Evaluating the Obstacles and Prospects Involved in Utilizing Social Media Platforms for Agricultural Communication among Nigerian Farmers

Stephen Esabu, Wilfred Oritsesan Olley & Ewomazino Daniel Akpor

Abstract
This study evaluates the obstacles and prospects involved in utilizing social media platforms for agricultural communication among Nigerian farmers in Gwagwalada Area Council, Abuja. The study used a survey research method to collect data from 300 farmers who are residents in the Area Council. This work used quantitative research method, where a survey is used to reach its conclusion. It debunks the claim that lack of internet access, and language barriers are obstacles to agricultural communication. It found out that respondents have more concerned for a strengthened internet presence in their communities rather than mere internet access availability; that language, time constraints, and the amount of materials available were of minimal concern to them. It also found out that social media could be a powerful tool for improving agricultural communication and development in Nigeria. The study recommends that regular training and retraining for farmers to improve use of social media for agricultural communication. The study also suggests that more research to ascertain which social media platforms Nigerian farmers use the most so as to provide trainings on how best to improve use of the platforms for better agricultural communication.
Keywords: Nigerian farmers; Agriculture; Social Media; Agricultural Communication

Introduction

The agricultural sector in Nigeria is of utmost importance to the national economy, as it contributes significantly to food security, employment, and overall GDP (Akinwumi, J. O., Adeseye, A. I., Alayande, F. T., & Oladipo, S. O. (2019). However, despite its importance, there is still a persistent challenge of an information gap between agricultural research and resource availability and the vast population of Nigerian farmers (Ogunlade, A. T., Oladunmade, O. A., & Abegunde, O. D. 2018). This gap hinders the dissemination of crucial information and hampers the adoption of improved agricultural practices.

In recent years, the emergence of social media platforms has provided a powerful means of information dissemination and communication, with widespread adoption and real-time interaction capabilities. Social media has revolutionized communication and has become the fastest adopted media technology in history, according to Kuria (2014). Furthermore, Barau and Afrad (2017) argue that social media has facilitated the exchange of ideas and information across cultures and boundaries, both locally and internationally. This cross-cultural and cross-boundary exchange has opened up new avenues for agricultural communication and has the potential to revolutionize the way information reaches farmers (Rahman et al., 2020).

Considering the prospects and challenges of utilizing social media platforms for agricultural communication among Nigerian farmers, it is essential to acknowledge the significant opportunities it offers for knowledge sharing and the improvement of agricultural practices. Social media has the potential to bridge the information gap and facilitate the dissemination of relevant and timely information to farmers. It can provide access to agricultural resources, training materials, and market opportunities that were previously inaccessible. Farmers can connect with experts, share experiences, and find solutions to agricultural challenges.

However, it is crucial to highlight that there are obstacles that hinder the full utilization of social media in agricultural communication in Nigeria. These obstacles may include limited internet connectivity and access to devices in rural areas, language barriers, time constraints, and limited availability of tailored content that meets the specific needs of different farmers. Additionally, there may be a lack of training and support for farmers on how to effectively use social media platforms for agricultural communication.

Therefore, this paper aims to evaluate the obstacles and prospects involved in utilizing social media platforms for agricultural communication among Nigerian farmers. By understanding and addressing these obstacles, the agricultural sector in Nigeria can fully harness the potential of social media for improved knowledge sharing, enhanced agricultural practices, and ultimately contribute to the growth and development of the sector.

Statement of Problem

The study seeks to evaluate the challenges and opportunities associated with the use of social media platforms to communicate with Nigerian farmers. According to Ogunlade et al. (2018), although the crucial role of the Nigerian farmers in the nation's economy and food security, there exists a significant information gap between agricultural research and its practical application. Besides, traditional methods of agricultural extension services often face limitations in reach and real-time communication with Nigerian farmers (World Bank, 2016).

While social media platforms offer immense potential for bridging this gap by facilitating widespread dissemination of information and resources that can improve their productivity, and fostering real-time interaction (Rahman et al., 2020), their effectiveness in the Nigerian agricultural context remains to be fully explored as a result of several obstacles.

This research therefore addresses the following three key problems. These include digital divide – unequal access to internet connectivity and technological infrastructure; digital literacy gap – inadequate knowledge and skills among farmers to use social media platforms for agricultural purposes; and skepticism towards new technologies by farmers.

Objectives of the Study

The study is aimed at the following:

1. To explore the benefits of social media for agricultural communication.
2. To identify the obstacles which prevent farmers from using social media for agricultural communication.
3. To recommend improved ways for use of social media for agricultural communication.

Literature Review

Considering the socio-economic realities of Nigerian farmers, a significant portion them resides in rural areas where there is limited access to reliable internet connectivity and technological infrastructure required to access social media (World Bank, 2023). Moreover, the digital literacy gap among farmers can hinder their ability to effectively navigate these platforms and engage with the information available (Adewale & Ogundele, 2020). Language barrier is another major obstacle to agricultural communication in Nigeria (Ani & Adeyemo, 2020). Many farmers speak only their local languages, which are often not understood by agricultural professionals or extension workers. This makes it difficult for farmers to access information and services, and it also makes it difficult for agricultural professionals to communicate effectively with farmers. Besides, many of these farmers face cultural barriers, as social media is often seen as a western technology that is not in line with traditional farming practices.

Agricultural Communication encompasses the dissemination of crucial and relevant information to farmers,

including best practices, new technologies, market trends, weather updates, and disease control strategies (Ogunlade et al., 2018). This communication has changed over time, from traditional methods such as word-of-mouth and print media to modern methods such as social media and mobile technology (Nwaobiala, Akpor, Anyanwu, & Nwachukwu, 2021). Research findings have shown that effective agricultural communication, which is essential for improving agricultural productivity and ensuring food security, has changed the way market information, agricultural practices, and government policies are communicated.

However, obstacles to social media platforms utilization for agricultural communication among Nigerian Farmers remain plenty such as limited access and digital divide many farmers. Some studies emphasize the significant challenge of limited access to technology and the internet in rural areas of Nigeria (Adewale & Ogundele, 2020). And according to report by the World Bank (2017), lack of internet access for many farmers in Nigeria has a significant impact on agriculture in the country. The report highlights the fact that only about 30% of people in Nigeria have internet access, and this figure is even lower in rural areas where farmers are predominantly live.

This digital divide hinders farmers' ability to utilize social media platforms effectively (World Bank, 2023), making it difficult for farmers to access important information and online resources, such as weather forecasts, new farming techniques, market prices, etc. This lack of information further leads to lower crop yields, lower incomes, and a less productive agricultural sector as they are unable to connect with other farmers, limiting their ability to share knowledge and learn from one another.

Also, according to Asoegwu et al., (2021), the lack of digital literacy skills among a considerable portion of Nigerian farmers has limited their ability to find their way around social media platforms for relevant agricultural information and engage in effective online communities. Hence, the need for capacity building and training programmes to improve social media use among agricultural extension workers. Similarly, another research has also pointed out that the high rate of illiteracy among farmers in Nigeria is definitely an obvious obstacle to effective agricultural communication (Dedeke et al., 2016).

While talking about digital literacy, it is important to stress that many farmers in rural areas have little or no formal education, which means that they may not be able to read or understand written information, such as instructions for using new farming techniques or market information. This makes it difficult for farmers to access and use the information they need to make informed decisions about their farming practices (Mohammed, 2019). It also makes it difficult for extension workers and other agricultural professionals to have effective communication with farmers. This suggests that even if there is reliable internet access available with many beneficial materials, many of the farmers will still be unable to benefit from them because they can neither read nor understand online content.

Another important obstacle to agricultural communication in Nigeria is skepticism of new technology. Many farmers are doubtful of new technologies because they are unfamiliar with how they work or how they can be used to improve agricultural practices. This skepticism leads to a lack of trust in and adoption of new technologies, which further limits farmers' access to information and services.

An example that readily comes to mind is the Nokia Life Tools service was introduced in 2009, with the goal of providing Nigerian farmers with useful information via their mobile phones (Tiamiyu, 2012). A service that was designed to be simple and easy to use, with information on weather, markets, and farming techniques via text messages on their mobile phones delivered to farmers in their local languages was faced with several challenges because many farmers were skeptical of the technology and its benefits. Deemed unsuccessful, the service was discontinued in 2012.

However, research findings suggest that social media holds immense potential for agricultural communication in Nigeria in the area of effective knowledge sharing. Social media platforms can facilitate farmer-to-farmer communication and knowledge exchange between them, promoting the dissemination of best practices and local innovations (Rahman et al., 2020). Platforms like Twitter, Facebook, and WhatsApp have the potential for sharing news and information about agriculture-related resources and connecting farmers with experts and organizations that can provide technical assistance. Social media can also help in building networks and communities of farmers as well as other stakeholders and facilitate communication between farmers and policymakers in addressing issues like access to credit, land rights, and other policy-related issues.

Social media can be used to promoting best practices and share information on new agricultural technologies, improved crop varieties, and sustainable farming methods (Akinwumi et al., 2019). This will help farmers can gain access to crucial real-time agricultural information like weather updates, market prices, and pest control strategies (Ogunlade et al., 2018). Similarly, social media, if infused into existing channels like agricultural extension services (a vital role in disseminating information to farmers) can improve outreach and information accessibility.

Suchiradipta & Saravanan (2016) defined social media as web based electronic tools of communication that allow users to interact, create, share, retrieve and exchange information and ideas in any form (text, pictures, video, etc.) that can be archived and used by virtual community members. A diverse range of social media platforms exist, each with unique functionalities and target audiences (Kaplan & Haenlein, 2010). Though each platform has its own unique features but they all share the common goal of connecting people and providing a platform for sharing content like photographs, videos, and text with users. Platforms like Facebook can be leveraged for group discussions and knowledge sharing, while Twitter offers real-time updates and information dissemination (Ahmad et al., 2020).

Empirical Review

There are empirical studies on social media and agricultural communication in Nigeria. Studies like those done by Adewale & Ogundele, 2020 and Ogunlade et al., 2018 highlight the significant challenge of limited access to technology and the internet in rural areas of Nigeria. This digital divide constitutes obstacles to farmers' ability to effectively utilize social media platforms for agricultural communication. World Bank data (2023) further emphasizes the need for government initiatives to bridge this gap through rural internet infrastructure development.

Adewale & Ogundele (2020) indicates how a lack of digital literacy skills among a considerable portion of the Nigerian farming population limits their ability to navigate social media platforms, access relevant agricultural information, and engage in online communities effectively.

In spite of the challenges, studies suggest that social media holds immense potential for agricultural communication in Nigeria. For instance, Rahman et al. (2020) found social media effective in facilitating farmer-to-farmer communication and knowledge sharing, promoting the dissemination of best practices and local innovations. Furthermore, Akinwumi et al. (2019) suggest social media can be used to share information on new agricultural technologies, improved crop varieties, and sustainable farming methods. On their part, Ogunlade et al. (2018) point out the potential for integrating social media with existing information dissemination channels, such as agricultural extension services, to improve outreach and information accessibility for farmers.

On addressing the challenges and moving forward, research suggests various approaches to address the challenges identified. Adewale & Ogundele (2020) emphasize the importance of digital literacy training programmes to equip farmers with the necessary skills to navigate social media platforms. They thus

recommended the need for more training and education for farmers on the effective use of the social media. On their parts, Rahman et al. (2020) established that social media can effectively facilitate farmer-to-farmer communication and knowledge sharing, promoting the dissemination of best practices and local innovations, while Akinwumi et al. (2019) found out that social media can be used to share information on new agricultural technologies, improved crop varieties, and sustainable farming methods.

In all, empirical research on social media and agricultural communication among Nigerian farmers suggests that in spite of the challenges, there are a lot of opportunities social media holds for agricultural communication for Nigerian farmers.

Theoretical Framework

This paper is anchored on Everett Rogers' Diffusion of Innovation Theory which explores how new ideas and technologies spread within a social system. According to Rogers (2003), the diffusion of innovation is a process by which an innovation (like social media) is communicated through certain channels over time among members of the social system. The theory helps to explain how and why social media is being adopted and used by Nigerian farmers. According to the theory, the relative advantage of social media, such as its low cost and its ability to reach a wide audience, has made it attractive to farmers. Apart from that, some social media platforms are compatible with the values and beliefs of many Nigerian farmers, who see it as way to improve their agricultural practices and connect with other farmers.

The trialability of social media, as can be seen from users' ability to create a free account and try it out without much cost on the part of farmers, has encouraged many other farmers to adopt it. The ability to see the results of others who are using social media or the observability of social media has encouraged others to adopt it. However, limited internet access and a lack of digital literacy have slowed the diffusion of social media among some Nigerian farmers.

Methodology

This work used descriptive survey to reach its conclusion. The approach enabled the researcher to have a richer and better understanding of the obstacles and prospects involved in utilizing social media platforms for agricultural communication among Nigerian farmers. Survey research helps researchers to understand individual or group opinions on a given topic. The study selected respondents using convenient and purposeful sampling. Only farmers who were easily accessible to researchers were chosen for this study. The population of the study include all farmers in Gwagwalada Area Council of the Federal Capital Territory. According to the Gwagwalada Area Farmers' Co-Operative Association, there are 2610 active farmers in the area council. Applying the Taro Yamane formular for sample size determination, the sample size for this population was determined to be three hundred and twenty-three (323). A well-structured questionnaire, made up of 13-items, designed to elicit responses from the farmers was used to gather data for this study. The questionnaire had open and closed-ended questions.

Data Presentation and Analysis

The data gathered from the respondents are presented in tables, and the simple percentage statistical method is used to analyze them. A 13-item questionnaire was distributed to 323 respondents, in their various locations over a period of seven weeks and the instruments retrieved were analyzed in line with the study's objectives using the Statistical Package for Social Sciences (SPSS) version 27. There was an attrition level of 23 instruments and the reasons for the attrition include participants not returning the instruments, instruments being lost or damaged during the distribution or retrieval process, and participants withdrawing from the study and not returning the instruments. Data collected and collated are presented in 13 tables, analyzed, and discussed below.

Table 1: Lack of access to internet prevents farmers from using social media for agriculture

Responses	Frequency	Percentage
Strongly disagree	90	31
Somewhat disagree	66	23
Strongly agree	144	46
Total	**300**	**100**

(Source: Field survey 2024)

The table indicates that 46% of respondents strongly agree that lack of access to internet prevents farmers from using social media for agriculture, while 31% strongly disagree and 23% somewhat disagree. This suggests that the majority of respondents (54%) disagree or strongly disagree that lack of access to internet prevents farmers from using social media for agriculture. This is indicated by the higher frequencies and percentages of the "somewhat disagree" and "strongly disagree" options. This implies that there is a disproportionate level of agreement on the issue in the sense that whereas lack of access to internet prevents some farmers from using social media for agriculture, there is a good number of farmers who have access to it.

Table 2: Navigating social media platforms is difficult

Responses	Frequency	Percentage
Strongly disagree	150	50
Somewhat disagree	102	34
Strongly agree	48	16
Total	**300**	**100**

(Source: Field survey 2024)

The above table shows that majority of respondents (94%) disagree with the idea that navigating social media platforms is difficult for Nigerian farmers. This suggests from respondents that navigating social media platforms is not difficult for Nigerian farmers who already have access to the internet. It further suggests that for them to acknowledge that navigating social media platforms is not difficult, they may be able to navigate the platforms if they have internet access.

Table 3: There is not enough social media content relevant to specific agricultural needs.

Responses	Frequency	Percentage
Strongly disagree	120	40
Somewhat disagree	72	24
Strongly agree	108	36
Total	**300**	**100**

(Source: Field survey 2024)

Table 3 suggests that there may not be enough of relevant content to specific agricultural needs on social media. Approximately, 64% of respondents disagree that there is not enough social media content that is relevant to specific agricultural needs, while 36% strongly agrees that there is not enough of relevant social media content for specific agricultural needs. This suggests that there is enough social media content relevant to specific agricultural needs.

Table 4: Language barriers prevent from using social media for agriculture effectively.

Responses	Frequency	Percentage
Strongly disagree	162	54
Somewhat disagree	96	32
Strongly agree	42	14
Total	**300**	**100**

(Source: Field survey 2024)

From the table above, it is evident that language barriers do not prevent effective us of social media for agriculture. Out of 300 respondents, 258 (86%) disagree that language barriers prevent them from using social media for agriculture effectively, while 42 (14%) strongly agrees that language barriers do prevent them from using social media for agriculture effectively. This suggests that language barriers do not prevent from using social media for agriculture effectively.

Table 5: Time constraint prevents from using social media for agriculture more often.

Responses	Frequency	Percentage
Strongly disagree	96	32
Somewhat disagree	96	32
Strongly agree	108	36
Total	**300**	**100**

(Source: Field survey 2024)

This table shows the responses from a survey about time constraint preventing from using social media for agriculture more often with 300 participants. While a total of 64% or 192 respondents disagree with the notion, 36% of respondents strongly agree. The data suggest that time constraint does not prevent farmers from using social media more often. It also suggests on the other hand that though farmers may not be able to use social media more frequently, it may not necessarily be due to time constraint.

Table 6: Social media helps access valuable agricultural information and resources.

Responses	Frequency	Percentage
Strongly disagree	30	10
Somewhat disagree	36	12
Strongly agree	234	78
Total	**300**	**100**

(Source: Field survey 2024)

This table demonstrates how social media helps access to valuable agricultural information and resources. The results indicates that 78% of the respondents strongly agree that social media helps access to valuable agricultural information and resources followed by 22% of respondents who disagree with the notion. This indicates that social media helps access to valuable agricultural information and resources.

Table 7: I have learnt about new farming techniques through social media.

Responses	Frequency	Percentage
Strongly disagree	24	8
Somewhat disagree	36	12
Strongly agree	240	80
Total	**300**	**100**

(Source: Field survey 2024)

This table shows that farmers learn new farming techniques through social media. The results indicate that overwhelming majority 80% of respondents have learnt about new farming techniques through social media with only 20% of respondents disagreeing. This result suggests therefore that farmers in their majority learn new farming techniques from social media.

Table 8: Social media allows farmers connecting with other farmers and share experiences.

Responses	Frequency	Percentage
Strongly disagree	12	4
Somewhat disagree	42	14
Strongly agree	246	82
Total	**300**	**100**

(Source: Field survey 2024)

From the table, it is clear that majority (82%) of respondents acknowledge that social media allows farmers to connect with other farmers and share experiences. Though the minority (18%) of respondents disagree, overall, the data suggests that a majority of responses agree that social media allows farmers to connect with other farmers and share experiences.

Table 9: Social media has helped me find solutions to agricultural problems like marketing my agricultural products more effectively.

Responses	Frequency	Percentage
Strongly disagree	30	10
Somewhat disagree	48	16
Strongly agree	222	74
Total	**300**	**100**

(Source: Field survey 2024)

The results of the table imply that a majority of respondents (74%) attest to the fact that social media has helped them find solutions to agricultural problems. Only 26% of respondents disagreed with this position. This suggests that a significant portion of respondents testify that social media has helped them find solutions to agricultural problems especially in the area of marketing their produce.

Table 10: Providing more training and support for farmers on social media use would be helpful.

Responses	Frequency	Percentage
Strongly disagree	24	8
Somewhat disagree	18	6
Strongly agree	258	86
Total	**300**	**100**

(Source: Field survey 2024)

The results on this table shows responses from a survey on providing more training and support for farmers on social media use would be helpful. Overwhelming majority of respondents (86% /or 258 of 300) chose “strongly agree” option, while minority of respondents (14% or 42 of 300) chose “agree” option. This suggests that providing more training and support for farmers on social media use would be helpful to farmers.

Table 11: Developing social media content tailored to the needs of different farmers would be beneficial.

Responses	Frequency	Percentage
Strongly disagree	18	6
Somewhat disagree	30	10
Strongly agree	242	84
Total	**300**	**100**

(Source: Field survey 2024)

This table shows the responses from a survey as regards developing social media content tailored to the needs of different farmers would be beneficial with 300 participants. While an overwhelming total of 84% or 242 respondents strongly agree with the notion, 16% or 48 of respondents disagree. The data suggest that developing social media content tailored to the needs of different farmers would be beneficial.

Table 12: Increasing internet connectivity and access to devices in rural areas would improve social media use for agriculture.

Responses	Frequency	Percentage
Strongly disagree	24	8
Somewhat disagree	12	4
Strongly agree	264	88
Total	**300**	**100**

(Source: Field survey 2024)

This table shows the responses from a survey on increasing internet connectivity and access to devices in rural areas would improve social media use for agriculture. The survey was carried out on 300 participants. While an overwhelming total of 88% or 264 respondents chose "strongly agree" option, 12% or 36 of respondents chose "disagree" option. The data suggest therefore that increasing internet connectivity and access to devices in rural areas would improve social media use for agriculture.

Table 13: Creating online communities and forums for farmers to connect and share knowledge would be beneficial.

Responses	Frequency	Percentage
Strongly disagree	12	4
Somewhat disagree	12	4
Strongly agree	276	92
Total	**300**	**100**

(Source: Field survey 2024)

This table shows the responses from a survey on creating online communities and forums for farmers to connect and share knowledge would be beneficial. The survey was carried out on 300 participants. An overwhelming total of 92% or 276 respondents chose "strongly agree" option, 8% or 24 of respondents chose "disagree" option. The data suggest therefore that creating online communities and forums for farmers to connect and share knowledge would be beneficial.

Discussion of Findings

RQ1: What are the obstacles that prevent farmers from using social media for agricultural communication?

Tables 1 and 4 answer this research subject. According to Table 1, 46% of respondents strongly agree that "lack of access to internet prevents farmers from using social media for agriculture", 31% of respondents strongly disagree, while 23% somewhat disagree. Table 4 shows that 54% of the 300 respondents strongly disagree with the assertion, "Language barriers prevent from using social media for agriculture effectively", 32% somewhat disagree while 14% strongly agree. These findings indicate that may be other obstacles that prevent farmers from using social media for agricultural communication other than that "lack of access to internet prevents farmers from using social media for agriculture", "There is not enough social media content relevant to specific agricultural needs" and "Language barriers prevent from using social media for agriculture effectively", that were investigated. This conclusion is inconsistent with conclusion of earlier studies by Adewale & Ogundele (2020) and the World Bank (2017) that showed that lack of internet access for many farmers in Nigeria has a significant impact on agriculture in the country. The same can be said for Ani & Adeyemo (2020) that found out that the Language barrier is another major obstacle to agricultural communication in Nigeria.

RQ2: What are the benefits of using social media for agricultural communication?

Tables 6, 7, 8 and 9 provide answers to this research subject. Tables 1 and 4 answer this research subject. According to Table 6, 78% of respondents strongly agree that "Social media helps access valuable agricultural information and resources", 10% of respondents strongly disagree, while 12% somewhat disagree. Table 7 shows that 80% of the 300 respondents strongly disagree with the assertion, "I have learnt about new farming techniques through social media", a total of 20% disagree. Table 8 shows responses to the assertion, "Social media allows farmers connecting with other farmers and share experiences." The table shows a majority responses of 82% with "strongly agree" option, while 18% disagree. Table 9 shows responses to the assertion, "Social media has helped me find solutions to agricultural problems like marketing my agricultural products more effectively", with "strongly agree" option at 74% and "strongly disagree" and "somewhat disagree" options at 26%. These findings point to the fact that the benefits of using social media for agricultural communication may include helping access valuable agricultural information and resources, learning about new farming techniques, allowing farmers connect with other farmers and share experiences, and helping find solutions to agricultural problems like marketing agricultural products more effectively. This conclusion is consistent with conclusion of earlier studies by Rahman et al. (2020) which found social media effective in facilitating farmer-to-farmer communication and knowledge sharing, promoting the dissemination of best practices and local innovations.

RQ3: What strategies could be implemented to improve use of social media for agricultural communication?

Tables 10, 11, 12 and 13 provide answers to this research subject. According to Table 10, 86% of respondents strongly agree that "Providing more training and support for farmers on social media use would be helpful", 8% of respondents strongly disagree, while 6% somewhat disagree. Table 11 shows that 84% of the 300 respondents strongly agree with the assertion, "Developing social media content tailored to the needs of different farmers would be beneficial", 10% somewhat disagree while 6% strongly disagree. Table 12 demonstrates that 88% of 300 respondents strongly agree that "Increasing internet connectivity and access to devices in rural areas would improve social media use for agriculture", while a total of 12% chose the "disagree" option. Table 13 shows that 92% of the surveyed 300 respondents strongly agree that "Creating online communities and forums for farmers to connect and share knowledge would be beneficial," while 8% of them disagree. These findings point to strategies that could be implemented to improve use of social media for agricultural communication to include, "providing more training and support for farmers on social media use", "developing social media content tailored to the needs of different farmers", "increasing internet connectivity and access to devices in rural areas to improve social media use for agriculture", and "creating online communities and forums for farmers to

connect and share knowledge." These strategies are in agreement with the works of Adewale & Ogundele (2020) which emphasized the importance of digital literacy training programmes to equip farmers with the necessary skills to navigate social media platforms and recommended more training and education for farmers on the effective use of the social media. Also to be mentioned is the study done by Rahman et al. (2020), which established that social media can effectively facilitate farmer-to-farmer communication and knowledge sharing, promoting the dissemination of best practices and local innovations and Akinwumi et al. (2019), which found out that social media can be used to share information on new agricultural technologies, improved crop varieties, and sustainable farming methods.

Conclusion

In conclusion, the study revealed that respondents expressed a greater concern for a strengthened internet presence in their communities rather than merely the availability of internet access that serves little or no purpose. Language, time constraints, and the amount of materials available were found to be of minimal concern to them. Furthermore, respondents enthusiastically shared the various benefits they experienced through social media for agricultural communication. These benefits included accessing valuable agricultural information and resources, learning about new farming techniques, connecting with other farmers to share experiences, and finding solutions to agricultural problems, such as improving the marketing of agricultural products. The study also identified several strategies that could enhance the use of social media in agricultural communication. These strategies encompass providing farmers with more training and support on social media use, developing tailored content to meet the specific needs of different farmers, increasing internet connectivity and access to devices in rural areas, and fostering online communities and forums for farmers to connect and exchange knowledge.

Recommendation

Based on the findings of this study, it is hereby recommended that:

1. Having provided Internet access for some farmers in the studied population, emphasis should now be on how to provide 5G network service that will improve on the Internet service available in those areas. This is because the concern of respondents is not just availability of Internet access but good and affordable services that will enhance what they already have.
2. Since some farmers have enjoyed some of the benefits of social media to agricultural communication, training and retraining for farmers should continue on a regular basis to improve use of social media for agricultural communication.
3. Future research should explore which social media platforms Nigerian farmers use the most so as to provide trainings on how best to improve use of the platforms for better agricultural communication.

References

Adewale, A. A., & Ogundele, O. M. (2020). Digital literacy skills gap among rural farmers in developing countries: A case study of Nigeria. International Journal of Education and Development using Information and Communication Technology, 16(2), 22-34.

Adewale, A. S., & Johnbull, O. M. (2017). Bridging the digital divide in Nigeria: The role of government policies. Journal of Library and Information Science Research, 9(2), 142-153.

Ahmad, M., Magaji, I. M., & Kurawa, B. A. (2020). An investigation into the use of social media platforms in Nigeria, Social Media + Society, 6(2), 1-14.

Ajayi, O. O., & Akinsola, A. K. (2018). Digital literacy skills among rural farmers in Southwestern, Nigeria. Library Philosophy and Practice (e-journal), 18(2), 1-12.

Akinwumi, J. O., Adeseye, A. I., Alayande, F. T., & Oladipo, S. O. (2019). The role of agriculture in the economic development of Nigeria. International Journal of Agricultural and Policy Research, 7(7), 132-140.

Ani, U. B., & Adeyemo, A. A. (2020). Exploring the potential of social media for agriculture in Nigeria. International Journal of Agricultural Economics and Rural Development, 10(1), 2-9. Retrieved from www.cribfb.com/journals

Asoegwu, S. N., Iwu, G. O., & Ezeh, O. C. (2021). Combating the spread of misinformation on social media in the context of agriculture: The Nigerian perspective. International Journal of Agricultural Extension and Research, 11(1), 1-10.

Barau, A.A. & Afrad, S.I. (2017). An overview of social media use in agricultural extension service delivery. Journal of Agricultural Informatics 8(3), 50-61.

Dedeke, I., Ajewole, H. B., & Ajayi, L. (2016). Social media and information communication technologies for agricultural extension in Sub-Saharn Africa: The journal of Agricultural Science, Research and Technology, 6(1), 13-20.

Dedeke, I., Obinne, P., Ogundadegbe, K., & Nwalozie, A. (2016). Perceptions of social media as a medium for agricultural information dissemination: Insights from Anambra State, Nigeria. Journal of Applied Agricultural Science and Technology, 6(2), 104-112.

Kaplan, A & Haenlein, M 2010. 'Users of the World, Unite! The Challenges and Opportunities of Social Media' Business Horizons, 53, pp. 59-68. Available on http://michaelhaenlein.com/Publications/Kaplan,%20Andreas%20%20Users%20of%20the%20world%20unite.pdf.

Kuria, C.W. (2014). Use of Social Media as a Source of Agricultural Information by Small Holder Farmers: A Case Study of Lower Kabete Kiambu County (MA Thesis). University of Nairobi. Pp 4-5

Mohammed, M. (2019). Effect of illiteracy and poverty on agricultural development in Nigeria. International Journal of Research and Innovation in Social Science, 3(5), 7-13.

Nwaobiala, S., Akpor, C., Anyanwu, C., & Nwachuckwu, E. (2021). Social media, youth empowerment and development in Nigeria. International Hournal of Communication and Media Studies, 7(1), 148-166.

Ogunlade, A. T., Oladunmade, O. A., & Abegunde, O. D. (2018). Challenges and prospects of agricultural information dissemination in developing countries: A case study of Nigeria. International Journal of Agricultural and Extension Education, 4(2), 118-129.

Rahman, M. S., Islam, M. N., & Uddin, M. N. (2020). Social media for agricultural information dissemination: A review of the literature. Heliyon, 6(11), e05448.

Suchiradipta, B. & Saravanan, R. (2016). 'Social Media: Shaping the Future of Agricultural Extension and Advisory Services' GFRAS Interest Group on ICT4RAS Discussion Paper, GFRAS: Lindau, Switzerland. Pp. 9

Tiamiyu, B.A. (2012). Mobile Phone and Nigerian Farmers: A Nigerian Case of the Impact of Mobile Phones on Farmers' Communication and Market Access. African Journal of Agricultural Research.

World Bank. (2023). World Development Indicators. [https://data.worldbank.org/](https://data.world

World Bank. (2016). World Development Report 2016: Digital Dividends. https://www.worldbank.org/en/publication/

World Bank. (2017). Digital development in Nigeria: World Bank report. Retrieved from http://documents.worldbank.org/curated/en/439001500379882360/Digital-development-in-Nigeria.

Stephen Esabu, Department of Mass Communication, Edo State University Uzairue
Wilfred Oritsesan Olley, Department of Mass Communication, Edo State University Uzairue
Ewomazino Daniel Akpor, Department of Mass Communication, Edo State University Uzairue