

## Assessment of Kisan Mobile Advisory (KMA) Service for Dissemination of Agriculture Information in Shajapur District of Madhya Pradesh

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### ABSTRACT

*Kisan Mobile Advisory services was conducted by Krishi Vigyan Kendra, Shajapur 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. The study was carried out among 240 respondents including KMA beneficiaries (Farmers-160, In-service personnel -50, Input dealers-30). After sending the messages for three years (2014, 2015 and 2016) responses were recorded each year by selecting 50 per cent of members from each category randomly. In this way 80 farmers, 25 in-service personnel and 15 input dealers were studied to know the impact of KMA services and their satisfaction. The result obtained indicated that messages were needful & timely reported by 82.50 per cent of farmers and 80 and 66.67 per cent for in-service personnel and input dealers respectively. The delivered messages were medium understandable for large majority 48.75 per cent of farmers, highly understandable for 84.00 per cent of in-service personnel and for input dealers 60 per cent, respectively. The messages were fully applicable perceived by 37.50 per cent of farmers, whereas medium, partially applicable & not applicable was reported by 43.75, 15.00 & 3.75 per cent of farmers. It was also found that 72 per cent messages were fully applicable for in-service personnel and 46.67 per cent for input dealers. The overall high impact of KMA services was reported by 61.25 per cent farmers, 76 per cent and 60 per cent on in-service personnel and input dealers respectively. Low impact was reported by 8.75 per cent farmers, 8 per cent by in-service personnel and 6.67 per cent by input dealers in Shajapur district of Madhya Pradesh.*

**Keywords:** Bulk message, in-service, dealers, Kisan Mobile Advisory (KMA).

### INTRODUCTION

The revolution in information communication technology has led to the widespread use of

computer technology as well as social media. This technology in turn influenced the society, development and environment.

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That is to say that in this age of information revolution, information technologies are being used in almost all walks of life. Hence, how can agriculture could remain untouched from this revolution. ICT has extended its foot in agriculture extension since one to two decades ago. And now it is being used immensely by the extension professionals and experts for the dissemination of scientific and technological information regarding agricultural practices from scientists or researchers to the farmers. Mobile telephone (with or without internet) is the most potent and omnipresent tool of agricultural extension.

The Kisan Mobile Advisory services through messages is one of the information technological services used to deliver the needful and timely agricultural information to improve farmers' agricultural technical knowledge with decision making ability, so as to enable them 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. (Kumar et al., 2014).

In agricultural extension i.e. extending research from lab to field, various modes of delivery services have been envisaged including internet, touch screen kiosks, agri-clinics, private kiosks, mass media, Common Service Centers, Kisan Call Centers, and integrated platforms in the departmental offices coupled with physical outreach of extension personnel equipped with pico-projectors and hand held devices. However, mobile telephony (with or without internet) is the most potent and omnipresent tool of agricultural extension. KVKs funded by Indian

Council of Agriculture Research is the key link in transfer of Technology to farmers. (Majeed et al., 2018).

The KMA service was launched in 2007 in Chhindwara District of Madhya Pradesh to provide bulk SMS to the farmers. In Shajapur KVK, the KMA services started in 2008.

The impact of this service was not quantified and there is felt need to study the impact of this message to improve upon the feedback from farmers hence the study was conducted with the objective to know the impact of KMA services on transfer of agricultural technologies in Shajapur district of Madhya Pradesh.

### MATERIALS AND METHODS

The current study was conducted at KVK, Shajapur, Madhya Pradesh in 2016. Through bulk message service messages were sent on agricultural aspects like (crop production, livestock management, weather, marketing and other enterprise) on the registered mobiles of the respondents. Total 240 respondents were registered for the study including 160 farmers, 50 in-service personnel and 30 input dealers. Messages were sent to KMA beneficiaries continuously for three years from 2014 to 2016 and the responses were recorded each year in the month of March. For feedback, 50 percent respondents from each category were selected randomly and interviewed through telephone callings. Hence, in total 120 respondents including 80 farmers, 25 in-service personnel and 15 input dealers were studied. An index was developed through following equation to assess the overall impact of technology and responses of the respondents were recorded on a four point continuum scale (Kumar et al., 2014).

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

Where,

TI= Technology impact index of a respondents

O = Total scores obtained by respondents

S= Total obtainable score

## RESULTS AND DISCUSSION

The results were categorized in following four headings-

**1. Need and time based information:** It is clear from Table 1 that advisory through KMA was needful & timely for 82.50 percent of the farmers, 80 per cent in-service personnel and 66.67 percent input dealers. A less number of the farmers (12.50%), in-service personnel (16%) and input dealers (26.67%) found the messages needful & not timely. And

a very few of them (5% farmers, 4% in-service personnel and 6.67% of input dealers) reported the advisory as not needful and timely.

**2. Understanding of the message:** Table 2 reveal that the sent advisory messages were medium understandable for large majority (48.75%) of the farmers, highly understandable for 84% of in-service personnel and 60% input dealers. Only 1.25 percent of the farmers responded that message was not understandable to them.

**Table 1: Distribution of the Respondents according to Need and Time Based Information**

Particulars	Farmers (n=80)		In-service personnel (n=25)		Input dealers (n=15)	
	f	%	f	%	f	%
Needful & Timely	66	82.50	20	80.00	10	66.67
Needful & Not Timely	10	12.50	04	16.00	04	26.67
Not Needful & Timely	04	05.00	01	04.00	01	06.67
Not Needful & Not Timely	00	00.00	00	00.00	00	00.00
<b>Total</b>	<b>80</b>	<b>100.00</b>	<b>25</b>	<b>100.00</b>	<b>15</b>	<b>100.00</b>

**Table 2: Distribution of the Respondents according to understanding of the message**

Particulars	Farmers (n=80)		In-service personnel (n=25)		Input dealers (n=15)	
	f	%	f	%	f	%
Highly Understandable	32	40.00	21	84.00	09	60.00
Medium Understandable	39	48.75	04	16.00	05	33.33
Low Understandable	08	10.00	00	00.00	01	06.67
Not Understandable	01	01.25	00	00.00	00	00.00
<b>Total</b>	<b>80</b>	<b>100.00</b>	<b>25</b>	<b>100.00</b>	<b>15</b>	<b>100.00</b>

**Table 3: Distribution of the Respondents according to Applicability of message**

Particulars	Farmers (n=80)		In-service personnel (n=25)		Input dealers (n=15)	
	f	%	f	%	f	%
Fully Applicable	30	37.50	18	72.00	07	46.67
Medium Applicable	35	43.75	05	20.00	05	33.33
Partially Applicable	12	15.00	02	8.00	02	13.33
Not Applicable	03	03.75	00	0.00	01	06.67
<b>Total</b>	<b>80</b>	<b>100.00</b>	<b>25</b>	<b>100.00</b>	<b>15</b>	<b>100.00</b>

**Table 4: Distribution of the Respondents according to Overall Impact of Technology**

Particulars	Farmers (n=80)		In-service personnel (n=25)		Input dealers (n=15)	
	f	%	F	%	F	%
Low (Score Upto 1-3)	07	08.75	02	08.00	01	06.67
Medium (Score Upto 3.1-6)	24	30.00	04	16.00	05	33.33
High (Score Upto 6.1-9)	49	61.25	19	76.00	09	60.00
<b>Total</b>	<b>80</b>	<b>100.00</b>	<b>25</b>	<b>100.00</b>	<b>15</b>	<b>100.00</b>

f-frequency

**3. Applicability of message:** Table 3 reveals that advisory was fully applicable for about 37.50 percent farmers, 72 percent for in-service personnel and 46.67 percent for input dealers, medium applicable by 43.75 per cent of farmers, 20 per cent in-service personnel and 33.33 percent of input dealers, partially applicable by 15% farmers, 8% in-service personnel and 13.33 of input dealers whereas it was not applicable for 3.75% of farmers, 6.67% for input dealers and 0 percent for in-service personnel.

**4. Overall impact of technology:** Table 4 indicated the overall impact of technology. The overall impact of technology was found high by 76% in-service personnel, 61.25% farmers and 60% by input dealers. The impact was found low by 8.75% farmers, 8% in-service personnel and 6.67% input dealers.

#### CONCLUSION

This globe has been transformed into a village by the cyber technology. Innovation and

scientific information in agriculture can be best transmitted to the farmers in limited time through the utilization of ICT like Kisan Mobile Advisory. 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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