

RESEARCH ARTICLE :

A study on benefits obtained by farmers through kisan call centre services

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SUMMARY : Kisan Call Centre (KCC) is one of the major initiative taken up by the Ministry of Agriculture and Farmers Welfare, Government of India to provide Agriculture and Allied sector information to the farming community through lane or mobile connection at appropriate time. The service provided through a toll free number of 1800-180-1551. Considering the importance of KCC, the research study was conducted in Mahaboobnagar District of Telangana State with a total sample size of 90 farmers. Ex-post facto research design was undertaken for the study with the objective to find out and analyze benefits obtained by the farming community through Kisan Call Centre Services. Data was collected from the respondents with the help of well-structured interview schedule. The percentage and correlation analysis was used for meaning full interpretation of data. The results revealed that maximum number of the respondents expressed that Able to save cost of cultivation due to advices from KCC (83.33%), KCC helps in forecast the pest and disease outbreak in particular region (76.66%), Easy to communicate to KCC rather than other similar service providers (73.33%). The Correlation analysis revealed that the variables such as farming experience, source of irrigation, contact with extension and other agencies, participation in extension methods, perception towards mobile phone in farming and innovativeness showed positive cum significant relationship with the obtained benefits of respondents.

KEY WORDS :

Kisan call centre (KCC), Benefits, Farmers

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BACKGROUND AND OBJECTIVES

Agriculture extension and farmer-outreach programmes are facing major challenges in terms of cost-effective outreach, solutions tailored to needs of individual farmers and an image that is farmer-friendly (Ramamritham, 2006). The mobile technologies have created new channels to communicate with others. Farming is not so linear but requires constant inputs at every

stage where new technological inputs provide better crop outputs. It means, crop production depends on weather, agricultural practices and management of pests and diseases at right time to save crops and gain better results. The final produce should provide better marketable price to farmers, where the market intelligence is the key, which provides regular information about nearby markets in local language.

Mobile phones are opening up new

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channel for connectivity and contributing to the free flow of ideas and opinions. Among ICTs, impressive penetration of mobile phones in many of the developing countries changing the agricultural communication process and mobile phones have made personal communications readily accessible for the first time, to women and men, poor and prosperous, rural and urban dwellers in developing as well as in industrial countries (Colle, 2011).

Kisan Call Centres (KCC) was launched by the Ministry of Agriculture and Farmers Welfare, Government of India. It is available for all within the country since 21st January 2004. The Farmer Call Centre is a synthesis of two hitherto separate technologies namely, the Information and Communication Technology (ICT) and the Agricultural Technology both have their specialized domains and work cultures. A toll-free telephone number “1800-180-1551” has been provided that is operational on all days from 6.00 am to 10.00 pm. Beyond these hours the calls are attended in the Interactive Voice Response System (IVRS) mode.

A Kisan Call Center consists of a complex of telecommunication infrastructure, computer support and human resources organized to answer effectively and efficiently the queries raised by farmers instantly in the local language. Thus, Kisan Call Center is bridging the information gap between the expert agriculturists and farmers. Replies to the farmers’ queries are given in 22 local languages. Keeping this background, the present study was undertaken with the objective to enlist the benefits obtained through Kisan Call Centre and to find out relationship between independent variables with the benefits obtained by the farmers.

RESOURCES AND METHODS

Expost facto research design was followed for the study. Research was conducted in Mahaboobnagar District of Telangana State as this district has the highest net sown area under main crops among all the districts in Telangana (Season and Crop Report 2012-13). In addition, this district had registered highest KCC services as per the dashboard data of m-Kisan portal.

The Mahaboobnagar district has been divided into 64 mandals (blocks). Out of the 64 mandals, two mandals (blocks) namely Manopad and Gattu were selected since they have maximum area under cultivation of crops. Three villages from each block were selected randomly.

Totally Six villages in two blocks were chosen for the study. From each village 15 beneficiary farmers were selected for the study with a total sample size of the 90. Simple random sampling method was followed for the study while selecting the farmers. Data was collected by using well-structured interview schedule with pre-testing procedure. The tabulated was analyzed by using SPSS statistical data package. Percentage analysis and correlation technique was performed to interpret data in meaning full way.

OBSERVATIONS AND ANALYSIS

The results obtained from the present study as well as discussions have been summarized under following heads :

Benefits of KCC to the farming community :

Farmers are availing many benefits out of the KCC services. The benefits are classified into Technological, Economic, Communication and Other benefits. The distribution of beneficiary respondents according to benefits obtained through KCC is given in Table 1.

Technological benefits :

From table 1, it could be inferred that, the forecast on the pest and disease outbreak in a particular region ranked first (76.66%) among the services through KCC because pest and disease incidence were more. In this region, farmers are growing multiple cropping pattern and pest and disease incidence were more. Keeping all available sources, farmers calling to KCC for getting information on pesticides and fungicides details.

The second benefit availed by the farmers were the usage of KCC services for weather forecasting for crops (60.00%). The reason may be that weather plays crucial role in all farming activities. The farmers might have preplanned their farm activities according to weather conditions.

KCC helps the farmers to gain knowledge (60.00%) by explaining technical advices in a proper manner and in an understandable manner. In order to increase their income the KCC service would have aroused their interests to acquire more knowledge coupled with adequate farming experience. Further, the agricultural scientists and Level-I officials also played a significant role in providing information to the farmers through mobile and land line telephone connectivity.

Since Level-I officials are agri-graduates with experience in practical knowledge sharing through KCC, significant number of farmers (60.00 %) benefited to avail exact information on specific problems. Besides, KCC helps the farmers to be updated on recent technologies (33.33%) through monthly training programmes conducted by nodal agency officer to the KCC officials.

Economic benefits :

Economic benefits gained by farmers in descending order of their importance were 83.33 per cent of the respondents able to save cost of cultivation due to advices from KCC and followed by KCC helps in improving the economic condition of the farmers (70.00%) and KCC helps in increasing productivity of crops (50.00%). The kind of advocacies provided by the

KCC operators to farmers is immediately without any time gap. The solutions offered by the operators are pragmatic and easy to adopt at the field level.

Communication benefits :

The list of communication benefits availed by the farmers namely; it is easy communicate to KCC rather than other similar service providers (73.33%) followed by KCC facilitates the farmers to exchange the information among the farming community (70.00%) and helps the farmers to provide instant feedback to the scientists (50.00%). As the KCC service provider receives the phone call in local language, trying to understand the farmer’s issues in a clear manner and offering maximum technological advises immediately which helps the farmer to save the crop from Pest and Disease and weather parameters.

Table 1 : Distribution of Respondents according to benefits (n = 90)

Sr. No.	Benefits	Yes		Rank
		No.	%	
I Technological benefits				
1.	KCC helps in forecast the pest and disease outbreak in particular region	69	76.66	I
2.	Use of KCC services for weather forecasting for crops	54	60.00	II
3.	KCC helps to gain knowledge to the farmers	54	60.00	III
4.	KCC provides required and exact information on specific problems	54	60.00	IV
5.	KCC helps the farmers to be updated on recent technologies	30	33.33	V
II Economic benefits				
1.	Able to save cost of cultivation due to advices from KCC	75	83.33	I
2.	KCC helps in improving the economic condition of the farmers	63	70.00	II
3.	KCC helps in increasing productivity of crops	45	50.00	III
III Communication benefits				
1.	Easy to communicate to KCC rather than other similar service providers.	66	73.33	I
2.	It facilitates the farmers to exchange the information among the farming community.	63	70.00	II
3.	KCC helps the farmers to provide instant feedback to the scientists	45	50.00	III
IV Other benefits				
1.	It benefits all the farmers irrespective of their landholding pattern	69	76.66	I
2.	Useful to the farmers for getting information on Govt. schemes	54	60.00	II
3.	KCC services assist the farmer in planning and decision making aspects in agriculture and allied sectors	45	50.00	III
4.	Useful to the farmers getting information on training programmes	45	50.00	IV

Multiple responses obtained

Table 2 : Distribution of respondents according to overall benefits (n=90)

Sr. No.	Over all benefits categories	Beneficiaries	
		No.	Per cent
1.	Low	22	24.44
2.	Medium	54	60.00
3.	High	14	15.56
	Total	90	100.00

Other benefits :

Other benefits obtained by the farmers were KCC provides services to all farmers irrespective of their landholding pattern (76.66%) followed by helpful to the farmers for getting information on Govt. schemes (60.00%), KCC services assist the farmers in planning and decision making aspects in agriculture and allied sectors (50.00%) and is useful to the farmers for getting information on training programs (50.00%).

Over all benefits :

Based on the data of technological, economical, communication and other benefits, overall benefits were calculated. The beneficiary respondents are as classified into low, medium and high category according to benefits obtained through KCC is given in table 2.

Table 2, shows that two third (60.00%) of the respondents had expressed medium level of benefits, followed by low (24.44%) and the rest (15.56%) of the respondents obtained high level of benefits through KCC. It could be concluded from results that two third (75.56%) of the beneficiaries benefited through call centre. The possible reason for that is KCC providing services to farmers at free of cost. Besides, the KCC service reaches the farmers in a touch of mobile or telephone buttons. Further, the farmers may make call at any number of times in the prescribed timings and they could get the solutions to farm problems.

Correlation analysis of socio-economic profile with benefits :

Correlation analysis was carried out between the

Independent Variables and benefits and the results were presented as follows:

Table 3, shows that six variables out of twelve variables such as farming experience, source of irrigation, contact with extension and other agencies, participation in extension methods, perception towards mobile phone in farming and innovativeness showed positive cum significant relationship with obtained benefits of respondents.

It could be seen from the results that out of twelve variables taken for the study, four variables namely farming experience, perception towards mobile phone in farming, innovativeness exhibited significant and positive correlation with benefits at one per cent level of significance.

Source of irrigation, contact with extension and other agencies, participation in extension methods showed positive cum significant association with benefits at five per cent level of significance. Whereas, material possession showed negative and significant association with benefits at one per cent level of significance and farm size showed negative and significant association with benefits at five per cent level of significance.

It could be inferred from results that higher farming experience, extension agency contact, participation in extension methods could help farmers to adopt improved technologies which in turn fetch more price. Hence, farming experience showed positive and significant relationship with benefits.

Help line services providing information to the farmers for free of cost. Helpline services has reduced transaction costs for seeking information and helped in

S. No.	Independent Variables	r value beneficiaries
1.	Age	-0.092 ^{NS}
2.	Educational status	0.017 ^{NS}
3.	Farm size	-0.226*
4.	Farming experience	0.309**
5.	Cropping pattern	0.008 ^{NS}
6.	Source of irrigation	0.210*
7.	Material possession	-0.392**
8.	Contact with extension and other agencies	0.317**
9.	Information seeking behavior	0.095 ^{NS}
10.	Participation in extension methods	0.236*
11.	Perception towards mobile phone in farming	0.376**
12.	Innovativeness	0.270**

* and ** indicate significance of values at P=0.05 and 0.01, respectively

NS=Non-significant

taking correct, timely decisions on farm practices and adoption of new technologies in agriculture and allied sectors. Hence, perception towards mobile phone in farming showed positive and significant relationship with benefits.

Innovative farmers rely on latest technologies. By adopting these latest technologies farmers can get more profits than traditional methods. Hence, innovativeness showed positive and significant relationship with benefits.

Conclusion :

The world moves fast on the usage of communication-innovation tools and techniques. The KCC is unique service provided by the Department of Agriculture and Cooperation throughout India through regional language with toll free calls from land line telephone and mobile phone connectivity. Now, KCC is providing free SMS services to the enrolled farmers in English and Regional language.

In addition, the Department of Agriculture and Cooperation has developed lot of Mobile Applications in Android Operating System. The Apps are not only useful for remote location data entry where desktop PCs are not available, but would also be available to farmers and all other stakeholders for extracting information from the web. The mobile Apps to be listed on mKisan Portal are

some good applications which are free of cost and do not have any royalty or Intellectual Property Right (IPR) issue. In this connection, more awareness and orientation training programme to be offered to extension officials and farmers on usage of KCC, Mobiles Apps to connect the unconnected.

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