

# **SOCIAL MEDIA USED BY THE FARMERS IN SHARING FARM INFORMATION**

## **ABSTRACT**

Social media has emerged as a highly powerful tool in facilitating online social interactions and has shown tremendous potential in facilitating information exchange among individuals. It has been extensively used by farmers to tremendous increase in the number of smart-phones users during the last decade. A study was conducted during 2021-22 to find out the different social media being utilized by the farmers. A total of 140 progressive farmers who are using social media were randomly selected from purposively selected blocks of the Kota division of Rajasthan. Results of the study revealed that WhatsApp, YouTube, and Facebook were the most popular social media tools which are being used by farmers for sharing farm information. Keeping in touch with extension workers/ scientists, sharing or capturing information, and socializing with relatives /contact were major purposes for the farming community on social media sites. It can be concluded that social media would deliberately remain as a booster or supporter or enhancer to the farming community.

**KEYWORDS:** Attitude, Google+, Flickr, Information, Internet, Telegram

## **INTRODUCTION**

In any field of development, information is power, and information & communication technologies in recent times have brought this power to the fingertips of the people through its recent addition – social media. Social media has great potential to be used as a tool of communication and networking for the benefit of the farming community. Social media has completely changed the topography of personal communication and taking on the world of professional communication as well. Aided by mobile phones, social media is spreading fast across the world. Today's world is the world of 'Social Media' and various social media tools such as Facebook, Twitter, YouTube, LinkedIn, WhatsApp, Research gate, etc. are becoming greater ways of sharing agricultural information.

According to Merriam-Webster (2020), social media refers to different kinds of electronic communication including social networking websites through which their users can form online communities for sharing ideas, messages, information, and videos. The basic

philosophy of social media is the democratization of information, communication, and knowledge management (Saravanan *et al.* 2015). Social media refers to internet-based digital tools for sharing and discussing information among people. It refers to the user-generated information, opinion, video, audio, and multimedia that shared and discussed over digital networks (Andres and Woodard, 2013). Social media means interactions among people in which they create, share, consume and exchange information and ideas in virtual communities and networks. Social media such as Facebook, Twitter, YouTube, and blogs are emerging as appropriate platforms to share information and create awareness among various stakeholders to generate and shape the content of the event. It gives farmers a voice and an opportunity to directly connect with their customers, which can help in direct marketing and increased profits alongside facilitating mass-personal communication (Carr and Hayes,2015).

Social media has emerged as a highly powerful tool in facilitating online social interactions and has shown tremendous potential in facilitating information exchange among individuals. Excessive growth of contemporary social media tools has primarily affected the characteristics of social relations and human psychology. Various social media platforms such as social networking sites (Facebook, Google<sup>+</sup>); micro-blogs (Twitter, Instagram); content communities (YouTube, Flickr, Tumbler), forums (Google hangout); socially-integrated messaging platforms (WhatsApp, Snapchat, Facebook, Telegram); and professional networking platforms (ResearchGate, LinkedIn, Academia.edu) have emerged over the past two decades. Number of internet users mostly use YouTube, Facebook, and WhatsApp for receiving, creating, and sharing information. Most social media does not require special skills and training, however, reading and writing skills are required. Access to smartphones and internet facilities allows users to share their interests, experiences, and circumstances. The fast-growing use of social media and mobile technologies create opportunity for the dissemination of technologies which can facilitate creating, sharing, preserving, and dissemination of knowledge and skills to transform agriculture (Owinyet *et al.*, 2014). WhatsApp has proved to be the potential to construct knowledge (Nain *et al.*, 2018). Therefore, recent developments in social media have paved a way for connecting more farmers and sharing farm information. Thus, the present study was conducted to find out the different social media being utilized by the farmers and attitudes towards social media use in farming in the Kota division of Rajasthan.

## RESEACH METHODOLOGY

The study was conducted in the Kota division of Rajasthan during 2021-22. Kota division was selected purposively because it is the agri-dominant region with ample high-yielding varieties, rich black fertile alluvial soils, strong irrigation, advanced farming practices adopted by the farmers, and higher crop productivity than the average yield of the state and in some cases, higher than the average yield of the country. One Panchayat Samiti from each district of the Kota division namely; Ladpura (Kota), Anta (Baran), Bundi (Bundi), and Jhalrapatan (Jhalawar) was purposively selected wherein; Krishi Vigyan Kendra's (KVKs-Farm Science Centres) are located. A list of KVK progressive farmers who are using social media was prepared in consultation with officials of respective KVKs. Subsequently, an equal number of thirty-five progressive farmers from each selected Panchayat Samiti were randomly selected. The data were collected from 140 randomly selected progressive farmers. For this purpose, a semi-structured interview schedule was developed and data were processed, tabulated, and analyzed.

## DATA ANALYSIS TOOL

**Arithmetic Mean** - This is the most common measure of central tendency. Its the mean of data indicates an average of the given collection of data. It is equal to the sum of all the values in the group of data divided by the total number of values.

For n values in a set of data namely as  $x_1, x_2, x_3, \dots, x_n$ , the mean of data is given as:

$$\bar{x} = \frac{x_1 + x_2 + x_3 \dots \dots \dots x_n}{n}$$

**Percentage**-to determine the percentage, we divided the value by the total value and then multiply the resultant by 100

$$Percentage = \frac{Value}{Total\ value} \times 100$$

**Mean Percentage Score (MPS)** indicates the ratio between the number of correctly answered items and the total number of test questions or the percentage of correctly answered items in a test.

$$\text{Mean Percentage} = \frac{\text{Mean}}{\text{Number of test items}} \times 100$$

### **Garrett's Ranking Technique**

To study the problems faced by the farmers in using social media, scoring technique was adopted, as suggested by Garrett for converting the ranks into scores, when the preference of a particular problem different from respondent to respondent. The conversion method was as follows:

As a first step the per cent position of each rank was found out by the given formula:

### **Garrett Scoring Technique Formula**

$$\text{Per cent position} = \frac{100 (R_{ij} - 0.5)}{N_j}$$

Where,  $R_{ij}$  = Rank given for  $i$ th item by the  $j$ th individual

$N_j$  = Numbers of items ranked by  $j$ th individual

## **RESULT AND DISCUSSION**

### **Socio-economic and psychological profile of the respondents**

The data in the table 1 revealed that the majority of the respondents belonged to the middle age 84 (60.00%) group. It was followed by the young age 32 (22.86 %) and old age 24 (17.14 %) group respectively. The young farmers have the potential to handle android smartphones and used social media better than aged persons. The maximum number of 68 (48.57%) the respondents had possessed a medium level of education status followed by a low 53 (37.86%) level of education and a high level of 19 (13.57%) education status respectively. The majority 129 (92.14%) of the respondent were found male and an overwhelming majority 136 (97.14%) of the respondents were married. The majority 89 (63.57%) of the respondents had medium families followed by small families 27 (17.86%) and large families 24 (17.14%) respectively.

It was also observed that nearly half 63 (45.00%) of the respondents had 2.00-4.00 ha of land and fell under the semi-medium land holding category, followed by 30 (21.42%) of the respondents who had 1.00-2.00 ha of land which were belonged to small landholding category. The majority 107 (76.43%) of the farmers in the study area possessed a medium level of ICT material and the maximum number of 61(43.58%) respondents had an annual income between 1 to 5 lakhs. Whereas 43 (30.71%) of respondents had an annual income of less than 1 lakhs followed by 32 (22.86%) of the respondents who had an annual income between 5 to 10 lakhs and only 4 (2.85%) respondents had annual income more than 10 lakhs, respectively. It was clearly understood from Table 1, that the maximum number of 65 (46.43%) of the respondents had an agriculture + livestock farming system. It was followed by agriculture + livestock + horticulture system 60 (42.85%), agriculture + livestock + horticulture + beekeeping farming system 8 (5.72%), and agriculture + livestock + bee keeping farming system 7 (5.00%) in the study area, none of the respondents did agriculture alone as their farming system. The maximum number of 68 (48.57%) the respondents did business as their subsidiary enterprise.

The table 1 further revealed that the majority 87 (62.61%) of the respondents had moderate innovativeness, followed by a high 37 (26.14%) level of innovativeness and a low level of 16 (11.43%) of innovativeness respectively in the study area. The majority 81 (57.85%) of the respondents had a medium level of extension participation followed by a high 34 (24.29 %) and low 25 (17.86%) level of extension participation respectively.

**Table:1 Socio-economic and psychological profile of the respondents(n=140).**

S.N.	Profile	Levels/ Category	Number	Per cent
1	Age	Young	32	22.86
		Middle	84	60.00
		Old	24	17.14
2	Education Status	Low	53	37.86
		Medium	68	48.57
		High	19	13.57
3	Gender	Male	129	92.14
		Female	11	07.86
4	Marital status	Unmarried	1	00.71
		Married	136	97.14
		Widow/widower	03	02.15
5	Family size	Small	27	19.29

		Medium	89	63.57
		Large	24	17.14
6	Landholding	Marginal	13	09.29
		Small	30	21.42
		Semi-medium	63	45.00
		Medium	10	07.14
		Large	24	17.15
7	Material possession	Low	7	05.00
		Medium	107	76.43
		High	26	18.57
8	Annual income	Less then 1 Lakhs	43	30.71
		Between 1-5 Lakhs	61	43.58
		Between 5-10 Lakhs	32	22.86
		More then 10 Lakhs	4	02.85
9	Farming system	Agriculture + Livestock	65	46.43
		Agriculture + Livestock + Horticulture	60	42.85
		Agriculture + Livestock +Bee keeping	07	05.00
		Agriculture + Livestock + Horticulture + Bee keeping	08	05.72
10	Subsidiary enterprises	Government service	07	05.00
		Business	68	48.57
		Private job	26	18.57
		Shop	39	27.86
11	Innovativeness	Low	16	11.43
		Moderate	87	62.14
		High	37	26.43
12	Extension participation	Low	25	17.86
		Medium	81	57.85
		High	34	24.29
13	Achievement motivation	Low	23	16.43
		Moderate	89	63.57
		High	28	20.00
14	Information sharing behaviour	Low	24	17.14
		Medium	65	46.43
		High	51	36.43

Higher percentage of the respondents had a moderate level of achievement motivation 89 (63.57%), followed by a high 28 (20.00%) and low 23 (16.43%) level of achievement motivation respectively. Maximum number of 65 (46.43%) the respondents in the study area had a medium level of information sharing behaviour followed by a high level of 51 (36.43%) and a low level of 24 (17.14%) of information sharing behaviour, respectively. Similar results were also reported by Suchiradipta and Saravanan, (2016),Balkrishna and Deshmukh, (2017),Thakur and Chander (2018),and Kaur and Singh (2021).

**Different social media being utilized by the farmers:**

The data from table 2 depicted that WhatsApp was the most popular social media platform used by the respondents (MPS 80.12) and assigned the first rank among social media tools. It was followed by YouTube (MPS 79.24), Facebook (MPS 76.98), Google+ (MPS 73.01), Instagram (MPS 70.53), Blogs (MPS 69.14),Agriculture Apps (MPS 68.64),Twitter (MPS 67.49) and were assigned II, III, IV, V, VI, VII, and VIII rank respectively.Thus, the most popular social media tools i.e. WhatsApp, YouTube, and Facebook are being used by the farmers for sharing farm information. Similar results were also reported by Meena *et al.* (2013), Irunguet *al.*(2015),Balkrishna and Deshmukh (2017),Thakur and Chander (2018),and Gour (2021).

**Table 2: Social media tools being utilized by the respondents (n= 140)**

S. No.	Social Media Tools	Regular		Sometimes		Never		MPS	Rank
		N	%	N	%	N	%		
1.	Facebook	81	57.86	39	27.86	20	14.28	76.98	III
2.	WhatsApp	115	82.15	19	13.57	6	4.28	80.12	I
3.	Twitter	25	17.86	47	33.57	68	48.57	67.49	VIII
4.	Instagram	62	44.29	38	27.14	40	28.57	70.53	V
5.	Google <sup>+</sup>	37	26.44	48	34.28	55	39.28	73.01	IV
6.	YouTube	89	63.57	34	24.29	17	12.14	79.24	II
7.	Agriculture Apps	41	29.29	51	36.43	48	34.28	68.64	VII
8.	Blogs	45	32.14	52	37.14	43	30.72	69.14	VI

The data on the use of social media behaviour among farmers revealed that the majority of the respondents (82.15%) used WhatsApp regularly followed by some time (13.57%) and only a few respondents (4.28 %) never used WhatsApp in the study area. The majority of the respondents (57.86%) used Facebook regularly followed by some time (27.86%), and 14.18 % of respondents never used Facebook. Similarly, the majority of the respondents (63.57%) viewed Youtube channels regularly and 24.29% of respondents viewed it sometime for sharing agricultural information. Apart from social media, the respondents were also used Instagram (44.29% regular and 27.14 % sometimes), Blogs (32.14% regular and 37.14% sometimes), Agriculture Apps (29.29% regular and 36.43% sometimes), Google<sup>+</sup> (26.44% regular and 34.38% Sometimes), and Twitter (17.86% regular and 33.57% sometimes) for sharing and receiving farm information in the study area. WhatsApp, YouTube, and Facebook have gained more popularity among agricultural practitioners to share farming-related information because these tools are simpler and easy to use, client-specific, user-generated content, enables one to many and many to many types of conversation and facilitating, discussion, multiple forms of sharing ranging from text-based messages to audios, visuals; audiovisual and even web links making it an information-enriched platforms.

### **Purpose of social media tools used:**

Table 3 revealed that the overwhelming majority of the respondents 108 (77.14%) used social media most importantly for purpose of keeping in touch with extension workers/ scientists and less importantly about 115 (82.14%) of the farmers used social media for marketing/sale product. It was also clearly indicated that the majority 103 (73.57%) of the respondents used social media most importantly for sharing or capturing information, about half of the respondents 69 (49.29%) used social media for socialization with relatives/contact, and 67 (47.86%) for occupational networking, The Mean and rank obtained in ascending order were keeping in touch with extension workers/scientists (M.S. 2.72) and assigned I rank. It was followed by sharing or capturing information (M.S 2.57), socialization with relatives /contact (M.S. 2.37), occupational networking (M.S.M.S. 2.11), marketing/sale product (1.24), and were assigned II, III, IV, and V rank respectively. keeping in touch with extension workers/ scientists, sharing or capturing information, and socialization with relatives /contact were major purposes for farming

communities on social media sites. The findings are in congruence with that of Chowdhury and HamblyOdame (2013), Irunguet *al.* (2015), Suchiradipta and Saravanan (2016), and Khan and Du (2017).

**Table 3: Purpose of social media tools used by the respondents**

(n= 140)

S. No.	Purpose of social media	Most important	Important	Less Important	Mean	Rank
1.	Sharing or capturing information	103 (73.57%)	14 (10.00%)	23 (16.43%)	2.57	II
2.	Occupational networking	67 (47.86%)	24 (17.14%)	49 (35.00%)	2.11	IV
3.	Socialization with relatives /contact	69 (49.29%)	55 (39.29%)	16 (11.42%)	2.37	III
4.	Keeping in touch with extension worker/scientists	108 (77.14%)	26 (18.57%)	06 (4.29%)	2.72	I
5.	Marketing/sale product	05 (3.57%)	20 (14.29%)	115 (82.14%)	1.24	V

## CONCLUSION

Social media networks have no doubt affected the lives of rural people. Social media are electronic communication tools that allow users to interact, create, share, retrieve, and exchange information and ideas in any form that can be discussed, archived, and used by virtual communities and networks. It can be concluded that WhatsApp, YouTube, and Facebook were the most popular social media platforms being utilized by the farmers for sharing farm information. Keeping in touch with extension workers/ scientists, sharing or capturing information, and socializing with relatives /contact were major purposes for the farming community on social media sites. Social media utilization in sharing farm information was a very good initiative taken in sharing farm information.

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