Impact of Social Media on Agricultural Extension in Afghanistan – A Case of Ahmad Aba District

Sherpaw Ahmadi¹, Muhsenullah Irfan² and Farhad sultanzoy³

¹Department of Agricultural Economics, Agriculture Faculty, Shaikh Zayed University, Khost, AFGHANISTAN.
 ²Department of Agricultural Economics, Agriculture Faculty, Paktia University, Paktia, AFGHANISTAN.
 ³Department of Forestry and Natural Resources, Agriculture Faculty, Paktia University, Paktia, AFGHANISTAN.

¹Corresponding Author: sherpaw.ahmadi@gmail.com

ABSTRACT

This study aimed to find out the impact of social media on agricultural extension among farmers of Ahmad Aba district and the overall status of social media users in the study area. The area has been selected for its accessibility and familiarity with topography, culture, and languages. This study has been conducted through a structured questionnaire and focus group discussion methods. This study revealed that 56 % of the respondent were using the internet regularly, roughly 30 % were using some time while 9.5 % were not using ore rarely due to the high service charge, poor network connection, and lack of personal interest. Facebook was the leading platform among other social media platforms. Moreover, 71 % of the respondents were using social media on their smartphones, 23.5 5 on tablets and only 5.5 percent were using through the computer. Some Facebook pages which are sharing agricultural information have a huge audience compared to other platforms.

Keywords- : Social Media, Agricultural Extension, Ahmad Aba District, ICT Technology in Afghanistan.

I. INTRODUCTION

The agriculture sector is a key pillar of the national economy of the country and the majority of people are busy in the agriculture field and earn their livelihood by farming. for the standardized, High-quality products and find marketing needs access to I freshly information, for more special technical knowledge and awareness for agricultural producers. Agricultural development, food security, self-sufficiency creates new work opportunities and reduce poverty Afghanistan has more modern agriculture systems and more agricultural experts, agricultural education and implementation research, and all departments because Afghanistan is a country which is the economy is dependent on agriculture and livestock in the mountains country majority of the population live in rural areas. They are busy in agriculture and livestock the currents products are insufficient for Afghanistan population and needed to research base promotes, new knowledge training farmers, and investment for sufficiency and agribusiness sectors the Afghanistan Land, climate and high quality of all products could more and deferent crops products

for self-sufficiency, food security reduce poverty and can export to regional countries. And Afghanistan can change high-quality products and business market.in the heart of Asia and afghan agricultural products has more customers in the different country, for example, saffron gets the first position in world level according to the quality and also pine nuts is most popular in international markets (Ahmadi. S, et al 2021).

In recent years, Afghanistan has experienced a rapid rise in social media. In terms of access to the networks, services could connect them with the world and provide information that is vital in agricultural development because it is a tool for communication (Kalusopa, 2005). In the context of information, social media empower marginalized rural residents, especially farmers. Currently, most households have access to the internet and express their views on a broad range (Ibrahimi, N. et al, 2015). They created groups that tied them together, such as cooperative groups and self-help groups. Social media platforms are also used to share links, news articles, information, feedback, and queries. In terms of relations, Facebook has a significant impact on social relations (Shaban, A. M., 2016). However, Social media has been mainly defined to refer to "the many relatively inexpensive and widely accessible electronic tools that facilitate anyone to publish and access information collaborate on a common effort, or build a relationship" (Bik, H. M., & Goldstein, M. C., 2013).

In addition, social media is a powerful tool that connected millions of people all around the world. Social media tools are most important in all agricultural practices but the ability of the tools can be connecting farmers, producers, and agribusiness firms around the world and sharing the Agricultural innovation and enhancement for building the capacities of agricultural extension and advisory service providers and sharing agriculture-relevant information. (Kipkurgat, T., et al, 2016).

The millennium development goals to reduce hunger and to promote food security are rooted in increasing agricultural productivity, especially from the products segment. That is reducing by the base of more investment in agriculture field because agriculture is basic factor of the engine of growth in many developing economies and self-sufficiency of food security and hunger reducing. For achieving the MDG sustainable agriculture are some main ways to keep food security and reduce poverty for all humans, and essentially for sustainable strategy long term investment in agriculture sector resources .in the worldwide. (Danso-Abbeam et al 2018).

II. SOCIAL MEDIA

Social media are the web-based tools of electronic communication that allow users to exchange knowledge, information in groups and individually, share ideas, personal messages, and opinions, make decisions and create, store, retrieve and exchange updated information -Allows to provide the facility of providing (videos, images, text, etc.), by anybody in the virtual world, social media facilities as a school at the home of each farmer in all the rural areas to easily learn. watch, and solve many farming problems. Because agriculture is the more basic factor of human sustainable life in the earth spare and needed more investment and new researches for this sector growth and food sufficiency, work opportunities. Reduce poverty for human welfare. In the current decade revolutionized on agriculture segment social media effective tools for showing products for marketing, share success stories, experience, typify farms to each other,

Social media pros in Agricultural extension

- 1. Easily accessible
- 2. Increase access to the internet
- 3. To Strengthen relations
- 4. Cost-effective

III. THE ROLE OF SOCIAL MEDIA IN FARMING

Social Media is the primary tool which are connecting farmers and created for connecting people is the key function by Users can share ideas, initiatives, advises, stories, and experiences their views in detail and discuss them with audiences and avoid plant diseases, pests weed control, and all agricultural practices exchange for Capacity development all around the different parts of the rural areas. for business development searching social media for business relationships is the best method to find customers and supplements. Also, social service media can communicate mass of customers. And covered in a few times the products and services to customers. And social media has a free creating account facility. and could receive business like agricultural development, agricultural products marketing, and possible easy campaign against pests. and no need to join more people in one hall for speech. and we could on social media share knowledge, messages, videos, and audio from office or home to rural area customers and farmers.

https://doi.org/10.31033/ijrasb.9.2.9

IV. OBJECTIVES OF THE STUDY

1. To find out the impact of social media on agricultural extension among farmers of Ahmad Aba district

2. To identified the type, of social media of agricultural producers and farmers to use effective sources.

3. To establish the frequency of diffusion of the information of agricultural by extension agents and the role of the Social Media in disseminating this information.

V. IMPACT OF SOCIAL MEDIA ON AGRICULTURAL EXTENSION IN AFGHANISTAN

Social media use is one of the important effective factors in the agriculture sector because it's in the few time has positive effects in the agriculture field. These Social media, such as Facebook, Blogs WhatsApp, YouTube, is widely used in diverse for sharing different information purposes. Online social interactions in agricultural domains have attracted to attention of researchers, for the dissemination and exchange of agricultural information. (Paudel, R. 2018).

Social media plays a very important role in enhancing interactions and information flows among different actors involved in agricultural innovation and also enhancing the capacities of agricultural extension and advisory service providers. Moreover, success in agriculture and rural development is determined by the action of millions of rural families on an individual basis whose decisions are shaped by the information, knowledge, and technologies available to them (Saravanan, R. et al, 2015). Furthermore, Media play a vital role in the development of e-commerce and overall commerce (Hajli, M. N., 2014). E-commerce is a modern type of commerce that helps the consumer to save their time and use it effectively. Social media is best in agricultural extension for the following reasons:

- Providing information
- Save money, time, and effort
- Cheaper compared to the traditional forms of extension
- Experts can be contacted directly
- Suitable for creating awareness among the users
- Supplying extension information to a nationwide
- Support rural adults learning to assist formers in solving problems

VI. MATERIALS AND METHOD

The current study assesses the role of social media platforms in enhancing agricultural extension. Data was collected through a well-structured questionnaire and group focus methods, in Ahmad Aba

International Journal for Research in Applied Sciences and Biotechnology

www.ijrasb.com

district of Paktia Province, Afghanistan. The area was selected for accessibility and well familiar with the topography, language, and cultures. We used a random sampling method, 200 respondents were in the study area. The respondents were asked if they use the internet especially social media for agricultural purposes. according to the table of samples size Morgan the 420 population of farmers we used from Cochran Formula 200 farmers selected samples of Research from Ahmad aba districts to mean for Collection Data is Researcher prepared questioners including different sections, social Media, extensional but used Likert measurement for respondents' ideas (very agree to agree).in the current research for assignment validity of questioner profits from agricultural extension department lecturer's advice for Reliability technical problems for correctness balance but the social researches researcher are specified the number of validity methods as like Cronbach's alpha methods .Who are The interview has been conducted by visiting the farmers working areas? The interview has been conducted in the local language Pashto, 100 Afghani were paid to every respondent as an interview fee. Furthermore, some of the data has been used from secondary sources that are properly cited.

VII. FINDINGS

We have witnessed the rapid growth of social media usage in Afghanistan since 2009. The number of users increased increasingly. Rather than entertainment and news, social media play a vital role in sharing information. On the other hand, the power outages, poor network connection, and high services charges lessen its users.

 Table 1: Rating scale of respondents on their status of using social media.

Questions	Alw ays	Very Often	Somet imes	Rar ely	Ne ver	To tal
Do you have						20
internet access?	112	36	33	12	7	0
Are you using						20
social media?	114	37	27	16	6	0

Source: This study

A specific open-ended question was asked from the 19 respondents (9.5%) who were not using the internet at all. As table 2 shows they answered differently.

 Table 2: Reasons for not using internet in the study area.

Reasons	Number of Respondents	Percent
Unaffordable Charge	11	57.89
Poor Network Connection	5	26.32

https://doi.org/10.31033/ijrasb.9.2.9

Personal Interest	2	10.53
Power Outages	1	5.26
Source: This study		

Those respondents who were using the internet thereby were asked which platform of social media use as their priority for receiving agricultural-related information. They were using various platforms as table 3 shows the summary of their responses.

Table 3: Most used social media platforms among the respondents (as their priority).		
		Relative

Number respondent	Relative Percentage
92	46 %
32	16 %
29	14.5 %
30	15 %
11	5.5 %
6	3 %
200	100 %
	respondent 92 32 29 30 11 6

Source: This study

VIII. SOCIAL MEDIA TOOLS COMMONLY USING IN AGRICULTURE EXTENSION EDUCATION IN AFGHANISTAN

Facebook

It is the most used type of social media platform which is covered wide areas and more effective element among the farmers for sharing typify gardens, products pictures, videos, and links to each other in the field of agriculture new information for changing to can traditional agriculture to modern agriculture. because Facebook than other media popular and essay access to Facebook using in Afghanistan for rural development and agribusiness, and their products. (Stock, 2018) Facebook is by extreme the largest online social network. All around the world in the first quarter of 2018 it had 2.2 billion monthly active users around the world (Wims, P., & Galvin, A. 2018).

Also, Facebook is the most popular used app among the respondents as another study also found Facebook as a leading platform among others (HAAND, R., & ELHAM, A. Z., 2021). There are a lot of pages and groups that share agricultural information as Tab. 3 shows. Especial, whenever the NGOs or agricultural department want to extend some new ideas, products, or innovations they post them on social media, with have a massive audience nowadays. Moreover, most agricultural specialists have their accounts they advise farmers, and farmers ask them questions when they come across with. YouTube is the other platform.

International Journal for Research in Applied Sciences and Biotechnology

www.ijrasb.com

WhatsApp, used for sharing information. Most of the farmers have groups for sharing the information about their harvest and sowing times, marketing of outputs and inputs that provide very useful information for the decision making. On the other hand, on YouTube millions of people can discover, watch and share originally-created videos (YouTube, 2005).

WhatsApp

WhatsApp is the other key platform that is professionally connecting extension relations among the farmers, producers, markets, experts, and other agricultural extension organizations. it could be increasing the farmer's awareness and knowledge level due to individuals and groups interacting with each other to share agricultural different new and fresh information. WhatsApp using for current agriculture development. sharing typify gardens, products pictures, videos, and links to each other in the field of agriculture new information for changing to can traditional agriculture to modern agriculture. And sharing advisory service for assisting farmers and producers to exchange ideas, experiences by text, audio, video, pdf, and other forms of flies in a few time-sharing. All around the rural areas of the country. (Thakur, D., et al 2018).

Blogs

Blogs are also web-based platform used for more specific topics. And the main functionalities of blogs, such as the cooperation among trainees and extension educators and to prompt accessing the modernized information, can benefit agricultural extension awareness training. They create and facilitate details and an in-depth discussion of any issue through explanations from the readers. With increased popularity, various blogs competitions are also organized around the world for rural areas youth to encourage them to beg a discussion about farming. and communicate summaries of essential publications, for increasing knowledge, awareness, and discussion on main issues to relevant agriculture and rural development. Especially the Blogs using experts, youths, educated typify farmers and producers for there are publishing success stories, researches shows, and their achievements activities. The blogs are benefits and easy way to achieve the new specific topics of all segments of agriculture. And facilitate specialized information to farmers and producers. (Ferentinos, J., et al 2013). YouTube

YouTube is an electronic learning tool, and web bass videos sharing platform, and this is the third topvisited website for learning different fields of knowledge and information shared all around the world this tool is the best practical school for each farmer and producer in Rural areas at very home and farm. But All people can easily access to watch videos are on this website each time this web is the most important for agricultural extension education and knowledge diffusion and users can upload and download and watch the videos sharing and facilitating easy technics for the solving problems of farmers during the all crops seasons such as products marketing pests' controls, harvesting, irrigation, grading, sort, and all practice learn in YouTube. (Clark, J. R., et al 2015,).

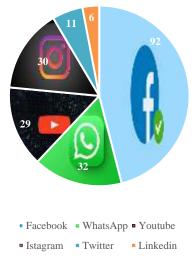
Page Name	Language	Followers (as per October 2021)	
Agriculture And Technology	Pashto	28,000	
E-Afghan Ag	Dari, English	13,583	
Agriculture and Livestock	Pashto	19,431	
Agriculture in Afghanistan	Pashto	9,411	

Table 4: Agricultural-related local pages with a huge

Source: This study

Table 4 present just a small example there numerous pages and groups which help enhance agricultural extension. The considerable point is that the huge number of followers indict the big interest of the audience in receiving agricultural information through social media.

Social Media Stats in Ahmad Aba **Distrcit - October 2021**



Source: This study

Figure 1: Graphical representation of table 3, social media status in the study area.

The most interesting question about the devices through the respondents was using the internet. Most of the respondents were using mobile (smartphones), there the less number of the respondents were using the computer, table 5 present a summary of the responses.

www.ijrasb.com

Table 5: Respondents used devices for using the

internet.			
Devices	# respondent	Percent	
Mobile	142	71	
Tablet	47	23.5	
Desktop	11	5.5	
Total	200	100	

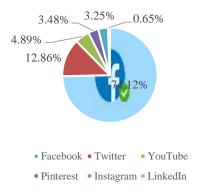
Source: This Study

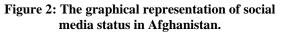
Table 6: Overall status of using social media across the country.

Social Media Stats in Afghanistan - October 2021		
Facebook	74.12%	
Twitter	12.86%	
YouTube	4.89%	
Pinterest	3.48%	
Instagram	3.25%	
LinkedIn	0.65%	
Blogs	3.30	

Source: Stat Counter

Social Media Stats in Afghanistan -October 2021





IX. CONCLUSION

The society – the rural people, the field level extension-workers, farmers – do not read journals; they read blogs, watch YouTube and use Facebook and Twitter and these are the mediums that reach them effectively. The mentioned platforms are among the popular platforms for delivering information in the different areas of agriculture such as livestock, farming, and agricultural marketing. Most of these activities are individual efforts, there is a lack of monitoring to organize activities even though some pages are belonging to governmental offices. Ministry of agriculture, ministry of rural retaliation & development, and its directorate in 34 provinces of the country have their accounts on social media through which they share information. Using social media for sharing information is the demand of the 21st century (Neill et al., 2011). However, using social media for enhancing agricultural extension is a great alternative to previous convention methods.

RECOMMENDATIONS

As the study availed that social media play a significant role in the agricultural extension process. The government especially the agricultural sector must pay attention to it because it is neither expensive nor timeconsuming compared to other methods of extension.

The official of the agriculture sector must work together with the information and communication sector to provide cheaper internet packages for the farmer and familiarize them with their usage. This will the government to tie the farmer together and give them proper feedback. Moreover, most of the farmers are illiterate the official will be able to help them to take a proper decision in their farming.

Agricultural specialists with specialists of technology must work together to develop apps for farmers considering the Afghanistan situation as other countries have. To provide information about the sowing time, harvesting time, irrigation time, and fertilizing times. It will play a significant role in increasing the technical efficiency of farming.

Create social media Groups for every field of agriculture including agricultural experts to share and show new knowledge and information like marketing, metrological conditions, harvesting, irrigation, and fertilizing modern technics to share in these groups for awareness of farmers,

REFERENCES

[1] Ahmadi, S et al (2021) Assessing the Role of Agricultural Extension on Apple Crops Marketing in Paktia Province-Afghanistan

SABT.IRANDOC.AC.IR. 2021 February 16. (Persian).

[2] Bechman, J. (2011). Social Media Use of Cooperative Extension Family Economics Educators: Online Survey Results and Implications. J. of Exten, 49(6)

[3] Bik, H. M., & Goldstein, M. C. (2013). An introduction to social media for scientists. *PLoS biology*, *11*(4), e1001535.

[4] Paudel, R. (2018). Social media in agricultural extension. *Agriculture Extension Journals* (2018).

[5] Hajli, M. N. (2014). A study of the impact of social media on consumers. International journal of market research, 56(3), 387-404.

[6] HAAND, R., & ELHAM, A. Z. Social Media Addiction in the Least Developed Countries: a quantitative study among university students in

International Journal for Research in Applied Sciences and Biotechnology

www.ijrasb.com

https://doi.org/10.31033/ijrasb.9.2.9

Afghanistan. International Journal of Sports Culture and Science, 9(2), 233-245.

[7] Kipkurgat, T., Onyiego, M., & Chemwaina, S. (2016). Impact of social media on agricultural extension in Kenya: a case of Kesses District. *International Journal of Agricultural Extension and Rural Development Studies*, *3*(1), 30-36.

[8] Danso-Abbeam, G., Ehiakpor, D. S., & Aidoo, R. (2018). Agricultural extension and its effects on-farm productivity and income: insight from Northern Ghana. *Agriculture & Food Security*, 7(1), 1-10.

[9] Mamgain, A., Joshi, U., & Chauhan, J. (2020). Impact of Social Media in Enhancing Agriculture Extension. *Agriculture & Food: E-Newsletter*, 2(9), 367-370.

[10] Ibrahimi, N., Omer, M., Irfani, M., & Kabul, A. (2015). Social media and articulation of radical narratives in Afghanistan. *A research and policy paper*.

[11] Kalusopa, T. (2005). The Challenges of Utilising Information and Communication Technologies (ICT's) for the small scale farmer in Zambian, Library Technology, 23(3), 2006.

[12] Neill, O.B., Zumwalt, A. and Bechman, J. (2011). Social Media Use of Cooperative Extension Family Economics Educators: Online Survey Results and Implications. J. of Exten, 49

[13] Shaban, A. M. (2016). The use of social networking sites (Facebook) and their impact on social relations. *Journal of Educational and Psychological Researches*, 13(49).

[14] Stock D. (2018). *Roles of Social Media on Information Sites*. Munich, GRIN Verlag, https://www.grin.com/document/516534

[15] Wims, P., & Galvin, A. (2018). Opportunities for Facebook to Improve knowledge transfer to Farmers and Enhance Agricultural Extension. *International Journal of Agricultural Science, Research and Technology in Extension and Education Systems*, 8(3), 175-184.

[16] Saravanan, R., Suchiradipta, B., Chowdhury, A., Hall, K., & Odame, H. H. (2015). Social media for rural advisory services. *What Works in Rural Advisory Services*? 111.Neill, O.B., Zumwalt, A. and

[17] Stat Counter: https://gs.statcounter.com/socialmedia-stats/all/afghanistan (reached on October 1, 2021)

[18] YouTube. (2005, 11

[19] Thakur, D., Chander, M., & Katoch, V. (2018). WhatsApp Model for Farmer Led Extension: Linking Actors and Generating Localized Information for Farmers. *Asian Journal of Agricultural Extension*, *Economics & Sociology*, 1-8.

[20] Ferentinos, J., Koutsouris, A., Costopoulou, C., & Ntaliani, M. (2013). Enhancing agricultural training using blogs: the Greek case. In *Proc. of the 1st International Conference on Computer Supported Education: Recent Techniques in Educational Science.* WSEAS International Conferences, Athens (pp. 115-119).

[21] Clark, J. R., Miller, F. L., & Jecmen, A. C. (2015, September). YouTube Videos Provide Expansion of Information of Fruit Cultivars. In *HORTSCIENCE* (Vol. 50, No. 9, pp. S258-S258). 113 S WEST ST, STE 200, ALEXANDRIA, VA 22314-2851 USA: AMER SOC HORTICULTURAL SCIENCE.

[22] YouTube. Retrieved 12 5, 2010, from YouTube