



Constraints and Suggestions Expressed by the Farmers toward Kisan Call Centre (KCC) Advisories

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Authors' contributions

This work was carried out in collaboration between both authors. Author RPR designed the study, collected data, performed the statistical analysis and wrote the first draft of the manuscript. Author KVN corrected a manuscript and help to identify the most suitable statements. Both authors read and approved the final manuscript.

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ABSTRACT

Kisan Call Centre (KCC) is an ICT initiative with the core aim of answering farmers' queries through telephone call in their own dialect. KCC offering services at free of cost countrywide by dialling a common Toll-Free number 1800-180-1551. In this study, an attempt has been made to document the constraints faced by the KCC beneficiaries and seek their suggestions to overcome them in Chamarajanagar District of Karnataka during 2021-22. Totally 200 respondents were considered for the study and personal interview method was adopted for collection of data. The data was analysed using frequency and percentage analysis. The results revealed that, it is difficult to explain the symptoms of pests and diseases of plant over phone call (94.50%), is the major technical constraints and location specific needs of the farmer not solved by KCC officials

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(91.50%), are the technical and general constraints expressed by the KCC beneficiaries. KCC should provide the facility of snap chats wherever, it is required to understand symptoms in better way (90.50%) and The publicity and awareness programs to be organized to increase awareness about KCCs among farmers (97.00%) are the technical and general suggestion given by beneficiaries to overcome the constraints.

Keywords: Advisories; constraints; farming; kisan call centre and suggestions.

1. INTRODUCTION

Agriculture is an important sector in economic and social development in most of the developing countries. Agriculture plays a significant role in Indian economy. Farmers practicing agriculture face numerous problems and seek proper and timely guidance or suggestions to tackle the same. With the advent of Information and Communication Technology (ICT), the catering of the needs of the farmers has become easy. ICT in a broader term and it encompasses gadgets, tools, applications, internet etc. there have been many interventions by private and government in application of ICT in agriculture and allied aspects [1-3].

ICT projects like Kisan Call Centre (KCC) initiated by government of India, Raintha Mitra Kendras' info kiosks of Karnataka State Department of Agriculture, Krishi Marata Vahini Kiosks developed by Karnataka Agricultural Marketing Board and e-choupals, a private initiative of ITC Limited are delivering the grass root level and are widely popular in Karnataka [4].

KCC was launched on 21st January, 2004 by the Department of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India throughout the country to cater the needs of the farming communities. KCC provides an information on technologies, crop protection, sources of information, e.g.: advice to addressing specific problems answered by expert's information on Government health programmes, contact details of health service providers, counselling services on HIV Counselling and legal advice in 22 local languages. Farmer from any part of the country can get the solutions for his queries by contacting KCC by dialling the toll-free number 1800-180-1551. The operator at the KCC will attend the call to answer queries of the farmers immediately. In case the operator at the call centre is not able to address the farmers' query immediately, the call will be forwarded to agricultural specialists. At the most the call centre will take 48 hours to provide with the suitable solution (Ministry of Agriculture &

Farmers Welfare). Information and communications technology (ICT) can be broadly interpreted as technologies that facilitate communication, processing and transmission of information by electronic means. It has revolutionised the whole communication process [5], still there is a problem with the internet connectivity at farmers field and little or no awareness of usage of internet, KCC is one of the best ICT solutions to access the required information.

Though there are number of Agri advisory services namely ATIC, AC & ABC and other private initiatives where ATIC is rendering single window system for agricultural information and its platform was created to allow optimistic interaction between farmers and Subject Matter Specialists for effective technology transfer and livelihood improvement [6], so this kind of benefits are available to cater various solutions to the agricultural problems, farmers are not aware of several existing services. Two-thirds (65.00 %) of the respondents were aware of KCC service. However, almost three-fourth (74.20 %) of the respondents had never used KCC and availed advisory services for agricultural purpose (Manjuprakash *et al.*, 2017). Hence, an attempt was made to elicit the constraints faced by the beneficiaries and their suggestions to overcome them.

2. METHODOLOGY

The present study was carried out during 2021-22 to study the constraints and suggestion expressed by the farmers about the functioning of the KCC advisories. The data was collected from the beneficiaries of KCC users in Chamarajanagar District of Karnataka. 200 KCC beneficiaries were selected randomly with the help of stratified random sampling method.

Ex-post facto research design was adopted and it is a systematic empirical enquiry in which the scientists do not have direct control on influencing the variables because of their manifestation have already occurred. Hence, this

design was considered as appropriate for the study (Kerlinger, 1966).

2.1 Selection of Respondents

Chamarajanagar District was purposively selected as it received a lowest call (3,984 calls) as compared to the other Districts (i.e. Tumkur, Mysuru, Hasan, Bengaluru, Bengaluru Rural and Chikkaballapura) which comes under the Jurisdiction of University of Agricultural Sciences, Bangalore

(<https://dackkms.gov.in/account/login.aspx>).

Further, four taluks of Chamarajanagar District were selected and names and address of the farmers of four taluks of Chamarajanagar district who made a call to Kisan Call Centre (KCC) in the year 2019 were collected from the office of Kisan Call Centre located at University of Agricultural Sciences Bangalore and from each of the selected taluk 25 Dry land farmer and 25 Irrigated land farmers were chosen for the study. Thus, final sample size was 200.

The detailed name of taluk and number of the respondents selected from the both Dry land and Irrigated land are presented in the Table 1.

Table 1. Details of taluks and respondents selected for the study

Sl. No.	Taluk	Dry land	Irrigated Land
1.	Chamarajanagar	25	25
2.	Kollegala	25	25
3.	Yelandur	25	25
4.	Gundlupete	25	25
	Total	100	100

2.2 Sampling Technique

Stratified random sampling was employed in the study. It is a sampling method in which a population group is divided into one or many distinct units called strata based on shared behaviors or characteristics.

2.3 Data Collection

2.3.1 Secondary data

Name and address of the farmers who called to kisan call centre during 2019 from chamarajanagar was collected from the kisan call centre Bengaluru.

2.3.2 Primary data

The data was collected using well-structured and pre-tested interview schedule and personal interview method was adopted to obtain the essential information from KCC beneficiaries. The data generated was analysed using frequency and percentage and the constraints and suggestions were ranked using Garret ranking.

3. RESULTS AND DISCUSSION

The general constraints expressed by KCC beneficiaries are presented in Table 2, and it could be observed that, majority (91.50 %) of the KCC beneficiaries opined that, location specific needs of the farmer not solved by KCC officials and it was ranked first, this might be because KCC officials might not be providing the information as desired by the KCC beneficiaries suiting to their local situation. 88.00 per cent of the respondents expressed that, lack of awareness among people about the Kisan Call Centre (Rank II), this might be because KCC is a government initiation and intended to provide the need based advisory services over telephonic conversation and hence, it might have not created an awareness to larger extent to the people as lack of awareness on KCC among the farmers is one of the reasons for people not accessing it. More than three fourth (78.00 %) of the KCC beneficiaries expressed that, lack of interest among the farmers to avail the benefits of the KCC (Rank III), this might be because of the reason that, the Raita Samparka Kendra and other grass root level government offices are in the vicinity and are helping farmers with the advisory services. Less than three fourth (69.50 %) of the KCC beneficiaries expressed that, information provided by KCC has low credibility (Rank IV), as some information provided by the KCC officials cannot be applicable in the real field situations. Hence, farmers felt that provided information is not trustworthy. Less than two third (63.00 %) of the respondents expressed that, illiterate farmers could not call and ask the KCC officials (Rank V) as the many of the farmers are illiterate in the rural area they must take a help from others. Psychological hesitation in calling KCC (58.50 %) ranked last among all the constraints. As the proper advice to the farmers timely is important to undertake various operations and every farmer seeks information or solutions. The present results are in the line with [7,8].

Table 2. Constraints faced by the farmers in availing the KCC services (n=200)

Sl. No.	Constraints	No.	%	Ranking
General constraints				
1.	Location specific needs of the farmer not solved by KCC officials	183	91.50	I
2.	Lack of awareness among people about the Kisan Call Centre	176	88.00	II
3.	Lack of interest among the farmers to avail the benefits of the KCC	156	78.00	III
4.	Information provided by KCC has low credibility	139	69.50	IV
3.	Illiterate farmers could not call and ask the KCC officials	126	63.00	V
5.	Psychological hesitation in calling KCC	117	58.50	VI
Technical constraints				
1.	It is difficult to explain the symptoms of pest and diseases of plant over phone call	189	94.50	I
2.	Information given by the KCC officials are not location specific	180	90.00	II
3.	Phone line of Kisan Call Centre was found busy	176	88.00	III
4.	Most of the time Kisan Call Centre agents put farmers call for waiting	163	81.50	IV
5.	Personnel of Kisan Call Centre are sometimes unable to understand the farmers' problem	147	73.50	V
6.	Kisan call centre personnel are not well prepared to answer the farmers questions which leads to confusion about the technology	133	66.50	VI
7.	Poor telecom or cellular network	92	46.00	VII

*Multiple response

The technical constraints faced by the KCC beneficiaries are presented in the Table 2, revealed that majority (94.50 %) of the KCC beneficiaries had expressed that, it is difficult to explain the symptoms of pest and diseases of plant over phone call and this obtained rank first, this might be because miss communication between KCC official and farmers, as farmers does not have a proper knowledge to explain the problems to the KCC officials so that KCC officials cannot provide the proper answer to farmers. 90.00 per cent of the respondents had expressed that, information given by the KCC officials were not location specific (Rank II), this might be because as KCC officials are just providing the needed information to farmers without considering the caller location. The majority (88.00 %) of the KCC beneficiaries had expressed that, phone line of Kisan Call Centre was found busy (Rank III), as the KCC currently working in the 21 different location and covering all the States and UTs so call trafficking is the major problem and also a smaller number of the farm tele advisories are maintaining the calls from different location might be the reason that farmers are getting busy while calling to KCC. More than two third (66.50 %) of the KCC beneficiaries had expressed that, Kisan call centre personnel are not well prepared to answer the farmers questions which leads to confusion about the technology (Rank VI), as the difficulty in explaining the pest and disease over a phone

call its difficulty for the KCC officials to give a suitable answer so it might lead the confusion about the technologies. Less than two third (59.00 %) of the KCC beneficiaries had expressed that, poor telecom or cellular network (Rank VII), this might be KCC receives more call from rural area so in rural area telecom department has setup only few networks so farmers cannot reach KCC officials when they required. The results are in line with [9,10,11].

General suggestions given by the farmers could be observed from Table 3 that, among the general suggestions given by KCC beneficiaries, vast majority (97.00 %) of KCC beneficiaries suggested that, the publicity and awareness programs to be organized to increase awareness about KCCs among farmers (Rank I), as it is not possible for all the farmers to avail its benefit due to lack of awareness to make farmers to avail the services, awareness on existence, importance and its activity need to be created to increase. Less than two third (60.50 %) of the KCC beneficiaries suggested that, the KCC personnel should advise after having completely listening to the farmers problem (Rank II), it will help the beneficiaries to get a proper information about the quarries. 60.00 per cent of the KCC beneficiaries suggested that, KCC personnel should use local or regional words rather than scientific and technical words to make it understandable to the farmers (Rank III) as many

time KCC officials use technical words to explain a symptom to the caller it might have led a confusion so technical words must be avoided while giving the solution. More than half (57.50 %) of the KCC beneficiaries suggested that, KCC personnel need to be experienced and well versed with agriculture and allied aspects to provide solutions to the farmer's problems (Rank IV) So, it will help to reduce time taken to answer as well as it avoids putting a call on hold. More than half (55.50 %) of the KCC beneficiaries had suggests that, all agriculture & allied sector government schemes information to be provided (Rank V), as it will help caller to gain a knowledge about the new schemes. 54.50 per cent of the KCC beneficiaries suggested that, the feedback option need to be established in KCC regarding the services provided by KCC (Rank V), as it will strengthen working condition of KCC.

Technical suggestion could be observed from Table 3 that, among the technical suggestions given by KCC beneficiaries were arranged rank-wise for interpretation. Majority (90.50 %) of the respondents suggested that, KCC should provide the facility of snap chats wherever, it is required to understand symptoms in better way (Rank I) because over a phone call it was hard to explain the problem to the KCC officials. 87.50 per cent

of the farmers suggested that, the information provided by the KCC personnel should suit to the locale of the farmer for practical adaptation (Rank II). This might be due to the fact suggestions given by KCC official were not possible to adopt in the local condition, hence before suggesting the personnel of KCC have to analyse its practicability so that the farmers use it. More than three fourth (77.50 %) of the KCC beneficiaries suggested that, proper network connectivity needs to be given in all rural areas (Rank III), network is the most important thing in connecting people from one place to another so Department of Telecommunication need to act to setup more network to reach people. Exactly three fourth (75.00 %) of the respondents suggested that, the KCC personnel should be well trained and competent (Rank IV) as it helps to control the time taken to be answer the queries and provide credible information. Less than three fourth (71.50 %) of the KCC beneficiaries suggested that, a greater number of KCC service centre to be increased to avail the facility (Rank V), as now only in 22 KCC service centres are managing the calls throughout India so by increasing the number of the KCC service centres will help to reach more people. The results are in line with [12].

Table 3. Suggestions given by the farmers to strengthen the KCC advisor services (n=200)

Sl. No.	Statements	No.	%	Ranking
General Constraints				
1.	The publicity and awareness programs to be organized to increase awareness about KCCs among farmers.	194	97.00	I
2.	The KCC personnel should advise after having completely listening to the farmers problem	121	60.50	II
3.	The KCC personnel should use local words rather than scientific and technical words to make it understandable to the farmers	120	60.00	III
4.	KCC personnel need to be experienced and well versed with agriculture and allied aspects to provide solutions to the farmer's problems.	115	57.50	IV
5.	All agriculture & allied sector government schemes information to be provided	111	55.50	V
6.	The feedback cell needs to be established in KCC regarding the services provided by KCC.	109	54.50	VI
Technical Suggestions				
1.	The KCC should provide the facility of snap chats wherever, it is required to understand symptoms in better way	181	90.50	I
2.	The information provided by the KCC personnel should suit to the locale of the farmer for practical adaptation.	175	87.50	II
3.	Proper network connectivity needs to be given in all rural areas	155	77.50	III
4.	The KCC personnel should be well trained and competent	150	75.00	IV
5.	More number of KCC service centre to be increased to avail the facility	143	71.50	V

*Multiple response

4. CONCLUSION

With the advancement of Information Technology, KCC is one of the important ICT initiatives need to be tapped to make it more accessible to the farmers around the country. As majority (88.00 %) of the KCC beneficiaries lacking in awareness on KCC so extension activities at rural areas should be taken in order create awareness about KCC. Since, KCC work on network basis, proper measures to be taken by the concerned stakeholder to make it more convenient in availing its benefit and majority (94.50 %) facing problem during explain symptoms and disease over a phone call to get a solution from the expert. Hence, the provision should be made to send photographs of the sample for better understanding. Hiring of the most experienced, skilled and dynamic personnel at the KCC advisory service centre is one of the important factors to bring positive attitude on the farmers towards KCC advisories in the years to come.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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