Impact Assessment of Kisan Mobile Advisory System in Relation to Dissemination of Agriculture Technology to The Beneficiary Farmers in Khargone District (M.P.)

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Abstract: *Kisan Mobile Advisory system (KMAs) is one such initiative of ICT which provides location-specific and crop specific farm advisory services and facilities to the farming community in a particular area. Kisan Mobile Advisory Services has been considered as a communication service by which messages are being provided in the form of SMS through KVKs. The result in respect to overall impact of Kisan Mobile Advisory system (KMAs) obtained by farmers presented that out of the total beneficiaries, the higher proportion of the beneficiaries 39.17 per cent was obtained incomplete knowledge followed by complete knowledge confronted by 35.00 per cent beneficiaries and partial knowledge confronted by 25.83 per cent beneficiaries respectively.*
Key Words: *Kisan Mobile Advisory, Dissemination of Agriculture Technology*

I. Introduction

The Kisan Mobile Advisory system (KMAs) through messages is being used to deliver the needful agricultural information, specially to improve farmers' agricultural technical knowledge with decision making ability, so that, they may be able 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 target farmers covering the broad category of information like, crop production, livestock management, weather forecast, marketing, general awareness and other enterprises etc.

In short it can be said that Kisan Mobile Advisory system (KMAs) 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. The Kisan Mobile Advisory system (KMAs) delivers real-time agricultural information and customized knowledge to improve farmers' decision making ability so that they may be able 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. Keeping the importance of Kisan Mobile Advisory system (KMAs) in view the present study entitled "Impact Assessment of Kisan Mobile Advisory System in Relation to Dissemination of Agriculture Technology to the Beneficiary Farmers in Khargone District (M.P.)" have been selected for study with following specific objective.

Objectives of the Study

To assess the impact of Kisan Mobile Advisory system (KMAs) as technological information obtained by the beneficiary farmers.

II. Review of Literature

Kumar *et al.* (2014) found that message were needful & timely reported by 82 per cent of farmers and 88.57 & 66.67 per cent for extension personnel and input dealers, respectively. The messages were fully applicable perceived by 42 per cent of farmer, whereas medium & partially applicable was reported by 48 & 49 per cent of farmers.

Patel *et al.* (2015) found that it was highly understandable for 80 per cent and 50 per cent KMA member of in-service personnel and input supplier category, respectively. Messages were needful and timely for 67.5 per cent of KMA member of farmers' category and about 70 per cent and 50 per cent for in-service personnel and input supplier, respectively.

Nargawe (2017) reported that majority of the respondents i.e. 54.28 per cent indicate medium level impact of Kisan Mobile Advisory Services followed by those 22.86 per cent who considered high as well as low impact of Kisan Mobile Advisory Services.

III. Material & Method

The present study has been conducted in Khargone districts of Madhya Pradesh. Kisan Mobile Advisory (KMA) system was launched in the year 2007-08 for farming community in the Khargone district. Presently this programme has been working in all blocks of Khargone District. Kisan Mobile Advisory (KMA) system is one of the important extension system in the district for dissemination of agriculture technology, hence, its impact should be assess for further improvement. In this respect the district has been selected for present study. The Khargone district comprises of 9 blocks. Among the list of blocks, one block (i.e. Khargone block) of Khargone district has been selected randomly. A list of villages with Kisan Mobile Advisory system for the selected block Khargone have been prepared with the help of Kisan Advisory Personnel in the block. From this list five villages was selected randomly. List of beneficiary farmers of Kisan Mobile Advisory (KMA) of the five selected villages has been prepared. Among these list, 24 beneficiary farmers of KMAs was selected from each selected village by using simple random sampling method. In this way 120 beneficiary farmers have been selected from consolidated list.

The data was collected through the researcher himself. The task was accomplished through a door to door visit to the selected beneficiaries using the structured interview schedule. The data was collected for the year of 2016-17 through survey method.

IV. Result & Discussion

Impact of Kisan Mobile Advisory system (KMAs) as technological information obtained by the beneficiary farmers:

Today mobile is turning out to be extremely important, information and communication technologies 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. 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. This programme was completed a long period of time and farmers have received bulk message services related to agricultural aspects. The success of the programmes needs to be assessing for future development. In assessment of impact of Kisan Mobile Advisory system (KMAs) as technological information obtained by the beneficiary farmers, 23 components of agricultural technology has been considered in study to get the opinion of farmers regarding they perceived level of knowledge or information through this service. The beneficiaries have been categorized in appropriate statistical procedures on the basis of their frequencies in level of information they perceived and presented in following table:

Table: Distribution of the beneficiaries according to their technological information obtained through Kisan Mobile Advisory system (KMAs). (n=120)

S.No	Area of technology	Partial knowledge	Incomplete knowledge	Complete knowledge
1.	Layout of farm	32 (26.67)	42 (35.00)	46 (38.33)
2.	Soil Management	35 (29.17)	45 (37.50)	40 (33.33)
3.	Soil nutrient management	28 (23.33)	55 (45.84)	37 (30.83)
4.	Water management	34 (28.33)	40 (33.33)	46 (38.34)
5.	Nursery preparation	46 (38.33)	54 (45.00)	20 (16.67)
6.	Sowing time	23 (19.16)	38 (31.67)	59 (49.17)
7.	Seed variety	30 (25.00)	42 (35.00)	48 (40.00)
8.	Seed treatment	30 (25.00)	43 (35.83)	47 (39.17)
9.	Recommended dose of fertilizer	10 (8.33)	58 (48.34)	52 (43.33)
10.	Weed management	36 (30.00)	58 (48.33)	26 (21.67)
11.	Pest management	23 (19.16)	41 (34.17)	56 (46.67)
12.	Disease management	28 (23.33)	53 (44.17)	39 (32.50)
13.	Floriculture	56 (46.67)	44 (36.67)	20 (16.66)
14.	Vegetable	30 (25.00)	44 (36.67)	46 (38.33)
15.	Dairy: Nutrition and health	36 (30.00)	50 (41.67)	34 (28.33)
16	Poultry: Nutrition and health	38 (31.67)	43 (35.83)	39 (32.50)
17.	Goat: Nutrition and health	26 (21.66)	50 (41.67)	44 (36.67)
18.	Climate and rainfall	26 (21.67)	52 (43.33)	42 (35.00)
19.	Information on extension activities	34 (28.33)	39 (32.50)	47 (39.17)
20.	Diversification of the crops	31 (25.83)	41 (34.17)	48 (40.00)

21.	Post harvest management	26 (21.67)	48 (40.00)	46 (38.33)
22.	Storage and processing	20 (16.67)	51 (42.50)	49 (40.83)
23.	Marketing information	33 (27.50)	46 (38.33)	41 (34.17)
	Overall average	31 (25.83)	47 (39.17)	42 (35.00)

Figure in parentheses shows percentage to total

Study leads to determine the facts that the higher percentage of beneficiaries in the area was found to be incomplete knowledge through Kisan Mobile Advisory system (KMAs) followed by complete knowledge and partial knowledge respectively. The possible reasons could be majority of the beneficiaries found the information was incomplete because subject areas covered in Kisan Mobile Advisory system (KMAs) were found to irrelevant up to some extent for their situation like poor educational, undeveloped infrastructure background and unavailability of network and electricity. On the other hand, the common farmers are not very much interested in the new technologies disseminated through Kisan Mobile Advisory system (KMAs).

V. Conclusion

The study depicted that the beneficiaries obtained complete (high level) information of agricultural technology like "layout of farm", "water management", "sowing time", "seed variety", "seed treatment", "pest management", "vegetable production", "information on extension activities" and "diversification of the crops" respectively.

The study depicted that the beneficiaries obtained incomplete (medium level) information of agricultural technology like "soil management", "soil nutrient management", "nursery preparation", "recommended dose of fertilizer", "weed management", "disease management", "dairy: nutrition and health", "poultry: nutrition and health", "goat: nutrition and health", "climate and rainfall", "Post harvest management", "storage and processing" and "marketing information" respectively.

In the last, it can be concluded that the beneficiaries obtained partial (low level) information of agricultural technology for only "floriculture" farming.

The result inrespect to overall impact of Kisan Mobile Advisory system (KMAs) obtained by farmers presented that out of the total beneficiaries, the higher proportion of the beneficiaries 39.17 per cent was obtained incomplete knowledge followed by complete knowledge confronted by 35.00 per cent beneficiaries and partial knowledge confronted by 25.83 per cent beneficiaries respectively.

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