



USAGE OF SOCIAL MEDIA IN DISSEMINATING AGRICULTURAL INFORMATION AMONG EXTENSION FARMERS INSOUTH WESTNIGERIA

¹Popoola, O. P., ¹Okoro, N. O., ²Alao, O. M., ³Yakubu, S., ³Uyamasi, I. M., ³Adara, C. T.

¹Department of Agripreneurship, Agricultural and Rural Management Training Institute (ARMTI), Ilorin, Kwara State, Nigeria.

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

³Department of Rural Development and Gender Issues (RUDEG), Agricultural and Rural Management Training Institute (ARMTI), Ilorin, Kwara State, Nigeria.

Corresponding Author's E-mail: Chrisbabafarm70@gmail.com, **GSM:** +2348062846211

ABSTRACT

The study examined the usage of social media in disseminating agricultural information among extension farmers in South-West Nigeria. A multi-stage sampling technique was used to select 299 respondents across Ekiti, Oyo, and Osun States. Data were analyzed using descriptive statistics. Results revealed that farmers were predominantly male (65.9%) with an average age of 49 years, indicating an active and productive farming population. Most respondents had some level of formal education, which may support ICT adoption. Findings further showed that farmers possessed low knowledge of most social media tools, except WhatsApp (Mean = 2.19), generator as power support ($\times = 2.18$), Zoom ($\times = 2.17$), and Facebook ($\times = 2.11$). Effectiveness ratings indicated that Facebook, email, WhatsApp, Zoom, video calls, and GPS were perceived as most effective among extension workers, while farmers rated blogs, Facebook, and video calls higher than other platforms. The study concludes that although social media holds great potential for agricultural information dissemination, farmers' limited knowledge of key platforms restricts optimal use. Strengthening digital literacy is recommended.

Keywords: Social, Media, Tools, Agricultural, Information, Dissemination,

INTRODUCTION

Social media technologies have transformed worldwide communication. Social media platforms like Facebook, Twitter, YouTube, Wikipedia, blogging, LinkedIn, Google+, and Renren may be used to develop cutting-edge management models in education (Adelakun *et al.*, 2020). The relevance of online tools in development has long been acknowledged, In underdeveloped nations like Nigeria, information and communication technology (ICT) has proved a potent instrument for modernizing agricultural techniques Adewoye and Adebayo (2021). By giving farmers access to rapid, precise, and context-specific information, the integration of these technologies seeks to transform conventional farming methods (Efobi *et al.*, 2023). ICT, according to Plotkin (2020), is a collection of technologies that facilitate the storage and distribution of data and information, including computers, voice information systems, television, radio, telephone, video, and fax. Farmers must use ICT to obtain the knowledge and information they need, and they may readily communicate and obtain information from scientists, researchers, and other farmers worldwide (Otekunrin *et al.*, 2023). In their discussion of ICT use by rural farmers, Adewoye and Adebayo (2021) pointed out that technology can boost sustainable agricultural development and increase productivity by bringing new information resources and open communication channels, which can enhance their productivity and improve sustainable agricultural development. ICT use will be crucial to maintaining agricultural progress (Jumbo *et al.*, 2023). In Ekiti State, agriculture continues to be a vital industry that makes a substantial economic contribution. The introduction of ICT has caused a paradigm change in the way that agriculture and ICTs are the second aim of the Sustainable Development Goals (SDGs), which stress the advantages of new technology in battle against poverty. Effective use of social media in agricultural farmers may boost agricultural output and perhaps achieve SDG 2. Many farmers use digital technologies to teach and learn globally. the objective of this study is to examine Usage Of Social Media In Disseminating Agricultural Information Among Extension Farmers In Ekiti State Nigeria The study aims to:examine the



socioeconomic characteristics of farmers, determine the extension workers knowledge in the usage of social media in disseminating agricultural information and accesses the effectiveness of the usage of social media among extension farmers

METHODOLOGY

The study was carried out in Southwest Nigeria. Farmers from all around the selected states made up the study's population. To ensure representation from a variety of agro-ecological zones, a multi-stage sampling technique was used to select respondents for the study. In the first stage, three (3) states were randomly selected from South- West Nigeria (Oyo, Ekiti and Osun States). The second stage involved selection of all Agricultural Development Projects (ADPs) from each of the selected states. The third stage involved selection of 60% of arable farmers in the study areas. A sample size of 299 farmers were used for the study (79 from Ekiti;84 from Osun and 136 from Oyo). Data were analyzed using 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

The result in Table 1 shows that 65.9% and 34.1% of the respondents were males and females, respectively. This is evident in the fact that males are the dominate stakeholders in farming business. This may be so as farming has been reported to be tedious and debilitating by numerous researchers across the globe. For instance, Acharya *et al* (2020) reported that farming in India was energy demanding and therefore involved high participation of male. In contrary, Oseni *et al*. (2013) posited that women are heavily involved in the production of arable crops in Nigeria. This implies that both male and female participate in farming and due to the changes in the way of life, the rate at which changes occur in farming is so alarming due to the technological innovations that daily appear to mankind in all spheres of life. The findings further highlights that the average age of the respondents in the study area was approximately 49 years while only 2.7% and 14.0% of the respondents were less than 30 years and 60 years and above, respectively. This means that farmers in the study area were still active and they would therefore have the strength required to carry out farming activities. In the same vein, at aged 50, one may not have the required agility to encourage productivity in farming based on the assertions of Mgbenka *et al*. (2015)who reported an average age of 50 years for farmers in Nigeria and recommended that young farmers should be encouraged in order to drive innovations in farming with the aim of promoting agricultural transformation. The findings also showed that the respondents had one form of education with the highest being primary education 46.8%. This implies that farmers may easily learn and utilize web tools in their farming operations as Oladeebo and Masuku (2013) reported that education was among the critical factors in the determination of efficiency of farmers in crop production with significant impact on the managerial ability to manage farming enterprises. Similarly, the significance of education to the adoption and utilization of farming techniques had been affirmed by Gombe, (2016) who reported that education is required for farmers to take decisions to adopt and utilize farm-based technologies and lack of education has been a serious setback to making agricultural extension workers' efforts yield results in many parts of Nigeria.



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

Knowledge of Social Media Tools among Farmers

Tables 2 describe knowledge of the social media among extension workers in the study area. Evidence from the results reveal that farmers' knowledge was low in almost all the web tools except in the use of WhatsApp in the teaching and learning agricultural practices ($\bar{x} = 2.19$) ranked 1st, the use of generator as alternative power supply ($\bar{x} = 2.18$), ranked 2nd, the use of zoom for face-face communication ($\bar{x} = 2.17$) ranked 3rd and the use of facebook for social interactions ($\bar{x} = 2.11$) ranked 4th. This shows that farmers only have high knowledge of few of the web tools and their knowledge of this few if well utilized may encourage them to seek for the knowledge of others. However, farmers may find it difficult to initiate conversations with the use of web tools except agricultural extension workers introduce such to them. The inability of extension workers to introduce some of the web tools to the farmers may be responsible for the poor knowledge recorded in the findings above.

Table 2: Knowledge of Extension Workers and Farmers on the Social Media Usage

Knowledge of webtools	Farmers		
	Mean	Std. Dev	Rank
Using Twitter for effective agricultural information	1.36	0.74	13 th
Instagram for sharing images of farm inputs and products	1.43	0.7	12 th
Using Soundation can allow Extension Agent to record	1.53	1.08	11 th
Using YouTube for effective presentation.	1.72	0.85	7 th
Wikis enables me to create collaborative knowledge bases	1.67	0.81	8 th
Using Blogs for creating agricultural websites	1.57	0.84	10 th
Using Google sheets for analyze agricultural data	1.93	0.87	5 th
Using Facebook for social networking tool	2.11*	0.82	4 th
Using Research Gate for social networking tool	1.89	0.82	7 th
Using Skype for web conferencing tool	1.92	0.78	6 th
Using generator as alternative to power supply	2.18*	0.76	2 nd
WhatsApp in teaching and learning agricultural practices	2.19*	0.76	1 st
Using zoom for Face-to-face communication	2.17*	0.78	3 rd

Source: Field Survey, 2026. Mean > 2.0 = High

Effectiveness of Social Media in Agricultural Information Dissemination

The results in Table 3 show the perceived effectiveness of social media for information dissemination among farmers in the study area. It was revealed based on the findings of this study that Facebook ($\bar{x} = 3.55$) ranked 1st, email ($\bar{x} = 3.50$) ranked 2nd, WhatsApp ($\bar{x} = 3.45$) ranked 3rd, zoom ($\bar{x} = 3.32$) ranked 4th, video calls ($\bar{x} = 3.30$) ranked 5th, internet ($\bar{x} = 3.11$) ranked 6th and GPS ($\bar{x} = 3.11$) ranked 7th were identified as effectiveness out of the other social media that were been used by the agricultural extension workers for information dissemination to farmers. The identified effectiveness web tools may likely record higher level of usage among the respondents and frequent usage has been linked with effectiveness as submitted by Mburu (2013). This means that regular usage may enhance effectiveness. Therefore, the above identified effective social media may be among those that the agricultural extension workers regularly use either for social networking or for their professional work. On the part of the farmers, none of the identified social media were found effective. The ineffectiveness of the web tools may be due to the fact that they were not being used and without usage, farmers may not be able to assess their effectiveness. Casual usage will not also give a true picture of the effectiveness of a technology.

Table 3: Effectiveness of Social Media for Agricultural Information Dissemination

Effectiveness of social media	Farmers		
	Mean	Std. Dev	Rank
Facebook	2.45	1.10	2 nd
Blog	2.73	1.11	1 st
WhatsApp	2.01	0.05	9 th
Podcast	1.33	0.68	14 th
Skype	1.87	0.93	10 th
Youtube	2.40	0.17	6 th
Twintter	1.28	0.93	15 th
LinkedIn	0.72	1.39	17 th
Soundation	0.89	0.52	16 th
Google Docs:	2.03	1.10	8 th
Email	2.42	0.16	5 th
Zoom	2.06	1.10	7 th
Instagram	1.51	0.87	12 th
Wiki	1.45	1.92	13 th
Telegram	2.52	0.09	4 th
Video calls	2.65	0.02	3 rd
Global Positioning System (GPS)	1.54	1.88	12 st
Dropbox	1.74	0.85	11 st

Source: Field Survey, 2026. Mean > 3.0 = Effective

CONCLUSION AND RECOMMENDATION

The study assessed the use of social media for agricultural information dissemination among extension farmers in South-West Nigeria. Results showed that although farmers are within a productive age group and have basic education, their knowledge and use of most social media platforms remain low. Only WhatsApp, Facebook, Zoom, and generator-supported access showed moderate awareness. In contrast, extension workers rated Facebook, email, WhatsApp, Zoom, and video calls as highly effective, revealing a clear gap between farmers' usage and extension workers' preferred ICT tools. Farmers' low effectiveness ratings further highlight limited adoption and poor exposure to digital platforms. Overall, the study concludes that while social media has strong potential to enhance agricultural information delivery, its impact is hindered by low digital literacy, limited usage, and inadequate engagement with online tools among farmers. Therefore, based on the findings, the study recommends...

1. Strengthen Digital Literacy Training: Agricultural Development Programmes (ADPs) should organize regular training for farmers on the use of social media tools such as Facebook, WhatsApp, YouTube, Google tools, and Zoom for agricultural learning.
1. Extension Worker–Farmer ICT Alignment: Extension workers should actively introduce farmers to the platforms they commonly use for information dissemination to bridge usage and knowledge gaps.
2. Invest in ICT Infrastructure: Government and NGOs should improve access to reliable internet connectivity, provide solar-powered charging units, and support affordable smartphones in rural communities.
3. Integrate Social Media into Extension Programs: ADPs should formally incorporate social media communication strategies into their extension activities for timely delivery of agricultural innovations.

REFERENCES

- Acharya, S. K; Huque, M and Ghoshal, S (2020). Farmers and Stressful Farming: The Conflict and Chaos. *Open Access to Information Journal*, **3**(2): 33 – 41.
- Adelakun, O. J, Thomas, K. A and Lawah, B. O (2020). Use of Media Marketing Tools among Cassava Growers in Oyo State, Nigeria. Capabilities for Information and Communication Technologies applications (Cyber-extension) in Agriculture. *Journal of Agricultural Extension*, **24**(1): 148-156.



- Adewoye, J.O. and Adebayo, A.A. (2021) 'Measuring of information communication technology (ICT) impact on sustainable development', *International Journal of Managerial Studies and Research (IJMSR)*, **9**(2): 30–37.
- Efobi, O.C., Nwalieji, U.H. and Ahaneku, C.E. (2023) 'Constraints to the use of ICT tools in Anambra State, Nigeria', *International Journal of Science and Technology Research Archive*, **4**(1): 255–265.
- Jumbo, C. N., Asemah, E.S., Anyanwu, B. J. C., Onyebuhi, A. C., Etumnu, E.W. and Anyi, O. S. A. (2023) 'Utilisation of new media in communicating insecurity in Southeast Nigeria', *COMMICAST*, **4**(1): 25–36.
- Otekunrin, O.A., Mukaila, R. and Otekunrin, O.A. (2023) 'Investigating and quantifying food insecurity in Nigeria: a systematic review', *Agriculture*, **13**(10) 187-193.
- Plotkin, R. (2020) Communication and Cyberspace, Infobase Holdings, Inc. Senapathy, M. (2021) 'Digital divide on agriculture using ict devices among the farmers in Wolaita zone, Southern Ethiopia', *Transformacje*, **4**(11): 3–12.
- Gombe, S. Y; Suandi, T. B; Ismail, I. A and Omar, Z (2016). Trends and challenges in Nigerian Extension Education and Research. *Journal of Education and Practice*, **7**(22): 82 – 89.
- Mburu. P. (2013). Factors Influencing Access to Agricultural Information by Small Holder Farmers Through ICT channels in Deiya Location Kiambu County. *University of Nairobi, Master Thesis*.
- Mgbenka, R. N; Mbah, E. N and Ike, E. C (2015). A review of small holder farming in Nigeria: Need for Transformation.
- Nwabugwu, T. S, Nwobodo, C. E, Okoro, J. C (2019). Awareness and Use of E-Resources Among Public Extension Personnel in Anambra State, Nigeria. *Journal of Agricultural Extension*, **23**(1): 161 – 170.
- Oladeebo, J. O and Masuku, M. B (2013). Effect of farmer education and managerial ability on food crop production in Nigeria. *Journal of Economics and Sustainable Development*, **4** (7): 75 – 83.
- Oseni, G; Goldstein, M and Utah, A (2013). Gender dimensions in Nigerian agriculture. Africa Region Gender Practice Policy Brief, No. 6 World Bank Washington, DC.