

Use of Social Media in Agricultural Outreach Activities: A Study at CCS Haryana Agricultural University, Hisar

Bhanu Partap¹ and Manju²

Abstract

Social media plays a crucial role in this digital era in every human endeavor. The present study aims to evaluate the use of social media and its impact in agricultural outreach activities at Chaudhary Charan Singh Haryana Agricultural University, Hisar. The study found that more than ninety percent of the extension specialists were aware of the social media applications and their use in sharing agricultural information and outreach activities. Further, it was also found that WhatsApp was the most preferred medium of communication among the extension specialists. Social media was used by 36% of the respondents for sharing agricultural information with the farmers' community. It was also suggested that proper awareness and training programs be organized frequently for extension specialists and the farmers' community.

Keywords: Social Media, Agricultural Universities, Agricultural Extension.

Introduction

Agriculture plays a significant role in the growing economy of India. The agriculture sector has also created the highest employment opportunities compared to other sectors. There is a need to share current, relevant, and timely information with the farmers' community for sustainable agricultural development. In this digital era, Information Communication Technology (ICT) plays a crucial role in disseminating information accurately at a greater speed in less cost. Another side, social media, which is a part of the digital revolution, can be used as a communication and social tool to benefit any sector of society. The farmers' community is no exception to it.

¹ Assistant Librarian, Nehru Library, CCS Haryana Agricultural University, Hisar.

² Librarian, Chandigarh College of Architecture, Vidya Path, Sector- 12 D, Chandigarh.
Corresponding E-mail: bpartaps2005@gmail.com

Social media is an ICT or Internet-based platform that helps create and exchange user-generated content, an interactive way of communication. Mayfield (2008) defined social media as "a cluster of new online media having the following characteristic, i.e., Participation, Openness, Conversation, Community, and Connectedness." Thus, it can be said that social media is a collective and online communication channel, which can be used for personal interaction and or content sharing. Similarly, social media has become the main channel of communication in the agricultural sector worldwide. Agricultural information is the backbone of agricultural productivity in various ways, and it acts as an essential source for farming practices.

Agricultural information includes land, labor, Government policies, capital, livestock, new technology, market conditions, supply chain management, transportation channels, etc. Apart from traditional information dissemination channels such as newspapers, television, magazines, public notices, radio, etc., ICT-based information sharing channels are becoming the necessity of the day among the farmers' community. Social media is one of the main media for creating content or sharing information among peers or farmer's communities in this digital era.

Agricultural information sources like extension services, research, and educational institutions disseminate useful information to the farming community to fully utilize the information for better decision-making, take advantage of the market opportunities, and cope with the continuous changes in their production systems. Information is critical in agriculture development because it acts as a tool between stakeholders and serves as a channel for accessing trends and shaping decisions" (Kalusopa, 2005).

ICT applications have tremendously changed the overall scenario of information and dissemination patterns among the agricultural scientists, teachers, students, and farmer's community. Nowadays, social media applications have widely being used by all agricultural stakeholders. Chaudhary Charan Singh Haryana Agricultural University, Hisar is one of

India and Asia's most prominent agricultural universities and has played a significant role in imparting agricultural education, research, and extension activities. A study was planned to know the use of social media in agricultural outreach activities at Chaudhary Charan Singh Haryana Agricultural University, Hisar.

Social Media

In Merriam Webster Dictionary (2017), it is defined that "social media is a form of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (such as videos)."

Social media can be defined as a collection of online communication channels based on the principle of Web 2.0 and is mainly meant for community-based input, social networking, interaction, and content and media sharing. Social media comprises of all the social networking sites like Facebook, Whatsapp, Twitter, Tumbler, Academia.Edu, Wikipedia, Skype, Viber, Hangouts, WeChat, YouTube, Pinterest, Instagram, Hike, Telegram, Blogs, and other communication tools within virtual worlds (Soni, 2016).

Social media is the most recent and emerging form of digital communication in this digital era, and it is a great place to start a conversation, connect with both the young and old generation alike, and get people excited. It has changed the topography of personal communication and taken on the world of professional communication as well. In other words, the creation of social media has revolutionized the way people communicate worldwide. Aided by smartphones, social media is spreading fast across the world. Social networking sites, blogs, socially integrated messaging platforms, forums, discussion boards, and groups are different social media platforms. Social media sites gained their popularity not only because they connected friends and family, but their huge potential of communication was rapidly realized, and it started finding its use in professional communication" (Pal, 2018).

Role of Social Media in Agriculture

Social media is playing an essential role in personal and professional lives. Similarly, social media is becoming an essential medium for sharing information in the farming sector. Social media is now being used in the farming sector because social media have the utility to connect farmers, agri-entrepreneurs, agri-scientists around the world. Social media can help all the agricultural stakeholders such as farmers, students, teachers, scientists, agri-innovators, agri-entrepreneurs, etc., by providing the platform for the easy and quick flow of information and services. Agricultural research, education, and extension establish connections with one-to-one and many to many in sharing and exchange of information. It can be summarised that with the help of social media, any farmer can get farming-related information quickly and easily such as plant diseases, plant pathology, farming system, pesticides, new breeds, innovations in farming machinery, soil-related, water-related, climate-related, market-related and government policies, etc. Thus, social media are helping to improve farmers' welfare and the rate of information exchange.

Review of Literature

Gurdeep Singh et al. (2021) conducted a study to assess the role of social media in enhancing agricultural growth in the Punjab state of India. This study revealed that only six percent of the young farmers were using radio as a source of information for agriculture. The majority of young farmers preferred social media viz. YouTube, WhatsApp, and Facebook as a source of agricultural information. In contrast, it was also revealed that young farmers observed that social media significantly impacted crop management practices. Idu et al. (2021) noticed that most of the respondents (30.0%) indicated that social media had helped to engage youths in agriculture through extension services, while age, education, farm experience, income, and gender of the respondents significantly influence the usage of social media in agriculture. A study was conducted by Inegbedion, et al. (2021) on the use of social media in the marketing of agricultural products and

farmers' turnover in South-South Nigeria explored the use of social media (WhatsApp and Instagram) in the marketing of agricultural products and found that use of social media enhances efficiency and turnover of farmers. In contrast, the researchers concluded that the use of social media channels (WhatsApp and Instagram) in the marketing of agricultural products significantly influences cost reduction and hence efficiency in marketing and enhances turnover of farmers through increased demand for agricultural products. Similarly, a study on social media in agricultural extension services from the perspective of farmers and extension agents was conducted by Kumar Ghosh et al. (2021)

Thakur and Chander (2018) conducted a study to know the use of social media in agricultural extension in India. They found that the potential of social media channels like Facebook, WhatsApp, and YouTube, among others, was not yet fully exploited by agricultural extension and development departments to reach out to farmers in India. There is a definite lack of organized efforts to use social media from the public extension system in India.

A study on role of social media in agriculture marketing and its scope was conducted by Balkrishna and Deshmukh (2017) and found that social media was very useful tool in agricultural marketing because it saves time and cost of the farmers for getting information. Facebook, YouTube, WhatsApp, Twitter and LinkedIn were the most popular social media in agricultural marketing. The researchers also found that the role of social media in agricultural marketing was dominated by males. On the other hand, Kipkurgat et al. (2016) conducted a study to explore the impact of social media on agricultural extension in Kesses District of Kenya and revealed that farmers in Kesses District have diverse source of agricultural information for example the Internet, social media and extension services, and majority of farmers prefer social media in agricultural information seeking with a positive attitude, pointing to the assumption that social media is largely beneficial and convenient as a source of agricultural information, while poor network access, power outages, and costly charges

when accessing the Internet were identified the most common challenges faced by the farmers.

It can be said that social media can play a vital role in agricultural information sharing and other outreach activities. Social media can fill the gap between extension specialists, agricultural scientists, and farmers. Many studies were conducted in western countries, but not many studies have been conducted from an Indian perspective. Therefore, the present study has been planned to fill this gap.

About CCS HAU, Hisar

After the division of Punjab State, the first established university in Haryana State in 1970 is Haryana Agricultural University, which is one of Asia's biggest agricultural universities. In 1991, it was renamed after India's seventh Prime Minister, Chaudhary Charan Singh. Thus, now it is known as Chaudhary Charan Singh Haryana Agricultural University, Hisar. The university covers an area of 8645 acres, out of which 7219 acres are on the main campus and 1426 acres at sub-campuses. The university has five colleges on its main campus with different departments, i.e., College of Agriculture (COA), College of Home Science (COHS), College of Agriculture Engineering & Technology (COAE&T), College of Basic Science & Humanities (COBS&H), and College of Fisheries Science (COFS). The university has two more colleges on its outstation campuses i.e., College of Agriculture, Kaul (COAK), and College of Agriculture, Bawal (COAB). The university is affiliated with the Indian Council of Agricultural Research (ICAR) (CCS HAU, 2022).

Statement of the Problem

The application of Information and Communication Technology (ICT) has widely impacted all spheres of human life. Social media is now becoming an inseparable part of human beings' personal and professional lives. Similarly, ICT applications and social media have also significantly impacted the farming sector. Now, the farming community wants their

desired information quickly and in an accessible mode of communication. Social media is now playing an essential role in sharing agriculture-related information and the welfare of the farming community. During the Covid-19 pandemic, the farming community was also affected. They could not visit the agricultural research centers, universities, and Kissan Seva Kendras to get their desired information and solutions related to farming. In this situation, social media applications were being used by the District's Extension Specialists (DEE) to share the agri-information among the innovative farmers and try to resolve the issues related to the crops and other farming issues. Therefore, it was decided to assess the use of social media in agricultural outreach activities at CCS Haryana Agricultural University, Hisar.

Objectives of the Study

The present study was undertaken with the following objectives:

- To assess the awareness of extension specialists toward the use of social media
- To find out the opinion of extension specialists towards the adoption level of social media for sharing agricultural information or outreach activities
- To ascertain the social media preference for sharing information
- To explore the importance level of social media among the extension specialists
- To identify the constraints faced by the extension specialists in the adoption of social media

Scope of the Study

The present study was undertaken with the primary objective to study the use of social media in agricultural outreach activities at CCS Haryana Agricultural University, Hisar. The present study aimed to highlight the

awareness level, adoption level, and constraints faced by the District Extension Specialists (DES) towards the use of social media in agricultural outreach activities. The study was limited to getting the opinion only from the extension specialists working for the welfare of the farmers' community of Haryana state of India. The findings from the present study would be beneficial for agricultural students, scientists, teachers, extension specialists, library science professionals, etc., to understand the current state of the use of social media in agricultural outreach activities.

Material and Methods

The present study is an online exploratory study assessing the use of social media in agricultural extension activities by the District Extension Specialists (DES). An online questionnaire (Google form) has been prepared and shared among the extension specialists of CCS Haryana Agricultural University, Hisar, through e-mail and WhatsApp to collect the data or opinions. The telephonic conversation was also made in some cases to seek further clarification. A total of 75 District Extension Specialists (DES) were approached, out of which 59 were responded positively; thus, a 78.66% response rate has been achieved. Data were then analyzed and interpreted as the study's objectives using simple percentage analysis.

Data Analysis and Interpretation

The collected data are analyzed, interpreted, and presented under the following sections:

Table-1: Gender-wise Distribution of District Extension Specialists

Gender	No. of Respondents	Percentage
Male	38	64.40
Female	21	35.60
Total	59	100

Table 1 shows the gender-wise distribution of District Extension Specialists

(DEE)/respondents. They were positively offered their opinion on the study on the use of social media in agricultural outreach activities at CCS HAU, Hisar. Out of 59 respondents, 38 respondents were male, and 21 were female respondents who participated in the study.

Table-2: Awareness of using Social Media

S. No.	Awareness	Frequency	Percentage
1.	Fully aware	36	61.02
2.	Aware	18	30.50
3.	Somewhat aware	05	08.48
4.	Not- aware	0	0
	Total	59	100

The data regarding awareness about using social media among the respondents is presented in Table 2. It is revealed that 61.02% of the respondents were fully aware of social media and its use. In comparison, 30.50% of respondents were aware of the use of social media. On the other hand, 8.48% of the respondents were reported that they are somewhat aware of the use of social media in sharing agricultural information and other outreach activities.

Table-3: Adoption level of Social Media among Extension Specialists for sharing Agricultural Information or for Outreach Activities

S.No.	The adoption level of social media	Frequency	Percentage
1.	Always	15	25.42
2.	Sometimes	12	20.34
3.	Situation based	23	38.98
4.	In combination with manually sharing info.	09	15.26
	Total	59	100

The adoption level of social media among extension specialists for sharing agricultural information and other outreach activities is highlighted by the

data given in Table 3. It is apparent from the data presented in Table 3 that 38.98% of the respondents were tried to use social media on a situation basis for sharing agricultural information, whereas 25.42% of the respondents were opined that they always try to use social media applications for agricultural outreach activities. On the other hand, 20.34% of the extension specialists sometimes used social media. In comparison, 15.26% of the respondents opined that they tried to use social media to share information among the farmers' community manually.

Table - 4: Social Media Preferences

S. No.	Social media preferences	Frequency	Percentage
1.	WhatsApp	44	74.58
2.	Facebook	08	13.56
3.	YouTube	05	08.47
4.	Others	02	03.39
	Total	59	100

Table 4 reveals the preferences of District Extension Specialists (DES) towards adopting various social media applications for sharing agricultural-related information. It is evident from the data that the majority of the respondents (74.58 %) preferred to use WhatsApp. In comparison, 13.56 % of the respondents preferred to use Facebook, followed by YouTube (8.47 %) and other applications (3.39 %), respectively. From the results, it can be interpreted that WhatsApp is the most preferred social media channel among the extension specialists of CCS HAU, Hisar, for sharing agricultural-related information to farmer's and other outreach activities.

Table- 5: Constraints Faced by the Extension Specialists in the Adoption of Social Media

S. No.	Constraints in the adoption of social media*	Frequency (n= 59)	Percentage
1.	Poor Internet connectivity/network in rural areas	50	84.75
2.	Institutional obligations in some cases	22	37.29
3.	Lack of interest	27	45.76
4.	Restricted use of social media	20	33.90
5.	Financially not supported by authority	33	55.93
6.	Fear of Internet addiction, and other reasons	40	67.80

*Multiple choices were permitted

The data regarding various constraints faced by the extension specialists in the adoption of social media for sharing agricultural information with the farmers' community are presented in Table 5. It is clear from the data that the majority of the respondents, i.e., 84.75%, reported that poor Internet connectivity and network in rural areas was the primary constraint, which was faced during the sharing of agricultural-related information to the farmers via social media. In comparison, 67.80% of the respondents have reported the fear of Internet addiction and other reasons. On the other hand, 55.93% of the respondents reported that they were not supported financially by the authority to pay high Internet/data charges. In contrast, lack of interest in social media was the primary constraint for 45.76% of the extension specialists. Similarly, 37.29% of the respondents opined that there are institutional obligations in some cases, followed by restricted use of social media respondents during office hours by 33.90% respondents.

Table - 6: Importance of Social Media in sharing Agri-information/ Outreach

S.No.	Importance of social media	Frequency	Percentage
1.	To a great extent	21	35.60
2.	To some extent	27	45.76
3.	Neutral	08	13.56
4.	Not at all	03	05.08
	Total	59	100

The data given in Table 6 reveals the opinion of District Extension Specialists (DES) towards the importance of social media in sharing agricultural information and outreach activities. It is clear from the data in Table 6 that 45.76 % of the respondents opined that social media is essential to some extent for them in sharing agricultural information with the farmers' community. In contrast, social media is vital to a great extent for 35.60 percent of the respondents. On the other hand, 13.56 % of the respondents were neutral. In comparison, 5.08 % of the respondents opined that social media is not essential for sharing agricultural information and outreach activities. The data interpretation shows that more than 80% of the extension specialists feel the importance of social media for sharing agricultural information in this digital era.

Major Findings

Some of the significant findings may be summarized as follows:

- The study illustrated that more than 90 % of the respondents were aware of the social media applications and their use in sharing agricultural information and outreach activities.
- About 39 % of the respondents were using social media for sharing agricultural information on a situation basis. In comparison, 25.42% of the respondents opined that they always tried to use social media applications for agricultural outreach activities.

- The Majority of the respondents (74.58%) preferred to use WhatsApp, while 13.56% preferred to use Facebook.
- The Majority of the respondents (84.75%) reported that poor Internet connectivity and network in rural areas was the primary constraint for sharing agricultural-related information with the farmers via social media, while 67.80 % of the respondents reported the fear of Internet addiction and other reasons as constraints.
- 45.76 % of the respondents opined that social media is vital to sharing agricultural information with the farmer's. In contrast, social media is vital to a great extent for 35.60 % of the respondents.

Conclusion

Social media is an integral part of our personal and professional life in this digital era. Everyone now expect every type of information in digital form. The information in digital format can save the stakeholders' space, time, and efforts. In agricultural sector, teachers, students, scientists, extension specialists and farmers also need right information in right time in digital format through user friendly social media platforms. In this study, some interesting findings have been found about the usage and utility of social media in sharing agricultural information and other outreach activities among the extension specialists of Chaudhary Charan Singh Haryana Agricultural University, Hisar. Based on the opinion obtained from District Extension Specialists (DES), it can be concluded that more than ninety percent of the extension specialists are aware of social media applications and their use in sharing agricultural information and outreach activities. However, during the study, the respondents raised some critical issues. Hence, it is suggested that Internet/mobile network issues must be resolved in rural areas by the government, and fundamental awareness and training on ICT applications and social media must be frequently provided to the extension professional and farmers. Furthermore, it is also suggested that the Authority of the University must promote the official use of social media in sharing agricultural information and for other outreach activities for the welfare of the farming community.

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