

Training Needs Assessment on the Use of Social Media among Extension Agents in Oyo State, Nigeria

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ABSTRACT

Agricultural information exchange has been dominated by industrial media such as newspapers, television, and magazines for decades. However, social media as a form of Information and Communication Technology (ICT) method for harmonizing sustainable agriculture and natural resources provides broader agricultural community that eliminates physical distance. The study therefore examined training needs assessment on the use of social media among agricultural extension agents in Oyo State, Nigeria. All the 90 agricultural extension agents in Oyo State Agricultural Development Programme (OYSADEP) were interviewed. This includes 35 from Ibadan/Ibarapa zone, 22 from Saki, 19 from Oyo and 14 from Ogbomosho zone. Result shows that the mean age of extension agents in Oyo State was 38 ± 2 years, (98.8%) had one form of tertiary education or the other. Majority (72.0%) exhibited high need for training on the use of social media even when the result revealed that Facebook (47.6%) was mostly used social media among the agents. The result of inferential statistics shows that there was a significant relationship between education $\chi^2=10.142$, $p<0.05$, marital status ($\chi^2=19.632$, $p<0.05$), social media used ($r=-0.337$, $p<0.05$) and training needs. However, inverse but significant relationship existed between extension agents' knowledge of social media ($r=-0.875$, $p<0.05$) and training needs. Concerted efforts by relevant stakeholders to train extension agents will in no measure foster sustainable food security drive in Nigeria.

1. Introduction

Increasing smallholder productivity is one the greatest challenge in this century. The dimensions of the challenge include growing populations, growing demand for food, rising poverty, economic stagnation, worsening environmental degradation, and climate change. ICTs based applications like Variable rate technology, Geographical Information System (GIS), Geographical Position System (GPS), satellite imagery, and other data collection technologies have increased the information available about soil health, weather conditions, and disease outbreaks. These ICTs based applications provide information that makes very site-specific farming possible and thereby raising hope for agricultural productivity. However, the key to using these technologies to boost productivity requires complementary technologies. Data analysis technologies (such as data mining or mediation software) and information dissemination technologies (such as mobile phones and radio) are essential to reaching smallholders effectively. Dissemination also includes the crucial human component: Extension agents and farmers themselves must transmit and share knowledge (International Institute for Communication and Development (IICD), 2006).

Agricultural enterprise requires knowledge management to enhance agricultural productivity and combat the problem of food insecurity. This enables appropriate agricultural information to reach agricultural extension agents (knowledge intermediaries) and smallholder farmers in a timely manner. Rural education is increasingly becoming important means of disseminate these information, however

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many rural schools still operate tenuously, some relying on untrained or volunteer teachers necessarily disconnected from pedagogical training or dominance of the subject matter.

Currently in Nigeria, agricultural information comes mainly from research institutions, which generates new technologies to farmers. It thus follows that the agricultural research information service center is the custodian of several information resources including CD-Rom databases (which could be bibliographic, research, factual), multimedia knowledge bases and in house publication. Other sources may include agricultural information providers such international organizations and local non-governmental organizations and community based organization. The main modes of delivery are farmers' magazines, newspaper, posters, handbooks, radio, television, films and videos. However, there are ample rooms for testing other forms of information dissemination, such as the mobile telecommunication system (Omotayo, 2005).

Social media use for disseminating agricultural information has the potential to bridge the gap created by the short fall in the farmers' extension ratio. The ratio of extension agents to farm families as recommended by Food and Agricultural Organisation is put at 1:250; this is against 1: 4,882 with 415,030 farm families in Oyo state (FAO, 2012). The use of social media is becoming increasingly necessary among all professionals of the world. The information that is transfer on the social media cannot be compared to any other means of information dissemination in the world because it gives direct access to information source and how to go about the use of the information gathered. This is believed to have the potential to change the face of agriculture in Nigeria and improve or increase the channel of gathering information among farmers because the ratio of agricultural extension officers is very low compare to the number of farmers that exist in the country (FMARD, 2011).

The field of agricultural extension specializes in the dissemination of information to the farmers and rural dwellers to improve their standard of living in all aspect of life. Social media could provide a platform for an interaction mediated by electronic communication between the farmers or extension officers. According to Ogungbameru (2004), when there is difference or gap between actual performance and what is needed or expected, productivity suffers. Training can reduce it if it does not completely eliminate this gap. The training is to improve the means of disseminating information through the use of social media. The rate at which technology is increasing is overwhelming and social media as a part of technology improvement is growing day by day. Integrating social media into extension work for disseminating agricultural information to farmers will elicit easy access to innovations and invariably improve agricultural production. However, the use of social media is not yet maximized by professionals in Nigeria and as such makes it difficult for farmers to get necessary information to solve their problems.

In the recent time, extension service, service providers and extension clients are experimenting with new digital opportunities that can be effectively used to exchange process, manage and communicate information to help rural farmers to effectively utilize any agricultural information received (Sanusi, Petu-Ibikunle and Mohelia, 2010). Therefore, It suggests that competent and well-trained extension agents are needed if adoption of new technologies required to achieve Millennium Development Goals (MGDs) hope to be achieved in 2015. Social media will provide quick and easy way to build relationships and interact with people in agriculture. Social media creates a much broader agriculture community, so obstacles like physical distance and isolation are issues of the past (MSU, 2012).

One of the major roles of social media in extension is its ability to facilitate effective linkage between extension workers and farmers and also between farmers and research result. IDU (2006), a study conducted on cyber Extension (University Based Extension Based Project for Agricultural Research) found that the web could be effectively used to facilitate extension work, appropriate forum for educational outreach and cost-effective means to reach extension agents, educators and opinion leaders who will transfer the knowledge gained to their clientele. It is against this backdrop that the study was carried out to assess the training needs of extension agents on the use of social media for agricultural information dissemination in Oyo State, Nigeria. The specific objectives are to:

determine the perception of extension agents on the use of social media for agricultural information dissemination.

1. determine the awareness of the extension agents on the use of social media for agricultural information dissemination.
2. investigate the knowledge of extension agents on the use of social media for agricultural information dissemination.
3. ascertain the constraints in the use of social media by extension agent.

2. Hypotheses

- a) There is no significant relationship between types of social media used and training needs on social media.
- b) There is no significant relationship between perception of social media and training needs on social media.
- c) There is no significant relationship between knowledge of social media and training needs on social media.

3. Methodology

3.1. Study Area

The study was carried out in Oyo state, Nigeria. Oyo State is an inland state in south-western Nigeria, with its capital at Ibadan. It is bounded in the north by Kwara State, in the east by Osun State, in the south by Ogun State and in the west partly by Ogun State and partly by the Republic of Benin. Oyo state is situated in Latitude 7°24'N and Longitude 3°54'E as well as altitude 234m above sea level. Oyo state was created in February, 1976 and covers a total of 28,454 SqKm of land mass. Oyo state has a population of about 5, 591, 589 people with 33 local government areas. The Climate is equatorial, notably with dry and wet seasons with relatively high humidity. The dry season lasts from November to March while the wet season starts from April and ends in October. Average daily temperature ranges between 25 °C (77.0 °F) and 35 °C (95.0 °F), almost throughout the year (wikipedia, 2013).

The population of the study constituted all the agricultural extension agents that work under Agricultural Development Programme (ADP) in Oyo state.

Sampling Procedure and Sample size: Oyo state has four Agricultural Development Programme (ADP) zones which include Ibadan/Ibarapa, Saki, Oyo and Ogbomosho zones. Ibadan/Ibarapa has 35, Saki 22, Oyo 19 and Ogbomosho 14 extension agents to give a total of 90 respondents. All the 90 extension agents in the state were sampled for the study.

3.2. Measurement of variables

Independent Variables

The use of Social Media

Respondents were provided with list of the following social media: Facebook, Twitter, MySpace, BBM, YouTube, Yahoo Messenger, MSN, goggle talk, logbook, LinkedIn. They were asked to respond to questions related to access, frequency of use and the purpose for which they are used. The mean score was determined to ascertain respondents' access, frequency of use and the purpose for which social media were used for various purposes. This was measured at interval level of measurement

Perception on the use of social media

Respondents were asked to react to 21 perception 5 likert scale statements to ascertain their perception on the training needs on the use of social media for agricultural information dissemination. All positive statements were scored 5, 4,3,2,1, while negative statements were score in

reverse other. The perception value above the mean was considered favorable and below mean unfavorable. This was measured at nominal level of measurement.

Knowledge on the use of Social media

Respondents were presented with 16 social knowledge questions. Correct response was score 1 and incorrect response 0. The maximum score was 16, while the minimum score was 0. The scores were standardised using the mean to categorise respondents' knowledge on the use of social media into high and low. This was measured at nominal level of measurement.

Dependent Variables

The dependent variable for this study is the training need on the use of social media. A two point rating scale was used to measure the training needs. The scale was coded needed (1) and not needed (0). A mean value was used to represent the responses into needed and not needed. A training need that was needed has a score equal or above mean and while lower than mean was not needed. This was measured at interval level of measurement.

4. Results and Discussion

Structured questionnaire was administered to all the 90 extension agents sampled by trained enumerators. However, 91.1% return rate was obtained that represented 82 respondents analysed and discussed in this section. Data were analysed with Statistical Package for Social Sciences (SPSS) software to obtain the Pearson Product Moment Correlation (r) and Chi Square (χ^2) values.

Distribution of Respondents according to their personal Characteristics

Table 1 shows that the mean age of extension agents in Oyo State was 38 years, as the majority (84.1%) of them were between 28 and 49 years old. Only 4.9% and 11.0% of them were younger than 28 years and older than 49 years, respectively. This result is consistent with Akinbile (2007) who found that population between 21 and 40 years of age constitute the active work force. It implies that even distribution of age among the extension agents will assure continuity in the extension processes and knowledge exchange among the extension agents required for increase productivities. Majority (89.0%) of the extension agents were male while only 11.0% of them were females. This indicates a serious gender imbalance in the Agricultural Development Projects of the State. In Akinsorotan and Oladele (2009) Agricultural Development Project extension officer are mainly male officers and this is not good for gender equality in extension services. The result further revealed that most of the respondents were married (91.5%) while only 8.5% were single. Nearly all (98.8%) had one form of tertiary education or the other. This result indicates that extension service delivery among the literate minds. This will provide a solid platform to inculcate social media training for dissemination agricultural information required to drive the development of agricultural transformation agenda. (FMRAD, 2011) asserted that education is required as a basic prerequisite to sharpen extension agents' knowledge, skills and practices for effective delivery if food security will be achieved in Nigeria.

Table 1 further show that the mean income per annum of the extension agents was \$2,016. The majority (78.0%) of them earn between \$884 and \$3,149 per annum. The income distribution of the agents reveals that the agents were not well paid in the study area. Consequently, their financial status will affect their purchasing power of ICTs needed for social media. FAO (2012) opined all agricultural extension agents should be well remunerated as an incentive to ensure proper and adequate agricultural information delivery. The mean year of experience of the extension agents was 7 years. The majority (84.1%) of them had between 2 and 13 years of experience. It implies that majority of the extension agents are still learning on the job and adapting to new technologies might not be difficult, this consistent with Jibowo (2005). On the type of extension services used by the respondents, majority (62.2%) operates the T&V service delivery system, while 24.4% of them operate the general extension service system. Only 3.6% specialised in crop and fishery extension, while 6.0% were specialised in women extension service delivery system. It implies that there is a dearth of specialised extension service delivery system in the state and as such makes dissemination of viable information through social media somewhat difficult. This is against Sokoya, Onifade and

Alabi (2012) who found that extension services delivery is developing fast due to the introduction of information communication technology.

Table 1. Distribution of the extension agents according to their personal characteristic N=82

Variables	Frequency	Percentage
Age category (in years)		
<28	4	4.9
28-49	69	84.1
>49	9	11.0
Mean=38		
Sex		
Male	73	89.0
Female	9	11.0
Marital status		
Single	7	8.5
Married	75	91.5
Educational level		
Secondary	1	1.2
Tertiary	81	98.8
Income per annum (\$)		
< 884	17	20.7
884 – 3,149	64	78.0
>3,149	1	1.2
Mean= 2,016		
Religion		
Christianity	65	79.3
Islam	17	20.7
Years of experience		
<2	3	3.7
2-13	69	84.1
>13	10	12.2
Mean=7		
Type of extension service		
General	20	24.4
Crop	3	3.6
Fishery	3	3.6
Women	5	6.0
T and V	51	62.2

Distribution of Respondents according to the Type of ICTs use for Social Media

Table 2 shows that all (100.0%) of the extension agents were using mobile phones for extension services particularly through text messages which a major component of the growth enhancement scheme of the agricultural transformation agenda of the Federal Government of Nigeria. Very few were using laptops (26.8%) and desktop computers (20.7%) for extension work. However, none of the extension agents were using the latest multifunctional ICTs that is iPads and tablets which is an indication that the use of ICTs was still low among the agents. Tesfaye (2010) opined that multifunctional ICTs like iPads and tablets offer quicker access to social media as it can be moved around in the farms and rural environment.

Table 2. Distribution of ICTs Use by Extension Agents N=82

ICTs	Frequency	Percentage
Mobile phone	82	100.0
Laptops	22	26.8
Desktop computer	17	20.7
Ipads	0	0.0
Tablets	0	0.0

Distribution of Respondents according to Social media use for Information

Table 3 shows that Facebook was the mostly (47.6%) used social media among the agents, followed by Yahoo Messenger (22.0%). This medium if well harnessed the gap between researchers and farmers can be bridged. This is premised on the fact that social media enables blogging, tagging, discussion and networking. Social networking sites are becoming the mainstream cultural phenomenon and Agricultural Researchers (ARS) have found tremendous role social media can play in establishing connections, facilitating dissemination of agricultural research findings and exchange of information as an important ingredient for increasing agricultural production (Boyd and Ellison, 2007).

Table 3. Distribution of Social Media Use by Agricultural Extension Agents N=82

Variables	Frequency	Percentage
Twitter	7	8.5
MySpace	8	9.8
Facebook	39	47.6
YouTube	9	11.0
BBM	7	8.5
Google talk	10	12.2
Flickr	2	2.4
LinkedIn	3	3.7
Yahoo messenger	18	22.0
MSN	10	12.2
Logbook	2	2.4
Pheed	0	0.0

Respondents' Perception of social media for information Dissemination

Table 4a and 4b show the distribution of respondents according to their perception of social media for agricultural information Dissemination. Extension agents perceived the use of social media to be effectively save time and energy (mean=3.6), they also felt that misuse of social media can negatively affect the extension agent in charge of account (mean=2.9). Extension agents expressed the fact that Social media can be used in other aspect side from extension service delivery (mean=2.4). The Tables further show that more (54.9%) of the extension agents had a favourable perception of social media while 45.1% were unfavourably disposed to social media use. The implication of this is that the extension agents' perception of social media was favourable and if the advantages can be maximised for disseminating agricultural information, farmers will have access to results of researchers needed to boost production. This finding is consistent with Sokoya et al (2012) who affirmed that disposition to the use of social media can affect the use for whatever purpose it is intended.

Table 4a. Distribution of Extension Agents' Perception Of Social Media N=82

S/n	Statement	Strongly agree	Agree	Undecided	Disagree	Strongly disagree	Mean
1	Social media aids or encourage information dissemination	45 (54.9)	29 (35.4)	-	8 (9.8)	-	1.7
2	Age is not a barrier in the use of social media	19 (23.2)	43 (52.4)	10 (12.2)	10 (12.2)	-	2.1
3	Social media can be use in extension delivery services	37 (45.1)	32 (39.0)	4 (4.9)	4 (4.9)	-	1.6
4	The use of social media may not effectively save time and energy	8 (9.8)	12 (14.6)	4 (4.9)	24 (29.3)	31 (37.8)	3.6
5	Social media can be used in other aspect of life than in extension delivery service	25 (30.5)	22 (26.8)	12 (14.6)	20 (24.4)	3 (3.7)	2.4
6	For new users, social media might require the technical know-how to operate it	19 (23.2)	58 (70.7)	5 (6.1)	-	-	1.8
7	Social media encourage a continuity in inter personal relationship which can help to maintain a cordial extension agent to farmer relationship	48 (58.5)	31 (37.8)	3 (3.7)	-	-	1.5
8	Social media has more advantages to disadvantages	26 (31.7)	47 (57.3)	6 (7.3)	3 (3.7)	-	1.8
9	Social media is not a good platform for confidentiality	17 (20.7)	38 (46.3)	9 (11.0)	17 (20.7)	1 (1.2)	2.4
10	Social media training will encourage the highest level of extension professionalism	45 (54.9)	29 (35.4)	6 (7.3)	2 (2.4)	-	1.6
11	Social media encourage important dialogue	41 (50.0)	33 (40.2)	8 (9.8)	-	-	1.6
12	Social media promotes better and fast agriculture solution	46 (56.1)	30 (36.6)	5 (6.1)	1 (1.2)	-	1.5
13	Extension agents can pay more attention to details through social media	33 (40.2)	26 (31.7)	2 (2.4)	8 (9.8)	13 (15.9)	2.3
14	Social media encourage easy access to information for extension agents	38 (46.3)	33 (40.2)	5 (6.1)	3 (3.7)	-	1.6
15	Social media is a good way to enlighten the farmers on issues relating to whatever problem they are facing	38 (46.3)	30 (36.6)	9 (11.0)	5 (6.1)	-	1.8
16	Social media is the best way to improve extension delivery service in Nigeria	41 (50.0)	37 (45.1)	3 (3.7)	1 (1.2)	-	1.6
17	Social media aids the coming together of people in their groups	36 (43.9)	34 (41.5)	6 (7.3)	6 (7.3)	-	1.8
18	Social can be used to easily track farmers inputs and outputs	25 (30.5)	40 (48.8)	6 (7.3)	7 (8.5)	4 (4.9)	2.1
19	Social media help in achieving transparency in extension services	36 (43.9)	30 (36.6)	4 (4.9)	12 (14.6)	-	1.9
20	Social media bring about collaboration between extension agents across the globe	41 (50.0)	32 (39.0)	7 (8.5)	2 (2.4)	-	1.6
21	Social media misuse can affect the extension agent in charge of the account	10 (12.2)	27 (32.9)	19 (23.2)	13 (15.9)	13 (15.9)	2.9
22	There is need for training on the use of social media for extension agents	41 (50.0)	31 (37.8)	7 (8.5)	-	-	1.5

Table 4b. Extension Agents' Level of Perception of Social Media

N=82

Variable	Frequency	Percentage
Unfavourable	37	45.1
Favourable	45	54.9

Distribution of Respondents according to their Knowledge of social media

Knowledge test results on Table 5 revealed that many respondents already had basic knowledge of social media. About 95.1% of the extension agents knew about social media and 92.7% knew that it can be used to share innovation. Also, 91.5% knew that it can be used to send information to many people in different places within a short period of time and can be used to store contact details. Okwu and Daudu (2011) observed that Nigeria has an elaborate agricultural research and extension system but the result of these researches are not fully made available to the end users; hence, the researchers, extension workers, farmers, which means that end users are not sufficiently exposed to new knowledge. It is imperative there that effort should be made by relevant government and non-government agencies to establish connections among stakeholders for proper dissemination of current and relevant information/knowledge for sustainable agricultural production.

Table 5. Distribution of Extension Agents' Knowledge of Social Media

N=82

S/n	Statement	Yes	
		Frequency	Percentage
1	Have you heard about social media e.g Facebook, twitter, YouTube, 2go, MSN, Pheed etc	78	95.1
2	Do you use social media for personal communication	69	84.1
3	You can upload video, picture, message via social media	62	75.6
4	You can communicate with your farmers through social media	65	79.3
5	You can send information to many in different places within a short period via social media	75	91.5
6	You cannot create personal accounts on social media	49	59.8
7	It is possible to see your farmers while attending to them via social media	42	51.2
8	You can attach documents to be sent through social media	69	84.1
9	You can have personal information or notes on social media	68	82.9
10	You can have conference talk through social media	55	67.1
11	You can share new innovation through social media	76	92.7
12	You can have most of your contact details on social media e.g phone number, email etc	75	91.5
13	Most of your social media account can be linked to each other	65	79.3

Distribution of Extension Agents' Awareness of Social Media

Table 6 reveals that Facebook is the social media that was the most popular (97.6%) and followed by Yahoo Messenger (69.5%). Other social media that they were familiar with include Blackberry Messenger (58.5%), Google Plus (53.6%), Google Talk (52.4%), Youtube (46.3%) and Twitter (42.7). All the respondents maintain at least one account with the social networking sites, but Facebook was the most popular social media used by agricultural extension officers in Nigeria. This support the opinion of Boyd and Ellison (2010) that Facebook is the most used social media in Nigeria.

Table 7. Distribution of Extension Agents' Awareness of Social Media N=82

s/n	Social media	Yes	
		Frequency	Percentage
1	Facebook	80	97.6
2	Twitter	35	42.7
3	YouTube	38	46.3
4	Blogs	16	19.5
5	MSN	25	30.5
6	Google talk	43	52.4
7	Yahoo messenger	57	69.5
8	Google plus	44	53.6
9	2go	51	62.2
10	BBM	48	58.5
11	Pheed	16	19.5
12	Logbook	17	20.7
13	MySpace	23	28.0
14	LinkedIn	17	20.7
15	Flickr	15	18.3
16	Hi5	15	18.3
17	Friend feed	15	18.3

Training need

Table 8 reveals that the top needed areas of training in the use of Facebook among the agents were 'tagging contact to a picture or video (70.7%)', 'placing an advertisement (70.7%)', 'creating a group (68.3%)' and 'uploading pictures and videos (64.6%)'. The top needed areas of training in the use of Twitter were 'opening an account (78.0%)', 'posting a link (76.8%)' and 'making a tweet one's favourite (76.8%)'. In addition, the top needed areas of training in the use of YouTube were 'placing an advertisement (78.0%)', 'posting a video message (76.8%)' and 'viewing a video (76.8%)'. The top needed areas of training in the use of Blog were 'creating an account (76.8%)', 'posting messages and information (76.8%)' and 'maintaining an account (76.8%)'. This result shows that the extension agents require basic skills in the use of all the social media.

Table 8. Distribution of Extension Agents' Training Need on the Use of Social Media N=82

S/n	Variable	Needed	
		Frequency	Percentage
A Area of training Facebook			
1	Opening Facebook account	48	58.5
2	Uploading pictures and videos	53	64.6
3	Posting message	40	48.8
4	Share Information	41	50.0
5	Create your group	56	68.3
6	Send and receive messages	39	47.6
7	Place an advertisements	58	70.7
8	Search for new friends	45	54.9
9	Add new friends	46	56.1
10	Tag contact to a picture or video	58	70.7
B Area of training on Twitter			
1	Open an account	64	78.0
2	Post tweet	55	67.1
3	Post link	63	76.8
4	Follow a friend	57	69.5
5	Unfollow a friend	55	67.1
6	Search for new friends	54	65.9
7	Make a tweet your favorite	63	76.8

S/n	Variable	Needed	
8	Send and read direct messages (DM)	54	65.9
C	Area of training on YouTube		
1	Open an account	60	73.2
2	Receive video message	60	73.2
3	Post video message	63	76.8
4	Placing advertisement	64	78.0
5	Searching for videos	61	74.4
6	downloading video	61	74.4
7	How to view video	63	76.8
D	Area of Training on Blog		
1	Create an account	63	76.8
2	Post messages or information	63	76.8
3	Receive message or information	62	75.6
4	Create a link to other media	62	75.6
5	Maintain an account	63	76.8
E	Area of training on 2go		
1	Registration of an account	59	72.0
2	Receive and send message	58	70.7
3	linking it to other social media	58	70.7
4	Receive messages from other social media	58	70.7

Hypotheses testing

Result of analysis on Table 9 shows that there were no significant relationship between sex ($\chi^2=1.347$, $p>0.05$), religion ($\chi^2 = 1.652$, $p>0.05$), type of extension practice ($\chi^2 =8.729$, $p=0.05$) and their training need on the use of social media. However, there was a significant relationship between their educational level ($\chi^2=10.142$, $p<0.05$), marital status ($\chi^2 19.632$, $p<0.05$) and training need on the use of social media. This result implies that the extension agents' training need on the use of social media is irrespective of their sex, religion and type of extension practice, but on their marital status and educational level. The significance of marital status is due to age category. The expected relationship between educational level and training need was upheld; meaning that the more educated an extension agents had less need for training on social media. In a related study, Sokoya et al (2012) affirmed education is imperative to acquiring social media skills.

Table 9. Chi Square relationship between socioeconomic characteristics and training need

Variable	Chi-square value	df	p-value
Sex	1.347	1	0.246
Marital status	19.632	2	0.000*
Educational level	10.142	1	0.041*
Religion	1.652	2	0.438
Type of extension practice	8.724	5	0.121

*significant : $p<0.05$

Result of analysis on Table 10 shows that there was significant relationship between social media used ($r= -0.337$, $p<0.05$) by the extension agents and their training need on the use of social media. This could be due to the similarities in commands of all the social media; an agent that is vast in the use of one is likely to be able to use another well enough, Steinfeld and Lampe (2007) also establish the fact that social media provides a unique environment because of its heavy usage patterns, ability to bridge gaps and similarity among the social media helps in the usage. The Table further revealed that there was a significant relationship between extension agents' perception of social media ($r=0.935$, $p<0.05$), knowledge of social media ($r= -0.875$, $p<0.05$) and their training need on the use of social media. It implies that the extension agents put a lot of value on the potentials of social media and therefore would like to be trained on its use for their professional effectiveness. In a related study, Paul

(2011) asserted that, afterschool professionals increasingly embrace social media platforms as perception and knowledge increases, but there seems to be a limited understanding of its applicability to the workplace. Thus, the call for training becomes imperative for the extension agents.

Table 10. Pearson Product Moment Correlation (PPMC) Showing Relationship between Social Media Used, Perception, Knowledge and Training Need

Variables	r-value	p-value
Perception of social media	0.935	0.028*
Knowledge of social media	-0.875	0.033*
Social media used	-0.337	0.002*

*significant : $p < 0.05$

5. Conclusion and Recommendations

The weak linkage between researchers, extension agents and farmers explains the failure in application of research findings to improve rural poor farmers. A critical and effective training platform for agricultural extension agents will foster meaningful participation to harness social media skills. Deliberate capacity building programme as an integral part of all ICT projects will also guarantee food security and human resource development through knowledge building and information sharing. Based on the foregoing, the following recommendations were made:

- Agricultural extension training should encourage e-learning programmes using various social media platforms.
- Relevant stakeholders in agricultural extension delivery should facilitate an extension system that is ICTs driven.
- Nigerian agricultural technology transfer policy should emphasize the use of social media for transfer of technical information to farmers.

References

- Akinbile, L.A (2007). Social Impact of limestone Exploitation in Yewa North Local Government Area of Ogun State, Nigeria. *Pakistan Journal of Social Science* 1:107 111, Maxwell Journal
- Akinsorotan, A.O and Oladele, O.I (2007). Organizational Values Perceived as evident among Extension Agents of Agricultural Development Program in Nigeria. *Journal of Agricultural Tropical, Subtropics* Vol 42, (3).
- Boyd, D.M. and N.B. Ellison. (2007). "Social Network Sites: Definition, History, and Scholarship." *J. Comp.-Mediated Comm.* 13: Article 11 doi:[10.1111/j.1083-6101.2007.00393.x](https://doi.org/10.1111/j.1083-6101.2007.00393.x)
- Extension Service of Mississippi State University (MSU, 2012), www.msucare.com/pubs/infosheets retrieved 17 January 2013.
- FAO (2012). Urban and peri – Agriculture. Food and Agricultural Organization (FAO) of the United Nations, document pp 19-23. Retrieved 19 January, 2013 from <http://faostat.fao.org/default.htm>
- FMARD (2011): "Agricultural Transformation Agenda" Nigeria: Report on Agricultural Extension Transformation" Federal Ministry of Agriculture and Rural development, Abuja. Research Enugu: New Generation Books.
- IICD (International Institute for Communication and Development) (2006): ICTs for Agriculture Livelihoods: Impact and Lessons Learned from IICD Supported Activities. The Hague: IICD.<http://www.iicd.org/files/IICD-agri-impact-2006.pdf>, accessed July 2014.
- Jibowo, A.A. (2005): History of Agricultural Extension in Nigeria. In: Adedoyin, S.F. (ed). *Agricultural Extension in Nigeria*. Ilorin: Agricultural Extension Society of Nigeria, pp.1-15
- Ogunbameru, B.O. (2004). Training Development in: Akinsorotan "Element of Agricultural Extension Administration" Personal Management. Bounty Press, Ibadan, p.65.

- Okwu, O.J. and Daudu, S. (2011) "Extension Communication Channels' Usage and Preference by Farmers in Benue State, Nigeria "Journal of Agricultural extension and Rural Development 3(5) 88-94
- Omotayo, A.M. (2005): Information Communication Technology and Agricultural Extension: Emergency Issues in Transferring Agricultural Technology in Developing Countries. In Adedoyin, S.F. (ed) Agricultural Extension in Nigeria, ARTMI. Ilorin
- Paul Young (2011). National Afterschool Association; Social Media Usage Practices Among Afterschool Professionals. Social Media Survey via Survey Monkey, April-May, 2012
- Sanusi, M.A, Petu-Ibikunle, A.M and C.M Mohelia (2010): The influence of ICT on the dissemination of Agricultural Information among urban farmers in Northern Guinea Savannah Zone of Nigeria. African Scientist 11(2) pg 135-140
- Sokoya, A.A, Onifade, F.N and Alabi, A.O. (2012) Establishing connection and Networking; The Role of Social Media in Agricultural Research in Nigeria. World Library and Information Congress. <http://conference.ifla.org/ifla78> Retrieve 2nd May, 2013
- Steinfeld, R and Lampe,C. (2007). "Trust and privacy concern within social networking sites: A comparison of Facebook and MySpace". In Proceedings of AMCIS 2007, Keystone, Colorado,USA, 2007 <http://csis.pace.edu/~dwyer/research/SteinfeldLampeIS2007.pdf> Retrieved February 18, 2014
- Tesfaye Nekatibebe (2010). Evaluating the Impact of Social Media on Traditional Marketing, Helsinki Metropolia University of Applied Sciences BBA Business Administration International Business and Logistics Bachelor's Thesis.
- Wikipedia (2013): http://en.wikipedia.org/wiki/Oyo_State