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Usefulness of KMAS as Perceived by The Farmers

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ABSTRACT

Kisan Mobile Advisory Service (KMAS) delivers real-time agricultural information and customized knowledge to improve farmers' decision-making ability so that they may enable to increase their production and productivity, better aligning the farm output to market demands; securing better quality and improved price recovery in a globally competitive agrarian economy. The study was conducted at Kolar district of Karnataka state. A total of 120 farmers who had registered under KMAS were selected randomly for the study. Ex-post facto research design was used for the study. Usefulness of KMAS was measured by employing the scale developed by Singh (2012) with due modifications. Majority of the registered farmers perceived KMAS messages as 'most useful' and 'regularly utilized' the information sent by KMAS.

Key words : *Kisan Mobile Advisory Service (KMAS); Agrarian economy; Real-time;*

Revolution in ICT has made access to the information easy and cost effective to the rural masses in general and farming community in particular. Nearly for the last two decades, ICT practitioners are experimenting variety of innovative ICT initiatives for the agricultural and rural development in India. While developing countries are still lagging behind high-income countries in overall ICT usage and applications, the mobile phone has been regarded as a more accessible and less expensive means to reduce the digital divide. Mobile plays a key role in improving the availability of information on agricultural production and market in developing countries. This would improve their income and quality of life by increasing agricultural productivity and introducing income channels other than traditional farm jobs. The Kisan Mobile Advisory Service (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. Since 2013 onwards KVK Kolar has been using Kisan Mobile Advisory Service to send the agriculture to the farmers. Hence, it is important to know the usefulness of KMAS as perceived by the farmers. Considering this, the present study was carried out with the object : To study the usefulness of KMAS as perceived by the farmers.

METHODOLOGY

An Ex-post-facto research design was adopted for the study. Kolar district of Karnataka state was purposively selected as it is one of the leading tomato producing districts of Karnataka state and has the effective rate of KMAS message delivery to the farmers. Out of 6 talukas in Kolar district, two talukas i.e., Kolar and Bangarpet were selected purposively. A total of 12 villages were selected for the study i. e. 6 from each taluka. Ten (10) tomato farmers from each village who have registered under KMAS were selected randomly for the study thus constituted a total sample of 120 farmers. Usefulness of KMAS was measured by employing the scale developed by *Singh (2012)* with due modifications. Frequency and Percentage analysis was carried out to study the usefulness of KMAS.

RESULTS AND DISCUSSION

From the Table 1, it was found that KMAS SMS related to plant protection perceived as 'most useful' (73.33%) followed by useful (16.66%) and not useful (12.00%) by the farmers. Further Majority (66.66%) of farmers perceived as SMS, were 'most useful' for improving the agriculture knowledge and about 63.33 per cent of farmers perceived as SMS, were 'most useful' for increasing the farm yield. SMS related to information on organization of extension activities perceived as 'most useful' (62.50 %) followed by useful (20.83%) and not useful (16.67%) by the farmers. SMS related to nursery management in different crops perceived as (58.33%) 'most useful' by the farmers. Majority (70.83%) of farmers perceived as SMS, were useful for improving farm and home condition followed by 'most useful' (25%) and not useful (4.16%) by the farmers. Majority (75.00%) of farmers perceived as SMS, were useful for increasing adoption of technology followed by 'most useful' (20%) and not useful (5.00%) by the farmers.

SMS related to nutrient management perceived as useful (70.00%) by the farmers and 63.33 per cent of farmers perceived as SMS, were useful for creating awareness about health and hygiene.

Table 1. Overall usefulness of Kisan Mobile Advisory Service (KMAS) as perceived by farmers (N=120)

Particulars	Level of usefulness (%)		
	Most useful	Useful	Not useful
Improving the agriculture knowledge	66.66	20.83	12.50
Nursery management in different crops	58.33	35.83	5.83
Nutrient management	25.00	70.00	5.00
Effective Plant protection advisories	73.33	16.66	10.00
Increases farm yield	63.33	25.00	11.66
Improving farm and home condition	25.00	70.83	4.166
Creating awareness about health & Hygiene	20.00	63.33	16.66
Increasing adoption of technology	20.00	75.00	5.00
Information on extension activities	62.50	20.83	16.67

Hence, it can be concluded that most of the Kisan Mobile Advisory Service messages were perceived as most useful to useful by the farmers. The possible reasons could be majority of the respondents found that the information was 'most useful' because subject areas covered in KMAS were most relevant to their situation and with good educational background of the farmers they are very much interested in the new technologies disseminated through KMAS. The result was in consonance with the result of studies conducted by *Singh (2012).*

Understanding of KMAS Messages by the farmers: Understanding of KMAS Messages by the farmers It is apparent from Table 2 that, majority 70.00 per cent of the farmers said messages were 'easy to understand', (19.16%) farmers said messages were 'difficult to understand' and only (10.83%) farmers said messages were 'not understanding'. Majority of the farmers easily understood the KMAS messages the reason might be that the majority of the farmers have semi medium level of education.

*Language of KMAS Messages by the farmer*s : From Table 3, it was found that majority 76.66 per cent of the farmers said that language used in the messages were 'simple to understand' as the language used in KMAS messages are local language of that area so that it can be easily understandable. While, 15.83 per cent farmers said that language were 'complex to understand' and only (10.83%) farmers said that language used in the message is 'not at all understand'.

Table 2. Understanding of KMAS Messages by the farmers

Understanding of messages	No.	%
Easy to understand	84	70.00
Difficult to understand	23	19.16
Not understanding	13	10.83
Total	120	100.00

Table 3. Language of KMAS Messages by the farmers

Language of KMAS Messages	No.	%
Simple to understand	92	76.66
Complex to understand	19	15.83
Not at all understood	09	07.50
Total	120	100.00

Table 4. Time lines of KMAS message

Language of KMAS Messages	No.	%
Message is timely	73	60.84
Message is not timely	47	39.16
Total	120	100.00

Timeliness of KMAS message : It could be noted from the Table 4 that, majority 60.83 per cent of farmers said messages were timely. These findings were in line with research findings of *Parganiha et al. (2012).*

Relationship between profile characteristics and knowledge level of respondents on KMAS : The results in the Table 5 exhibit that the variables studied annual income, innovativeness and use of ICT tools showed a positive and significant relationship with knowledge level of the respondents at one per cent level of significance. As age was concerned, it had negative and significant relationship with knowledge level of the respondents at one per cent level of significance. Variables like education, extension contact, mass media exposure and economic motivation had positive and significant association with knowledge level of the respondents at five per cent level of significance.

The correlation values of the variables farm size and socio-political participation had non-significant relationship with knowledge level of respondents.

Age is the important factor to decide the knowledge in any technology. It is inferred that old age farmers still not habituated to use the mobile phones. Young aged people are enthusiastic and have more use of mobile phones for getting information related to agriculture and allied activities. As age increases the interest of the farmers towards new ideas, skill and technology deceases. Hence, they possess low level of knowledge.

Table 5. Relationship between profile characteristics and knowledge level of respondents on KMAS

Independent variable	(r)
Age	-0.2345**
Education	0.1975*
Farm size	0.1784NS
Annual income	0.2829**
Socio Political Participation	0.1185NS
Extension contacts	0.1802*
Mass media exposure	0.1949*
Economic Motivation	0.1872*
Innovativeness	0.2458**
Use of ICT tools	0.3280**

*Significant at 0.05 level of probability:
NS - Non-significant
**Significant at 0.01 level of probability.

Education enhances the knowledge level of the farmers and helps to acquire latest know how about new technology. Education helps them to find out the cause and effect of the specific components and enable them to address the constraints efficiently. Obviously, the gain and retention of knowledge is more among the educated people and they become more receptive to the innovation compared to less educated or illiterate farmers.

Farmers with larger holdings will have more opportunities and potentialities to gain information and learn a greater number of technological innovations. But most of the tomato farmers have semi- medium land holdings, and fragmented land holding because of the nuclear family. Farmers with less land holding are less bother about the message sent through KMAS due to lack of resources. It is quite possible that farmers with larger holdings evince keen interest to know about new farm practices and be more receptive to such ideas, skills and other management factors.

Persons with more resources are in better position to acquire knowledge through extension contacts and participation in extension activities as well as through their easy access to mass media. These facts might have motivated the farmers of higher income group to gain knowledge and to seek more information regarding new technology in tomato cultivation resulting in the positive and significant relationship with this variable

Social participation did not significantly influence on Knowledge of recommended package of practices because famers have medium to low level of socio-political participation.

Greater the extension contact, greater would be the knowledge of recommended practices in tomato cultivation among respondents. This might be due to the fact that farmers approach to change agents like AEO, AO, ADA etc., when they need information regarding recommended practices in tomato cultivation.

Mass media creates awareness. Mass media exposure will enable the farmers to find out the solution for a particular constraint but the implementation of

the idea in the real field situation is decided by the factors like extent of personal interest, motivation and urgency of the situation. It was seen that all categories of farmers had good levels of mass media exposure but big farmers showed more interest to know about new technologies of production.

Farmers having more economic motivation kept themselves updated with the information regarding price fluctuation, varieties which was more in market demand and sold when prices were at peak ultimately earned more profits.

Innovativeness is associated with the individual's earliness in the use of new practices. Innovative farmers will always be experimenters. During any constraint situation farmers with high levels of innovativeness will experiment the new ways of doing things to change the existing situation and there by acquiring new knowledge.

More ICT use creates awareness. ICT exposure will enable farmers to find out solution for a particular constraint but the implementation of the idea in the real field situation is decided by the factors like extent of personal interest, motivation and urgency of the situation. It was seen that all categories of farmers had good levels of ICT use but big farmers showed more interest to know about new technologies of production. These findings are in line with the findings of *Reddy (2017), Ndag et al. (2008).*

CONCLUSION

From the above findings, it can be concluded that the study clearly indicated that majority of the registered farmer perceived KMAS messages as 'most useful' and 'regularly utilized' the information sent by KMAS. Therefore, it is suggested that other farmers who have not registered for KMAS, can be motivated to use KMAS service by creating awareness through Raitha Samparka Kendras (RSK) and Krishi Vignyan Kendras (KVKs). The findings indicated that education, extension contact, mass media exposure, innovativeness, economic motivation, annual income and use of ICT tools were the prominent variables influencing the level of knowledge.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

REFERENCES

Ndag, I.; Sanusi, R.A and Aigbekaen, E.O. (2008). Comparative analysis of information and communication technology (ICT) use by agricultural extension workers in south-west and north-central Nigeria. In proceedings of the 19th annual International Information Management Association. Pp.35-40.

Parganiha, Omprakash; Shrivastava, S.K.; Chaubey, A.K. and Nag, J.L. (2012). Impact of kisan mobile advisory (KMA) on agricultural technology dissemination. *Indian Res. J. Ext. Edu.*, Special Issue, **II** : 175-178

Reddy, Madhan Mohan (2017). Impact of mobile Advisory services on cotton farmers. Ph.D. (Ag.) Thesis. Professor Jayashankar Telangana State Agricultural University, Hyderabad. Telangana

Singh, Hardevinder; Singh, Gurdeep and Jagadish, G. 2012. Analysis of kisan mobile advisory service in south western Punjab. *J. of Krishi Vignan*, **1** (1) : 1-4.

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