

Original Research Article

Effectiveness of WhatsApp Agro - Advisory service by the scientist of KVK of Cauvery Delta Zone

ABSTRACT

Nowadays usage of Social media is increasing rapidly in 21st century among the social media WhatsApp is most and popular one and used by large number of peoples. The present study was focused on how effectively KVK's farmers use WhatsApp group for agricultural purpose. Three districts of Cauvery Delta Zone Nagapattinam, Thiruvarur, Karaikal KVK WhatsApp groups were purposively selected from each group 40 farmers were selected randomly. Totally 120 farmers were selected for this study. Data were analyzed by the descriptive statistics. It reported that overall effectiveness of the farmers uses WhatsApp groups was at the medium level (74.17%) it clearly indicate that farmers were using group for their agricultural activities. The easiness of understanding of information on Whatsapp was found to be good, and image and video-based information, in addition to textual information were aided in a better understanding of information. Based on the study suggested that importance to be placed on disseminating weather and market information to aid in decision making for the adoption of agricultural technologies.

Keywords: Effectiveness, WhatsApp, KVK

1. INTRODUCTION

In recent years, using of social media (WhatsApp, Facebook, YouTube, Instagram, Twitter) users getting increasing day by day and rural people also access the social media in their rural location. Whatsapp is most popular Social media Three in one people are using for their connected with their relation and friends and forming a WhatsApp group interacted with the large number of people and community and also sharing their information in their group and created business account for their business. According to Naruka *et al.*, (2017) Farmers can benefit greatly from social media. It can assist farmers in obtaining information about farm operations, clarifying their doubts about plant/livestock disease symptoms, and gaining immediate access to market-related information. However, this is only possible if they are socially networked in virtual space with human resources such as agricultural researchers, extension agents, veterinarians, progressive farmers, sellers, and other buyers. The low cost of smartphones has resulted in an unprecedented increase in social media use in rural India. The power of social media can be harnessed for the benefit of farming communities (1). According to Jain and sanghi (2016) Mobile internet and smart phone penetration in rural areas has increased significantly, with half of all internet users by 2020 (2). Digital India is one such endeavor done by the Indian government to guarantee that all government services are available electronically to all citizens. It connects rural areas to high-speed internet networks, as well as knowledge of the latest agricultural technologies and their use to boost crop productivity. Using of social media particularly in areas such as agriculture, where disease and pest outbreaks can be detected and stopped before they reach the economic threshold and saving millions of people life and economic growth of the country. There are numerous social media platforms available, with which WhatsApp being the most

popular. WhatsApp is utilised by the majority of Indian farmers. According to Mahesh Narayanan and Senthilkumar (2022) said that farmers were actively engaged during morning hours in WhatsApp group due to their free time rather than later hours. Farmers opined that WhatsApp positively impacted them in obtaining timely information as well as personalized information (3). Farmers used this group to share information about their farming needs and to give advice to neighboring farmers about problems they were having in field They also used this group to find the inputs they needed for their farms and to market their produce to other farmers. Creative farmers and professionals are using WhatsApp to share their knowledge and experiences about agriculture and related activities with other group members. Majority of group members communicated their farm experiences and information via WhatsApp. Farmers' knowledge exchange is known as "innovative farmer-led extension delivery." In order to provide site-specific information, WhatsApp's importance must be expanded and updated. ICAR Krishi Viygan Khendra (KVKs) has now started a separate WhatsApp group for their specific area farmers. Through which they share all crop information, inputs availability, various training programmers, advisory services, livestock information, and schemes. This WhatsApp platform serves as a direct link between farmers and KVK scientists. Through this group by simply clicking and submitting one snap or video to a representative source, after assessing the issue at the expert level, the farmer will receive an instant solution to the connected problem. Hence, the present study objective is focused on the Effectiveness of the Farm advisory services in dissemination of farm technology to the farmers of KVK's WhatsApp group by the Scientists and Relationship between farmers profile character and effectiveness.

2. METHODOLOGY

The study was conducted in Krishi Vigyan Kendras WhatsApp group of Nagapattinam, Thiruvarur, Karaikal of Cauvery Delta Zone of Tamilnadu state and Pudhucherry union territories were purposively selected. The main goal of communicating information via Whatsapp was to make farmers aware of the value of modern crop management practises in increasing crop productivity and, ultimately, to convince farmers to adopt the technologies communicated. WhatsApp assists KVK scientists in the easy dissemination of technology and information such as agricultural, horticultural, and animal husbandry, as well as training for rural youth and women for self-employment and rural society development. Simple random sampling techniques was used to select 40 respondents from each KVK's WhatsApp group. The study included 120 respondents in total. The effectiveness of WhatsApp groups was collected based on the understanding of the message, need-based information, visibility of the content, create awareness, gained knowledge, shared information with fellow famers, convinced with the message, and adoption of that technology. Data were gathered through well-structured interviews and face-to-face interviews with famers. Descriptive statistics such as Mean, Standard Deviation, Percentage, and Frequency, Correlation were used to analyse the collected data..

3. RESULTS AND DISCUSSION

Table 1 shows the effectiveness of the WhatsApp message received by the famers from the KVK's scientists. Need based information more than half of the respondents (56.67 %) pleaded that information shared in the WhatsApp groups were medium range of need to the agricultural activities followed by (40.83 %) respondents informed that highly needed for their agricultural activities and only (2.50 %) respondents feels that information shared in groups were low in need of their agricultural activities this results were accordance with the Akashdeep Jain *et al.*,(2019) he sound that majority of the respondent uses WhatsApp have medium level need based information (4). In terms of creating awareness, Majority of respondents (89.00%) reported they have a medium level of awareness, followed by (16.00%) have a low level of awareness and (15%) have a high level of awareness. This is

because KVK's scientists and progressive farmers shared information about new varieties of paddy and recent improved technology for their farm land development, and made them aware about the government schemes and policies that were helpful in making farmers secure. With regard to knowledge gained majority of the respondents (90.00%) informed that medium level of knowledge gained followed by (8.33%) respondents have high level of knowledge gained and only few (2.67%) respondents were found with low knowledge gained because of scientist and farmers use local language Tamil as their medium of exchange language so every farmers easily read and understand the content of the message. Regarding Shared with fellows majority of the respondents (85.00%) opinioned that medium range shared an information and technology to other farmers followed by (15.00%) have high range of sharing information. Because most farmers were educated and well versed in using smart phone. In terms of convinced of the message (75.00%) respondents reported that medium level of satisfaction with the messages followed by (15.83%) of respondents have high level of satisfaction with messages and (9.17%) respondents have low level of satisfaction with the messages. Because KVK's scientists transfer technology or farming practices in videos, pictures, audio, and documents made them more satisfied with convinced the information and farmers read or watch all of the technology and gain comprehensive knowledge about the specific farming practices and technology, and they were persuaded to try it out in their field conditions. Regarding to the Adoption of the technology half of the respondents (60.00%) revealed that medium level of adoption followed by (20.83%) of respondents with low level of adoption and remaining (19.17%) respondents had high level of adoption this all comes through because of maximum farmers were convinced with the technology and practices shared in that groups but during adoption of that technology or practice make the farmers to think about their situation and most of the farmers had low land holding so they were not in situation to take the new technology or practice in their field and they feels that it leads to the huge loss in their income. Even though some innovative farmers always try new practices and technology in their field condition.

Table 1. Effectiveness of WhatsApp

S.No.	Effectiveness of WhatsApp	Range	Frequency	Per cent
1.	Need based information			
	Low	Below 9	3	2.50
	Medium	9 – 11	68	56.67
	High	Above 11	49	40.83
2.	Create awareness			
	Low	Below 16	16	13.33
	Medium	9-13	89	74.17
	High	Above 13	15	12.50
3.	Gained knowledge			
	Low	Below 8	2	1.67
	Medium	8 -11	108	90.00
	High	Above 11	10	8.33
4.	Shared with fellow farmers			
	Low	Below 5	0	00.00
	Medium	5 -8	102	85.00
	High	Above 8	18	15.00
5.	Convinced with messages			
	Low	Below 7	11	9.17
	Medium	7- 9	90	75.00
	High	Above 9	19	15.83
6.	Adopted technology know through the WhatsApp			

Low	Below 5	25	20.83
Medium	5 – 10	72	60.00
High	Above 10	23	19.17

Table 2. Overall Effectiveness of the WhatsApp

S.No	Overall Effectiveness	Range	Frequency	Percent
1.	Low	Below 49	12	10.00
2.	Medium	49 - 61	89	74.17
3.	High	Above 61	19	15.83
Total			120	100

Table 2. shows that Medium level of effectiveness was found with majority of the respondents (74.17%) followed by high level of effectiveness was reported with (15.83%) of respondents and low level of effectiveness was found with only (10%) of respondents. This result is because of the using WhatsApp among the famers would increases their ability to search the solution of their field problem, aware about the new technology and practices introduced in the agriculture, government scheme and policy, market price for their produce, weather report and most importantly share their know information to their other farmers and famers also asked solution for their field problem directly through the except and KVK's scientist.

Table no. 3 Relationship between profile characters and effectiveness of the WhatsApp

Variable. No.	Variables	'r' value	'P' value
X ₁	Age	.127 ^{NS}	.167
X ₂	Educational Status	-.003 ^{NS}	.974
X ₃	Occupational Status	.008 ^{NS}	.930
X ₄	Experience in Farming	.136 ^{NS}	.139
X ₅	Farm Size	.216 [*]	.018
X ₆	Annual Income	.151 ^{NS}	.100
X ₇	Information Seeking Behaviour	.205 [*]	.024
X ₈	Innovativeness	.014 ^{NS}	.880
X ₉	Social Media Exposure	.642 ^{**}	.000
X ₁₀	WhatsApp operating skills (Familiarity)	.490 ^{**}	.000
X ₁₁	WhatsApp operating skills (utilization)	.085 [*]	.035

X ₁₂	Receptivity to messages from smartphone	.290**	.001
X ₁₃	Possession of Electronic Gadgets	.340**	.000

*. significant at the 0.05 level (2-tailed), **. significant at the 0.01 level (2-tailed), NS= non – significance

Table 3. shows that 7 out of 13 variables were significant to the effectiveness of WhatsApp. The variables social media exposure (x₉), WhatsApp operating skills (familiarity) (x₁₀), receptivity to messages from the smartphone (x₁₂), possession of electronic gadgets (x₁₃) showed positive correlation and significant with the WhatsApp effectiveness at 1 per cent level of significance. The variables farm size (x₅), information seeking behavior (x₇), WhatsApp operating skills (utilization) (x₁₁) had positive correlation and significant at 5 per cent level of significance. And the variables age (x₁), educational status (x₂), occupational status (x₃), experience in farming (x₄), annual income (x₆), and innovativeness (x₈) showed non-significant relationship with the effectiveness of WhatsApp. Positive relationship of variables such as farm size, information seeking behavior, social media exposure, WhatsApp operating skills (familiarity), WhatsApp operating skills (utilization), receptivity to messages from the smartphone, possession of electronic gadgets to the effectiveness of WhatsApp because more number of farmers were familiar in uses smart phone so it easy for them handle WhatsApp for Agricultural and information shared in the groups and messages were very simple on their own language so it easy for them to understanding the message and applied in the field condition in the successful manner.

4. CONCLUSION

WhatsApp groups not only provide agricultural information to the famers but also assist them to communicate directly with scientists and strengthen their bonds through regular interaction. This study clearly reported that there was a high demand for information related to new technology and practices that are shared regularly in groups. Sharing the information to other farmers through WhatsApp was very simple and covers the large area in shorter period of time. Farmers are easily convinced by new technologies and practices, but farmers face difficulties in adapting to that technology. For this it is suggested that importance to be focused on disseminating weather and market information to aid in decision making for the adoption of agricultural technologies.

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