



## Social Media Use Profile of Farmers in Haryana

Ayush Mishra<sup>1</sup>, Jogender Singh<sup>2</sup>, Joginder Singh Malik<sup>3</sup> and Abhilash Singh Maurya<sup>4\*</sup>

<sup>1</sup>PG Student, <sup>3</sup>Professor, Department of Extension Education, CCS HAU, Hisar-125004, Haryana, India

<sup>2</sup>Senior District Extension Specialist, Krishi Vigyan Kendra, CCS HAU, Sonipat-131001, Haryana, India

<sup>4</sup>Assistant Professor, Department of Agricultural Economics and Extension, School of Agriculture, Lovely Professional University, Jalandhar-144411, Punjab, India

\*Corresponding author email id: 483agabhilash@gmail.com

### ARTICLE INFO

Keywords: Social media, ICT, Garrett ranking, Preference, Use, Farmers, e-extension

<http://doi.org/10.48165/IJEE.2022.58311>

### ABSTRACT

Social media are digital networks that are used to share and discuss user generated information - opinion, video, audio, and multimedia spreading far and wide even in remote areas of the country and has changed the way farmers communicate and interact. This study was conducted in 2021, with an objective to understand the use of social media by farmers and to analyze its relationship with economic profile characteristic. The data were collected personally from Hisar and Sonipat districts of Haryana, with a sample size of 200 respondents comprising 25 farmers from eight villages through a structured interview schedule. Findings revealed that 69.00 per cent of the respondents were in medium category of social media use. Garrett ranking analysis revealed that watching videos was the most preferred purpose of social media use among farmers followed by chatting/ connecting with peers. Also, YouTube was found to be most preferred social media followed by WhatsApp and Facebook. Further, education, family income, cosmopolitaness-localitiness, social participation, extension contact and extension participation showed positive relationship with social media use while age had negative relationship. Also, regression analysis showed that the eleven personal variables selected for the study could explain 53.30 per cent variation in the social media use.

### INTRODUCTION

Social media are web-based tools of electronic communication that allow users to personally interact with others individually or in groups for the purposes of exchanging information, sharing thoughts and opinions, influencing and facilitating decision-making by creating, storing, retrieving and exchanging information in any form (text, pictures, video, etc.) by anyone in the virtual world (Saravanan & Suchiradipta, 2016). These are digital networks that are used to share and discuss user generated information - opinion, video, audio, and multimedia (Andres & Woodard, 2013). As per digital 2020, the number of mobile phone users in world is 5.2 billion while the number of internet users is 4.66 billion. The active social media users worldwide stood at 4.14 billion, a 53.00 per cent

penetration. The world combine spends 10 billion hours on social media everyday with an average active user spending 2 hours 29 minutes per day on different social media platforms. India with a population of over 1.3 billion has 1.06 billion mobile phone connections. The number of social media users in India are 450 million as in 2020. WhatsApp is the most used social media with 53 crores active users followed by YouTube (448 million) & Facebook (41 million). Instagram, Twitter and Telegram have 21 million, 4 million and 1.75 million active users respectively (Digital 2020 and GOI data published in India today, 2021).

Social media has now become a mainstream form of communication across the globe, and its influence is increasing with the rise in the number of smart phone users (Lathiya et al., 2015) although television, radio, agriculture officer and progressive farmers

and other personal sources still dominate into strong group of information sources usefulness and overall agricultural information system (Ravikumar et al., 2015; Nain et al., 2015).

ICT tools are mostly used to get benefit of general communication and entertainment purpose and less for marketing and other productive purpose (Panda et al., 2019). Social media platforms are not confined to transfer and sharing of agricultural information but also provide farmers with holistic knowledge about ongoing developments in their surroundings. The extension mechanism for purposeful farmer to farmer learning exchange is also created which in turn may be a step towards innovative farmer led extension delivery mechanism (Nain et al., 2019). Social media also helps farmer to connect with extension agents and specialists to get real time solution to their specific problems. Many progressive farmers are able to sell their products directly to the retailers and consumers by using social media. Keeping these observations in view, this study aims to get an insight on the use of social media by farmers, purpose of social media use and preferred social media platforms.

### METHODOLOGY

The study was conducted in Hisar and Sonipat districts which were selected from west and east zones of Haryana respectively. Two blocks Hansi-1 and Hisar-2 were selected randomly from Hisar districts while Rai and Kharkhoda blocks were selected from Sonipat district. Further, two villages were selected from each of the four blocks randomly. In Hisar, Umra and Garhi were selected from Hansi-1 block whereas, Balsamand and Arya Nagar were selected from Hisar-2 block. In Sonipat, Manouli and Halalpur were selected from Rai block while Kanwali and Rohat were selected from Kharkhoda block. Also, Twenty-five farmers having smart phone facility were selected from each of the villages, thus a total of 200 farmers were selected for the study. The data were collected through personal interview technique with the help of structured interview schedule and analyzed using MS Excel and Statistical Package for Social Sciences (SPSS). In order to measure social media use, the respondents were asked questions about use of different social media, time spent on social media, purpose of using social media, perceived benefits of using social media, pattern of social media use and usefulness of social media, etc. The scores for these questions were added to get overall score of a respondent and then respondents were categorized into low medium and high based on his/her total score using mean and standard deviation. Also, to get more clarity on the use of social media respondents were asked to

rank in order of preference the purpose for which they use social media, what social media means to them and which social media were most preferred by them and the ranking done by all of the respondents were analyzed using Henry Garret ranking technique. Additionally, Correlation and regression analysis was carried out to understand the relationship between social media use and socio-economic traits of the farmers.

### RESULTS AND DISCUSSION

#### Social media use

The data in Table 1 reveal that more than two-thirds of the respondents (69.00%) belonged to medium category with respect to overall social media use followed by high category (18.50%). It can be concluded from the data that vast majority of farmers were actively using social media although their extent of use differs. Affordable smart phones, improved connectivity in villages, cheaper data plans and increasing awareness about ICT might be the reasons for these results. The findings were also supported by Jat et al., (2021) who revealed that majority of farmers (59.70%) were in medium group of ICT use followed by low and high group.

**Table 1.** Distribution of respondents on the basis of overall use of social media

S.No.	Category	Frequency	Per centage
1	Low (<43)	25	12.50
2	Medium (43-67)	138	69.00
3	High (>67)	37	18.50

#### Preference and ranking of purpose of social media use by the respondents

It can be inferred from Table 2 that watching videos (rank 1<sup>st</sup>) with average value of 65.16 was the most preferred option when it comes to purpose of social media use by the respondents followed chatting/connecting with friends, peers and relatives (rank 2<sup>nd</sup>) and getting agriculture related information (rank 3<sup>rd</sup>) with average value of 60.70 and 57.21 respectively. Interacting with buyers and sellers (rank 7<sup>th</sup>) and connecting with agricultural institutions and government agencies (rank 6<sup>th</sup>) were the least preferred options with average value of 28.94 and 39.71 respectively, when the respondents were asked to rank the purpose of their social media use. It can be concluded here that respondents use social media more for entertainment and personal use than for professional purposes like building a network of potential buyers and sellers or connecting

**Table 2.** Preference and ranking of purpose of social media use by the respondents (n=200)

S.No.	Purpose of social media use	Total Value	Average Value	Rank
1	To get agriculture related information	11442	57.21	3
2	Learning about new innovations & techniques	10980	54.90	4
3	To connect with agricultural institutions & Govt. agencies	7942	39.71	6
4	Chatting/ connecting with friends, peers & relatives	12141	60.70	2
5	Watching Videos	13023	65.15	1
6	Interacting with buyers and sellers	5788	28.94	7
7	Any other*	8884	44.42	5

\*includes leisure activities, casual browsing & searching, group and video calls

with govt. departments, agencies and agricultural institutions. Although, some progressive farmers were using social media for the purpose of learning about new innovations and techniques developed in the field of agriculture. The findings are in line with Kumar et al., (2019) who stated that, online chatting, entertainment, news, networking and browsing were the main social media activities in which farm youth were engaged in. Further, they concluded that most farming youth lack proper knowledge of social media use in agriculture.

### Preference and ranking of what social media means to the respondents

It was evident from Table 3 that of all the factors ranked by the respondent, social media as a means of entertainment is ranked 1<sup>st</sup> with the highest average value (63.16), followed by source of information (rank 2<sup>nd</sup>) and source of leisure time (rank 3<sup>rd</sup>) with average value of 56.90 and 54.89 respectively. Social media as a source of income and source knowledge were the last and 2<sup>nd</sup> last with average value of 26.61 and 43.55 respectively. It can be concluded from the table that respondents give more preference to social media as a source of entertainment and source of information over other options. This can be attributed to the fact that social media is yet to reach its full potential in rural India. At present, farmers view social media mainly as a means of entertainment and focus more on contents related to personal consumption like music videos, short videos, sharing jokes etc. over professional contents. The results are supported by Jain & Sanghi (2016) who stated that people of rural India access internet mainly for consumption of contents related to new and videos.

**Table 3.** Preference and ranking of what social media means to respondents

S.No.	Social media means	Total Value	Average Value	Rank
1	Source of entertainment	12633	63.16	1
2	Source of information	11380	56.90	2
3	Source of leisure time	10979	54.89	3
4	Source of Knowledge	9111	43.55	6
5	Source of income	5322	26.61	7
6	Basic need	10719	53.59	4
7	Source of Personal Communication	10056	50.28	5

### Preference and ranking of different social media by the respondents

It can be concluded from Table 4 that YouTube (rank 1<sup>st</sup>) was the most preferred choice of social media among the respondents with average value of 64.74 followed by WhatsApp (rank 2<sup>nd</sup>) and Facebook (rank 3<sup>rd</sup>) with average value of 63.90 and 61.81 respectively. The results are in line with the findings of Balkrishna & Deshmukh (2017), who observed that YouTube, WhatsApp and Facebook were the most popular social media applications. Also, Instagram was ranked 4<sup>th</sup> while Twitter (rank 6<sup>th</sup>) was the least preferred social media among the farmers. Moreover, while Facebook, WhatsApp and YouTube were preferred by respondents across all categories, Instagram was generally preferred more by

**Table 4.** Preference and ranking of different social media by the respondents (n=200)

S.No.	Social Media	Total Value	Average Value	Rank
1	Facebook	12362	61.81	3
2	WhatsApp	12781	63.90	2
3	YouTube	12948	64.74	1
4	Twitter	5964	29.82	6
5	Telegram	7609	38.04	5
6	Instagram	8336	41.68	4

young farmers as compared to middle and old farmers whereas only a small group of well-educated farmers preferred Twitter. The findings are similar to Joshi & Dhaliwal (2019) who revealed that more than half of the farmers were regularly using Facebook while 82.00 per cent and 78.00 per cent farmers were using WhatsApp and YouTube respectively. Further, they revealed that more than 80.00 per cent farmers never used Twitter while 78.00 per cent farmers never used Instagram. The results were also supported by the study of Khou & Suresh (2018) which stated that YouTube was the most popular social media followed by Facebook & WhatsApp.

### Relationship between profile of the respondents with social media use

It can be concluded from Table 5 that personal variable of the respondents' such as education, family income, landholding, cosmopolitaness-localitiness, mass media exposure, social participation, extension contact and extension participation were significant and positively correlated (at 0.01% level of probability) with social media use while age had significant but negative relationship with social media use. This might be due to the fact that young farmers use a greater number of social media and for multiple purposes as compared to old farmers who use lesser number of social media (mainly Facebook, WhatsApp and YouTube) and for limited purposes. This is supported by the study of Kaur (2014), which revealed that social media use varied between

**Table 5.** Relationship between profile of respondents with social media use

S.No.	Personal Variables	Correlation coefficient ('r' value)	Regression coefficient (B value)
1	Age	-0.257**	-4.815
2	Gender	0.015	0.281
3	Education	0.443**	2.352
4	Family type	0.011	0.354
5	Family income	0.407**	0.723
6	Land Holding	0.197**	0.342
7	Cosmopolitaness-Localitiness		
I	Personal Localite	0.377**	0.403
II	Personal Cosmopolite	0.482**	0.331
8	Mass Media Exposure	0.317**	0.561
9	Social Participation	0.406**	1.159
10	Extension Contact	0.526**	0.768
11	Extension Participation	0.361**	1.312

$R^2 = 0.533$ , Constant=17.972

\*\* Correlation is significant at 0.01 level of significance; NS = Non-Significant

different age groups and young generation spend greater time on social media than the older generation. Also, as social participation, contacts with extension functionaries and participation in extension activities increases use of social media increase as farmers tend make more use of social media to build relationship, make connections and interact with peers and experts. Similarly, education makes farmer more capable of understanding the benefits of ICTs like social media and make their better utilization. The findings are similar to Joshi & Dhaliwal (2019) who revealed that age had negative relation with social media utilization while education has positive relationship. Further, Family income also showed significant relationship as higher incomes means greater affordability which in turn affects availability and accessibility of modern ICT tools such as smartphones, desktops and laptops. The results are also supported by the Raghuprasad et al., (2012) who found that education, landholding & annual income had positive and significant relationship with utilization of ICT tools.

The regression analysis gave value of  $R^2$  as 0.533 which revealed that 53.30 per cent variation in the social media use could be explained by the eleven variables selected in the study.

### CONCLUSION

The study concludes that majority of farmers were in medium category of social media use. Watching videos is the most preferred purpose of social media use followed by chatting/connecting with friends and peers. Social media is viewed by respondents as source of entertainment followed by source of information. YouTube is the most preferred social media followed by WhatsApp and Facebook. Socio-personal traits of farmers such as education, family income, cosmopolitaness-localiteness, social participation, extension contact and extension participation show positive relationship with social media use while age show negative relationship. It can be implied from the study that while social media are used by farmers, it is yet to reach its full potential when it comes to making its productive use for agriculture related activities. Farmers are using social media more often for personal purposes such as entertainment rather than using it for professional reasons.

### REFERENCES

- Andres, D., & Woodard, J. (2013). Social media handbook for agricultural development practitioners. *USAID and FHI*, 360.
- Balkrishna, B. B., & Deshmukh, A. A. (2017). A study on role of social media in agriculture marketing and its scope. *Global Journal of Management and Business Research*.
- Chakravarti, A. (2021, February 25). Government reveals stats on social media users, WhatsApp leads while YouTube beats Facebook, Instagram. *India Today*. <https://www.indiatoday.in/technology/news/story/government-reveals-stats-on-social-media-users-whatsapp-leads-while-youtube-beats-facebook-instagram-1773021-2021-02-25>.
- Digital. (2020). Global digital overview- Data reportal. <https://datareportal.com/reports/digital-2020-global-digital-overview>
- Jain, N., & Sanghi, K. (2016). The rising connected consumer in rural India, The Boston Consulting Group. <https://www.bcg.com/publications/2016/globalization-customer-insight-rising-connectedconsumer-in-rural-india.aspx>.
- Jat, J. R., Punjabi, N. K., & Bhinda, R. (2021). Use of ICTs by tribal farmers for obtaining agricultural information in Southern Rajasthan. *Indian Journal of Extension Education*, 57(3), 16-19.
- Joshi, D., & Dhaliwal, R. K. (2019). Utilization of social media by farming community: A case from Punjab state. *Indian Journal of Extension Education*, 57(1), 47-52.
- Kaur, P. (2014). Relationship between social networking sites usage pattern and motivations behind usage: A study of generation Z "A Digital generation". *International Journal of Applied Services Marketing Perspectives*, 3(2), 996-1004.
- Khou, A., & Suresh, K. (2018). A study on the role of social media mobile applications and its impact on agricultural marketing in Puducherry region. *Journal of Management*, 5(6), 28-35.
- Kumar, M., Suchiradiptra, B., & Saravanan (2019). Reshaping the future of agriculture: A youth and social media perspective. Discussion Paper 6 MANAGE-Centre for Agricultural Extension Innovations, Reforms, and Agripreneurship (CAEIRA), pp 45-53.
- Lathiya, A., Rathod, A., & Choudhary, K. (2015). Role of social media in agriculture. *International Journal of Commerce and Business Management*, 8(2), 268-273.
- Nain, M. S., Singh, R., & Mishra, J. R. (2019). Social networking of innovative farmers through WhatsApp messenger for learning exchange: A study of content sharing. *Indian Journal of Agricultural Sciences*, 89(3), 556-558.
- Nain, M. S., Singh, R., Mishra, J. R., & Sharma, J. P. (2015). Utilization and linkage with agricultural information sources: A study of Palwal district of Haryana state. *Journal of Community Mobilization and Sustainable Development*, 10(2), 152-156.
- Panda, S., Modak, S., Devi, Y. L., Das, L., Pal, P. K., & Nain, M. S. (2019). Access and usage of Information and Communication Technology (ICT) to accelerate farmers' income. *Journal of Community Mobilization and Sustainable Development*, 14(1), 200-205. <https://indianjournals.com/ijor.aspx?target=ijor:jcmsd&volume=14&issue=1&article=037>
- Raghuprasad, K. P., Devaraja, S. C., & Gopala, Y. M. (2012). Attitude of farmers towards utilization of information communication technology (ICT) tools in farm communication. *Research Journal of Agricultural Sciences*, 3(5), 1035-1037.
- Ravikumar, K., Nain, M. S., Singh, R., Chahal, V. P., & Bana, R. S. (2015). Analysis of farmers' communication network and factors of Knowledge regarding agro-metrological parameters. *Indian Journal of Agricultural Sciences*, 85(12), 1592-96.
- Saravanan, R., & Bhattacharjee, S. (2014). Mobile phone applications for agricultural extension in India. *Mobile Phones for Agricultural Extension: Worldwide mAgri Innovations and Promise for Future*. (Edited by Saravanan, R), pp 1-75.
- Saravanan, R., & Suchiradiptra, B. (2016). Social media policy guidelines for agricultural extension and advisory services. GRFRAS interest group on ICT4RAS, pp 9-11.
- Singh, G., Singh, P., Tiwari, D., & Singh, K. (2021). Role of social media in enhancing agricultural growth. *Indian Journal of Extension Education*, 57(2), 69-72.