

Farmers' participation in the Kisan Call Centre – A critical evaluation

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Agricultural extension services are meeting the information needs of farmers through various means such as farm and home visits, group contacts and mass communication methods. The present technology dissemination system typically involves a top down approach where scientists determine research priorities, generate innovations and provide the results to extension agents, which are then passed on to individual farmers. Though this system has been efficient and effective, the speed with which all the farmers are covered is really challenging. There is a need to connect rural communication, research and extension networks and provide access to the much needed knowledge, technology and services (Forno, 1999). It is well known that radio, telephone, television, computer and print media are available everywhere fortunately in many remote areas also. Above all, telephone services have been made available in small towns, markets and villages. Telephone which is a powerful electronic machine that was a farmer's dream earlier has become a reality as the farmers can immediately make use of it to address their field problems and other farm related problems (Manhas et al, 2005). With a view to utilise the extensive telecom infrastructure in the country for farmers, the Department of Agriculture and Co-operation (DAC), Ministry of Agriculture (MoA), Govt. of India launched Kisan Call Centres (KCCs) on January, 21, 2004 across the country in order to respond to the issue raised by farmers instantly in the local language, on a continuous basis.

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At present, the Kisan Call Centres are operating in 13 states all over India. The call centre functions with a toll free number '1551' throughout the country and the call lands on to the nearby centre in the state where the call is made. Queries related to agriculture and allied sectors are being addressed through these centres.

The President of India opined that, in the last one year of its operation, the call centres have provided consultancy, information, assistance and guidance to over five lakhs callers from the villages of eight states. The top users of the scheme are Maharashtra and Tamil Nadu followed by Uttar Pradesh and Rajasthan (Kalam, 2005). The KCC is a synthesis of two hitherto separate technologies namely, Information and Communication Technology (ICT) and Agricultural Technology. The KCC consists of three levels namely level I which is the basic call centre interface, with high quality band width and local language proficient agriculture graduate, level II with subject matter specialists on concerned important crops and enterprises, connected through good band width telecom and computer connectivity and level III which is the management group to ensure ultimate answering and resolution of all the farmers' queries which are not resolved at level II, connected on off line mode.

In Tamil Nadu, the KCC was established on 21st January 2004. More than a year has passed since the operation of the scheme in Tamil Nadu. Hence the study was undertaken with the following objectives:

- a) to know about the extent of participation of farmers in the services of KCC
- b) to understand the reach of the services of the scheme towards its intended clients and the level of awareness of the farmers about the centre.
- c) to access gender-wise and area-wise participation of the farmers and the profile of the users of KCC.

Methodology

There are 13 KCCs operating in the country. The KCCs operating in the state of Tamil Nadu were selected purposively for the study. The KCC functions

at three levels in Tamil Nadu covering all the 30 districts of Tamil Nadu, and two Union Territories namely Andaman and Nicobar islands and Pondicherry. The level I KCC operates at Dalmia, Samsung, Soni (DSS) Infotech Limited, at Chennai. Six level II centres operate at various locations in the state viz., Commissionerate of Agriculture, Directorate of Horticulture and Plantation Crops; Commissionerate of Agricultural Marketing and Agri-Business; Tamil Nadu Veterinary and Animal Science University (TANUVAS), at Chennai; Agricultural Technology Information Centre (ATIC), Tamil Nadu Agricultural University (TNAU), Coimbatore; National Research Centre for Banana (NRCB), Trichy. The level III centre is the Coconut Development Board (CDB), at Chennai. For analyzing the coverage area-wise participation of the users of KCC, the level I centre, DSS Infotech Limited at Chennai and level III centre CDB at Chennai were selected as such. Out of the six level II centres, ATIC, TNAU, at Coimbatore was selected based on the higher proportion of calls to the centre than the other level II centres.

The users of the KCC were those who made at least one call to the centre. To access the gender-wise participation and the profile of the users of KCC, the callers of level I, level II and level III centres during November 2004 to October 2005 were considered as respondents. The list of telephone numbers of the users of KCC were collected from the caller list maintained at the level I centre and the telephone numbers were randomly selected using the random number table. A total of 36,989 calls were made to the centre during the study period. 150 samples were drawn randomly from the telephone number list of total 35,853 callers of level I centre, in such a way that five to six respondents were drawn from each unit of the coverage areas of the KCC. From the sample of 150 callers, the response through telephone survey was obtained from 62 respondents only. Similarly, 75 respondents were drawn from the total 1,136 callers of level II centres, in such a way that two to three respondents were drawn from each unit of the coverage areas. However, only 32 users responded. The response with respect to gender-wise participation and the profile of the users were obtained from the selected respondents through telephone survey with the help of a well structured and pre tested interview schedule.

Results and Discussion

Participation of Farmers in KCC

Participation of the farmers in KCC was evaluated based on the number of calls made to the KCC during November 2004 to October 2005. The number of calls made to the centre directly represents the number of farmers who had participated in the services of KCC. The evaluation of the reports maintained at level I KCC indicated that, a total of 36,989 farmers (36,989 calls) had participated in the services of the KCC scheme during November 2004 to October 2005. Out of these 36,989 users, 35,853 calls were handled at the level I centre itself. The remaining 1136 calls of the users were escalated to the identified level II centres spread throughout Tamil Nadu based upon the nature of the query. It could be inferred that on an average, more than 3000 users had participated in the KCC scheme. It was a sign of good participation from the farmers who were considered as the users of the centre by making more than 36,000 calls within 10 months from the start of KCC.

This finding could be supported with the KCC report for the calls received during January 2004 to April 2005 that, Tamil Nadu ranked first in the country, for the total number of calls received. (TCIL, 2005). This finding also showed better performance of the KCC and the response from the farmer's side. The increased response from the farmers' side during the initial period might be due to the attraction of the toll free service of the KCC and the curiosity of the farmers in knowing about the functioning of the KCC. It could be inferred from the results that there was good response from the farmers for better services of KCC.

The participation of farmers in the KCC scheme has been evaluated in three dimensions such as gender-wise participation of farmers, coverage area-wise participation and the profile of the participants.

Participation of farmers based on gender

Gender-wise participation of farmers in the KCC scheme was an attempt to analyze which gender group had maximum involvement in availing the

services of KCC. The dependence on agricultural information for both male and female can be understood from Table 1.

Table 1. Gender-wise participation of farmers in KCC

n = 36989

S.No.	Sex	No. of calls made	Per cent (%)
1	Male	36847	99.62
2	Female	142	0.38
	Total	36989	100.00

It is interesting to note from the Table 1 that almost cent per cent (99.62%) of the calls were made by men followed by less than half (0.38%) of the calls made by women. It is a well known that, in our rural society, males have higher exposure to external environment than females. Even though females have more involvement in agriculture and allied fields nowadays, male members have better orientation to innovative approaches and greater exposure with the outside world. Moreover, the information need with regard to agriculture and allied fields is more for male groups because of the decision making power vested with them. Awareness, knowledge, exposure to the outside world and desire to utilize the new technologies might be the reason for higher participation of men than women folk.

Participation of farmers based on coverage area

The KCC scheme would be a successful one, only if it generates participation from both the gender groups located in all the coverage areas. The coverage area-wise participation of farmers referred to the number of calls made by the farmers from 32 coverage areas of KCC at Tamil Nadu. The details on coverage area-wise distribution of calls are presented in Table 2.

It can be observed from Table 2 that out of the 32 coverage areas, more than one-tenth (14.56%) of the calls were made from Erode district and less than one-tenth (7.64%) of the calls from Coimbatore district. Less than one per

cent of the calls had been made from Thiuvallur (0.99%), Ramanathapuram (0.44%), Nilgiris (0.24%) and Andaman and Nicobar (0.06%).

Maximum number of calls were received from Erode district possibly due to the fact that the farmers had progressive involvement in agriculture followed by higher rate of awareness about KCC. The high level of awareness might be due to the fact that there were more number (1060) of life members of Valarum Velanmai which is a monthly Tamil magazine supplying farm information. Among all the districts of Tamil Nadu, Erode district enrolled higher life membership in this agricultural magazine. In Valarum Velanmai, advertisement about KCC had been given once in three months on a regular basis. Coimbatore district farmers recorded more number of calls due to the awareness created by KVK and ATIC at TNAU, Coimbatore which is one of the level II centres of KCC. Awareness about KCC was promoted during the visit of the farmers to the ATIC, TNAU, and FDG conveners with the scientists. The FDG conveners in turn might have spread the information about KCC to their peer groups. Apart from this source of awareness, Coimbatore district ranked first in the subscription to Valarum Velanmai magazine. The awareness about KCC could have spread among the farmers through the magazine.

The cropping system in Nilgiris is mostly mono-cropping especially tea crop. Due to mono-cropping, the information needs of the farmers in Nilgiris might have been limited than that of the farmers of all other coverage areas. This could be the reason for minimum calls from Nilgiris. Ramanathapuram also recorded minimum calls. This might be due to the agriculturally unfavourable nature of the area with prolonged water scarcity. Since the farmers of Ramanathapuram had less dependence on agriculture, very few calls might have been made.

It could be inferred that districts with minimum dependence on agriculture and lack of awareness have not been attracted by the KCC scheme which naturally led to minimum participation.

Table 2. Coverage area-wise participation of farmers

n = 36989

S.No.	Coverage areas	No. of Calls	Per cent (%)
1	Erode	5384	14.56
2	Coimbatore	2825	7.64
3	Salem	2286	6.18
4	Viluppuram	2175	5.88
5	Tiruchirappalli	1944	5.26
6	Thanjavur	1580	4.27
7	Cuddalore	1570	4.24
8	Dharmapuri	1552	4.20
9	Namakkal	1538	4.16
10	Tirunelveli	1498	4.05
11	Perambalur	1294	3.50
12	Tiruvannamalai	1294	3.50
13	Tiruvarur	1267	3.43
14	Nagapattinam	1119	3.03
15	Karur	1012	2.74
16	Vellore	984	2.66
17	Dindigul	841	2.27
18	Chennai	801	2.17
19	Madurai	755	2.04
20	Kanchipuram	742	2.01
21	Pudukkottai	631	1.71
22	Virudhunagar	565	1.53
23	Thoothukudi	549	1.48
24	Theni	469	1.27
25	Krishnagiri	460	1.24
26	Kanyakumari	420	1.14
27	Sivaganga	408	1.10
28	Pondicherry	384	1.04
29	Thiruvallur	368	0.99
30	Ramanathapuram	164	0.44
31	Nilgiris	87	0.24
32	Andaman and Nicobar	23	0.06
	Total no. of calls	36989	100.00

Profile of the users of KCC

A comprehensive understanding of the profile of the users of KCC aids in understanding the background of the people participating in the services of KCC. The data on the characteristics of users were pooled together and the findings are presented here.

i) Age

It can be seen from Table 3 that less than half (44.6%) of the users of KCC were in the middle age group (36-45 years), nearly one-third (32.9%) of the users are over 45 years. It is also seen that less than one-fourth (22.3%) of the users were youth.

The farmers of middle age group had more participation in the KCC due to their progressive involvement in agriculture than the other two groups. The reason attributed for less involvement of youth might be that most of the youth were employed in other professions such as engineering, business, teachers etc which normally pulls them away from agriculture.

ii) Sex

Table 3 indicates that the users of KCC were mostly male (85.11%). Only 14.89% of the users were female. The reason for higher participation of men folk may be due to their direct involvement in decision making in agriculture than women.

iii) Educational status

From Table 3, it is clear that, more than one-fourth of the users of KCC (28%) were educated up to college and high school (27%). Less than one-fifth of the users had education up to higher secondary (19.14%) and middle school (15.90%). It was found that none of the users were illiterate. It could be inferred that, the users with education upto college level might have had higher awareness about the KCC, and had utilized the services. Hence, education played a major role in improving awareness of the innovations and utilizing the same.

Table 3. Profile of the users of KCC

n = 94

S.No	Profile	Category	Users of KCC	
			Number	Per cent (%)
1.	Age	Young	21	22.3
		Middle	42	44.6
		Old	31	32.9
2.	Sex	Male	80	85.11
		Female	14	14.89
3.	Educational status	Illiterate	0	0.00
		Primary school	6	6.38
		Middle school	15	15.90
		High school	27	28.70
		Higher secondary	18	19.14
		Collegiate	28	29.80
4.	Occupation status	Agriculture as primary occupation	75	79.80
		Agriculture as secondary occupation	19	20.20
5.	Farm size	Marginal farmers	8	8.51
		Small farmers	27	28.72
		Big farmers	59	62.76
6.	Social participation	Low	9	9.57
		Medium	70	74.46
		High	15	15.95
7.	Location	City	4	4.25
		Town	17	18.08
		Village	73	77.65
8.	Time of awareness	Less than 5 months	26	27.65
		6 – 10 months	32	34.04
		More than 10 months	36	38.29
9.	Frequency of contact	Less than 5 times	66	70.21
		6 – 10 times	15	15.95
		More than 10 times	13	13.82

iv) Occupational status

It could be seen that more than three – fourth (79.80%) of the users had agriculture as their primary occupation and the rest had agriculture as their secondary occupation.

As the KCC was providing information on agriculture and allied fields, the people belonging to farming community with more involvement in agriculture would have utilized the services of KCC.

v) Farm size

It could be inferred from the Table that more than half (62.76%) of the users of KCC were big farmers followed by small and marginal farmers.

Since area under agriculture is more for big farmers, naturally there would be higher information need in agriculture for them and hence more dependence on KCC.

vi) Social participation

It could be observed that nearly three–fourths (74.46%) of the users of KCC had medium level of social participation. This could be attributed by more number of users being degree holders. It was found during the survey, that a majority of the degree holders were members of organic club and farmers association at their places and hence the result.

vii) Location

It is observed from Table 3 that a majority of the users of KCC were from villages. Less than one-fifth (18.08%) of the users were from towns followed by city.

It is well known that agriculture is an occupation which is mostly followed in villages. Since people in villages had more involvement in agriculture than people belonging to the town and city, a majority of the users of KCC were from villages.

The utilization of the services of KCC was thus influenced by the occupation and location of the people.

viii) Time of awareness

It is obvious from Table 3 that, majority of the users were aware of the KCC just 10 months right from the period of survey. More than one-fourth of the users were aware of the KCC since five months from the period of survey.

This implies that, the maximum number of users got aware during the initial stages of the establishment of the KCC.

ix) Frequency of contact

The results from Table 3 reveal that a majority of the users had contacted the KCC less than 5 times for getting clarification on agriculture and allied fields. The reason attributed for this result as expressed by many of the farmers during the survey was failure in getting connectivity to the KCC. It was found that, less need of agricultural information during summer and dissatisfaction with the advice might have also contributed for the less number of contacts with the centre.

Conclusion

The results obtained as a result of the evaluation of the extent of participation of the farmers in the KCC scheme clearly represents that, male group had higher participation in the total. The farmers from Erode and Coimbatore districts have utilized the services of the KCC scheme as compared to the farmers from other coverage areas of the centre. Areas like Nilgiris, Ramanathapuram and Andaman and Nicobar islands recorded minimum calls. The evaluation of the profile of the participants revealed that, people with more dependence on agriculture (big farmers, people living in villages and agriculture as the main occupation) had utilized the services of the scheme in total.

In general, the participation of the farmers was not equal from both the gender groups and all the coverage areas. The profile also showed wide inequalities. The KCC scheme aims at meeting the information needs of all categories of farmers without any bias. Hence, in order to improve and strengthen participation of the farmers, more efforts are needed to spread

awareness about the existence, objective and the functioning of the scheme. The sources of spreading awareness may be widened to, newspapers, posters, advertisement over radio and television, and agricultural magazines etc. It was observed that there was minimum participation from women. Hence, women folk need to be motivated through personal contacts made by the extension workers by way of targeting the SHGs. To promote awareness, the DAC in collaboration with the level III centre, could release advertisements at regular intervals by proper selection of media such as FM radio, television (all private channels) Tamil dailies and agricultural magazines at fixed and regular intervals.

The present evaluation clearly reveals that participation of the farmers in the KCC scheme is one of the best indicators for accessing the performance and achievement of objectives of the scheme. The essential modifications with respect to attracting the intended clientele pertaining to farmers belonging to different gender and coverage areas needs to be taken care of by the implementing agency.

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