Results

As illustrated in the PRISMA flow diagram in Figure 1 below, the identification stage of the search initially yielded 66 papers. Two articles were initially excluded because of duplication, resulting in 64 articles for further consideration. At the screening level, titles and abstracts were reviewed on the basis of the inclusion criteria, leading to the selection of papers for further analysis. Upon further screening of abstracts, only 59 articles remained. In the final stage, after a thorough review of the full-text papers and consideration of the inclusion and exclusion criteria and quality assessment for relevance of the discussion of the reports, only 7 articles were selected for final examination as they contained all the relevant variables. In total, 89.39% (59) of the articles were excluded for not meeting the requirements, whereas 10.61% (7) were used for the analysis.

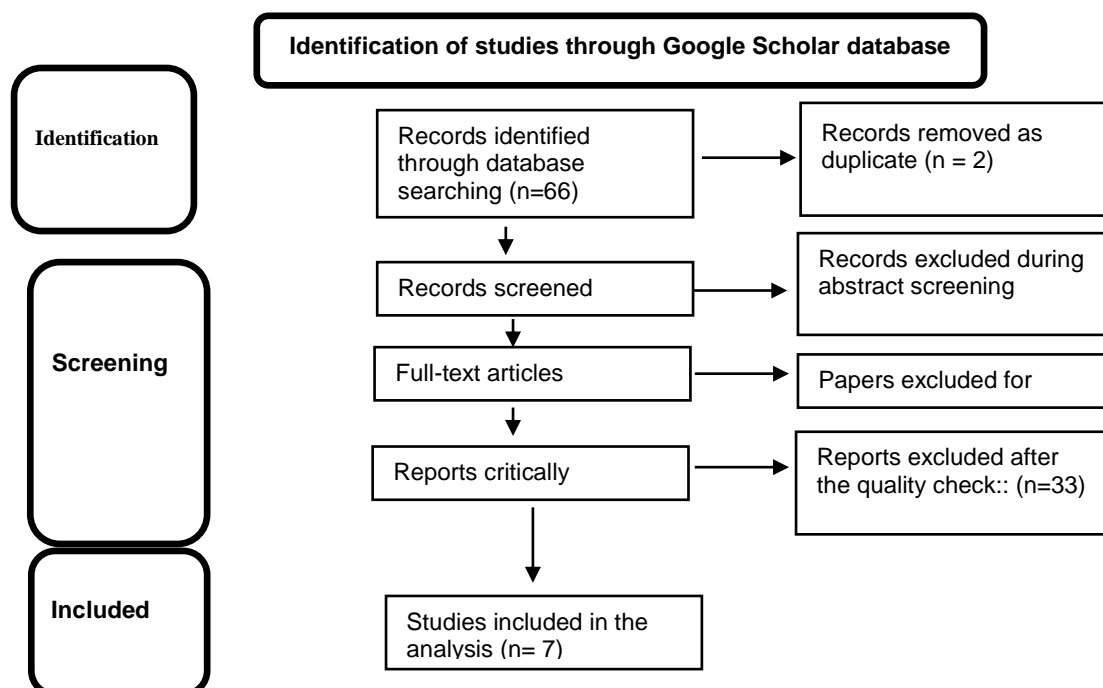


Figure 1: Flow diagram of the article selection process(Adapted from Moher et al., 2009)

DISCUSSION OF FINDINGS

This research examines the role of social media in enhancing agricultural extension services in rural Nigeria, integrating insights from seven carefully selected studies. The analysis focuses on three principal themes: the extent of social media engagement among youths, the challenges in utilizing these platforms, and strategies to optimize their use for agricultural extension.

Level of Social Media Use among Youths for Agricultural Extension Services in Rural Areas of Nigeria

Several studies have examined the extent of social media use among youths in rural agricultural contexts. Oluyaire et al. (2019) reported the significant adoption of platforms such as Facebook and WhatsApp for agricultural information dissemination among farm youths in rural areas of Abuja, Nigeria. The study emphasized that these platforms are vital tools for accessing and sharing agricultural knowledge. In a similar context, the study conducted by Abraham et al. (2022) emphasized that WhatsApp and YouTube are extensively used by adolescents for the purpose of livestock production, thereby enhancing the dissemination of information relevant to the acquisition of inputs and the administration of livestock. Nwele et al. (2024) further corroborated these findings, recognizing Facebook (83.7%) and WhatsApp (81.3%) as the dominant platforms utilized for agricultural extension services among the youth population in Kogi State, Nigeria. The study also acknowledged the existence of varying degrees of engagement with alternative platforms, including Twitter, YouTube, TikTok, and Instagram.

Conversely, Imiti and Odjebor (2022) underscored that while Facebook and WhatsApp are prevalent, these platforms are not perceived as the primary or most trusted sources for agricultural information. Kughur, Agada, and Naswem (2019) reported that younger farmers in Benue and Nasarawa States use social media, particularly WhatsApp and Instagram, with significant regional differences in platform preference. Idu et al. (2023) noted out that mobile phones and radio remain more frequently used ICT tools among smallholder rice farmers in Abuja, suggesting a broader reliance on various digital technologies beyond social media.

Although these studies highlight the widespread use of social media among rural youths for agricultural purposes, there is limited research specifically examining the effectiveness of these platforms in improving agricultural extension services. Additionally, most studies focus on specific regions or crops, indicating a need for more comprehensive research covering diverse agricultural practices and geographical areas in Nigeria.

Challenges Encountered by Youths in Utilizing Social Media for Agricultural Extension Services

The utilization of social media for agricultural extension services is fraught with several challenges, as documented by existing studies. Oluyaire et al. (2019) identified limited internet access, a lack of digital literacy, and inadequate infrastructure as significant barriers to effective social media use among farm youths in Abuja. These challenges are compounded by poor power supply, high data costs, and low income, as noted by Abraham et al. (2022), which further hinders the effective use of social media in rural agricultural settings.

Nwele et al. (2024) provided a detailed account of these challenges, listing poor network connections (82.1%), unreliable information on social media (53.8%), and high internet data costs (25.5%) as primary obstacles. The study also highlighted issues such as less trust in e-buying and e-selling platforms and the illiteracy and lack of awareness among youths regarding social media usage. Imiti and Odjebor (2022) echoed these challenges, emphasizing the technical and content-related issues that limit the effectiveness of social media as a tool for agricultural extension.

In a broader context, Kughur, Agada, and Naswem (2019) identified power supply issues and the high cost of social media access as significant barriers for cereal crop farmers in Benue and Nasarawa States. Moreover, Idu et al. (2023) noted out that poor network reception, inadequate power supply, and language barriers are critical constraints to the effective use of ICTs, including social media, among smallholder rice farmers in the Kuje Area Council.

Despite the identification of numerous challenges, few empirical studies have explored how these barriers can be systematically addressed to optimize social media use for agricultural extension services. Most studies focus on identifying challenges rather than providing actionable solutions, indicating a gap in practical strategies to overcome these obstacles.

Ways to Harness Social Media Use among Youths to Improve Agricultural Extension Services in Rural Areas of Nigeria

The selected studies offer several recommendations for harnessing social media to improve agricultural extension services. Oluyaire et al. (2019) suggested enhancing internet access, providing digital literacy training, and creating tailored agricultural content as strategies to optimize social media use among farm youths. Abraham et al. (2022) similarly recommended improving internet infrastructure and increasing digital literacy to address the challenges identified in their study.

Nwele et al. (2024) emphasized the importance of improving internet connectivity, offering digital literacy training, and enhancing content quality to engage youths more effectively in agricultural extension services. The study also highlighted the need to build trust in e-buying and e-selling platforms to encourage their use among rural youths.

Imiti and Odjebor (2022) proposed enhancing the quality of agricultural content on social media and building trust in online agricultural transactions as crucial steps for increasing the effectiveness of social media in this context. Kughur, Agada, and Naswem (2019) recommended ensuring a steady power supply and reliable internet connections to support social media use among cereal crop farmers in Benue and Nasarawa States. Finally, Idu et al. (2023) called for agricultural extension agencies to take effective measures to strengthen extension services and increase ICT usage among smallholder rice farmers.

While these studies provide valuable recommendations, there is a lack of empirical evidence on the effectiveness of these strategies in real-world settings. Future research should focus on evaluating the impact of proposed interventions and exploring innovative approaches to enhance social media use for agricultural extension services in rural Nigeria.

Conclusion

This systematic review explored the role of social media in enhancing agricultural extension services among youths in rural areas of Nigeria. The findings from the seven selected studies indicate a significant but uneven level of social media usage among youths for agricultural purposes. Platforms such as Facebook, WhatsApp, and YouTube are commonly used, but challenges such as poor network connectivity, digital literacy deficits, and inadequate infrastructure persist, hindering the full potential of social media in agricultural extension.

The studies reviewed highlight both the opportunities and the barriers to leveraging social media for agricultural extension services. Youths actively use these platforms to access agricultural information, but the effectiveness of this usage is constrained by systemic issues such as unreliable internet access and the high cost of data. Additionally, trust issues and the lack of high-quality, relevant content further complicate the situation. Despite these challenges, the potential for social media to enhance agricultural extension services remains strong, provided that these barriers can be addressed through targeted interventions.

This review underscores the importance of improving digital infrastructure, enhancing digital literacy, and tailoring agricultural content to meet the specific needs of rural youths. Addressing these challenges will be crucial for fully harnessing the power of social media to support agricultural extension services and ultimately improve agricultural productivity in rural areas of Nigeria.

Recommendations

To maximize the impact of social media on agricultural extension services, there is an urgent need for internet providers to improve internet connectivity in rural areas. This could involve investing in better network infrastructure and ensuring a consistent power supply to support the use of digital tools for agricultural purposes.

Training programs aimed at improving digital literacy among rural youths should be prioritized. These programs should focus on teaching the effective use of social media platforms for accessing and disseminating agricultural information, as well as building trust in online resources.

Agricultural extension services should collaborate with digital content creators to develop high-quality, relevant content that addresses the specific needs of rural farmers. This content should be easily accessible, culturally appropriate, and available in local languages to ensure that it resonates with the target audience.

Efforts should be made to increase the trust of rural youth in e-commerce platforms related to agriculture. This could involve setting up verification systems, providing user education on safe online practices, and ensuring the reliability of online agricultural marketplaces.

Stakeholders, including government agencies, NGOs, and private sector partners, should collaborate to create an enabling environment for the effective use of social media in agricultural extension services. This could involve public-private partnerships to fund digital infrastructure projects, as well as policy reforms to support digital agriculture initiatives.

Future research should focus on exploring innovative ways to overcome the challenges identified in this review. Longitudinal studies examining the impact of specific interventions on social media usage for agricultural extension services in rural Nigeria could provide valuable insights and help refine strategies for improving agricultural productivity through digital means.

Contribution to Knowledge

This study provides an in-depth analysis of the current state of social media engagement among rural youths and the potential use of social media in enhancing agricultural extension services among rural youths in Nigeria, drawing insights from seven studies. It highlights significant social media engagement with platforms such as Facebook, WhatsApp, and YouTube, while identifying key challenges such as limited internet access, digital literacy deficits, and inadequate infrastructure. The research underscores regional variations in social media use and calls for targeted strategies to address these barriers, including improving digital infrastructure, enhancing digital literacy, and developing culturally relevant content. This study therefore contributes to a deeper understanding of how social media can be effectively leveraged to improve agricultural productivity and extension services in rural Nigeria, through systematic literature review.

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