

Satisfaction Level of the Farmers Regarding Kisan Call Centre (KCC) Advisories

Abstract

The Kisan Call Centre (KCC), initiated on January 21st, 2004, by the Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India, serves as a crucial support system for farming communities across India. This study, conducted in 2021-22 in Chamarajanagar District of Karnataka, aimed to assess the Satisfaction Level of 200 KCC beneficiaries regarding its advisory services. Utilizing stratified random sampling, the study employed an ex-post facto research design to gather insights. The data collection involved secondary data from the KCC in Bengaluru and primary data through structured interviews with beneficiaries. Results revealed that 76.00% of beneficiaries expressed high satisfaction with the technical knowledge of KCC experts, with 74.50% satisfied with expert availability, and 73.50% with expert guidance in advisory services. Additionally, 70.50% were highly satisfied with patience of expert in listening to the complete query of the farmers through helpline services. Regarding technological information provided by the KCC 53.00% expressed high satisfaction with the technological information provided by the KCC, and 52.50% acknowledged the assistance of advisory services in crop preservation and yield improvement. However, including all the aspect like technical information, helpline services and advisory services provided by the KCC. Notably, a significant 44.00% of both dryland and irrigated land farmers expressed high satisfaction with the overall services of the KCC. This research highlights the importance of ICT-driven initiatives like the KCC in empowering farmers and improving agricultural productivity and sustainability.

Key words: Kisan Call Centre, agricultural advisory services, farmer satisfaction, ICT in agriculture, Karnataka, India

1. INTRODUCTION

In India, where most people rely on farming for a living, agriculture is a vital industry for the country's economic and social development. despite this, farmers frequently face a wide range of difficulties, and in order to successfully navigate through them, they need prompt and proper advice. The introduction of Information and Communication Technology (ICT) has greatly facilitated the process of meeting farmers' requirements. ICT, which includes gadgets, tools, applications, and the internet, has seen a number of interventions in agriculture from both the private and public sectors. Initiatives such as the Kisan Call Centre (KCC) established by the Government of India, Raintha Mitra Kendras info kiosks of the Karnataka State Department of Agriculture, Krishi Marata Vahini Kiosks by the Karnataka Agricultural Marketing Board, and e-choupals, a private initiative of ITC Limited, have been instrumental in delivering grassroots-level solutions and are widely embraced in Karnataka (Pushpa, 2016).

The Kisan Call Centre (KCC), launched on January 21st, 2004, by the Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India, has been pivotal in catering to the needs of farming communities across the nation. Operating on toll-free numbers 1551 or 1800-180-1551, the KCC provides a plethora of information, ranging from agricultural technologies and crop protection to government health programs and legal advice, all in 22 local languages. Farmers can readily seek solutions to their queries, with the KCC ensuring immediate assistance by connecting them with agricultural experts. In instances where immediate solutions are unavailable, the queries are forwarded to specialists, with a commitment to providing suitable resolutions within 48 hours (R Puneeth Raja and K VenkatarangaNaika, 2023). Despite challenges such as limited internet connectivity in farming areas and a lack of awareness about internet usage, the KCC stands out as one of the most effective ICT solutions for farmers to access the necessary information. While various other Agri-advisory services exist, including ATIC and ACABC, which aim to provide comprehensive agricultural solutions, the awareness among farmers regarding these services remains limited. Surveys indicate that while 65.00% of respondents were aware of the KCC service, a substantial

51 74.20% had yet to utilize the Kisan Call Centre and avail its advisory services for agricultural
 52 purposes (James, D.J. 2017 And Chitrashree, K Et All 2020). Hence, an attempt was made to analyse
 53 the satisfaction level of the KCC beneficiary about advisory services given by KCC

54 2. METHODOLOGY

55 The present study was carried out during 2021- 22 to study the satisfaction level of KCC
 56 beneficiaries about advisory, helpline services and technical advisory services given by KCC. The
 57 data was collected from the beneficiaries of KCC in Chamarajanagar District of Karnataka. 200 KCC
 58 beneficiaries were selected randomly with the help of stratified random sampling technique. Ex-post
 59 facto research design was adopted and it is a systematic empirical enquiry in which the scientists do
 60 not have direct control on influencing the variables because of their manifestation have already
 61 occurred. Hence, this design was considered as appropriate for the study (Kerlinger, 1966).

62 2.1 Samples and sampling Procedure

63 Chamarajanagar District was purposively selected as it received a lowest call (3,984 calls) as
 64 compared to the other Districts (i.e. Tumkur, Mysuru, Hasan, Bengaluru, Bengaluru Rural and
 65 Chikkaballapura) which comes under the Jurisdiction of University of Agricultural Sciences,
 66 Bangalore(<https://dackkms.gov.in/account/login.aspx>). Further, four taluks of Chamarajanagar District
 67 were selected and names and address of the farmers of four taluks of Chamarajanagar district who
 68 made a call to Kisan Call Centre (KCC) in the year 2019 were collected from the office of Kisan Call
 69 Centre located at University of Agricultural Sciences Bangalore and from each of the selected taluk 25
 70 Dry land farmer and 25 Irrigated land farmers were chosen for the study with a help of Stratified
 71 random sampling technique. Thus, final sample size was 200

72 2.2 Data collection

73 Secondary data Name and address of the famers who called to Kisan Call Centre during
 74 2019 from Chamarajanagar was collected from the Kisan Call Centre Bengaluru and Primary data
 75 was collected using well-structured and pre-tested interview schedule and personal interview method
 76 was adopted to obtain the essential information from KCC beneficiaries. The data generated was
 77 analysed using frequency and percentage.

78 3. RESULTS AND DISCUSSION

79 The results of the itemised level of satisfaction regarding advisory service of KCC is
 80 presented in the Table 1 indicated that, more than three fourth (76.00 %) of the beneficiaries
 81 expressed that, they were highly satisfied with the technical knowledge of the experts. Followed by,
 82 74.50 per cent of them stated that, they were highly satisfied with the availability of experts, 73.50 per
 83 cent of the respondents indicated that expert'sguidance highly satisfied, cordial response of the
 84 professionals during advisory services (72.50 %), interest of experts inadvising (71.00 %), time taken
 85 to solveproblem (70.50 %), communicationskills (70.00 %). Almost same per cent (69.50 %) and
 86 (69.00%) of the respondents expressed that, language ofexpert and sampledagnosis respectively.
 87 This implies that, majority of the respondents had highly favourable to favourable attitude and they
 88 were highly satisfied with the advisory service of the KCC. **This findings in line with Sharma (1999)**

89 **Table 1: Satisfaction level of the farmers regarding advisory services of KCC**

90

(n=200)				
Sl.No.	Advisory/diagnosis service	Highly Satisfied	Moderately satisfied	Least satisfied
1.	Technical knowledge of theexperts	152 (76.00 %)	45 (22.50%)	3 (1.50%)
2.	Communicationskills	140	53	7

		(70.00 %)	(26.50)	(3.50 %)
3.	Time taken to solveproblem	141	47	12
		(70.50 %)	(23.50 %)	(6.00 %)
4.	Availability ofexperts	149	43	8
		(74.50 %)	(21.50 %)	(4.00 %)
5.	Interest of experts inadvising	142	48	10
		(71.00 %)	(24.00 %)	(5.00 %)
6.	Expertguidance	147	35	18
		(73.50 %)	(17.50 %)	(9.00 %)
7.	Cordial response of the professionals during advisory services	145	42	13
		(72.50 %)	(21.00 %)	(6.50 %)
8.	Language ofexperts (Fluency)	139	47	14
		(69.50 %)	(23.50 %)	(7.00 %)
9.	Samplediagnosis	138	48	14
		(69.00%)	(24.00 %)	(7.00 %)

91 *Multiple Response

92 Satisfaction level of the farmers regarding helpline services of KCC

93 The itemised satisfaction level of the farmers from helpline services of KCC is presented
 94 Table 2. The results revealed that, more than two third (70.50 %) of the farmers were highly satisfied
 95 with the patience of the experts in listening to the complete query of the famers, this might be
 96 because, the experts of KCC listen to the farmers queries clearly to understand their problems to give
 97 a suitable solution. This was followed by, understandability of the information (67.50 %), support of the
 98 expert in explaining the symptoms of the crops (60.00 %) and Utility of the information (58.00 %). This
 99 might be due to the fact that, the call made by the farmers to the KCC will be recorded and the
 100 personnel at the KCC also were dedicated to serve the farming community with the better solutions to
 101 the farmers. In order to understand the problems, they aided the farmers in explaining the symptoms
 102 based on which the suggestions were made. It was also found in the study area that, more than half
 103 of the farmers adopted the suggestions provided by the experts. **The findings are similar to Davinder**
 104 **Singh (2019)**

105 **Table 2: Satisfaction level of the farmers from helpline services of KCC**

(n=200)

SI.No.	Helpline services	Highly Satisfied	Moderately satisfied	Least satisfied
1.	Patience of the expert in listening to the complete query of the famers	141 (70.50 %)	45 (22.50 %)	14 (7.00 %)

2.	Utility of the information	116 (58.00 %)	65 (32.50 %)	19 (9.50 %)
3.	Understandability of the information	135 (67.50 %)	46 (23.00 %)	19 (9.50 %)
4.	Support of the expert in explaining the symptoms of the crops	120 (60.00%)	73 (36.50 %)	7 (3.50 %)

107 *Multiple Response

108 Satisfaction level of the farmers regarding the technological information provided by the KCC

109 Table 3 depicts the satisfaction level of the farmers regarding the technological information
 110 provided by the KCC revealed that, more than half (53.00 %) of the farmers were highly satisfied
 111 regarding the technology information given. Followed by, help of advisory services in saving the crops
 112 and obtain better yield (52.50 %), less than half (49.50 %) of the farmers were satisfied with the skills
 113 of expert in identifying the disease by listening to the symptoms over phone call. Further, the farmers
 114 expressed that, the cost of suggested technology (49.00 %) was highly satisfiable, improving
 115 efficiency (48.00 %) and saving of time and money in transportation to avail the services at their office
 116 (47.50 %) were highly satisfiable to both dryland and irrigated land farmers in the study area. The
 117 findings are **contradictory with Davinder Singh (2019)**

118 **Table 3: Satisfaction level of the farmers regarding the technological information provided by**
 119 **the KCC**

120 (n=200)

SI.No.	Technological information	Highly Satisfied	Moderately satisfied	Least satisfied
1.	Technology information given	106 (53.00 %)	83 (41.50 %)	11 (5.50 %)
2.	Cost of suggested technology	98 (49.00 %)	94 (47.00 %)	8 (4.00 %)
3.	Improved efficiency	96 (48.00 %)	84 (42.00 %)	20 (10.00 %)
4.	Identification of the disease by listening to the symptoms	99 (49.50 %)	82 (41.00 %)	19 (9.50 %)
5.	Help of advisory services in saving the crops and obtain better yield	105 (52.50 %)	69 (34.50 %)	26 (13.00 %)

6.	Saving of time and money in transportation to avail the services at their office	95 (47.50 %)	82 (41.00 %)	23 (11.50 %)
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121 *Multiple Response

122 **Overall level of satisfaction of Dryland and Irrigated land Farmers towards KCC advisory**
123 **services**

124 The data presented in the Table 4 shows the overall level of satisfaction of the farmers
125 including all the aspect like technical information, helpline services and advisory services provided by
126 the KCC. It was observed among the dryland farmers that, less than half (44.00 %) of them were
127 highly satisfied about the services of KCC followed by low (35.00 %) and medium (21.00 %) level of
128 satisfaction towards KCC advisory services. This results are in line with Dash *et. al* (2019)

129 **Table 4: Overall level of satisfaction of Dryland and Irrigated land Farmers towards**
130 **KCC Advisory Services**

131 (n=200)

Category	Dry land Farmer (n ₁ =100)		Irrigated land Farmer (n ₂ =100)		Overall (n=200)		χ ² Test
	No.	%	No.	%	No.	%	
	Low	35	35.00	29	29.00	63	
Medium	21	21.00	27	27.00	42	21.00	
High	44	44.00	44	44.00	95	47.50	
Mean ± SD	28.94 ± 6.57		30.5 ± 6.39		29.7 ± 6.515		

132 ^{NS}-Non-significant

133 Whereas, in case of irrigated land farmers, it was observed that, same per cent
134 (44.00 %) as that of dryland farmers were highly satisfied regarding services of KCC followed by low
135 (29.00 %) and medium (27.00 %) level of satisfaction about the services provided by KCC.

136 More interestingly, it could be observed that, similar per cent of both dryland and irrigated
137 land farmers had high level of satisfaction towards KCC advisories. This might be due to the fact that,
138 the queries raised by the farmers of two farming system might be different but the level of satisfaction
139 held by the farmers of both farming systems remained the same.

140 The results of pooled samples of dryland and irrigated land farming systems is presented in
141 the Table 4 and it explains that, less than half (47.50 %) of the beneficiaries were highly satisfied
142 regarding overall services provided by KCC. This might be because the advices given by the farm
143 advisories were well suited to local conditions and the suggestions were given only after thorough
144 understanding of the problems explained by the farmers. Thus, the solutions were useful and farmers
145 accepted and adopted to use in real situations. Further, less than one third (31.50 %) of the
146 beneficiaries had low level of satisfaction and 21.00 per cent of the beneficiaries had medium level of

147 satisfaction about the overall services providing by KCC. This result is in the line with Davinder Singh
148 (2019) and Bansal (2009) meanwhile it is contradictory with Chaturvedani et al. (2016).

149

150 The data was subjected for testing overall satisfaction of the farmers towards advisory
151 services of KCC between dryland and irrigated land farmers and it was found to be statistically non-
152 significant ($\chi^2=1.31$ ^{NS}).

153

154 4. CONCLUSION:

155 The Kisan Call Centre (KCC) emerges as a crucial pillar of support for farmers, evident in its
156 commendable statistics: 76.00% satisfaction in technical expertise, 74.50% in expert availability, and
157 73.50% in guidance. Notably, 70.50% of farmers laud the expert's patience, while 53.00% appreciate
158 the technological insights provided. The overarching 44.00% overall satisfaction rate, particularly
159 resonant among dryland and irrigated land farmers, underscores the KCC's pivotal role in
160 empowering agricultural communities. Through its ICT-driven solutions, the KCC not only provides
161 timely and knowledgeable assistance but also cultivates a sense of confidence and capability among
162 farmers, ultimately contributing significantly to the enhancement of agricultural productivity and
163 sustainability

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