

## CORRELATES OF UTILIZATION PATTERN OF KISAN MOBILE ADVISORY SERVICE

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### ABSTRACT

*The study was undertaken to find the relationship between the selected attributes and utilization pattern of KMAS in Banaskantha district of Gujarat state. A total of 123 respondents were selected through multistage sampling technique constituted sample size and data collection was done with the help of structured schedule by personal interview of the respondents. Statistical techniques such as Correlation, regression and step wise regression were used to analyze the data for meaningful interpretation. The findings of the study revealed that age, education, farming experience, sources of information, extension participation, scientific orientation and attitude had positive and significant association with utilization pattern of KMAS. From regression analysis, it was found that age, education, extension participation, scientific orientation and attitude significantly contributed in explaining the variation in utilization pattern of KMAS. The study recommends the consideration of these variables during selection of the farmers for implementation of extension programmes.*

**Keywords :** utilization pattern, farmer-subscribers, KMAS, correlates

### INTRODUCTION

Agriculture is a predominant sector and the backbone of Indian economy engaging 60 percent of the population. The performance of the sector basically depends on the performance of small holder farming. Despite the presence of a large Indian economy, there has been a lag in Indian agriculture which is characterized by poor connectivity and disintegration of market, small farm holdings coupled with delayed information to the farmers. Thus, the adoption of modern technologies and relevant information has a key role to play for modernizing the system of farming. The availability of exact information in proper time along with its proper utilization is indispensable for agriculture. But the ground reality is hard-hitting with only one extension worker available for every 2879 farmers in India (Mukherjee and Maity, 2015). A recent survey reported that only 41 per cent of the farm households received any assistance from either government or private extension services, and the government extension machinery covering only 11 per cent of the households who received extension assistance (Bera, 2014). As statistics suggest, majority of the farmers still remain unreached. With the abilities of reaching large number of people individually and simultaneously, Information and Communication Technologies (ICTs) are assuming a greater role in the extension work. Though television and radio have been used for disseminating agricultural information for a long time (Purushothaman et al., 2003), the recent

developments in the mobile, computing and networking technologies provide new ways of technology transfer.

KMAS is started by ICAR with the aim of passing the agricultural information to maximum number of farmers in local language through SMS free of cost. It is operated by KVKs all over the India. Subject areas of KMAS are Agronomy, Plant protection, Horticulture, Animal science, Home science, Dairy, etc. KMAS is highly advantageous as farmers can get free information, location specific information delivery, availability of information in local language and cost effective. KMAS has been launched in 192 KVKs all over India and KVK Deesa is one of the KVK selected for implementation of scheme. KVK is using Kisan Portal, Ministry of Agriculture, Government of India to send the SMS to the farmers.

To improve the utilization of KMAS it is important to know the factors influencing the utilization of KMAS by farmer-subscriber. So keeping these points in mind the study was mainly focused to reveal the association between the selected attributes of the farmers of Banaskantha district and utilization pattern of KMAS.

### OBJECTIVES

- (1) To know profile characteristics of farmer-subscribers of KMAS

- (2) To know the association between the selected attributes and utilization pattern of KMAS

## METHODOLOGY

The study was confined to *ex-post facto* research design as the independent variables have already made impact on utilization of ICT that was studied by the researcher (Kerlinger, 1976). Multi stage sampling technique was employed in the study. The study was conducted in Banaskantha district of Gujarat state, where Krishi Vigyan Kendra (KVK) is providing agricultural technological knowledge through KMAS. KVK Deesa is selected by ICAR for mobile advisory services among 192 KVKs selected in

first phase since 2009. The area of work of KVK Deesa is Banaskantha district, hence it was selected purposively. Banaskantha district comprises of 14 talukas. Out of these six talukas were purposively selected on the basis of more number of subscriber farmers of KMAS. Three villages from each selected taluka were purposively selected on the basis of higher number of subscriber farmers of KMAS. Village wise list of subscriber farmers was obtained from KVK Deesa. Random sampling method was used in selection of respondents in proportion to 30 per cent of the subscribers from each selected village. Finally, a sample of 123 farmers was drawn from the population. The data was collected with the help of structured schedule by personal interview of the respondents.

## RESULTS AND DISCUSSION

**Table 1: Profile characteristics of farmer-subscribers of KMAS**

(n=123)

Sr. No.	Variables	Category	Frequency	Percentage
1	Age	Young (Up to 35 years)	38	30.89
		Middle (36-50 years)	60	48.78
		Old (Above 50 years)	25	20.33
2	Education	Illiterate	09	07.32
		Functionally literate	02	01.63
		Primary school	58	47.15
		Middle school	36	29.27
		High school	07	05.69
		College or Post Graduate	11	08.94
3	Farming experience	Low (upto 10 years)	33	26.83
		Medium (from 11 to 20 years)	52	42.28
		Moderately high (from 21 to 30 years)	24	19.51
		High (above 30 years)	14	11.38
4	Farming system	Agriculture	04	03.25
		Animal husbandry	01	00.81
		Agriculture + Animal husbandry	97	78.87
		Horticulture + Animal husbandry	01	00.81
		Agriculture + Horticulture + Animal husbandry	20	16.26
5	Land holding	Marginal (up to 1.00 ha)	30	24.39
		Small (from 1.01 to 2.00 ha)	57	46.34
		Medium (from 2.01 to 4.00 ha)	26	21.14
		Big (above 4.00 ha)	10	08.13
6	Annual income	Low (below ₹ 0.15 lakhs )	22	17.89
		Medium (from ₹ 0.15 to 3.53 lakhs)	84	68.29
		High (above ₹ 3.53 lakhs)	17	13.82
7	Scientific orientation	Low (below 19.55 score)	12	09.76
		Medium (from 19.55 to 24.95 score)	96	78.05
		High (above 24.95 score)	15	12.19
8	Attitude	Less favourable (below 48.08 score)	11	08.94
		Favourable (from 48.08 to 59.53 score)	99	80.49
		Highly favourable (above 59.53 score)	13	10.57

The results of the investigation carried out are presented through the Table 1 showing the socio-economic characteristics of farmers who have opted KMAS as source of information and used it for information. It could be observed from table 1 that majority of the farmers (79.67 per cent) belonged to middle and young age group. The probable reason of the finding might be that, middle and young aged people are enthusiastic and use more of mobile phones for getting information related to agriculture and allied activities. Moreover, these people have more family responsibility and sensibility. They also work with a sense of commitment and involvement. The results are agree with the Vinaya et al., (2013), Patil (2016) and Patel *et al.* (2018).

Results pertaining to the education indicated that great majority of farmers (76.42 per cent) had primary to middle school education. This might be due to the fact that farmers now have easy access to schools in their own villages or nearby villages along with realization of formal education importance in the present situation. As they had education, they were able to use mobile phones easily and gather knowledge on recent technologies disseminated through KMAS.

With respect to farming experience, majority of farmers belonged to medium to moderately high (61.79 per cent) farming experience category. This mainly depends upon age as majority of the farmers in the present study belonged to young and middle age category indicating the possibility of beginning the farming at an early age itself.

The results shows that more than three fourth of the farmers (78.87 per cent) had followed agriculture + animal husbandry system of farming. It is obvious that agriculture + animal husbandry farming system is prevalent in the study area as dairy cooperative network is well established in North Gujarat. Hence, a large segment of farmers under study were found following these farming systems jointly.

The study also revealed that majority (70.73%) of the farmers had small and marginal land holding. This might be due to the fragmentation of land among of the members of the family resulting in large number of small and marginal farmers.

The results showed that majority of the respondents had medium level of annual income. It might be due to the animal husbandry enterprise which gives higher and assured income and practicing of more than one farming systems / enterprises by the farmers.

With respect to scientific orientation, more than three fourth farmers were found to possess scientific approach

and this might be due to their faith in using various scientific management practices of crop production with efficient resource management in farming.

From this findings it can be inferred that almost all farmers had favourable attitude towards KMAS. The possible reason for this kind of result might be due to the majority farmers awareness regarding various functions of mobile message service network like receiving of messages, understanding of messages.

**Table 2: Association between the selected attributes and utilization pattern of KMAS**

(n=123)

Sr. No.	Independent variables	Correlation coefficient (' r ' value)
X <sub>1</sub>	Age	-0.761**
X <sub>2</sub>	Education	0.746**
X <sub>3</sub>	Farming experience	-0.729**
X <sub>4</sub>	Farming system	-0.029 <sup>NS</sup>
X <sub>5</sub>	Land holding	0.005 <sup>NS</sup>
X <sub>6</sub>	Annual income	0.119 <sup>NS</sup>
X <sub>7</sub>	Sources of information	0.469**
X <sub>8</sub>	Extension participation	0.835**
X <sub>9</sub>	Scientific Orientation	0.773**
X <sub>10</sub>	Attitude	0.780**

\*\* = Correlation is significant at 1 per cent level

NS = Not significant

It is apparent from Table 2 that among the farmers, the variables such as education, sources of information, extension participation, scientific orientation and attitude had positive and significant association with utilization pattern of KMAS at 1 per cent level.

The possible reasons for the above trend may be attributed to the fact that education helps an individual in acquisition of knowledge, broadening the vision and motivating towards higher accomplishment. Education orients them to the outside world and provides new opportunity for life. Literate farmers might be able to locate, understand, interpret, evaluate, and use information disseminated through KMAS in an appropriate way.

It is obvious that contact with media people and institutions make the vision of the farmers wider and makes them efficient to use latest available technology. Hence the use of various sources of information might have motivated the farmers for better utilization of KMAS.

Extension participation is committed to a comprehensive and inclusive participation of agrarian

society for technology transfer. Further, participation in different extension programmes by farmers provides a lot of opportunities to acquire detail information that might have helped the farmers to be selected as subscribers of KMAS by the KVK.

The scientifically oriented farmers are likely to have more inclination to use scientific methods in farming. Another reason might be that higher income and active involvement in various extension programmes helped them to develop progressiveness and scientific outlook, that might have lead the farmers for more utilization of KMAS services.

Positive attitude towards new innovation is prime requirement to accept it. Positive attitude always make the acceptance of technology very easier and faster. Hence, the positive attitude of the farmers might have helped them for more utilization of the KMAS.

Age and farming experience had negative and significant association with utilization pattern of KMAS at 1 per cent level. The probable reason might be that the young farmers are more enthusiastic than older one. It can thus be said that young farmers used KMAS more than older one. Old age farmers had more experience of farming hence they might have got the knowledge of some aspects. This might be the reason for lower use of KMAS by old age farmers.

Generally, farming is a hereditary occupation and most of the farmers start farming at a very young age. Hence more the age of a farmer, more experience he acquires in farming. Therefore, they might have not realized the importance of some messages. As, it was revealed that age was negatively associated with utilization pattern of KMAS, the negative relation between farming experience with utilization pattern of KMAS seems to be logical.

Farming system had negative and no significant association while land holding and annual income had no significant association with utilization pattern of KMAS.

Majority of the farmers followed agriculture + animal husbandry farming system and it was found common to all the farmers in the study area therefore, it might not have affected the utilization pattern.

The amount of land holding a farmer has is mostly acquired hereditarily from their parents and has no relation with his education, extension participation, scientific orientation and attitude. As, the farmers who had high utilization of KMAS were having different land holding ranging from marginal to big size, the findings seemed to be on right lines.

KMAS sends messages to farmers free of cost so annual income of farmers might have not exerted its effect on utilization pattern of KMAS.

## CONCLUSION

The farmer's background factors that influence knowledge and attitude of respondents towards the use of KMAS must be reckoned within any programme of rural communication. The findings indicated that extension participation, attitude, education and scientific orientation were the prominent variables influencing the utilization of KMAS. Therefore, extension workers should concentrate on these aspects to increase the level of extension participation and education for increasing utilization of KMAS.

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