

Role of Social Media in Enhancing Agricultural Growth

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ABSTRACT

Social media has been extensively used by rural youth due to tremendous increase in the number of smart-phones users during last decade. A survey was conducted during 2018-19 to study the use of social media as a source of agricultural information, use pattern, preference towards different modes of information receiving and sharing, and frequency of use among rural youth. The 200 rural youth were randomly selected from the South-Western Mansa district of Punjab. Results of the study revealed that only ~6 per cent of the young farmers were using Radio as source of information for agriculture. Majority of the young farmers preferred social media viz. Youtube, WhatsApp and Facebook as a source of agricultural information. The young farmers had subscribed agriculture based channels on YouTube for getting agriculture related information. Majority of young farmers had been maintaining 4-5 WhatsApp groups to share and receive information on agriculture and allied fields. Use of PAU Mobile App and Digital Newspaper (Kheti Sandesh) was also popular among farmers. Young farmers observed that use of social media has a significant impact on crop management practices. About one-fourth (~27%) of respondents had increased acreage under recommended crop varieties, ~16.5 per cent had reduced the average number of sprays on rice crop, ~22.5 per cent had been scheduling irrigation based on weather based agro-advisory and ~24.1 per cent were getting information on marketing of crops from social media.

Keywords: Mobile Apps, Digital media, Youtube, WhatsApp and Facebook

INTRODUCTION

Information is vital in agricultural development because it is a tool for communication (Kalusopa, 2005). Extension services are required to improve agricultural productivity by providing farmers with requisite information helping them to optimize use of limited resources (Muyanga and Jayne, 2006; Singh *et al.*, 2017). Worldwide agriculture has witnessed a shift in the past few decades and extension mechanism need to stay ahead and equip the farmers by enhancing their management and decision making skills (Singh *et al.*, 2018; Singh *et al.*, 2020a). But in reality there is only

one extension worker available for every 2879 farmers in India (Mukherjee and Maity, 2015).

In India, large numbers of positions in public extension system are vacant, resulting in overwork for extension personnel and thus, lowering their efficiency (Mukherjee and Maity, 2015). Extension system is also entrusted with numerous other development activities, which ultimately weaken the focus on extension (Singh *et al.*, 2018). As results large numbers of farmers are still unreached. Recent reports imply that only 41 per cent of the farming families are in contact with government or private extension services. The government extension system

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covers only 11% of the households (Bera, 2014). Information and Communication Technologies (ICTs) has the abilities of reaching large number of people simultaneously, therefore have a greater role in the extension work. Sandhu *et al.*, (2012) concluded mobile based delivery ensures timeliness and is of great use to the farmers. Dissemination of agricultural information through television and radio has played an important role for a long time (Purushothaman *et al.*, 2003), but the recent developments in the mobile and internet has provided new ways of technology transfer. Tremendous increase in mobile subscriptions has further increased the use of web based services and various applications like Youtube, Facebook and other mobile apps.

Social media allows individuals to create and share user-generated content (Kietzmann, Hermkens, McCarthy, Silvestre, 2011). The number of internet user mostly use Youtube, Facebook and Whatsapp for receiving, creating and sharing information. Most social media does not require special skill and training, however reading and writing skills are required. Access to smart phone and internet facility allows users to share their interests, experiences and circumstances. Smartphone are ubiquitous in developing countries because they afford user portability, personal control, and flexibility (Castells *et al.*, 2007). The fast growing use of social media and mobile technologies create opportunity for dissemination of technologies which can facilitate creating, sharing, preserving and dissemination of knowledge and skills to transform the agriculture (Owiny *et al.*, 2014). WhatsApp has proved to be potential to construct knowledge (Nain *et al.*, 2019). Therefore, recent developments in social media have paved a way for reaching more number of farmers and improving agricultural extension services. Thus, present study was conducted with the objective to know the use of social media among young farmers for receiving agricultural information, pattern of use and impact on agricultural practices.

METHODOLOGY

The study was conducted during the year 2018-19. The data were collected from Mansa, a south-western district of the Punjab. There are about 42000 farming

families in the district mainly engaged in cultivation of rice, cotton and wheat crop. The data were collected from 200 randomly selected farmers who were actively engaged in agriculture and below 45 years of age. For the purpose of data collection a questionnaire was developed. The data regarding use of various media including social media for receiving information regarding agriculture was collected.

RESULTS AND DISCUSSION

Sources of information and social media used by young farmers

The television and radio were least preferred by young farmers for getting technical information regarding agriculture. Only 6.0 per cent of the young farmers were using radio for receiving information related to agriculture (Table 1), while 9.0 per cent were using television for this purpose.

Table 1: Different sources used by young farmers for receiving agricultural information

Source of information	% of respondents†
Television	9.0
Radio	6.0
Public extension system	21.5
Private extension system	36.0
Print media	13.0
Social media	72.5
Neighboring farmers	16.0

†Multiple responses

Print media was used by 13 per cent of the young farmers. About one fifth (21.5%) were contacting Govt. extension system for getting information regarding agricultural problems while more than one third (36.0%) were relying on private extension services. Due to ease of receiving, retrieving and sharing social media was the most preferred source of agricultural information among rural youth. A majority of farmers (72.5%) were using social media for receiving and sharing agricultural information.

Among the social media WhatsApp was most preferred and 61.5 per cent of the young farmers were

Table 2: Use of social media by young farmers for receiving agricultural information and the pattern of use of social media among young farmers

Social Media	% of respondents [†]	No. of channels subscribed/groups maintained			
		≤2	2-3	3-4	≥5
Youtube	37.0	14 (17.9) [‡]	47 (60.3)	13 (16.7)	04 (5.1)
Facebook	23.0	19 (41.3)	23 (50.0)	04 (8.7)	—
WhatsApp	61.5	07 (5.7)	17 (13.8)	26 (21.2)	73 (59.3)
Agri-mobile Apps	22.5	—	—	—	—
Digital paper	6.0	—	—	—	—

[†]Multiple responses, [‡]Values in parenthesis are percentage

using this social media for getting agricultural information (Table 2). Thus, WhatsApp was more popular among rural youth for sharing and receiving agricultural information. This was followed by Youtube, which was used by 37.0 per cent of the respondents. Facebook was used by 23.0% of the respondents for getting agricultural information. Apart from social media, young farmers also used mobile app for getting information regarding agriculture. PAU mobile app was downloaded by 22.5 per cent of the young farmers. Digital paper (*Kheti Sandesh*) was directly received by 6.0 per cent of the farmers.

The data on pattern of use of social media among young farmers revealed that majority of the young farmers (59.3%) maintained about 4-5 WhatsApp group for sharing and receiving agricultural information and majority (28.5%) used social media twice in a day. Among Facebook users, majority (50.1%) had maintained 2-3 groups/communities and majority (52.2%) used Facebook once in a day (Table 2). Similarly, more than one half of the respondents (56.4%) viewed Youtube channels once in a day for getting agricultural information and a great majority (60.3%) had subscribed 2-3 Youtube channels.

Impact of social media use on agricultural practices followed by farmers

The use of social media has significant impact on knowledge and practices of young farmers. More than one fourth of the respondents reported that they have increased area under recommended varieties (26.9%) and due to increased knowledge (32.4%) as a result of

Table 3: Effect of use of social media on knowledge and agricultural practices followed by farmers

Change in agricultural practices	%age of respondents [†]
Enhanced knowledge about insect pests and diseases	31.0
Increased knowledge about recommended crop varieties	32.4
Knowledge about market prices	24.1
Increase in area under recommended varieties	26.9
Balanced use of fertilizers	15.1
Decrease in excessive use of insecticides	16.5
Irrigation scheduling based on agro-advisory	22.7

[†]Multiple responses

use of social media for getting agricultural information (Table 3). Farmers also reported that their knowledge regarding insect pests and diseases increased (31.0%) and decreased excessive use of insecticides (16.5%).

Farmers also reported balanced use of fertilizers (15.1%) due to increased knowledge through social media. Similarly, weather based agro-advisory helped farmers scheduling irrigation to save crop from lodging (22.7%). Near about one fifth (24.1%) of the farmers reported that they had enhanced awareness about agricultural fairs. Farmers also reported enhanced knowledge about market prices (24.1%) as a result of use social media for receiving agricultural information.

CONCLUSION

With technological advancement, social media platforms like YouTube, WhatsApp and Facebook can

be easily included in delivering content in different formats for dissemination of agricultural information. The direct participation of the all the stakeholders can be enhanced in development related discussions with increased use of social media. All stakeholders can actively participate in and contribute in the discussions and follow-up actions. For holistic development in agriculture the use of social media is gaining importance and is acting as common platform to have a discourse and increase inclusion unreached and marginalized farmers or farm women. Social media has paved a way for more open discussions foremost for two way communication.

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