Impact of Kisan Mobile Advisory (KMA) On Agricultural Technology Dissemination

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ABSTRACT

The experiments conducted by various institutions accumulated the rich experiences of information technology utilization in agriculture technology dissemination. Enriched with the abilities of interaction, demassification and synchronization, these technologies opened up a new way to decentralized development. Krishi Vigyan Kendra, Raipur (Bhatapara) started Kisan Mobile Advisory (KMA) service in the year 2008 (October) and selected 200 (Farmers=125, In-service Personnel=50, Input Dealers=25) Mobile holder members for sending the messages of Agricultural aspects in their Mobile by using Bulk Message Service. After sending the messages for 2 years responses from the members were taken in month of October 2010. For the responses about KMA 20 percent members from each category were selected in this way 25 Farmers, 10 In-service Personnel and 5 Input Dealers were selected and interviewed through telephone by calling in their respective mobile numbers. Among three categories (Farmers, In service Personnel and Input Dealers) of members of Kisan Mobile Advisory (KMA) a case study was undertaken to document the impact of services provided to the members and fined out their satisfaction with KMA services. The result obtained indicated that message was medium understandable for large majority (44%) of the members of farmers category, it was highly understandable for 80 and 53.33 percent KMA members of In-service Personnel and Input Dealers category respectively. Message was Needful & Timely for 64 percent of the KMA members of farmers category and about 68 and 53.33 percent for In-service Personnel and Input Dealers respectively. As for as Applicability of the message is concerned the message was fully applicable for about 40 percent of KMA members of farmers category, whereas Medium & Partially applicable was reported by 16 & 24 percent of members respectively. It was also found that message was fully applicable for In-service Personnel (60%) and Input Dealers (53.33%). it was found that technology imposes high impact on 58 percent of KMA members of farmers category, whereas 72 percent and 53.33 percent members of In-service Personnel and Input Dealers category reported technology impacted highly on them. Low impact was reported by ranging about 08-20% of KMA members among all categories.

Key Words: *ICT; Kisan Mobile Advisory; Mobile; Internet; Bulk Message Services;*

In recent past people like Indians used to believe in secrecy of information. But the concept of people living in this 21st century is totally reversed. Presently we like to share the information. Information is thus emerging as more and more power. Experts of this field confidently predict that our poverty line will no longer be measured in the terms of money, but in terms of information. It is merely possible because of the revolution of information communication technology which is responsible for wide spread penetration of computer technology as well as mobile services in to the social fabric. The technology in turn influenced the society, development and social environment. That is to say that in this age of information revolution, information technologies are being used in almost all walks of life. Today in every walk of life, Computer, Internet and Mobile are turning out to be extremely important. Well known communication scientist Marshal Mcluhan predicted in his pioneering book "Medium is the Message" that due to information revolution the world would become very small. So small that it will be described as "Global Village".His prediction is now turning out to be quite true. Information Technology (ICT) is today becoming as important as 'roti', kapra, aur makan'.

Emerging Information systems and communication

networks have redefined the way knowledge is shared, processed, stored and retrieved. Even in rural India, ICTs are having a profound impact changing the rationale of development activities and strategies. A number of initiatives have proved the potential of ICTs in meeting the information and communication needs of the people for agriculture and rural development. Information and Communication Technologies (ICTs) are facilitating faster sharing of information and innovations and acting as a key agent for changing agrarian situation and farmers lives by improving access to information and sharing knowledge. Pioneering ICT experiments in India show that the rural livelihoods are greatly enhanced by access to information on improved agricultural practices, pest and disease control, market and weather. National efforts are underway to reduce urban and rural digital divide. Nearly for the last two decades, ICT practitioners are experimenting variety of innovative ICT initiatives for the agricultural and rural development in India.

Kisan Mobile Sandesh (KMS) is one such initiative of ICT which provides location-specific and crop-specific farm advisory services and facilities to the farming community in a given area. Launched in 2007 in Chhindwada District of Madhya Pradesh and in October 2008 this was started by different KVKs of Chhattisgarh also by Krishi Vigyan Kendra, Bhatapara.. At present the Kisan Mobile Sandesh (KMS) is becoming the largest ICT initiative in Chhattisgarh providing farm advisory services to the farmers. The Kisan Mobile Sandesh (KMS) 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.

METHODOLOGY

In Kissan Mobile Sandesh (KMS) service, 200 (Farmers=125, In-service Personnel, Input Dealers=25) Mobile holder members were selected for sending the messages of Agricultural aspects in their Mobile by using Bulk Message Service from five blocks namely Bhatapara, Kasdol, Gariyaband, Abhanpur and Simga and two Massages in a week have been sending to the members since 1st October 2008.

After sending the messages for 2 years feedback was taken in month of October 2010. For the feedback of KMS 20 percent members from each category were selected in this way 25 Farmers, 10 In-service Personnel and 5 Input Dealers were selected and interviewed through telephone by calling in their respective mobile numbers. To asses the overall impact of technology a devices was developed and responses of the respondents were recorded on a four point continuum scale for each aspects and assigned a scores like-

i. Understanding of the Message (Highly-3, Medium-2, Low-1, Not-0),
ii. Need and Time Based Information (Needful & Timely-3, Needful & Not Timely-2, Not Needful & Timely-1, Not Needful & Not Timely-0) and
iii. Applicability of Message (Fully-3, Medium-2, Partially -1, Not-0). Finally an index was worked out to asses 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

Among three categories (Farmers, In-service Personnel and Input Dealers) of members of Kisan Mobile Sandesh (KMS) a case study was undertaken to document the impact of services provided to the members and fined out their satisfaction with KMS services.

Understanding of the Message : The result obtained indicated that message was medium understandable for large majority (44%) of the members of farmers category, it was highly understandable for 80 and 53.33 per cent KMS members of In-service Personnel and Input Dealers category respectively. No members of any category of KMS were reported that message was not understandable for them. Table No. (1).

Need and Time Based Information : KMS provided a vide bouquet of agricultural information ranging from their land preparation to harvesting and storage and also about allied enterprises but needfulness and timeliness

Table 1. Distribution of the Respondents according to understanding of the message

Particulars	Farmers (n=50)		In-service Personnel (n=25)		Input Dealers (n=15)	
	No.	%	No.	%	No.	%
Highly Understandable	20	40	20	80	08	53.33
Medium Understandable	22	44	05	20	04	26.67
Low Understandable	08	16	00	00	03	20.00
Not Understandable	00	00	00	00	00	00.00

Table 2. Distribution of the Respondents according to Need and Time Based Information

Particulars	Farmers (n=50)		In-service Personnel (n=25)		Input Dealers (n=15)	
	No.	%	No.	%	No.	%
Needful & Timely	32	64.00	17	68.00	08	53.33
Needful & Not Timely	08	16.00	05	20.00	03	20.00
Not Needful & Timely	06	12.00	02	08.00	03	20.00
Not Needful & Not Timely	04	08.00	00	00.00	01	06.67

Table 3. Distribution of the Respondents according to Applicability of Message

Particulars	Farmers (n=50)		In-service Personnel (n=25)		Input Dealers (n=15)	
	No.	%	No.	%	No.	%
Fully Applicable	20	40.00	15	60.00	08	53.33
Medium Applicable	08	16.00	05	20.00	03	20.00
Partially Applicable	12	24.00	03	12.00	04	26.67
Not Applicable	10	20.00	02	08.00	00	00.00

Table 4. Distribution of the Respondents according to Overall Impact of Technology

Particulars	Farmers (n=50)		In-service Personnel (n=25)		Input Dealers (n=15)	
	No.	%	No.	%	No.	%
Low (Score Upto 1-3)	09	18.00	02	08.00	03	20.00
Medium (Score Upto 3.1-6)	12	24.00	05	20.00	04	26.67
High (Score Upto 6.1-9)	29	58.00	18	72.00	08	53.33

of the messages was very important. The data presented in Table No. 2 indicated that message was Needful & Timely for 64 percent of the KMS members of farmer's category and about 68 and 53.33 percent for In-service Personnel and Input Dealers respectively. Less numbers of farmers (08%), In-service personnel (00%) and Input dealers (6.67%) were reported the massage was Not Needful & Not Timely for them.

Applicability of Message : As for as Applicability of the message is concerned the data presented in Table No. 3 indicates that message was fully applicable for about 40 percent of KMS members of farmers category, whereas Medium & Partially applicable was reported by 16 & 24 percent of members respectively. It was also found that message was fully applicable for In-service Personnel (60%) and Input Dealers (53.33%).

Overall Impact of Technology : Table No. 4 indicated the Overall Impact of Technology and it was found that technology imposes high impact on 58 percent of KMS members of farmers category, whereas 72 percent and 53.33 percent members of In-service Personnel and Input Dealers category reported technology impacted highly on them. Low impact was reported by ranging about 08-20% of KMS members among all categories.

CONCLUSION

With the economic, social, political and cultural development in the village the technologies like mobile, internet, internet, teletext, video text and microcomputers should necessarily be used for communication with farmers. Indian agriculture has drastically changed after liberalization, globalization, marketization and

privatization. The shift towards commercial and export oriented agricultural demands, information based approaches to agriculture communication is need of present scenario. Undoubtly, the ICT like Kisan Mobile Advisory offer great scope for collection and dissemination of agricultural and rural information up to the farmers and its initiatives confirms the fact that farming community is also geared to accept change.

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