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Information Delivery System Through Kisan Mobile Advisory Services

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ABSTRACT

The KVK catered to the needs of those who are employed and those who whish to be self employed. The main activities of KVK is to update the technical Knowledge and Skills of the farming communities and to train the Farmers and farm women in scientific farming and allied fields like Crop production, Seed production, Horticultural crops, Dairy, Fisheries, Agro forestry and other enterprises.Mobile phone is the important ICT tool for faster dissemination of technology almost 70 percent of the world's mobile phone subscribers are in developing world. Initially we started programme for sending information through Mobile of different stake holder ie. Farmers/ farm women,Extension personnel & Impute supplier. The massage scheduled on every tuesday & friday ie. two massage per farmers in a week. The content development is the very important aspect in the KMA, we are using different step for preparation and verification of the content. This programme was started during 2008-09 to 2010-11 with 1000 farmers those using mobile for this purpose, out of that 150 farmers selected through random sampling method. The impact shows that the sifting of knowledge of the farmers from Low to Medium and High .The timely information reach in farmers which stand first in the rank among other performance parameters. There is a greater role for KMA to provide technical assistance, appropriate technology input and follow systematic approach of encouraging crop production technology and other enterprises in order to enhance adoption of improved technology. Day by day number of beneficiaries increasing in this programme which show the success of the programme.

Information delivery system is the one of the main components for dissemination of knowledge or new technology. Information gap has been recognized as one of the important constraints in the overall agricultural development of the country. Indian agriculture had been on traditional lines till the first waves of green revolution in late 60s. The green revolution gave a sudden boost to the production and productivity of major cereals in the assured irrigated areas. Quick dissemination of technological information from the Agriculture Research System to the farmers in the fields and reporting farmers' feedback to the research system is one of the critical inputs in transfer of technology.

To increase the farm production, the farmers need to be informed on recent scientific farm innovations. Farm information and technology dissemination to the farmers provides opportunities for their self development , improves existing knowledge, skills and enhances their capability. In this connection, Information and Communication technologies (ITCs) hold lot of promise to deliver agricultural knowledge to the farmers. In order to provide agricultural extension services through ICTs, it is necessary to assess the information needs of the farmers so as to prepare and deliver specific messages or technologies and also to develop ICT based training modules as per the need and requirements of farmers.

KVK imported learning through work experience and its concerned with technical literacy . KVK imported training to practicing farmers and farm women. The KVK catered to the needs of those who are employed and those who whish to be self employed. The main activities of KVK is to update the technical Knowledge and Skills of the farming communities and to train the Farmers and farm women in scientific farming and allied fields like Crop production, Seed production, Horticultural crops, Dairy, Fisheries, Agro forestry and other enterprises.

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Information and Communication Technologies (ICTs) can accelerate agricultural development by facilitating knowledge management. Mobile phone is the important ICT tool for faster dissemination of technology almost 70 percent of the world's mobile phone subscribers are in developing world. As an affordable and accessible means of communication, both men and women are realizing the potential of this technology to create economic opportunities and strengthen social network in rural areas.

METHODOLOGY

The KVK has pioneered for the first time IT enabled service aiding instant messaging from KVK to individual farmers for extending agricultural information through SMS alerts. Initially we started programme for sending information through Mobile of different stake holder ie. Farmers/ farm women,Extension personnel & Impute supplier. The massage scheduled on every tuesday & friday ie. two massage per farmers in a week. The content development is the very important aspect in the KMA, we are using different step for preparation and verification of the content. This programme was started during 2008-09 to 2010-11 with 1000 farmers those using mobile for this purpose, out of that 150 farmers selected through random sampling method. Data was collected using structured interview scheduled prepared for KMA user farmers in Jabalpur district of Madhya Pradesh. Data analysis was done through frequency, distribution and mean value.

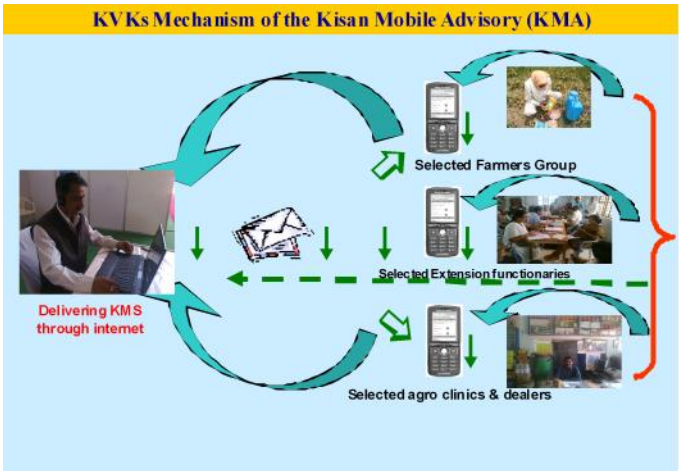

Table : 1. Category wise distribution of Messages

S.No.	Categories	Beneficiaries
1.	Farmers/Farmwomen	1000
2.	Extension Personnel	50
3.	Inpute Supplier	25

RESULTS AND DISCUSSION

Table 2 revealed that the number of beneficiaries increased five times during 2008-09 to 2010-11. The maximum number of massage send to the KMA farmers related to the agricultural practices followed by fruit and vegetable farmers. The increasing trend of the farmers shows that the KMA provide good and timely information to the farmers.

Table : 2. Distribution of theme wise Messages.

S.No.	Theme	No. of Message delivered					
		2008-09		2009-10		2010-11	
		No. of Messages	No. of Beneficiaries	No. of Messages	No. of Beneficiaries	No. of Messages	No. of Beneficiaries
1.	Agriculture Practicing Farmers	79	110	82	290	96	742
2.	Fruit & Vegetable farmers	58	45	62	80	58	102
3.	Dairy farmers	18	20	22	43	29	74
4.	Entrepreneurs	23	25	26	87	25	82
	Total	**178**	**200**	**192**	**500**	**208**	**1000**

Performance of the KMA user observed through the statement mention in the table 3. Which shows that input of the programme for betterment of agricultural practices. The table revealed that 145 farmers out of 150 were

eassely understand the messege, which is very important for success of the programmes. Information is very important but timely information is more important in the agricultural practices in this regards 149 farmers out of 150 Agreed this statement and its stand first in the rank of the table. The content of the massage is very simple

Table : 3. Performance indicator for KMA Users

S.No	Statement	Farmers/ Farm women (n-150)	Extension personnels (n-50)	Input Suplier (n-25)	Mean score	Rank
1	Massages easy to understand	145	48	22	215	IV
2	Need based information	146	50	21	217	III
3	Timely Information	149	48	24	221	I
4	Massage read by the Users	146	50	21	217	III
5	Save time and money	143	45	20	208	V
6	Strong linkage with KVK	148	48	23	219	II
7	Feed back response	126	36	16	178	VII
8	Increase social contact	138	37	18	193	VI

that's why 146 farmers out of 150 read by the message and accordingly using the information for betterment of agriculture practices as well as enhancement in income.

The table 4 explain about frequency distribution of the farmers about crop production practices and other enterprises through KMA above data reveals that the Knowledge of the farmers regarding agronomical practice shows that the 54.67 % farmers has High level of knowledge about Vegetable production technology while, 25.33% farmers has Low level of Knowledge, in Agro forestry system. While in some other practices i.e. Use of high yielding variety, Seed rate and seed treatment, Fertilizer requirement and application, Agricultural equipment, Sowing methods and techniques, Water management and Fruit production and Management respondents have given average response 48.00%, 44.00%, 36.00% 36.00% 34.67%, 34.67% and 34.00% respectively.

Table : 4. Knowledge of the farmers about crop production practices and others enterprises through Kisan Mobile Advisory (KMA).

N=150

S.No.	Practices	Knowledge level					
		Low		Medium		High	
		Freq.	Per.	Freq.	Per.	Freq.	Per.
1	Use of high yielding variety	32	21.33	72	48.00	46	30.67
2	Seed rate and seed treatment	28	18.67	66	44.00	56	37.33
3	Sowing methods and techniques	37	24.67	52	34.67	61	40.67
4	Use of insecticide and pesticide	30	20.00	46	30.67	74	49.33
5	Fertilizer requirement and application	28	18.67	54	36.00	68	45.33
6	Weed management	30	20.00	39	26.00	81	54.00
7	Water management	35	23.33	52	34.67	63	42.00
8	Use of bio-fertilizer and preparation method	25	16.67	47	31.33	78	52.00
9	Vegetable production technology	26	17.33	42	28.00	82	54.67
10	Agro forestry System	38	25.33	52	34.67	60	40.00
11	Fruit production and Management	24	16.00	51	34.00	75	50.00
12	Animal health care	22	14.67	48	32.00	80	53.33
13	Agricultural equipment	18	12.00	54	36.00	78	52.00
14	Agri. based enterprises	32	21.33	46	30.67	72	48.00

Table 5. Frequency distribution of farmers regarding knowledge through Kisan Mobile Advisory

Categories	Before KMA		After KMA	
	Freq.	Per.	Freq.	Per.
Low	98	65.33	29	19.33
Medium	36	24.00	69	46.00
High	16	10.67	52	34.67

The table 5 showed that impact of KMA user for enhancement of knowledge from low to medium as well as high categories of the farmers related to the agronomical practices. The table shows the very good impact of the KMA within a very short Spain.

Table 6. Overall Impact of KMA on adoption of agricultural practices. (N-150)

S.No.	Technology	Extent of Adoption					
		Complete Adoption		Partial Adoption		No Adoption	
		Freq.	%	Freq.	%	Freq.	%
1	Use of wilt resistant gram variety- JG-63	65	43.33	48	32.00	37	24.67
2	Ridge & furrow of planting in soybean along with var.- JS-9752	70	46.67	28	18.67	52	34.67
3	Planting of hybrid Paddy under SRI	74	49.33	38	25.33	38	25.33
4	Use of insecticide and fungicides for control of pod borer in gram and neck blast in paddy respectively	86	57.33	42	28.00	22	14.67
5	Farmers prepared and used vermin compost in vegetables	69	46.00	34	22.67	47	31.33
6	Planting of eucalyptus, bamboo and aonla on degraded lands	60	40.00	29	19.33	61	40.67
7	Rejuvenation of old orchard	46	30.67	38	25.33	66	44.00
8	Animal feeding and breeding	52	34.67	22	14.67	76	50.67
9	Use of rotavator, land leveler weeding and sowing equipment	49	32.67	16	10.67	85	56.67
10	Develop small enterprises (ie. Dairy, vermin compost, seed production, masala & flore mills etc.)	68	45.33	36	24.00	46	30.67

The KMA users was asked to determine the extent of adoption of selected technology and recommended package of practices for crop production. The percentage distribution are reported in table-5,the complete adoption of insecticide and pesticides for control of pod borer in gram and neck blast in paddy 57.33% were observed. 49.33% Planting of hybrid Paddy under SRI, 46.67% Ridge & furrow of planting in soybean along with var.- JS-9752, 46.00% Farmers prepared and used vermin compost in vegetables, 45.33% Develop small enterprises. Partial adoption about 32.00% Use of wilt resistant gram variety- JG-63, 25.33% Rejuvenation of old orchard,

39.33%. However , 56.67% respondent did not adopt se of rotavator, land leveler weeding and sowing equipment, 50.67% Animal feeding & breeding and 40.67 % respondents Planting of eucalyptus, bamboo and aonla on degraded lands. It was noticed from the results that majority of the respondents had complete adoption of use of insecticide and fungicides for control of pod borer in gram and neck blast in paddy.

CONCLUSION

The programme KMA launched the 2008-09 in the KVK Jabalpur, the impact shows that the sifting of knowledge of the farmers from Low to Medium and High .The timely information reach in farmers which stand first in the rank among other performance parameters. There is a greater role for KMA to provide technical assistance, appropriate technology input and follow systematic approach of encouraging crop production technology and other enterprises in order to enhance adoption of improved technology. Day by day number of beneficiaries increasing in this programme which show the success of the programme. Indian agriculture has drastically changed after liberalization, globalization, marketization and privateization. The shift towards commercial and market oriented agricultural demands. Infromation based approaches to agriculture communication in need of present scenario undoubtly, the (KMA) user 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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