

AWARENESS AND USE OF SOCIAL MEDIA FOR AGRICULTURAL INFORMATION AMONG FARMERS IN SOUTH WEST NIGERIA

Adara C.T. ¹ Adefila O. A ² Ajiboye I. O³., Yakubu, S¹ Ilori.T.O¹ Iyiola.O.A^{1&3}

¹Department of Rural Development and Gender Issues (RUDEG), Agricultural and Rural Management Training Institute (ARMTI), Ilorin, Kwara State, Nigeria

²Department of Training Technology Development (TTD), Agricultural and Rural Management Training Institute (ARMTI), Ilorin, Kwara State, Nigeria.

³Department of Agripreneurship, Agricultural and Rural Management Training Institute (ARMTI), Ilorin, Kwara State, Nigeria.

Corresponding Author's E-mail: Chrisbabafarm70@gmail.com Tel.: +2348062846211

ABSTRACT

This study examined farmers' awareness and use of social media tools for agricultural information dissemination in Southwest Nigeria. Social media platforms have increasingly become important channels for sharing agricultural knowledge and improving communication among farmers, researchers, and extension agents. Despite their potential, the level of awareness and utilization of these digital tools among farmers remains uncertain. The study specifically investigated the socio-economic characteristics of farmers, their awareness of social media tools, and the constraints affecting their use of social media for agricultural information dissemination. A multistage sampling technique was used to select 300 farmers from three states in Southwest Nigeria—Ekiti, Osun, and Oyo. Data were collected through semi-structured interviews and analyzed using descriptive statistics. The results showed that the majority of the respondents were male (65.9%) with an average age of 49 years, and most had primary education (46.8%). Findings also revealed that awareness and use of many social media tools for agricultural information were relatively low, although platforms such as WhatsApp, Telegram, video calls, and Zoom recorded moderate awareness. Major constraints to the use of web tools included language barriers, high costs of internet services, power failures, limited digital skills, and security concerns. The study concludes that improving digital literacy, infrastructure, and affordable internet access will enhance farmers' use of social media to disseminate agricultural information.

Keywords: Social media tools, Agricultural information dissemination, Farmers' awareness, Southwest Nigeria

INTRODUCTION

The internet-based digital tools for information sharing and discussion among individuals are called social media. It also refers to the information or facts required to address issues people encounter daily. Individuals have a variety of information needs, ranging from psychological to decision-making. As stated by Amartya (2023). The use of social media by agricultural researchers and extension workers has the potential to transform Nigerian agriculture and enhance or expand the information-gathering channel among farmers, who are the ultimate consumers of the study. Therefore, it is essential that they stay current and broaden their knowledge of agricultural information. (Kareem *et al.*2020). Using social media in farming operations is the technology strategy. Social media sites like Facebook, WhatsApp, Twitter, and Telegram have become essential resources for improving stakeholder communication and the exchange of agricultural knowledge.

This is especially important in a country like Nigeria, where academics, farmers, and extension agents sometimes struggle to get timely and relevant information. (Olorunniyi *et al.*, 2022). Real-time communication enabled by social media allows farmers and other stakeholders to share ideas, spread innovative farming techniques, and overcome geographical barriers (Akwiwu and Patrick, 2019). The ineffectiveness of Nigeria's various extension delivery techniques in planning for significant and sustained agricultural expansion worries all agricultural stakeholders. (Agwu *et al.* 2023). However, agricultural research organizations face a hurdle in generating research findings that would enhance Nigerian agriculture. Furthermore, this study aims to investigate farmers' socioeconomic characteristics, assess their awareness of social media use in service delivery, and identify the obstacles to its use in agricultural information dissemination. Social media has the potential to promote knowledge creation, sharing, and cooperation, but little is known about how it is used by farmers in Nigeria for delivery.

MATERIALS AND METHODS

The Southwest Nigerian survey. Farmers from all around Nigeria made up the study's population. To ensure representation across a variety of agro-ecological zones, 300 farmers from different states were selected using random sampling. To provide farmers with an equal chance of being selected for the study, three Nigerian states—Ekiti, Osun, and Oyo—were randomly selected in the first step. One agricultural development zone (ADP) was chosen from each state at the second stage. In the third step, 300 farmers (60 from Ekiti State, 114 from Osun State, and 126 from Oyo State) were selected at random. Semi-structured interviews were conducted to examine farmers' perspectives and experiences with digital technologies for agricultural information sharing. Inferential statistics and descriptive analytical methods, such as frequency counts and percentages, were used in the study.

RESULTS AND DISCUSSION

Socio-economic Characteristics of Farmers

According to the results, men accounted for 65.9% of respondents, while women accounted for 34.1%. The fact that men make up the majority of stakeholders in the farming industry is indicative of this. This could be the case because farming has been described by many researchers worldwide as tiring and incapacitating. As an example, Acharya *et al.* (2020) stated that because farming in India required a lot of energy, many men were employed. On the other hand, Oseni *et al.* (2013) suggested that women have a significant role in Nigeria's production of arable crops. This suggests that both men and women engage in farming, and the pace of these changes is concerning, given the technological advancements humans encounter daily across every aspect of life.

The results also show that the average age of respondents in the research area was almost 49 years, with just 2.7% and 14.0% of respondents being under 30 and over 60, respectively. This indicates that there were still farmers in the research area, and as a result, they would have the strength needed to continue farming. Similarly, according to Mgbenka *et al.* (2015), one might not have the necessary agility around age 50 to promote farming production. who stated that Nigerian farmers are on average 50 years old and suggested that young farmers be encouraged to spearhead the adoption of farming technologies to advance agricultural transformation. The results also revealed that respondents held only one type of education, with primary education accounting for the largest percentage (46.8%). According to Oladeebo and Masuku (2013), this suggests that farmers may readily learn and use web tools in their farming operations. revealed that one of the key determinants of farmers' crop production efficiency was their level of education, which had a major influence on their managerial capacity to run farming businesses. In a similar vein, Gombe (2016) confirmed the importance of education for the adoption and application of farming techniques. who stated that in many regions of Nigeria, agricultural extension workers' efforts have been severely hampered by a lack of education, which is necessary for farmers to make judgments about adopting and using farm-based technologies.

Table 1: Distribution of the Respondents based on Socio-economic Characteristics

Variables	Deviation	Freq.	Percentage	Mean	Std. Dev.
Sex					
Male		197	65.9		
Female		102	34.1		
Age (years)					
<30.00		8	2.7		
30.00 - 44.00		110	36.8		
45.00 - 59.00		139	46.5	49.36	10.07
60.00+		42	14		
Years of formal schooling					
<= 6.00		86	28.8		
7.00 - 12.00		88	29.4	10.85	5.89
13.00+		125	41.8		
Highest Educational qualification					
No formal education		62	20.7		
Primary		140	46.8		
Secondary		81	27.1		
Post secondary		16	5.4		
Marital status					
Single		13	4.3		
Married		243	81.3		
Divorced		40	13.4		
Separated		3	1		
Widowed					
Your average income per annum					
<= 360000.00		129	43.1		
360001.00 - 660000.00		82	27.4		
660001.00 - 960000.00		59	19.7	760881.81	146552
960001.00+		29	9.7		
Experience (Years)					
<= 10.00		130	43.5		
11.00 - 20.00		91	30.4	15.1	7.4
21.00+		78	26.1		

Source: Field Survey, 2026

Awareness of social media tools among farmers

Table 2 shows mixed levels of awareness of different social media tools among farmers. Platforms like Facebook, YouTube, Email, Instagram, and the Internet have relatively higher experience levels, suggesting they are more familiar and widely used. WhatsApp, Telegram, and video calls also show strong awareness, indicating their popularity for communication. However, tools such as podcasts, Skype, Google Docs, Soundation, Wiki, and LinkedIn show high “never heard” responses, revealing limited exposure to more specialized or professional digital tools. Interestingly, GPS has one of the highest experience levels (38.8%), reflecting its relevance to farming activities.

The findings suggest that extension programs should prioritize widely used platforms such as WhatsApp and Facebook for delivering agricultural information. There’s also a need for targeted training to improve farmers’ digital literacy, especially on tools with low awareness but high agricultural value (e.g., Google Docs, LinkedIn, Wiki, podcasts). Enhancing awareness can improve communication, record-keeping, and access to broader agricultural knowledge. However, Offia and Ajie (2020) found that the frequent use of these technologies for communication in Delta State, Nigeria, is hampered by data costs.

Table 2: Awareness of social media tools among farmers

Social media tools component	Never heard	Heard it	Seen	Experienced
Facebook	163 (54.5)	36 (12.0)	17 (5.7)	83 (27.8)
Blog	109 (36.5)	109 (25.4)	32 (10.7)	82 (27.4)
WhatsApp	27 (9.0)	181 (60.5)	54 (18.1)	37 (12.4)
Podcast	192 (64.2)	39 (13.0)	26 (8.7)	42 (14.0)
Skype	211 (70.6)	31 (10.4)	33 (11.0)	24 (8.0)
Youtube	135 (45.2)	62 (20.7)	29 (9.7)	73 (24.4)
Internet	83 (27.8)	80 (26.8)	37 (12.4)	99 (33.1)
LinkedIn	118 (39.5)	83 (27.8)	24 (8.0)	74 (24.7)
Soundation	141 (47.2)	62 (20.7)	27 (9.0)	69 (23.1)
Google Docs	172 (57.5)	46 (15.4)	24 (8.0)	57 (19.1)
Email	137 (45.8)	55 (18.4)	35 (11.7)	72 (24.1)
Zoom	87 (29.1)	88 (29.4)	16 (5.4)	108 (36.1)
Instagram	80 (26.8)	98 (32.8)	52 (17.4)	69 (23.1)
Wiki	116 (38.8)	88 (29.4)	44 (14.7)	51 (17.1)
Telegram	55 (18.4)	157 (52.5)	59 (19.7)	28 (9.4)
Video calls	28 (9.4)	154 (51.5)	71 (23.7)	46 (15.4)
Global positioning system (GPS)	112 (37.5)	36 (12.0)	35 (11.7)	116 (38.8)
Dropbox	23 (7.7)	175 (58.5)	55 (18.4)	46 (15.4)

Source: Field Survey, 2026

Figures in parentheses are percentages

Constraints to the Use of Social Media Tools

Table 3 shows that farmers face several constraints that limit their use of social media tools. The highest-ranked challenges are the need for special devices (Mean=2.13), frequent hacking concerns (2.11), and language barriers (2.10), indicating that technical and security issues strongly discourage usage. Other notable constraints include irrelevant content, electricity issues, and the perceived complexity of social media tools. Lower-ranked but still relevant barriers, such as poor internet coverage, low awareness of information sources, and delayed message delivery, further restrict effective communication. The Implications of this study suggest that improving digital literacy, providing affordable devices, enhancing rural internet and power supply, and promoting local-language content would significantly increase farmers' adoption of social media for agricultural information.

This outcome is consistent with that of Yaseen et al. (2020), that some of the main social obstacles faced by farmers are language barriers, ignorance, stereotyped conduct, and irrelevant material.

Table 3: Constraints to the use of social media Tools

Constraints	Mean	Std. Dev	Rank
Poor internet coverage	1.87	0.96	11 th
lack of awareness of information sources available and untimely provision of information	1.83	0.99	13 th
Language barriers (as the majority of the text is in English)	2.10	0.92	3 rd
Electricity/power failure	2.04	0.88	6 th
Complex to use	2.06	0.83	5 th
Limited knowledge and skills in social medial tools	2.01	0.84	7 th
High cost	2.00	0.85	8 th
It requires special types of devices to use some of the social medial tools	2.13	0.78	1 st
Availability of irrelevant/ undesirable content	2.08	0.78	4 th
Special training is needed to use social medial tools	1.98	0.82	12 th
Hackers often hack into accounts created with the social medial tools	2.11	0.81	2 nd
Virus attack on files can cause a lot of damage	1.88	0.86	10 th
Message delivery can be delayed at times	1.96	0.82	9 th
I sometimes encounter technical barriers and malfunctioning of devices	1.83	0.77	13 th
It is reducing family physical contact and relationship	1.80	0.78	15 th

Source: Field Survey, 2026.

Mean > 2.0 = Severe

CONCLUSION

The study shows that while farmers in Southwest Nigeria are becoming more aware of common social media tools like Facebook, WhatsApp, and YouTube, their use of more specialized digital platforms remains low. Socio-economic factors such as age, education, and income shape their ability to adopt these tools. Major barriers—including device costs, language limitations, security concerns, and poor infrastructure—further restrict effective use. Overall, social media holds strong potential for improving agricultural information flow, but adoption is still constrained.

Extension agencies should focus on training farmers to use both basic and advanced digital tools. Government and private partners should improve rural internet access, electricity supply, and cybersecurity awareness. Creating local-language content and subsidizing affordable smart devices would boost participation. Finally, leveraging widely used platforms like WhatsApp and Facebook can strengthen real-time communication and enhance agricultural service delivery.

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