

Impact of Kisan Mobile Advisory Service on Transfer of Agricultural Technologies

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ABSTRACT

The novel experiments on Kisan Mobile Advisory services was conducted by Krishi Vigyan Kendra through delivering messages twice a week to the registered mobiles on need based information technology in agricultural field. Through bulk message service messages were sent on aspects like crop production technologies, livestock management, weather, marketing and other enterprise in their registered mobiles. Total 300 farmers and other KMA beneficiaries were registered as (Farmers-200, Extension personnel-70, Input dealers-30) for this study. After sending the messages for three years (2011, 2012 and 2013) responses were taken in month of March of each year. To get the feedback 50 percent members from each category were selected randomly for interview through telephone by calling them on their respective mobile number. In this way 100 farmers, 35 extension personnel and 15 input dealers were studied to know the impact of KMA services and their satisfaction. Messages were needful & timely reported by 82 per cent of farmers and 88.57 and 66.67 per cent for extension personnel and input dealers. The messages were fully applicable perceived by 42 per cent of farmers, whereas medium & partially applicable was reported by 48 & 09 per cent of farmers. The delivered messages were medium understandable for large majority 49 per cent of farmers, highly understandable for 82.87 per cent of extension personnel and for input dealers 60 per cent, respectively. It was also found that 80 per cent messages were fully applicable for extension personnel and 53.33 per cent for input dealers. The overall high impact of KMA services was reported by 62 per cent farmers, 80 per cent and 60 per cent on extension personnel and input dealers respectively. Low impact was reported by eight per cent farmers, 8.57 per cent by extension personnel and 6.67 per cent by input dealers in Harda district of Madhya Pradesh.

Key Words: Bulk message, ICT, Kisan Mobile Advisory (KMA).

The success of agricultural development programmes in country like India largely depends on the nature and extents of effective use of mass media to mobilize people and to disseminate newly evolved agricultural technologies. (Birkenholtz and Maricle, 1991).

The people living in 21st century with the revolution of information communication technology which is responsible for wide spread access of computer technology as well as mobile services in to the social structure. The technology is turn influenced the society, development and social environment. (Manoj D., 2006).

In this age of information revolution, information technologies are being used in almost all walks of life. Today computer, internet and mobile are turning out to be extremely important, Information and Communication Technologies (ICTs) are facilitating fast sharing of information and innovations and acting as a key agent for changing agrarian situation and farmers lives by improving access to agricultural information. (O.P., Parganiha et al. 2012).

The reports indicated that 45 per cent of the world's ICT projects implemented in India. Asia's highest number of information kiosks implemented across rural India. (Chattopadhyay, 2004).

In addition, Government of India policy proposed a knowledge centre in every village by 2007. (Swaminathan, 2005). However, the most of the ICT projects are implemented in the socio- economically developed states of India.

Series of broadcasts on a particular topic

through the Krishi Community Radio Station has significantly increased the knowledge of the listeners on need-based aspects of agriculture. (Nithya Shree et al. 2013).

The Kisan Mobile Advisory services through messages is being used to deliver the needful agricultural information and specially to improve farmers' agricultural technical knowledge with decision making ability, so that, they may enable to increase their production and productivity to fulfill market demands with securing better quality life and income in present competitive agrarian economy. The advisory was sent to targeted farmers covering the broad category of information like, crop production, livestock management, weather forecast, marketing, general awareness and other enterprises etc.

METHODOLOGY

Present study was completed at KVK, Harda, Madhya Pradesh in year 2013-14. KVK, Harda started Kisan Mobile Advisory services in the year 2007 to solve the purpose. Through bulk message service messages were sent related to agricultural aspects like (crop production, livestock management, weather, marketing and other enterprise) on their registered mobiles. Total 300 farmers and other KMA beneficiaries were registered as (farmers-200, extension personnel-70, input dealers-30) for this study. After sending the messages for three years (2011, 2012 and 2013) responses from the KMA beneficiaries were taken in month of March of each year. To get the feedback 50 percent members from each category were

selected randomly for interview through telephone by calling them on their respective mobile number. In this way 100 farmers, 35 extension personnel and 15 input dealers were studied to know the impact of KMA services and their satisfaction. To assess the overall impact of technology a device was developed and responses of the respondents were recorded on a four point continuum scale for each aspects and assigned a scores like;

- Need and time based information (Needful & timely-3, Needful & not timely-2, Not needful & timely-1, Not needful & not timely-0)
- Understanding of the message (Highly-3, Medium-2, Low-1, Not-0), and
- Applicability of message (Fully-3, Medium-2, Partially-1, Not-0)

Finally an index was worked out to assess the overall impact of technology with the help of following equations.

$$TI = \frac{O}{S} \times 100$$

Where,

TI = Technology impact index of a respondents

O = Total scores obtained by respondents

S = Total obtainable score

RESULTS AND DISCUSSION

Impact of Kisan Mobile Advisory services on transfer of agricultural technology was assessed and being discussed as under

1. Need and time based information: The data presented in Table 1 indicated that advisory through message was needful & timely for 82 per cent of the

KMA recived farmers and 88.57 and 66.67 per cent for extension personnel and input dealers respectively. Less numbers of farmers (15%), extension personnel (11.43%) and input dealers (26.67%) were reported the message was Needful & not timely for them. And three per cent farmers and 6.66 per cent of input dealers reported the advisory was not needful and timely.

2. Understanding of the message: The results of Table 2 reveal that the sent advisory messages were medium understandable for large majority (49 per cent) of the farmers, it was highly understandable for 82.87 and 60 per cent of extension personnel and input dealers respectively. 02 per cent farmers reported that message was not understandable for them.

3. Applicability of message: Table 3 reveals that advisory messages were fully applicable for about 42 per cent farmers, 80 per cent for extension personnel and 53.33 per cent for input dealers, whereas medium applicable reported by 48, 17.14 & 33.33 percent farmers, extension personnel and input dealers respectively. Messages were partially applicable reported by 9, 2.86 & 6.67 per cent of farmers, extension personnel and input dealers. It was also found that messages were not applicable for 1 per cent of farmers and 6.67 per cent for input dealers and 0 per cent for extension personnel as well.

4. Overall impact of technology: Table 4 indicated the overall impact of technology and it was found that technology puts high impact on 62 per cent of farmers, 80 per cent and 60 per cent extension personnel and input dealers category. Low impact was reported by 8 per cent farmers, 8.57 per cent extension personnel and 6.67 per cent of input dealers respectively. The results of this study are in line with O.P., Parganiha et al. 2012.

Table 1
Distribution of the respondents according to need and time based information

Category	Farmers (N=100)		Extension personnel (N=35)		Input dealers (N=15)	
	No.	percentage	No.	percentage	No.	percentage
Needful & timely	82	82	31	88.57	10	66.67
Needful & not timely	15	15	04	11.43	04	26.67
Not needful & timely	03	03	00	00.00	01	06.66
Not needful & not timely	00	00	00	00.00	00	00.00
Total	100	100	35	100	15	100

Table 2
Distribution of the respondents according understanding of the message

Category	Farmers (N=100)		Extension personnel (N=35)		Input dealers (N=15)	
	No.	percentage	No.	percentage	No.	percentage
Highly understandable	42	42.00	29	82.87	09	60.00
Medium understandable	49	49.00	05	14.28	05	33.33
Low understandable	07	07.00	01	02.85	01	06.67
Not understandable	02	02.00	00	00.00	00	00.00
Total	100	100.00	35	100.00	15	100.00

Table 3
Distribution of the respondents according to applicability of message

Category	Farmers (N=100)		Extension personnel (N=35)		Input dealers (N=15)	
	No.	percentage	No.	percentage	No.	percentage
Fully applicable	42	42.00	28	80.00	08	53.33
Medium applicable	48	48.00	06	17.14	05	33.33
Partially applicable	09	09.00	01	02.86	01	06.67
Not applicable	01	01.00	00	00.00	01	06.67
Total	100	100.00	35	100.00	15	100.00

Table 4
Distribution of the respondents according to overall impact of technology

Category	Farmers (N=100)		Extension personnel (N=35)		Input dealers (N=15)	
	No.	percentage	No.	percentage	No.	percentage
Low (Score upto 1-3)	08	08.00	03	08.57	01	06.67
Medium (Score upto 3.1-6)	30	30.00	04	11.43	05	33.33
High (Score upto 6.1-9)	62	62.00	28	80.00	09	60.00
Total	100	100.00	35	100.00	15	100.00

CONCLUSION

Innovative information and improved communication is vital requirement for sustainable agricultural development in present scenario, hence cyber technologies like mobile, internet, powerpoint presentation and success stories based movies must be used in information communication system to motivate the farmers. The ICT like Kisan Mobile Advisory is proving as important tool for dissemination of

agricultural technologies, innovations and information up to the farmers in crucial time of urgent need without any hindrances that also seems the need of hour. KMA was found the novel step to transform the present agricultural information communication system at grass root level very quick and worth.

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REFERENCES

1. Birkenholtz, R.J. and Maricle, G.L. 1991. Adult Education in Agriculture; a National Survey. *J. of Exten. Educ.* **32(2):19-24**
2. Chattopadhyay, B.N., 2004. Value Added e-learning for Quality Extension Education, Presented and Published in the Resource Document of the ICAR Sponsored Winter School on "Advanced Extension Strategies for Agricultural Management with Quality Issues" during 17th November to 16th December, 2004 at BCKV, Kalyani, India.
3. Manoj, D. 2006. Information Technology - Need of the Hour for Rural Development. *Indian Media Studies J., July-Dec. 1(1):79*
4. Nithya Shree, Devendrappa and Nagnur Shobha 2013. Impact of KCRS Programmes on Science for Women Health and Nutrition. *J. of Global Communication, Vol. 6(2):166-119*
5. O.P. Parganiha, S.K. Shrivastava, A.K. Chaubey and J.L. Nag. 2012. Impact of Kisan Mobile Advisory (KMA) On Agricultural Technology Dissemination. *Indian Research J. of Exten. Educ., Special Issue (2):157-178*
6. Swaminathan, M.S. 2005. Rural Knowledge Revolution: A Road Map, *The Hindu, 9th July, 2005, New Delhi.*