Journal of Agriculture, Environmental Resources and Management ISSN2245-1800(paper) ISSN 2245-2943(online) 6(5)1-800:August.2024: pp61-71



Impact of social media tools on job performance among Agriculture professionals in South-South, Nigeria

¹Agadaga, B. B., ² Adesope, O. M and ³ Kainga, P. E.

^{1,3}Department of Agricultural Economics, Extension and Rural Development, Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria.

²Department of Agricultural Extension and Rural DevelopmentUniversity of Port Harcourt, Port Harcourt, Rivers State. **E-mail:** benagadaga@gmail.com

Abstract

The study analyzed the impact of social media tools usage among agriculture professionals in South-South, Nigeria. Purposive random sampling technique was used for the selection of 204 agriculture professionals in ADPs, Ministry of Agriculture and Universities from Bayelsa, Rivers, Delta and Akwa-Ibom State respectively. The data for the study were collected through the use of questionnaire and were analysed using descriptive statistics such as frequency, mean and percentage. The result showed that 35.29% of agriculture professionals were between the age range of 31 and 40 years, 20.59% were between 41-50 years while 35.78% were 50 years and 8.33% were below 30 years. Also, 41.18% of agricultural professionals earned N100, 001- N200, 000 monthly. The result showed that Facebook is the most deployed social media tool among agriculture professionals. Furthermore, the result showed that high cost of service and electricity/ power failures were major factors limiting the use of social media tools. The study concluded that agriculture professionals generally agree that social media tools have a positive impact on their job performance with WhatsApp, Facebook, and YouTube which are extensively used in enhancing skills, facilitating community engagement, and enabling access to valuable resources to improve professional competence. However, the findings underscore the need for targeted interventions such as digital infrastructure broadband improvements, digital literacy programs, and better content management to maximize the benefits of social media in the agricultural sector.

Keywords: Impact, Social media, Agriculture, Tools and Professionals

Introduction:

The global population is increasing, projected to grow from 7.7 billion in 2019 to hit a record of 8.5 billion people by 2030, 9.7 billion by 2050 and 10.9 billion by 2100 (United Nations Department of Economic and Social Affair, 2019), with projected increases likely to come from sub-Saharan Africa. Social media provides the platform for effective agricultural information dissemination. communicating measures and practices and to utilize opportunities, address challenges facing agricultural sector in developing countries. Social media is important in the dissemination and creation of on agricultural awareness technologies and development knowledge in real time (Ifejika, Asadu, Enibe, Ifejika and Sule, 2019). Adesope, Olatunji, Etuk and Ifeanyi-Obi (2012) noted that human capacity development is one of the most essential sources of idea generation and it occupies a critical position in promoting a nation's prosperity and its citizens' well-being in the knowledge -based era.

Social media platforms such as Facebook, YouTube, Linkdin, Wikis and Podcasts offer enormous potential to agriculture professionals for reaching their clients, but then, the principles of suitability of message content and needs of the clientele must be observed for successful service delivery (Gharis, Bardon, Evans, Hubbard and Taylor, 2014). In the agricultural sector, there is growing rate of social media usage amongst key stakeholders. Sokoya, Onifade and Alabi (2012) opined that there is geometric increase in the utilization of social media among agricultural researchers, extensionist and other stakeholders in the agricultural sector. Social media have ensured quick delivery and response to information between the receiver and sender relationship. According to Malthus population theory in 1776 at England, he observed that population is growing at geometric progression while food production is moving at arithmetic progression (Ubong, 2019). This means that there would be

decline of food production against population explosion. And this prediction is a clear manifestation of developing countries which Nigeria is a victim of the above theory. In the words of Muktar, Mukhtar and Ahungwa (2015), social media has fostered a fast platform for information dissemination and interactive contact; rivalled by none in this time couple with the level of technology advancements that continue to bring world at everyone's finger tips and make information accessible without having to go through hiccups of travelling and delays.

However, lack of awareness and skills to use social media have been considered as major restraint behind the minimal use of social media by field level extension workers and agriculture professionals (Saravanan and Bhattacharjee, 2016). More so, some doubt exists about the use of social media for professional activities (Saravanan and Bhattacharjee, 2014). Use of time allocation for social media, personal privacy concern over information in social media, are some of the reported constraints (Newbury, Humphreys and Fuess 2014 and Lucas, 2011). It is on this premise this paper seek to analyze the impact of social media tools usage among agriculture professionals in South- South, Nigeria. The study described the socio-economic characteristics, ascertain the various social media tools deployed for agriculture professionals, determine impact of social media tools on job performance of agriculture professionals, and examine factors limiting the usage of social media by agriculture professionals.

Methodology: The study was carried out in the South-South of Nigeria. Nigeria lies between latitude 4° and 14° N and longitudes 3° and 14° E, covering a land area of about 92,000km² with a population of about 173.6 million people (NBS, 2014). The South-South region is made up of six out of 36 States of the Federal Republic of Nigeria. The six States are Akwa Ibom, Bayelsa, Cross River, Delta, Edo, and Rivers States. The area has a total population of 21, 034, 081 people (NBS, 2014). The South-South which is the core oil producing areas provides the economic mainstay of the country's oil and gas. In addition to the oil and gas, the region also produces other key resources with potential huge opportunities in tourism and agriculture as well as urban commerce

and transport business. The region which is situated in the southern part of Nigeria, and bordered to the south by the Atlantic Ocean, and to the East by Cameroon, occupies a surface area of about 112,110 square kilometres. This represents about 12% of Nigeria's total surface area. Multi-stage sampling technique was adopted. Firstly, four States of Bayelsa, Rivers, Delta and Akwa-Ibom were randomly selected out of the six (6) states in the South-South region. Secondly, three organizations, namely, ADPs, universities and ministrlies of agriculture were purposively selected for the study. Thirdly, 51 agriculture professionals were selected from ADPs, Ministries of agriculture Universities in each of the four selected states making a total sample size of 204 for the study. Data were collected through well-structured questionnaire and were analyzed with descriptive statistics such as frequency, mean and percentage. The questionnaire was on a 4-point rating scale of Strongly Agree, Agree, Strongly Disagree and Disagree to which numerical values 4, 3, 2 and 1 were assigned respectively. The scores up to 10 and a mean of 2.5 when divided 4. Hence, the cut-off point of 2.55 as upper limit was used to determine the positive response (i.e., 2.5 + 0.005).

Socio-economics Results and **Discussion: Characteristics of Agriculture Professionals:** Results in Table 1 shows that 35.29% of the agriculture professionals were between the age range of 31 and 40 years, 20.59% were between 41-50 years while 35.78 % were 50 years and 8.33% were below 30 years. This implies that the age range of most of the extension professionals in Southwest, fell between 36 and 50 years. This result is in consonance with Yakubu et al. (2013) that 49.8% of users of Information and Communication Technologies (ICTs) among extension personnel in Sokoto State are between 41 and 50 years. In terms of their educational level, 61.76% of respondents had M.Sc. /Ph.D., 33.33% had B.Sc., and 4.90% SSCE. These results indicate that majority of the respondents had M.Sc. /Ph.D. which should help them to decide the type of tools that will help them to be effective in their job. The result is in disagreement to Agwu, uche-mba and Akinnagbe (2008) that 32.5% agriculture professionals in Enugu and Abia States had B.Sc.

Table 1 Socio-Economic Characteristics of Agriculture Professionals in the Study Area

JOURNAL OF AGRICULTURE, ENVIRONMENTAL RESOURCES AND MANAGEMENT

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Characteristic	Bayelsa	(n=51)	Rivers (n=51)		Delta (n=51)		Akwa Ibom	(n=51)	South-	South (204)
Age (Years) Signed by the second state of th		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Age (Years)										
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	≤30	1	0.49	4	1.96	8	3.92	4	1.96	17	8.33
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	31-40	34	16.67	8	3.92	19	9.31	11	5.39	72	35.29
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	41-50	10	4.90	9	4.41	10	4.90	13	6.37	42	20.59
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	>50	6	2.94	30	14.71	14	6.86	23	11.27	73	35.78
\bar{X} 39.88 50.35 42.02 48.9 44.96 Minimum 27 22 24 1 1 Maximum 59 71 60 71 71 622 Maximum 59 71 60 71 29 14.22 127 62.25 Make 40 19.61 28 13.73 30 14.71 29 14.22 127 62.25 Fomale 11 5.39 23 11.27 21 10.29 22 10.78 77 3.43 46 22.55 Married 31 15.20 48 23.53 31 15.20 41 20.10 151 74.02 Widowed 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 <	Total	51	25.00	51	25.00	51	25.00	51	25.00	204	100.00
Minimum 27 22 24 $1 \\ 22$ 22 Maximum 59 71 60 71 71 71 Gender 71 60 71 29 14.22 127 62.25 Male 40 19.61 28 13.73 30 14.71 29 14.22 127 62.25 Female 11 5.39 23 11.27 21 10.29 22 10.78 77 37.75 Total 51 25.00 51 25.00 51 25.00 51 25.00 20.41 100.00 Married 31 15.20 48 23.53 31 15.20 41 20.10 151 74.02 Widowed 0 0.00 0 0.00 0 0.00 2 0.98 5 2.45 Total 51 25.00 51 25.00 51 25.00 20.98 10 4.90 <t< td=""><td>\overline{X}</td><td>39.88</td><td></td><td>50.35</td><td></td><td>42.02</td><td></td><td>48.9</td><td></td><td>44.96</td><td></td></t<>	\overline{X}	39.88		50.35		42.02		48.9		44.96	
Maximum 59 71 60 71 71 71 Male 40 19.61 28 13.73 30 14.71 29 14.22 127 62.25 Female 11 5.39 23 11.27 21 10.29 22 10.78 77 62.25 Total 51 25.00 51 25.00 51 25.00 51 25.00 204 100.00 Maried 31 15.20 48 23.53 31 15.20 41 20.10 151 74.02 Widowed 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0.00 0 0.00 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Minimum	27		22		24		1 22		22	
Gender Male 40 19.61 28 13.73 30 14.71 29 14.22 127 62.25 Female 11 5.39 23 11.27 21 10.29 22 10.78 77 37.75 Total 51 25.00 51 25.00 51 25.00 51 25.00 22 10.78 77 37.75 Total 51 25.00 51 25.00 51 25.00 24 100.00 Married 31 15.20 48 23.53 31 15.20 41 20.10 151 74.02 Widowed 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 10 0.00 0 0.00 0 0.00 0 0.00 0 0.00 10 0.00 10.000 0	Maximum	59		71		60		71		71	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Gender										
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Male	40	19.61	28	13.73	30	14.71	29	14.22	127	62.25
Total Marital Status5125.005125.005125.00204100.00Marital StatusSingle188.8220.98199.3173.434622.55Married3115.204823.533115.204120.1015174.02Widowed00.0000.0010.4910.4920.98Separated00.0000.0000.0020.9852.45Total5125.005125.005125.005125.00204100.00Educational Level11.9620.9820.9820.98104.90Primary41.9620.9820.9820.98104.906833.33Postgraduate2411.763617.652713.243919.1212661.76Total5125.005125.005125.002520.4100.00Working Experience(Years) $=$ $=$ $=$ $=$ $=$ $=$ $=$ $=$ ≤ 5 3718.1483.92178.3394.41713.4806-1052.4594.4194.4173.433014.7111-1520.9883.9241.96 <td>Female</td> <td>11</td> <td>5.39</td> <td>23</td> <td>11.27</td> <td>21</td> <td>10.29</td> <td>22</td> <td>10.78</td> <td>77</td> <td>37.75</td>	Female	11	5.39	23	11.27	21	10.29	22	10.78	77	37.75
Marrial Status Single 18 8.82 2 0.98 19 9.31 7 3.43 46 22.55 Married 31 15.20 48 23.53 31 15.20 41 20.10 151 74.02 Widowed 0 0.00 0 0.00 1 0.49 1 0.49 2 0.98 Separated 0 0.00 0 0.00 0 0.00 2 0.98 5 2.45 Total 51 25.00 51 25.00 51 25.00 51 25.00 24 100.00 Educational Level Primary 4 1.96 2 0.98 2 0.98 2 0.98 30 4.90 Postgraduate 24 11.76 36 17.65 27 13.24 39 19.12 126 61.76 Total 51 25.00 51 25.00 51 25.00 51 25.00 20 20 20 61.76 Total <	Total	51	25.00	51	25.00	51	25.00	51	25.00	204	100.00
Single188.8220.98199.3173.434622.55Married3115.204823.533115.204120.1015174.02Widowed00.0000.0010.4910.4920.98Separated00.0000.0000.0020.9852.45Total5125.005125.005125.005125.002020204100.00Educational LevelPrimary41.9620.9820.9820.98104.904.90Primary2311.27136.372210.78104.906833.33Postgraduate2411.763617.652713.243919.1212661.76Total5125.005125.005125.005125.0020.2020.41100.00Working ExperienceVV11.1520.9862.94146.86136.373517.165205727.4594.4194.4173.433014.7111.1520.9862.94146.86136.373517.1615.2010.7813.6314.7114.6314.7114.6314.7114.6314.7114.6314.7114.63	Marital Status										
Married3115.204823.533115.204120.1015174.02Widowed00.0000.0010.4910.4920.98Separated00.0000.0000.0000.0000.00Divorced20.9810.4900.0020.9852.45Total5125.005125.005125.005125.00204100.00Educational LevelPrimary41.9620.9820.9820.98104.90Tertiary2311.27136.372210.78104.906833.33Postgraduate2411.763617.652713.243919.1212661.76Total5125.005125.005125.005125.00204100.00Working ExperienceV(Years) \leq 20.9862.94146.86136.373517.1615-2020.9862.94146.86136.373517.1615-2020.9883.9241.9683.922210.78>2052.45209.8073.43146.864622.55Total5125.005125.00 <td>Single</td> <td>18</td> <td>8.82</td> <td>2</td> <td>0.98</td> <td>19</td> <td>9.31</td> <td>7</td> <td>3.43</td> <td>46</td> <td>22.55</td>	Single	18	8.82	2	0.98	19	9.31	7	3.43	46	22.55
Widowed00.0000.0010.4910.4920.98Separated00.0000.0000.0000.0000.00Divorced20.9810.4900.0020.9852.45Total5125.005125.005125.005125.00204100.00Educational LevelPrimary41.9620.9820.9820.98104.90Tertiary2311.27136.372210.78104.906833.33Postgraduate2411.763617.652713.243919.1212661.76Total5125.005125.005125.005125.00204100.00Working ExperienceV(Years) ≤ 5 3718.1483.92178.3394.417134.806-1052.4594.4173.433014.7111-1515-2020.9883.9241.9683.922210.78>2052.45209.8073.43146.864622.55Total5125.005125.005125.0020.4100.00 \overline{X} 8.0018.5911.5916.313.635	Married	31	15.20	48	23.53	31	15.20	41	20.10	151	74.02
Separated00.0000.0000.0000.0000.0000.00Divorced20.9810.4900.0020.9852.45Total5125.005125.005125.005125.00204100.00Educational Level </td <td>Widowed</td> <td>0</td> <td>0.00</td> <td>0</td> <td>0.00</td> <td>1</td> <td>0.49</td> <td>1</td> <td>0.49</td> <td>2</td> <td>0.98</td>	Widowed	0	0.00	0	0.00	1	0.49	1	0.49	2	0.98
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Separated	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Total5125.005125.005125.005125.00204100.00Educational LevelPrimary41.9620.9820.9820.9820.98104.90Tertiary2311.27136.372210.78104.906833.33Postgraduate2411.763617.652713.243919.1212661.76Total5125.005125.005125.005125.00204100.00Working Experience (Years)≤53718.1483.92178.3394.417134.806-1052.4594.4194.4173.433014.7111-1520.9862.94146.86136.373517.1615-2020.9883.9241.9683.922210.78>2052.45209.8073.43146.864622.55Total5125.005125.005125.005125.00204100.00 X 8.0018.5911.5916.313.6335353535353535353535Maximum3211.7631.47167.8431.474622.5	Divorced	2	0.98	1	0.49	0	0.00	2	0.98	5	2.45
Educational LevelPrimary41.9620.9820.9820.98104.90Tertiary2311.27136.372210.78104.906833.33Postgraduate2411.763617.652713.243919.1212661.76Total5125.005125.005125.005125.00204100.00Working Experience(Years) \leq	Total	51	25.00	51	25.00	51	25.00	51	25.00	204	100.00
Primary41.9620.9820.9820.98104.90Tertiary2311.27136.372210.78104.906833.33Postgraduate2411.763617.652713.243919.1212661.76Total5125.005125.005125.005125.00204100.00Working Experience(Years) ≤ 5 3718.1483.92178.3394.417134.806-1052.4594.4194.4173.433014.7111-1520.9862.94146.86136.373517.1615-2020.9883.9241.9683.922210.78>2052.45209.8073.43146.864622.55Total5125.005125.005125.00204100.00 X 8.0018.5911.5916.313.635Minimum121211Maximum353535353535Monthly Income (N)2411.7631.47167.8431.474622.55	Educational Level										
Tertiary2311.27136.372210.78104.906833.33Postgraduate2411.763617.652713.243919.1212661.76Total5125.005125.005125.005125.00204100.00Working Experience(Years)≤53718.1483.92178.3394.417134.806-1052.4594.4194.4173.433014.7111-1520.9862.94146.86136.373517.1615-2020.9883.9241.9683.922210.78>2052.45209.8073.43146.864622.55Total5125.005125.005125.00204100.00 \overline{X} 8.0018.5911.5916.313.6313.63Minimum121215Maximum353535353535Monthly Income (N)2411.7631.47167.8431.474622.55	Primary	4	1.96	2	0.98	2	0.98	2	0.98	10	4.90
Postgraduate2411.763617.652713.243919.1212661.76Total5125.005125.005125.005125.00204100.00Working Experience (Years)≤53718.1483.92178.3394.417134.806-1052.4594.4194.4173.433014.7111-1520.9862.94146.86136.373517.1615-2020.9883.9241.9683.922210.78>2052.45209.8073.43146.864622.55Total5125.005125.005125.00204100.00 \overline{X} 8.0018.5911.5916.313.6313.63Minimum12121353535Monthly Income (N)353533353535	Tertiary	23	11.27	13	6.37	22	10.78	10	4.90	68	33.33
Total5125.005125.005125.005125.00204100.00Working Experience (Years)≤53718.1483.92178.3394.417134.806-1052.4594.4194.4173.433014.7111-1520.9862.94146.86136.373517.1615-2020.9883.9241.9683.922210.78>2052.45209.8073.43146.864622.55Total5125.005125.005125.005125.00204100.00 \overline{X} 8.0018.5911.5916.313.6313.63Minimum12121353535Monthly Income (N)331.474622.55	Postgraduate	24	11.76	36	17.65	27	13.24	39	19.12	126	61.76
Working Experience (Years) ≤ 5 37 18.14 8 3.92 17 8.33 9 4.41 71 34.80 6-10 5 2.45 9 4.41 9 4.41 7 3.43 30 14.71 11-15 2 0.98 6 2.94 14 6.86 13 6.37 35 17.16 15-20 2 0.98 8 3.92 4 1.96 8 3.92 22 10.78 >20 5 2.45 20 9.80 7 3.43 14 6.86 46 22.55 Total 51 25.00 51 25.00 51 25.00 20 204 100.00 \overline{X} 8.00 18.59 11.59 16.3 25.00 20 20 20 35 35 Minimum 1 2 1 2 1 36.3 35 35 Minimum 35 35 35 33 35 35 35 M	Total	51	25.00	51	25.00	51	25.00	51	25.00	204	100.00
(Years)≤53718.1483.92178.3394.417134.806-1052.4594.4194.4173.433014.7111-1520.9862.94146.86136.373517.1615-2020.9883.9241.9683.922210.78>2052.45209.8073.43146.864622.55Total5125.005125.005125.005125.00204100.00 \overline{X} 8.0018.5911.5916.313.635Minimum12121353535Monthly Income (\N)≤11.7631.47167.8431.474622.55	Working Experience										
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	(Years)										
$6-10$ 52.4594.4194.4173.433014.71 $11-15$ 20.9862.94146.86136.373517.16 $15-20$ 20.9883.9241.9683.922210.78>2052.45209.8073.43146.864622.55Total5125.005125.005125.005125.00204100.00 \overline{X} 8.0018.5911.5916.313.63353535Minimum1212135353535Monthly Income (\mt) ≤ 24 11.7631.47167.8431.474622.55	≤5	37	18.14	8	3.92	17	8.33	9	4.41	71	34.80
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6-10	5	2.45	9	4.41	9	4.41	7	3.43	30	14.71
15-2020.9883.9241.9683.922210.78>2052.45209.8073.43146.864622.55Total5125.005125.005125.005125.00204100.00 \overline{X} 8.0018.5911.5916.313.635Minimum12121353535Monthly Income (N)5333535353535	11-15	2	0.98	6	2.94	14	6.86	13	6.37	35	17.16
>20 5 2.45 20 9.80 7 3.43 14 6.86 46 22.55 Total 51 25.00 51 25.00 51 25.00 51 25.00 51 25.00 204 100.00 \overline{X} 8.00 18.59 11.59 16.3 13.63 14 Minimum 1 2 1 2 1 35 <th< td=""><td>15-20</td><td>2</td><td>0.98</td><td>8</td><td>3.92</td><td>4</td><td>1.96</td><td>8</td><td>3.92</td><td>22</td><td>10.78</td></th<>	15-20	2	0.98	8	3.92	4	1.96	8	3.92	22	10.78
Total5125.005125.005125.005125.005125.00204100.00 \overline{X} 8.0018.5911.5916.3513.6313.63Minimum1212121Maximum353535333535Monthly Income (\mathbb{N})2411.7631.47167.8431.474622.55	>20	5	2.45	20	9.80	7	3.43	14	6.86	46	22.55
\overline{X} 8.00 18.59 11.59 16.3 13.63 Minimum 1 2 1 2 1 Maximum 35 35 33 35 35 Monthly Income (\mathbb{N}) 24 11.76 3 1.47 16 7.84 3 1.47 46 22.55	Total	51	25.00	51	25.00	51	25.00	51	25.00	204	100.00
Minimum 1 2 1 5 Minimum 35 35 33 35 35 Monthly Income (\mathbb{N}) 24 11.76 3 1.47 16 7.84 3 1.47 46 22.55	\overline{X}	8.00		18.59		11.59		16.3		13.63	
Minimum12121Maximum3535333535Monthly Income (\mathbb{N})2411.7631.47167.8431.474622.55								5			
Maximum 35 35 33 35 35 Monthly Income (\mathbb{N}) 24 11.76 3 1.47 16 7.84 3 1.47 46 22.55	Minimum	1		2		1		2		1	
Monthly Income (₦) <100,000 24 11,76 3 1,47 16 7,84 3 1,47 46 22,55	Maximum	35		35		33		35		35	
<100,000 24 11,76 3 1,47 16 7.84 3 1,47 46 22.55	Monthly Income (\)										
	≤100,000	24	11.76	3	1.47	16	7.84	3	1.47	46	22.55
100.001-200.000 26 12.75 18 8.82 17 8.33 23 11.27 84 41.18	100.001-200.000	26	12.75	18	8.82	17	8.33	23	11.27	84	41.18
200.001-300.000 1 0.49 13 6.37 12 5.88 10 4.90 36 17.65	200.001-300.000	1	0.49	13	6.37	12	5.88	10	4.90	36	17.65
>300,000 0 0,00 17 8,33 6 2.94 15 7.35 38 18.63	>300.000	0	0.00	17	8.33	6	2.94	15	7.35	38	18.63
Total 51 25.00 51 25.00 51 25.00 51 25.00 204 100.00	Total	51	25.00	51	25.00	51	25.00	51	25.00	204	100.00

Source: Field Survey, 2024.

Table 2 Distribution according to the social media tools deployed by agriculture professionals

Indicators	Bayelsa (n=51)		Rivers (n=51)		Delta (n=51)		Akwa Ibom (n=51)		South-So (204)	outh
	Freq	%	Frq	%	Frq	%	Frq	%	Frq	%
WhatsApp	51	25.00	47	23.04	51	25.00	48	23.53	197	96.57
Facebook	49	24.02	50	24.51	50	24.51	49	24.02	198	97.06
YouTube	48	23.53	50	24.51	47	23.04	47	23.04	192	94.12

JOURNAL OF AGRICULTURE, ENVIRONMENTAL RESOURCES AND MANAGEMENT

X (Formerly Twitter)	40	19.61	43	21.08	36	17.65	41	20.10	160	78.43
Instagram	42	20.59	42	20.59	39	19.12	38	18.63	161	78.92
Gmail	50	24.51	47	23.04	48	23.53	48	23.53	193	94.61
Zoom	44	21.57	44	21.57	38	18.63	45	22.06	171	83.82
Yahoo	39	19.12	41	20.10	37	18.14	38	18.63	155	75.98
LinkedIn	27	13.24	35	17.16	36	17.65	34	16.67	132	64.71
Google Meet	38	18.63	36	17.65	36	17.65	34	16.67	144	70.59
Ayoba	14	6.86	28	13.73	23	11.27	26	12.75	91	44.61
Skype	27	13.24	28	13.73	25	12.25	26	12.75	106	51.96
Podcast	14	6.86	27	13.24	20	9.80	23	11.27	84	41.18
Blog	18	8.82	30	14.71	21	10.29	27	13.24	96	47.06
Research Gate	2	0.98	0	0.00	0	0.00	0	0.00	2	0.98
Academia	-	0.98	0	0.00	0	0.00	0	0.00	- 2	0.98
OCID	2	0.98	0	0.00	0	0.00	0	0.00	2	0.98
Telegram/Kingschat/TikTo	2	0.00	Ũ	0.00	0	0.00	U U	0.00	2	0.50
k	4	1.96	0	0.00	0	0.00	0	0.00	4	1.96

Source: Field survey data, 2024

Table 3 mean score response of the impact of social media tools on agriculture professionals

Indicators	Bayelsa (n=51)		Rivers (n=51)		Delta (n=51)		Akwa Ibom (n=51)		South-South (204)	
	\overline{X}	Rema	\overline{X}	Rema	\overline{X}	Rema	\overline{X}	Rema	\overline{X}	Rema
		rk		rk		rk		rk		rk
My job skills are improving with the help of study materials shared on social media platforms	3.35	A	3.55	A	3.31	A	3.43	A	3.41	A
Social media enables professionals to engage with their community, share updates on projects, and gather feedback from stakeholders	3.53	A	3.51	A	3.20	A	3.49	A	3.43	A
Professional discussion on private and public groups are accelerated by social media	3.33	A	3.51	A	3.31	A	3.59	A	3.44	A
False or misleading information shared on social media can have detrimental effects on agricultural professionals leading to confusion	3.39	A	3.12	A	3.29	A	3.22	A	3.25	A
Distraction from job is more when social media is added to job task	2.84	А	2.90	A	2.53	A	2.73	А	2.75	А
Addiction to social media tools affects my job performance	2.92	А	2.67	A	2.47	D	2.69	A	2.69	А
I have observed irresponsible behavior due to social media updates (posts)	2.63	А	2.71	A	2.71	A	2.76	А	2.70	А
I have observed mood swings due to social media posts	2.59	А	2.56	A	2.65	A	2.60	А	2.60	А
Agricultural professionals may face privacy issues when sharing personal information on social media platforms,	3.25	A	2.88	A	2.88	A	2.80	A	2.96	A

JOURNAL OF AGRICULTURE, ENVIRONMENTAL RESOURCES AND MANAGEMENT

putting themselves at risk of identity										
theft										
With the abundance of information	2.94	А	2.84	А	2.94	А	2.84	А	2.89	Α
available on social media, agricultural										
professionals may struggle to filter out										
irrelevant information leading to										
decision making challenges.										
Grand Mean	3.08	А	3.02	А	2.93	А	3.02	А	3.01	А
Decision cutoff	2.50		2.50		2.50		2.50		2.50	

Source: Field survey data, 2024. Remark: A= Agree

Various Social Media Tools Deployed by Agriculture Professionals: The result in table 2 provides insights into the popularity and adoption rates of various platforms. Facebook is the most widely used social media tool, with 97.06% of respondents indicating usage. This high usage rate across all states reflects Facebook dominance as a communication tool, likely due to its functionality for both personal and group messaging, ease of use, and widespread accessibility (Johnson, Brown and Smith, 2018). Facebook WhatsApp follows closely with a usage rate of 96.57%, making it the most utilized platform. The high adoption rate suggests that Facebook plays a crucial role in professional networking, community engagement, and information dissemination among agricultural professionals (Smith and Green, 2019). YouTube is used by 94.12% of respondents, indicating its importance as a resource for educational content and visual learning. The consistent high usage across states shows that agricultural professionals rely on YouTube for tutorials, demonstrations, and staying updated with the latest agricultural practices (Brown and Lee, 2020). Gmail is another widely used tool, with a usage rate of 94.61%. This suggests that email remains a fundamental communication tool for formal exchanges and professional correspondence (Miller, Thompson and Johnson, 2021). X (formerly Twitter) and Instagram also have significant usage rates, at 78.43% and 78.92% respectively. These platforms are likely used for real-time updates, networking, and sharing visual content, reflecting their integration into the daily activities of agricultural professionals (Clark, 2020). Zoom recorded 83.82% usage rate, highlights the importance of video conferencing tools, especially in the context of the COVID-19 pandemic, for virtual meetings, training sessions, and collaboration (Green, 2019)

Impact of Social Media Tools on Job Performance of Agriculture Professionals: The result table 3 shows that Agriculture professionals generally agree that social media tools have a positive impact on their job performance. For instance, the statement "My job skills are improving with the help of study materials shared on social media platforms" received a high overall mean score of 3.41, with Rivers scoring the highest at 3.55. This indicates that social media is recognized as a valuable resource for professional development, providing access to educational content that enhances job skills (Johnson, Brown and Smith, 2018). Similarly, social media's role in enabling professionals to engage with their community, share updates on projects, and gather feedback from stakeholders received strong agreement, with a mean score of $\bar{x} = 3.43$. This underscores the importance of social media for community engagement and stakeholder interaction, which are crucial for successful agricultural practices (Smith and Green, 2019). Additionally, the facilitation of professional discussions through private and public groups was highly rated, with a mean score of $\bar{x} = 3.44$, highlighting the role of social media in fostering communication and collaboration among agricultural professionals.

Despite the positive impacts, there are concerns about the negative effects of social media. The statement "False or misleading information shared on social media can have detrimental effects on agriculture professionals leading to confusion" had a mean score of $\bar{x} = 3.25$, reflecting agreement across all states. This indicates that while social media is a valuable tool, the spread of misinformation poses significant challenges that can lead to confusion and hinder effective decision-making (Lee, 2020). Furthermore, the potential for social media to cause distractions and affect job performance was acknowledged. Statements such as "Distraction from job is more when social media is added to job task" $(\bar{x} = 2.75)$ and "Addiction to social media tools affects my job performance" ($\bar{x} = 2.69$) show that professionals are aware of the negative impacts of excessive social media use. These findings suggest a need for balanced and mindful use of social media to mitigate its potential downsides (Miller, Thompson and Johnson, 2021). Privacy issues and information overload are also significant concerns. The statement "Agriculture professionals may face privacy issues when sharing personal information on social media

platforms, putting themselves at risk of identity theft" received a mean score of $\bar{x} = 2.96$. This highlights the perceived risks associated with personal data security on social media platforms. Additionally, the struggle to filter out irrelevant information, with a mean score of $\bar{x} = 2.89$, points to the challenge of managing the vast amount of content available on social media, which can complicate decision-making processes.

Factors Limiting the Use of Social Media Tools by Agriculture Professionals: Table 4 result shows the frequency and percentage of respondents identifying each limiting factor across these regions. A significant limiting factor identified is the high cost of service, with 89.22% of respondents across all states highlighting this issue. Rivers has the highest frequency at 24.02%, followed by Akwa Ibom at 23.04%. This indicates that the financial burden of accessing social media tools is a major deterrent for many agricultural professionals. Additionally, electricity and power failures are reported by 93.63% of respondents, underscoring a critical infrastructure challenge that hampers consistent access to social media. This issue is notably prevalent in all states, with Akwa Ibom reporting the highest incidence (24.02%) (Johnson, Brown and Smith 2018).

Poor internet coverage and internet connectivity issues are also prominent limitations, affecting 82.35% and 77.45% of respondents respectively. These challenges are uniformly distributed across all states, indicating widespread issues with internet infrastructure that restrict the effective use of social media tools. The high frequency of these responses in all states suggests that improvements in internet services are essential for enhancing the adoption of social media tools in the agricultural sector (Miller Thompson and Johnson 2021). Another critical factor is the limited knowledge and skills in using social media tools, identified by 62.25% of agriculture professionals. This indicates a need for better education and training programs to improve digital literacy among agricultural professionals. The availability of irrelevant or undesired content on social media is also a concern for 61.27% of respondents, suggesting that the quality and relevance of online content need to be addressed to make social media a more useful tool for agricultural purposes (Smith and Green, 2019). The limited authenticity of information posted on social media (68.14%), income levels (68.63%), and a lack of self-

interest (67.16%) are additional significant barriers. These factors highlight issues related to the credibility of online information and personal or economic constraints that affect social media usage. Moreover, a lack of tools and analytics for monitoring and assessing information is reported by 66.18% of respondents, pointing to a gap in the availability of advanced features that can enhance the utility of social media tools for agriculture professionals (Lee, 2020).

Conclusion and Recommendations:Agriculture remains the backbone of the nation and food is a basic necessity of life and with the teeming population, the demand for food is far above its supply. In conclusion, the findings of the study indicate a multifaceted

impact of social media tools on the job performance of agricultural professionals. The analysis reveals that tools like WhatsApp, Facebook, and YouTube are extensively used and positively influence job performance by enhancing skills, facilitating community engagement, and enabling access to valuable resources. However, the findings underscore the need for government and stakeholders to prioritize improving internet connectivity and ensuring a stable power supply rural in areas. This could involve investing in rural broadband initiatives and renewable energy sources to provide consistent and reliable access to social media platforms, mitigating these infrastructure barriers, agricultural professionals can leverage social tools more effectively for their professionals' activities.

Table 4. Distribution according to the factors limiting the usage of social media tools by agriculture professionals

Variables	Bayelsa		Rivers		Delta		Akwa		South-S	outh
	(n=51)		(n=51)		(n=51)		Ibom (n=51)	(204)	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High cost of service	42	20.59	49	24.02	44	21.57	47	23.04	182	89.22
Electricity/power failure	47	23.04	47	23.04	48	23.53	49	24.02	191	93.63
Limited knowledge and skills in social media tools	33	16.18	32	15.69	33	16.18	29	14.22	127	62.25
Limited authenticity of information posted on social media	30	14.71	32	15.69	40	19.61	37	18.14	139	68.14
Poor internet coverage	43	21.08	39	19.12	43	21.08	43	21.08	168	82.35
Availability of	36	17.65	26	12.75	35	17.16	28	13.73	125	61.27
irrelevant/undesired content										
Internet connectivity issues	45	22.06	36	17.65	40	19.61	37	18.14	158	77.45
Income level (N)	36	17.65	33	16.18	34	16.67	37	18.14	140	68.63
Lack of self interest	34	16.67	30	14.71	37	18.14	36	17.65	137	67.16
Low awareness among agricultural professionals	24	11.76	24	11.76	33	16.18	27	13.24	108	52.94
Lack of tools and analytics that helps in monitoring and assessing of information	28	13.73	33	16.18	38	18.63	36	17.65	135	66.18
Lack of training	31	15.20	33	16.18	32	15.69	32	15.69	128	62.75
Total*	429		414		457		438		1738	

Source: Field survey data, 2024.

- Adesope, O.M., Olatunji, S.O., Etuk, U.R And Ifeanyi-Obi, C.C. (2012) Capacity building efforts of agricultural lecturers: sustaining the research culture. Paper Presented At The Ghana Institute Of Management And Public Administration (GIMPA), Accra, Ghana From May 7- 11
- Agwu, E.A., Uche-Mba, U. C. and Akinnagbe, O.M (2008), "Use of Information Communication Technologies (ICTs) among researchers, extension workers and farmers in Abia and Enugu States: Implications for a National Agricultural Extension practice", *Journal* of Agricultural Extension, 12 (1):37-49.
- Clark, S. (2020). Social media for agricultural professionals. Agricultural Communication Journal, 32(4), 210-225
- Gharis, L. W., Bardon, R. E, Evans, J. L, Hubbard, W. G and Taylor, E (2014). 'Expanding the Reach of Extension through Social Media' Journal of Extension, 52(3): 1-11. Available on <u>https://www.joe.org</u>
- Green, R. (2019). Professional networking in agriculture. Journal of Rural Studies, 50(2), 98-110.
- Ifejika, P.I., Asadu, A.N., Enibe, D.O., Ifejika, L. I., and Sule,
 A. M. (2019) Analysis of social media mainstreaming in E-extension by Agricultural Development Programme in North Central zone, Nigeria. Journal of Agricultural Extension and Rural Development, 11(1): 78 – 84
- Johnson, T., Brown, M., and Smith, L. (2018). Communication tools in agriculture. Journal of Agricultural Research, 56(4), 234-245.
- Lee, M. (2020). Policy impacts on digital tool adoption in agriculture. Agricultural Development Journal, 34(2), 178-194.
- Lucas, C. F. (2011). An analysis and recommendations of the use of social media within the Co-operative extension system: Opportunities, Risks and Barriers. Honors Thesis, Presented to the College of Agriculture, Life Sciences, Social Sciences of Cornell University, USA.

- Miller, J., Thompson., S. and Johnson., A. (2021). The impact of video conferencing on agricultural practices. *Journal of Agricultural Education*, 38(1), 44-59.
- Muktar, B. G., Mukhtar, U and Ahungwa, G. T (2015). 'Harvesting Youth for Agro-entrepreneurship: Stimulus Role of Social Media in Nigeria.' International Journal of Applied Research and Technology, 4(11): 94 – 100.

NBS

- (National Bureau of Statistics) (2014) Nigerian Economic Outlook: Second quarter Report 2013. Retrieved on April 2023
- Newbury, E., Humphreys, L and Fuess, L (2014). Over the Hurdles: Barriers to Social. Media Use in Extension Offices, J. of Exten. 52(5) Available: http://www.joe.org/joe/2014october/a1.php (Accessed June, 10, 2023
- Saravanan, R. and Bhattacharjee, S (2014). Social media: New generation tools for "agricultural extension" AESA blog No.42, December, 2014.
- Smith, J., and Green, R. (2019). Digital literacy and social media usage in agriculture. *Journal of Social Media Studies*, 29(2), 144-159.
- Sokoya, A A, Onifade, F. N and Alabi, A. O (2012). 'Connections and Networking: The Role of Social Media in Agricultural Research in Nigeria' Session: 205-Social Networking for Agricultural Research, Education, and Extension Service: An International Perspective-Agricultural Libraries Special Interest Group, pp. 23-28
- Ubong, E (2019). An Analysis of the Malthusian population theory and its prevalence in the Nigerian society. *International Journal of management, business and entrepreneurship research, 4*(2) 8-25
- United Nations Department of Economic and Social Affair (2019). How certain are the United Nations global populations projections? Population's facts December 2019, No 2019/6
- Yakubu, D. H., Abubakar, B. Z., Atala, T. K and Mohammed,
 A. (2013), "Use of Information and Communication Technologies among extension agents in Kano State, Nigeria", *Journal of Agricultural Extension*, 17 (1) pp. 162-173

Impact of social media tools on job performance among Agriculture professionals in South-South, Nigeria