

## Fish farmers' attitudes toward the use of social media in Kwara State, Nigeria

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### ABSTRACT

This article assessed the fish farmers' attitude towards the use of social media in Kwara State, Nigeria. One hundred and Thirty fish farmers were purposively selected in four fishing communities in Kwara State, Nigeria. The data collected was analysed with the use of both descriptive and inferential statistics. 39.9 years was the mean age of the respondents, about 73.8 % of the fish farmers were married, the mean household size of the fish farmers was 4 persons, the mean years of experience was 7.7 years and the Annual mean income of the respondents was 181,115.38 Naira. About 56.9 % of the respondents make use of social media daily while 1,829.23Naira was the average monthly money used to buy data. WhatsApp was the most (87.7%) frequently used social media platform, and Information sharing purpose was the highest (90.8%) motive for using social media by the respondents. Social media usage enhances access to information on improved technology (mean=3.85) was the highest-ranked attitudinal statement. Irregular supply of electricity (mean=2.15) was the highest-ranked factor affecting the use of social media. Therefore, this study recommends providing training on social media use to fish farmers to enhance their productivity.

**Keywords:** Social Media; Attitudes; Fish Farmers; Kwara State.

### Introduction

Agriculture is a vital source of livelihood for many people in Nigeria (Ifabiyi, et al., 2022). The agricultural sector in Nigeria is characterized by the vast arable land for crop production, grazing fields for rearing animals, inland waters for irrigation and fish farming, limited climate-related risks, and large internal markets. Fish farming provides income and employment opportunities for several people in Nigeria. Fish has numerous nutritious advantages over meat as it has low cholesterol levels (Ifabiyi, 2022). Fish is a cheap and readily available source of protein for many people in Nigeria as about 3.2 million metric tonnes of fish are consumed per annum (FAO, 2018; Olaoye and Oloruntoba, 2011; Bene, et al., 2015; FAO, 2016; FAO, 2022). Social

media refers to various forms of content that are made available to the public (Kaplan and Haenien, 2010). Social media platforms such as Facebook, Twitter, Whatapp, and YouTube have become an integral part of human life. Countless individuals globally use these applications daily for communication and other purposes, because of their ease of use, speed, and reach, social media is fast changing the public discourse in society and setting trends and agendas in topics that range from the environment and politics to technology and the entertainment industry (Asur and Huberman, 2010). These new platforms are believed to have the specific potential for essential functions such as the provision of information on business opportunities, information on goods, information on market outlets, advertisement of goods, and communication (Sukit, 2021). Utilization of social media in marketing activities will provide


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new business outlets and also increase the profit margin of the business owners (Azeem and Ali, 2015). Social Media are useful platforms where fish farmers can obtain vital information that is necessary for their fishing activities (Hung, 2020). Fish Farmers need innovations in fish farming that would enhance their output and livelihoods. Social media will also enhance the marketing activities and income of the fish farmers. Social media links fish farmers to the market and provide them with up-to-date information (Tonny, Palash and Moniruzzaman, 2019). Considering the role of social media to the fish farmers and the dearth of information on the attitudes of fish farmers towards the use of social media in Kwara State, Nigeria. Hence, there is a need to assess the attitudes of fish farmers towards the use of social media in Kwara State, Nigeria. The specific objectives were to:

- 1) Determine the socio-economic characteristics of the fish farmers in the study area.
- 2) Identify the social media platforms used by the respondents in the study area.
- 3) Examine the fish farmers' perceived motive for using social media in the study area.
- 4) Assess the fish farmers' attitudes towards the use of social media in the study area.
- 5) Determine the factors affecting the use of social media among the respondents.

### **Methodology**

The research was carried out in Kwara State Nigeria. The population of the study comprised all fish farmers in Kwara State, Nigeria. One Hundred and thirty fish farmers were purposively selected from four riverine communities where there are fish farming activities in Kwara State, Nigeria. The selected fishing communities were Egbejila water-side = 40 Respondents, Odore =30 Respondents, Obate=30 Respondents, and Ajegunle =30 Respondents. The data was collected through the use of questionnaires. The level of use of social media was measured on a scale of Yes and No, while Yes=1 and No=0.

Based on their level of usage, any respondent that uses  $\geq 6$  social media platforms is categorized as a High User while any respondent that uses  $\leq 5$  social media platforms is categorized as a Low User. The perceived motive for using social media was measured on a scale of Yes and No where Yes=1 and No=0. The Attitude towards the use of social media was measured on a 5-point Likert type scale where Strongly Disagree=1, Disagree=2, Undecided=3, Agree=4 and Strongly Agree=5. The Factors affecting the use of social media among the respondents were measured on a 3-point Likert type scale where, Not a factor=1, Less severe=2, and Highly severe=3. Descriptive statistics such as frequency counts, percentages, and means were used to analyze the findings of the study.

### **Results and Discussion**

#### *Socio-economic Characteristics of the Respondents*

The result as presented in Table 1 revealed that about 74.5 % of the respondents were male. This indicates that fishing activities are dominated by males in Kwara State, Nigeria. The average age of the respondents was 39.9 years. This result shows that the fish farmers were relatively young, and agile and are still within the economically active age bracket. The majority (73.8%) of the fish farmers were married. The result in Table 1 revealed that the mean household size was 4 persons. The mean annual income of the fish farmers was 393 Dollars. This shows that the fishing enterprise is viable. About 63.8% of the respondents got information on fishing through the use of social media. The result in Table 1 revealed that about 46.9% of the fish farmers had tertiary education and about 29.2% had secondary education. This indicates that fishing enterprise is practiced by educated people. About 56.9 % use social media platforms. This infers that social media is common among fish farmers. The average money used monthly to buy data for

subscription was 3.99 Dollars. This indicates that social media usage requires some financial

obligations. The mean time spent on social media per day was 4.61 Hours.

**Table 1:** The Socio-economic characteristics of respondents

Variables	Frequency (n=130)	Percentage	Mean	Standard Deviation
<b>Gender</b>				
Male	98	75.4		
Female	32	24.6		
<b>Age (years)</b>				
Less than 30	43	33.1	<b>39.9 Years</b>	<b>11.24</b>
31 – 40	34	26.2		
41 – 50	38	29.2		
51 – 60	13	10.0		
Above 60	2	1.5		
<b>Marital status</b>				
Single	24	18.5		
Divorced	10	7.7		
Widowed	0	0.0		
Married	96	73.8		
<b>Household size (persons)</b>				
1 – 2	22	16.9	<b>4 Persons</b>	<b>1.66</b>
3 – 4	72	55.4		
5 – 6	29	22.3		
Above 6	7	5.4		
<b>Years of Experience</b>				
1 – 5	73	56.2	<b>7.7 Years</b>	<b>4.71</b>
6 – 10	18	13.8		
11 – 15	35	26.9		
16 and above	4	3.1		
<b>Annual Income</b>				
≥ 100,000	72	55.4	<b>181,115.38 Naira (393 US Dollar)</b>	<b>164,852.84</b>
101,000 – 200,000	15	11.5		
301,000 – 400,000	7	5.4		
401,000 – 500,00	22	16.9		
≥ 501,000	14	10.8		
<b>Sources of Information on fish production</b>				
Television	45	34.6		
Social media	83	63.8		
Neighbours	35	26.9		
Extension agents	26	20.0		
Radio	32	24.6		
Newspaper	25	19.2		
<b>Educational Status</b>				
No formal education	25	19.2		
Primary education	6	4.6		

Secondary education	38	29.2		
Tertiary education	61	46.9		
<b>Frequency of extension contact</b>				
Never	66	50.8		
Daily	26	20.0		
Weekly	16	12.3		
Monthly	6	4.6		
Quarterly	6	4.6		
Yearly	10	7.7		
<b>Use of Social Media</b>				
Yes	74	56.9		
No	56	43.1		
<b>Frequency of use of social media</b>				
Never	56	43.1		
Daily	35	26.9		
Weekly	7	5.4		
Monthly	19	14.6		
Quarterly	13	10.0		
<b>Money Use to buy Data per Month</b>			<b>1,829.23 Naira</b>	<b>2653.45</b>
			<b>(3.99 US Dollars)</b>	
0 (People that don't use social media)	56	43.1		
≤ 1000	29	22.3		
1001 – 2000	9	6.9		
2001 – 4000	11	8.5		
≤4000	25	19.2		
<b>Time spent on social media (Hour)</b>			<b>4.61 Hours</b>	<b>5.4</b>
0 (People that don't use social media)	56	43.1		
1 – 5	30	23.1		
6 – 10	11	8.5		
11 and above	33	25.4		
<b>Supportive occupation</b>				
Civil servant	42	32.3		
Trading	59	45.4		
Artisan	29	22.3		
<b>Membership of association</b>				
Yes	92	70.8		
No	38	29.2		

### *Social Media Platform Used by Respondents*

The Results in Table 2 showed that about 87.7% of the fish farmers use WhatsApp, 79.2% use Facebook, and about 45.4% use YouTube. The result shows that WhatsApp, Facebook, and YouTube were the topmost social media

platforms used by fish farmers in the study area. Several studies have reported similar findings that social media platforms such as WhatsApp, Facebook and YouTube are being used for business activities (Banjoko, *et al.*, 2022; Bolarin, Oyekunle and Adebayo, 2021). Linking extension services to fish farmers through social media could make fish farming to be more profitable and sustainable (Islam et al., 2020).

### ***Level of Use of Social Media***

The result in Table 3 shows that about 20.8 % of the fish farmers have a high level of use of social media while about 79.2 % have a low level of use of social media. This indicates that the majority of the fish farmers have a low level of use. This might be attributed to the involvement in other supportive occupations that limit their usage of social media.

### ***The Perceived Motive for Using Social Media***

The result in Table 3 showed that the fish farmers perceived motive for using social media. The

result showed that the majority (90.8%) of the fish farmers use social media for information sharing, about 87.7% for commercial purposes, 84.6% to connect with friends/family, and 78.5% for advertisement/marketing of products. This finding implies that fish farmers' motives for using social were mostly for sharing and seeking information, commercial purposes and connecting with friends/family/group members, and advertisement/marketing of products. This result concurred with the findings of Mustika, (2019) who reported that social media facilitates interaction between producers and potential consumers. According to Aliyu and Alfred (2017), social media have been reported to be the modern medium of communication and sharing of information among people.

**Table 2:** The social media platform used by respondents

<b>Social media</b>	<b>Frequency</b>	<b>Percentage</b>
Facebook	103	79.2
Whatsapp	114	87.7
Linkedin	25	19.2
YouTube	59	45.4
Instagram	40	30.8
Facebook messenger	52	21.5
Twitter	28	21.5
Tik Tok	38	29.2
Telegram	18	13.8
Snapchat	22	16.9

**Table 3:** The level of use of social media

<b>Usage Level</b>	<b>Percentage Range</b>	<b>Frequency</b>	<b>Percentage</b>
High	51-100	27	20.8
Low	1-50	103	79.2

Note: High= uses  $\geq 6$  social media platforms, Low= uses  $\leq 5$  social media platforms

**Table 3:** Respondents' perceived motives for using social media

Motive	Frequency	Percentage
Commercial purpose	114	87.7
Advertisement/Marketing	102	78.5
Information sharing	118	90.8
Educational/training	100	76.9
Entertainment/fun	76	58.5
Connect with friends/family	110	84.6
Connect with fish farmers' group	88	67.7
Seeking information on market price	90	69.2
Seeking information on input producers and suppliers	82	63.1

#### ***Attitude of Fish Farmers towards the Use of Social Media***

The result in Table 4 showed that the social media usage enhances access to information on improved technology (mean=3.85) was the highest ranked and also a positive attitude towards the use of social media. Social media help to bring about positive change towards fishing practices (mean=3.75), social media make communication to be faster (mean=3.75), social media usage makes fish farming easier (mean=3.65), using social media strengthens the linkage between fish farmers and extension agents (mean=3.66). This is to show that fish farmers acknowledged the importance of social media as a tool to source for information, discover business opportunities and promote business activities. This result is in line with the

findings of Banjoko *et al.*, (2022) who reported that social media enhances the users' business activities.

#### ***The Factors Affecting the Use of Social Media among Fish Farmers***

The result in Table 6 showed the factors affecting the use of social media. The irregular supply of electricity and Inadequate technical know-how (mean=2.15) was the most severe factors, Poor internet connection (mean=2.14), and availability of false information on social media (mean=2.08). Similar study by Amusat and Oyedokun (2018), reported that erratic power supply was the highest ranked factor limiting the use of media among the fish farmers.

**Table 4:** The attitude of fish farmers towards the use of social media

Attitudinal Statements	Strongly Disagree	Disagree	Undecided	Agree	Strongly agree	Mean (SD)	Rank	Remark
Social media usage makes fish farming easier	10(7.7)	23(17.7)	20(15.4)	27(20.8)	50(38.5)	3.65(1.35)	5 <sup>th</sup>	Positive
Social media usage enhances access to information on improved technology	4(3.1)	20(15.4)	21(16.2)	32(24.2)	53(40.8)	3.85(1.20)	1 <sup>st</sup>	Positive
Social media help to bring about positive change in fishing practices	15(11.5)	12(9.2)	16(12.3)	34(26.2)	53(40.8)	3.75(1.37)	2 <sup>nd</sup>	Positive
Using social media strengthens the linkage between fish farmers and extension agents	4(3.1)	23(17.7)	26(20.0)	37(28.5)	40(30.8)	3.66(1.17)	4 <sup>th</sup>	Positive
Social media is not sufficient to meet the information needs of the fish farmers	24(18.5)	26(20.0)	42(32.3)	12(9.2)	26(20.0)	2.92(1.35)	13 <sup>th</sup>	Negative
Social media is useful only for large-scale fish farmers	36(27.7)	24(18.5)	37(28.5)	19(14.6)	14(10.8)	2.62(1.31)	6 <sup>th</sup>	Negative
Social media usage causes distraction to fish farmers	43(33.1)	34(26.2)	22(16.9)	4(3.1)	27(20.8)	2.52(1.49)	15 <sup>th</sup>	Negative
Social media makes fish product marketing easier	6(4.6)	16(12.3)	43(33.1)	25(19.2)	40(30.8)	3.59(1.17)	7 <sup>th</sup>	Positive
Social media usage is costly	13(10.0)	23(17.7)	50(38.5)	19(14.6)	25(19.2)	3.15(1.21)	11 <sup>th</sup>	Positive
Social media always gives inaccurate information	11(8.5)	22(16.9)	49(37.7)	23(17.7)	25(19.2)	3.22(1.19)	10 <sup>th</sup>	Positive
Social media might be used to replace physical contact with extension agents	2(1.5)	15(11.5)	57(43.8)	35(26.9)	21(16.2)	3.45(0.94)	8 <sup>th</sup>	Positive
Social media make communication to be faster	2(1.5)	22(16.9)	29(22.3)	31(23.8)	46(35.4)	3.75(1.157)	2 <sup>nd</sup>	Positive
Social media links fish farmers to grants and loans sources	11(8.5)	30(23.1)	33(25.4)	28(21.5)	28(21.5)	3.25(1.26)	9 <sup>th</sup>	Positive
Social media usage is useless to fishing business	21(16.2)	40(30.8)	26(20.0)	31(23.8)	12(9.2)	2.79(1.23)	14 <sup>th</sup>	Negative
Social media helps to attract government supports in form of input suppliers and grants	20(15.4)	21(16.2)	45(34.6)	26(20.0)	18(13.8)	3.01(1.24)	12 <sup>th</sup>	Positive

Note: Positive Attitude  $\geq 3$ , Negative Attitude  $\leq 2.99$

**Table 6:** Factors affecting the use of social media among fish farmers

Factors	Not a factor	Less severe	Highly severe	Mean	Rank
High cost of data	78(60.0)	31(23.8)	21(16.2)	1.56(.757)	10th
No internet reception in some areas	56(43.1)	35(26.9)	39(30.0)	1.87(.848)	8th
Language barriers	56(43.1)	46(35.4)	28(21.5)	1.78(.777)	9th
Poor internet connection	20(15.4)	72(55.4)	38(29.2)	2.14(.656)	3rd
Irregular supply of electricity	25(19.2)	61(46.9)	44(33.8)	2.15(.716)	1 <sup>st</sup>
Inadequate technical know-how on the use of social media	30(23.1)	51(39.2)	49(37.7)	2.15(.769)	1st
Availability of false information on social media	31(23.8)	58(44.6)	41(31.5)	2.08(.743)	4th
High cost of internet enable phone	34(26.2)	54(41.5)	42(32.3)	2.06(.765)	5th
High level of illiteracy	34(26.2)	56(43.1)	40(30.8)	2.05(.756)	6th
Strenuous/stressful tasks involved in business activities	42(32.3)	50(38.5)	38(29.2)	1.97(.787)	7th

### Conclusion

According to the findings of this study, the study concluded that fish farming in Kwara State, Nigeria is dominated by young, agile, and educated males. Majority of the fish farmers uses social media. Whatsapp, Facebook, and Youtube were the most frequently used social media platforms by the fish farmers. Fish farmers' motives for using social were mostly for information sharing, commercial and advertisement/marketing of products purposes. Strenuous/stressful tasks involved in business activities, availability of false information on social media, and high levels of illiteracy were the most severe factors affecting the use of social media. Irregular supply of electricity inadequate technical know-how, poor internet connection, and availability of false information on social media were the leading factors limiting the use of social media among fish farmers.

### Recommendations

Based on these findings, the following recommendations were made:

- I. Irregular supply of electricity is one of the leading factors affecting the use of social media among fish farmers. This study recommends that concern agencies and

stakeholders should ensure the regular electricity is restored in Nigeria.

- II. Inadequate technical know-how on the use of social media is another factor affecting the use of social media among fish farmers. This study suggests training program aimed to improve the skill of fish farmers on the use of social media and ICT gadgets.
- III. Regarding false information on social media, fish farmers should ensure they verify the source of any information given via social media and never invest a larger portion of their capital into social media transactions they have not verified the source.
- IV. The cost of data should be affordable to encourage fish farmers to use social media.

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All authors contributed in this research.

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### Institutional Review Board Statement

All Institutional Review Board Statements are confirmed and approved.

### Data Availability Statement

Data presented in this study are available on fair request from the respective author.

### Ethics Approval and Consent to Participate

Not applicable



**Consent for Publication**

Not applicable.

**Conflicts of Interest**

The authors disclosed no conflict of interest starting from the conduct of the study, data analysis, and writing until the publication of this research work.

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