



## **FACTORS INFLUENCING FARMER'S USAGE OF SOCIAL MEDIA PLATFORMS FOR LIVELIHOOD ACTIVITIES IN NORTH WEST NIGERIA**

<sup>1</sup>Ahmad, M., <sup>2</sup>Ango, A. K., <sup>2</sup>Barau, A. A.

<sup>1</sup>Department of Agricultural Extension and Rural Development, Federal University Dutsinma

<sup>2</sup>Department of Agricultural Extension and Rural Development, Usmanu Danfodiyo University  
Sokoto

**Corresponding Author's Email:** amuhammad6@fudutsinma.edu.ng

### **ABSTRACT**

This study determined the factors influencing social media usage for farmer's livelihood in north-west Nigeria. A multi-stage sampling technique was used to select 369 respondents using social media which constitute the sample size of the study. Data used for the study were collected with the aid of a structured questionnaire which was analysed using descriptive and inferential statistics. Result of the study revealed that the mean age of the respondents was 40 years, majority (80% and 84%) of the respondents from the study area were male and married with the average household size of 6 people. Most (94%) of them had one form of formal education or the other and the mean annual income of N928188.00. Results of regression analysis revealed that age ( $P < 0.01$ ), educational attainment ( $P < 0.01$ ), cooperative membership ( $P < 0.10$ ) and access to credit ( $P < 0.10$ ) were found to significantly influence the usage of social media for livelihood activities among the farmers. Results further revealed that the challenges to the use of social media for livelihood activities includes reliability and authenticity of online information (52%), hacking of social media accounts (49%) and cyber bullying (46%) among others. The study concluded that use of social media platform has influenced on the livelihood of the farmers in the study area and its usage is influenced by age, education, membership of cooperative societies and access to credit. Hence the recommended that farmers should be encouraged to explore all online avenues to access extension services that could improve their livelihoods.

**Keywords:** Usage, Social media, Platforms and Livelihood

### **INTRODUCTION**

Social media refers to the internet-based digital tools for sharing and discussing information among people. It also refers to facts or knowledge needed to answer some questions faced by people in their daily life. People's needs for information varies from decision making through psychological to some more individual centered needs. According to Amartya (2023), the need for information with regards to development is pertinent to a person's occupation, the level of socio-economic development, and local agro-ecological conditions. Despite the establishment of different agencies and backed with several extension approaches and strategies with the aim of boosting farmers' livelihood, yet, agricultural performance and farmers livelihood remains unimpressive resulting in continued food importation, increase in consumer price index (CPI) and wide spread hunger Babasanya *et al.* (2020). One of the factors responsible for this is poor communication of agricultural research results; and the fact that agricultural production in Nigeria has remained in the hands of ageing and aged who are averse to modern information and communication technologies, therefore, there is urgent need to attract youth into agriculture for farm succession which digital agriculture can conveniently offer (FAO, 2020).

The platform of "social media" and "social networking sites" are used as a new extension tool to digitally connect the farmers with each other. They are connecting digitally with the world so as to create and share their content and also to enhance and share their knowledge and even market their produce, though the sites were originally designed to promote and encourage social interaction in virtual manner but surprisingly rural farmers in Nigeria have embraced this technology (Yunusa 2016). Agricultural information that are posted on Facebook for example were used to facilitate the



communication of personal information of the farmers, these sites allow farmers to maintain social contacts between themselves. The profiles on these social networking sites are open to public and any other farmer can view it and start their communication with each other just we do it in emails and online boards for messages. These kind of online interactions are generally addressing a numbers of concerns of the farmers and are used to address rural livelihood problems (FAO, 2020).

Nigeria is faced with the problem of big gap between extension agents and farmer's population resulting in a great shortage in food production and poor livelihood for farmers. This has overtime translated to hunger and famine in the country. Scholars have identified ICT facilities particularly social media as a bridge to fill this gap as well as provide avenue for produce marketing. According to Babasanya *et al.* (2020) there is likely to be stagnation in the dissemination, utilization and application of scientific agricultural information for purposeful development of the system if modern ICT facilities (such as social media) are not adequately built into the mainstream Nigerian agricultural extension system. The aim of this study is to determine the factors influencing social media usage for farmer's livelihoods in the study area. The objectives of the study were to:

1. describe the socio-economic characteristics of the targeted farmers in the study area;
2. determine the factors influencing use of social media in livelihood activities of farmers and
3. describe the challenges to the use of social media platforms by farmers for livelihood activities.

## **METHODOLOGY**

### **Description of the Study Area**

This Study was conducted in the North western region of Nigeria. The region is one of the six geo political zones of Nigeria, located between latitude  $9^{\circ}10'N$  and  $13^{\circ} 50'N$  of the equator and longitude  $3^{\circ} 35'$  and  $9^{\circ} 00' E$  of the Greenwich meridian. The regions fall within the Northern Guinea Savannah and Sudan Savannah agro-ecological zones of Nigeria. It comprises of seven states namely: Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto, and Zamfara States with a total land mass of  $216,065\text{km}^2$  which is equivalent to 18% of the total land area in Nigeria. North Western part of Nigeria is bounded to the north by Niger Republic, North East by Yobe State, South east by Bauchi and Plateau States to the South by FCT and Nasarawa States, South West by Niger State and the far west by Benin Republic. The region is projected to be a home for about 54,839886 million people (NPC, 2023).

The area is known for low annual rainfall with less than 800 mm of rain with a prolonged dry season of up to 9 months. The rainfall intensity is between the months of July and August with a minimum rainfall of about 60mm and a maximum of about 99mm, an annual variation in rainfall of between 15% and 20% (NIMET, 2023). The soils are reddish brown or brown soils of the semi-arid and arid areas and are known as ferruginous soils which are made up of about 85% sand with PH values that varied between 6.0 to 7.0 (Inuwa *et al.*, cited in Abaje *et al.*, 2016) and (Abaje and Oladipo, 2016). The region has few trees and more arable crops are grown, cereal crops such as maize, millet, sorghum, cowpea, wheat and vegetables are also grown in the region as a means of livelihood (Ebenehi, 2022). Other source of livelihood in the study area include trading, tailoring, bricklaying, welding, carpentry among others. Majority of the people living in the region practice agriculture as their main source of livelihood. Major languages spoken in the region include Hausa, Fulfulde, Zabarma, Atyap, and Boko.

### **SAMPLING PROCEDURE AND SAMPLE SIZE**

Multistage sampling technique was used in selecting the respondents from the study. The first stage involved a convenient sampling of three out of the seven states making up the total number of states in the region, the selection was based on the accessibility of the researcher to the states and the accessibility of the researcher to the groups of farmers using social media platforms. The second stage included a purposive selection of 50 percent of the total number of ADP zone in each of the three states based on the number of Local Government Areas and the level and the intensity of



agricultural production couple with the usage of social media among the farmers in each of the selected zones. The third stage involved a random selection of two Local Government Areas from the selected ADP zones of the states, the fourth stage involved the random selection of two communities or villages in each of the Local Government Area selected, a 9 percent proportionate selection was made from the total number of registered farmers in each of the communities or villages selected. This made us to arrive at a sample size of 369 farmers for the study.

#### **Data Collection and Analysis**

Data were collected using structured questionnaire to the respondents randomly drawn from the study area. Data were analysed using both descriptive and inferential statistics. Descriptive statistics were in achieving Objective 1 and 3 while the inferential used was multiple linear regression to achieved objective ii.

#### **MODEL SPECIFICATIONS**

The multiple linear regression empirical model is specified as:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6$$

Where:

Y = Usage of social media (average time spent using social media)

e = error term

a = Constant

$b_1 - b_n$  = Coefficient of independent variables

$X_1$  = Age of farmers

$X_2$  = Sex

$X_3$  = Marital status

$X_4$  = Educational level of farmers

$X_5$  = Membership of association

$X_6$  = Access to credit

#### **RESULT AND DISCUSSION**

Results in Table 1 revealed that the pooled average age of the sampled farmers was 40 years implying that majority of the farmers using social media in the North-west Nigeria were in their active productive ages, in Kano and Katsina state for example the mean ages of the targeted farmers were found to be 41.1 years and 38.8 years respectively while Sokoto State mean age of farmers was 39.3 years. this connotes that the farmers using social media in the study area were in the same age range implying that they belong to middle age classes, therefore their youthfulness would allow them withstand all the rigours, stress and tedium involved in agricultural production, also these group of farmers are mentally capable and alert to adopt new ideas and innovations brought about by modernisation and technological advancement like the use of social media to facilitate the spread of agricultural information on both production and marketing which will have positive effect on their livelihood, this finding was in concordance with the finding of guo et al. (2015) who reported that, age has a significant impact on agricultural output and invariably impactful on the livelihood of the farmers. This is in tandem with the finding of Halidu (2022) who additionally reported that the middle aged farmers are capable of providing sustainable food and livelihood security. This finding is also in line with that of Abdulrahman et al. (2016) who opined that old people are measured to be less energetic and less interested in agricultural innovations and hence develop inefficient production routines and practices.

The results in Table 1 also showed that majority (80%) of the farmers using social media in the study area were males while female farmers accounted for only (20%). This implies that there were male dominance among the respondents in the study area with Kano State accounting for (80%) male dominance, while Katsina and Sokoto States accounted for (79%) and (81%) respectively. This is not unconnected with the fact that there is disproportionate access and acquisition of social, economic and educational opportunities based on gender of an individual in the study area, this is in line with the finding of Lawson (2010) who carried out a similar research and established that most of the farmers in rural Nigeria are males, he concluded that the patriarchy nature of the farming



population in the study area was as a result of the fact that men being the heads of the households are saddled with the responsibility to cater for the responsibility of the whole family hence they tends to dominate most of the out of home occupations like farming. Also men have higher access to educational opportunities so they tends to be more socially inclined to using technologies for their livelihood activities like the social media, this also is in agreement with the finding of Barnabas et al. (2019) who reported that majority of the users of internet based e- wallet system to facilitate the marketing of agricultural produce in Kaduna State were males, which could be due to the fact that the internet based e-wallet system operates on a similar algorithms like that of the social media.

Results in Table 1 also indicated that cumulatively majority (84%) of the respondents were married, 9% and 7% were single and divorced, respectively. results on marital status across the states indicated that majority (84%, 87% and 80%) of the respondents in Kano, Katsina and Sokoto were married, respectively. This shows that majority of the respondents in the study area had family responsibilities hence they need to explore other opportunities and ideas that they can use to boast their standard of living and social media is an option. This finding is in tandem with the submission of Abdulrahman et al. (2016) who reported that married respondents with additional member of household members to cater for could be encouraged and incentivized to adopt agricultural technologies and innovations. Aliyu (2022) also opined that marriage is held as a serious institution especially in rural areas and no adult is regarded as responsible if he/she is not married and this sense of responsibility could be a propelling factor to the adoption and use of agricultural technologies and innovations.

Results in Table 1 further revealed that cumulatively 33% of the respondents had secondary education, 28% had either Ordinary National Diploma (OND) or National Certificate of Education (NCE), 22% of them had bachelor degree, 4% had master's degree and only few (6%) had no formal education. findings on educational attainments across the states indicated that 5% had any no formal education among the respondents in Kano state, 16% of them had no formal education in Katsina state and only 3% had no formal education in Sokoto state. summarily, majority of the respondents had attend one level of formal education or the other which could be the reason why most of them use one social media or the other sources for their livelihood activities. This finding is in agreement with the finding of Oladimeji et al. (2016) who opined that education assist farmers in reducing the transaction costs for using technologies that could assist them in accessing and interpreting information regarding alternative income generating activities and this could be achieved using the social media. Also this finding is in tandem with the finding of Halidu (2022) who opined that majority of the rural farmers in Nigeria had a certain level of formal education and is expected to influence the adoption of agricultural technologies and innovation, he further asserted that education is a very important variable that assist farmers to understand the advantages of using some agricultural innovation. Also Hliyu (2022) reported that educational level of the farmers has been shown to be a positive factor in the adoption of modern agricultural technologies that have the potentials to improve farmer's livelihood.

In addition, the results in Table 1 shows that cumulatively more than half (55%) of the respondents had a household size of 1-5 persons while 31%, 10% , 3% and 1% had a household size of 6-10, 11-15 16-20, and 21-25 persons, respectively with an average household size 6 persons. the result of this study based on household size revealed that majority (68%) of the respondents from Kano state had a household size ranging from 1-5 persons, also reasonable proportion (52% and 44%) of respondents in Katsina and Katsina states had a household size of 1-5 persons, respectively. Conversely findings revealed that only 2% of the Sokoto state respondents had a large household size of 21-25 persons and only 1% of the Katsina state respondents had a household size of 21-25 persons.

These findings imply that majority of the respondents in the study area had a relatively small household size, these results shows a positive and a direct correlation with the educational attainments of the respondents as it has been scientifically proven that the higher the education of an individual the smaller the size of his household. This finding is in sharp contrast with the finding of Barnabas (2019) who reported a large household size among the users of the internet based e-wallet system in Kaduna state, Nigeria, and Nwaobiala and Ubor (2015) who also reported that the farmers in the rural



Nigeria had a relatively large household size. Also this finding slightly contradicts the finding of Halidu (2022) who reported that farmers in north-central Nigeria had a moderately small household size. Arthur (2015) reported that household size is a very important socio-economic variable in the determination of rural livelihood as children assist their parents on the farm and other household activities. Also, Olumba and Rahji (2014) reported household size among the socio-economic variables that have a positive impact on the household standard of living and welfare.

Findings as presented in Table 1 shows that the mean annual income of the respondents in the study area was ₦928,188.00, also findings based on cumulative annual income revealed that 36% of the respondents had an annual income that ranges from ₦100000.00- ₦500000.00, 33% of them had an annual income that ranges from ₦501000.00- ₦1000000.00, also 19% of the respondents had an annual income that ranges from ₦101000.00- ₦150000.00 and only 12% among them had an annual income that is above ₦1500000.00. The average income of the respondents in Kano state was ₦1012273.00 slightly below the average income of the respondents in Katsina state which stand at about ₦1027189.00 and significantly above the average income of the respondents from Sokoto state which stand at about ₦745104.00. This finding is in agreement of Udiji *et al.* (2019); Itobiye (2013) and Okoh *et al.* (2018) who reported that farmers in their study area are moderate income earners, this will negatively influence the farmers output and invariably their livelihood.



**Table 1:** Distribution of the Respondents based on Socio-economic Characteristics (n = 369)

Variables	Kano state (n= 88) Freq (%)	Katsina state (n=233) Freq (%)	Sokoto state (n=48) Freq (%)	Pooled (n=369) Freq (%)
<b>Age</b>				
20 – 29	11(12)	28(12)	14(29)	53(14)
30 – 39	33(38)	83(36)	17(35)	133(36)
40 – 49	23(26)	96(41)	9(19)	128(35)
50 – 59	13(15)	22(9)	2(4)	37(10)
60 – 69	8(9)	5(2)	6(13)	19(5)
Mean	41.1	38.8	39.35	40
<b>Sex</b>				
Male	71(80)	184(79)	39(81)	294(80)
Female	17(20)	49(21)	9(19)	75(20)
<b>Marital status</b>				
Single	7(8)	15(7)	5(11)	27(9)
Married	75(85)	204(87)	39(80)	318(84)
Divorced	6(7)	13(6)	4(9)	23(7)
Widowed	0(0)	0(0)	0(0)	0(0)
Separated	0(0)	0(0)	0(0)	0(0)
<b>Education</b>				
Primary educ.	1(1)	19(8)	6(12)	26(7)
Secondary edu	43(48)	75(32)	6(12)	124(33)
OND/NCE	30(34)	53(23)	20(42)	103(28)
Bachelor	10(12)	64(27)	6(12)	80(22)
Master's degree	0(0)	6(3)	9(19)	15(4)
No formal educ	4(5)	16(7)	1(3)	21(6)
<b>Household size</b>				
1 -5	60(68)	122(52)	21(44)	203(55)
6 – 10	21(24)	76(32)	20(42)	117(31)
11 -15	5(6)	27(12)	4(8)	36(10)
16 -20	2(2)	6(3)	2(4)	10(3)
21 – 25	0(0)	2(1)	1(2)	3(1)
Mean	5	6	6	6
<b>Annual income (₦)</b>				
₦100000 - ₦500000.	19(22)	64(28)	28(58)	111(36)
₦501,000 – ₦1000000	45(51)	111(48)	0(0)	156(33)
₦1010000 – ₦1500000	9(10)	14(6)	20(42)	43(19)
>₦1500000	15(17)	44(18)	0(0)	59(12)
Mean	₦1012273	₦1027189	₦745104	₦928188

**Source:** Field survey, 2023; figures in parenthesis are in percentages

The pooled result of the frequency of extension contact as shown in Table 2 indicated that 36% of the respondents reported to have extension service fortnightly, this involve both private and public extension service, while 24%, 18%, 9% and 6% had contact with extension service weekly, once in six months, daily, and once annually, respectively. Similarly, only 7% among the respondents had no extension contact. Also findings across the states indicated that 39% of the respondents from Sokoto state had extension contact fortnightly, 33% of the respondents from Katsina state had extension contact fortnightly while Kano state accounted for 30% among the respondent who had extension service fortnightly. Furthermore Sokoto and Katsina states respondents reported 14% and 7% of extension contact in a year respectively. This finding is an indication that most of the respondents in the study area had a certain level of extension service hence the respondents are expected to be welcoming and embracing to all technologies that could improve their livelihood. This assertion is in agreement with the finding of Ebenehi (2023) and Uzonna and Qijie (2013) which also



corroborated with the finding of Khalid and Sherzad, (2019) who reported that regular extension visit facilitates the adoption of improved technologies in his study area.

Results in Table 2 indicated that cumulatively 33% of the respondents are affiliated to all farmers association of Nigeria, 27% of them were affiliated to poultry farmers association of Nigeria, 18% of the respondents were members of the rice farmers association of Nigeria also 15% of the respondents were members of the maize farmers association of Nigeria and only 7% of the respondents were not affiliated to any cooperative society or association. The result of farmer's affiliation to cooperative society or association across the states revealed that 60% of the respondents from Kano state were affiliates of all farmers association of Nigeria, 35% of the respondents from Sokoto state were affiliated to all farmers association of Nigeria and 21% of the farmers from Katsina state were members of all farmers association of Nigeria. Furthermore 38% of the respondents from Sokoto state were found to be affiliated to poultry farmers association of Nigeria, 33% of the respondents from Katsina state were affiliated to poultry farmers association of Nigeria and 7% of Kano state respondents were affiliates of the poultry farmers association of Nigeria. however Katsina state had 8% of its respondent not affiliated to any association, 7% of Sokoto state respondents were none members of any association and only 5% of the respondents from Kano state are not affiliated to any association. This shows that majority (97%) of the respondents were members of one farmers association or the other. This implies that social media usage for livelihood activities would be high as farmers association would serve as an avenue where farmers socialize and share valuable insights on how they can improve their livelihood through both on and off-farm livelihood activities. This finding corroborate with the finding of Ebenehi (2023) and Effiom, (2014) who both reported that membership of farmer's association can lead to improvement in rural livelihood assets. Findings in the pooled result for source of credit in the study area as shown in table 2 indicated that 35% of the respondent's access credit from informal sources like family and friends, 26% of the respondents' access credit from government loan schemes, 22% of the respondent's access credit from commercial banks, 6% among them access loan from non- government loan schemes and only 10% among them had no access to credit. The result of source of credit across the state revealed that 49% of the respondents from Kano state access credit from informal sources, 46% of the respondents from Katsina state access loan from informal sources and only 10% of the respondents from Sokoto state access credit from an informal source. Furthermore 17% of the respondents from Kano state had no access to credit, 15% of the respondents from Sokoto state reported no access to credit and only 8% of the respondents from Katsina state reported no access to credit. this implies that majority (87%) of the respondents across the states under study had access to credit. Access to credit is expected to have positive impact on the usage of social media and the livelihood of the respondents.

This is in agreement with the finding of Kudi *et al.* (2010) who opined that access to credit positively influence the use and adoption of improved technologies and would enable the farmers purchase some farming inputs which could improve their production and productivity and thereby improve their livelihood. The finding on the other hand is in disagreement with the finding of Lawan (2018) who hypothesized that access to credit negatively influenced the adoption of improved technologies by farmers, meaning any increase in the access of farmers to credit could reduce or even hamper the chances of farmers adopting improved agricultural technology.



**Table 2:** Distribution of Respondents based on Socio-economic Characteristics cont.. (n=369)

Variables	Kano state (n= 88) Freq (%)	Katsina state (n=233) Freq (%)	Sokoto state (n=48) Freq (%)	Pooled (n=369) Freq (%)
<b>Freq of extension contact</b>				
Daily	4(5)	31(13)	5(10)	40(9)
Weekly	25(28)	43(18)	12(25)	80(24)
Fortnightly	30(35)	77(33)	19(39)	126(36)
Half a year	15(17)	58(26)	5(10)	78(18)
Yearly	14(15)	7(3)	1(2)	22(6)
No Extension contact	0(0)	17(7)	6(14)	23(7)
<b>Membership of association.</b>				
AFAN	53(60)	48(21)	17(35)	118(33)
RIFAN	17(20)	46(20)	5(10)	68(18)
MAN	7(8)	43(18)	5(10)	55(15)
PFAN	6(7)	77(33)	18(38)	101(27)
None member	5(5)	19(8)	3(7)	27(7)
<b>Source of credit</b>				
Informal sources	43(49)	107(46)	5(10)	155(35)
Commercial banks	16(19)	50(21)	12(25)	78(22)
Government loan scheme	11(12)	48(20)	19(40)	78(26)
Non-gov't loan scheme	3(3)	12(5)	5(10)	20(6)
No credit access	15(17)	16(8)	7(15)	38(10)

**Source:** Field survey, 2023; figures in parenthesis are in percentages

#### FACTORS INFLUENCING FARMER'S USAGE OF SOCIAL MEDIA PLATFORMS FOR LIVELIHOOD ACTIVITIES

Multiple Linear Regression analysis results in Table 3 for the factors influencing the usage of social media for livelihood activities by the respondents revealed that the estimated R- square value was 0.075. This implies that over 7% of the variation in the respondent's usage of social media is explained the socio-economic characteristics considered in the model. The F-value 4.918 was significant with social media usage implying that the socio-economic characteristics included in the model contributed in explaining the variations in the respondent's usage of social media.

The coefficient of age was negative and significant at 1% level of probability. The negative correlation implies that as the farmers advance in age, their usage of social media reduces, this may be because old person tends to be preoccupied with their family responsibilities and their businesses, these responsibilities significantly reduce the level at which the farmers use the social media. This corroborated with the finding of Lemi (2005) but contradicts with previous studies by Shambel and Rajan (2017) and Gagabo (2014) where the ages of rural households were found to positively influence their decision to adopt technologies and diversify into other livelihood strategies.

Also the coefficient of education was positive and significant at 1% probability level, this implies that as the farmers get more educated, their usage of social media increase, this may be because of the fact that education goes along with exposure and exposure makes a person inquisitive, and inquisitiveness would propel a person increase the level he or she use technologies like the social media. This agrees with the finding of Abdullahi (2021).

The coefficient of membership of association was positively correlated and significant at 10% level of probability. This implies that as farmers increase the level at which they join association or cooperative society, their level of social media usage increase, this may be because joining associations will widen the social interconnectedness of the farmers and that will lead the farmers to opt for online socialization and communication using the social media. This finding corroborate with the finding of Warren (2002) and Bezemer and Ierman (2002) who reported that membership of associations promote social capital and social capital promote social interaction on social media.



The coefficient of access to credit was positive and significant at 10% probability level, this implies that as the farmer's access to credit increase, his usage of social media also increases, this may be because access to credit makes a farmer to have more resources at his disposal consequently the farmer would use the surplus for socialization as such his usage of social media will increase. This is in agreement with the finding of Kudi *et al.* (2010) and in disagreement with the finding of Lawan, (2018) and Abdullahi (2021).

**Table 3:** Factors Influencing the Usage of Social Media by the Respondents

Explanatory variables	Unstandardized B	Coefficient SE	Standardized Coefficient Beta	t-ratio	P- value
Age	-1.084	0.362	-0.153	-2.992	0.003***
Sex	1.470	6.591	0.012	0.223	0.824
Education	8.769	2.787	0.164	3.146	0.002***
Marital status	0.040	3.503	0.001	0.011	0.991
Membership of association	3.612	1.995	0.092	1.810	0.071*
Access to credit	6.369	3.303	0.098	1.928	0.055*
Constant	187.304	22.256		8.416	0.000
<b>Diagnostic Variables</b>					
R Square	0.075				
Adjusted R Square	0.060				
F (6, 362)	4.918				
Observation	369				

\*\*\* Significant at 1%, \*\* significant at 5%, \* significant at 10%

### Challenges to the Use of Social Media by the Respondents

Based on the challenges to the use of social media by the respondents in the study area, findings revealed that 52% and 49% of the respondents consider the problem of authenticity and reliability of online information and hacking of social media accounts as a moderate constraint to the use of social media in the study area. Also a good proportion of the respondents (46% and 41%) in the study area believed cyber bullying and unstable mobile network in rural areas to be a moderate constraint. The results further depicted that 36% and 32% of the respondents believed power supply problem, and high cost of data for browsing to be a moderate constraint. This finding corroborated with that of Babasanya *et al.* (2020) who reported that social media related problems like cyber bullying and hacking are affecting the usage of the social networking platforms.



**Table 4:** Challenges to the Use of Social Media (n=369)

Variables	Frequency (n=369)	Percentage (%)	Ranking
<b>Hacking</b>			
High Constraints	67	18	3 <sup>rd</sup>
Moderate Constraints	181	49	1 <sup>st</sup>
Low Constraints	103	28	2 <sup>nd</sup>
Not a Constraints	18	5	4 <sup>th</sup>
<b>Fear of Cyber bullying</b>			
High Constraints	22	6	4 <sup>th</sup>
Moderate Constraint	111	30	2 <sup>nd</sup>
Low constraints	170	46	1 <sup>st</sup>
Not a constraints	66	18	3 <sup>rd</sup>
<b>Authenticity and Reliability of information</b>			
High Constraints	107	29	2 <sup>nd</sup>
Moderate Constraints	192	52	1 <sup>st</sup>
Low Constraints	63	17	3 <sup>rd</sup>
Not a Constraints	7	2	4 <sup>th</sup>
<b>Epileptic Power supply in rural areas</b>			
High Constraints	107	29	3 <sup>rd</sup>
Moderate Constraint	122	33	2 <sup>nd</sup>
Low Constraints	133	36	1 <sup>st</sup>
Not a Constraint	7	2	4 <sup>th</sup>
<b>Unstable mobile network service in rural areas</b>			
High Constraints	125	34	2 <sup>nd</sup>
Moderate Constraints	151	41	1 <sup>st</sup>
Low Constraints	71	19	3 <sup>rd</sup>
Not a Constraints	22	6	4 <sup>th</sup>
<b>High Cost of data for browsing</b>			
High Constraints	111	30	2 <sup>nd</sup>
Moderate Constraints	129	35	1 <sup>st</sup>
Low Constraints	100	27	3 <sup>rd</sup>
Not a Constraints	29	8	4 <sup>th</sup>

**Source:** Field survey, 2023

## CONCLUSION AND RECOMMENDATION

Based on findings, the study concluded that some socio-economic characteristic of the farmers like education, membership of association and access to credit significantly influence farmers usage of social media and the need for social media in disseminating agricultural information cannot be over emphasized because it can serve as viable tool to reach out to our teaming population of farmers.

1. Farmers should be encouraged and motivated to explore all avenues including that of the social media to form both online and offline cooperative societies and they should be enlightened to use the cooperative society to:
  - a. Access financial resources from both the private and public financial institutions by using that association registration certificate as a collateral for group lending schemes and other online financial products like the internet based e-wallet system for farmers tested in Kaduna State, Nigeria
  - b. Access both online and offline extension services to enhance their technical know-how on production and marketing.
  - c. Access both online and offline market information on the prices of agricultural commodities in different markets which could help farmers integrate production and marketing thereby improving their livelihood.
  - d. Access subsidized farm inputs like agrochemicals from governments and other interventionist agencies



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