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Jinjil Jestas
PG Scholar, College of Agriculture,
Kerala Agricultural University,
Vellanikkara, Kerala, India

Krishnadas M
Assistant Professor, Regional
Agricultural Research Station,
Pattambi, Kerala, India

Prema A
Professor and Head, Department
of Agricultural Economics, College
of Agriculture, Vellanikkara,
Kerala, India

Neetha Rose CD
Assistant Professor, Department of
Agricultural Economics, College of
Agriculture, Vellanikkara, Kerala,
India

Ayyoob KC
Assistant Professor and Head,
Department of Agricultural
Statistics, College of Agriculture,
Vellanikkara, Kerala, India

Meer Ahamed Ibrahim
Communication Centre, Kerala
Agricultural University,
Mannuthy, Kerala, India, Kerala,
India

Corresponding Author:
Jinjil Jestas
PG Scholar, College of Agriculture,
Kerala Agricultural University,
Vellanikkara, Kerala, India

Perceived constraints in accessing and using Kisan Credit Card facilities among paddy farmers in selected areas of Kerala

Jinjil Jestas, Krishnadas M, Prema A, Neetha Rose CD, Ayyoob KC and Meer Ahamed Ibrahim

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Abstract

The Kisan Credit Card (KCC) scheme provides institutional crop credit to farmers, but access to and effective use of the scheme may be affected by procedural, informational and operational constraints. This study examined the perceived constraints associated with KCC access and use among paddy farmers in selected areas of Thrissur and Palakkad districts of Kerala. Primary data were collected from 120 respondents, comprising 60 KCC beneficiaries and 60 non-beneficiaries, using structured interview schedules. Major constraints were identified through focus group discussions and field-level probing and were subsequently ranked using the Henry Garrett Ranking Technique. Complex documentation procedures received the highest mean Garrett score (74.11), followed by lack of awareness of KCC sub-limits and prompt-repayment subvention (70.86) and the reported PRS-related credit-record issue associated with delayed paddy procurement settlements (70.84). Processing delays (66.06) and inadequate credit limits in relation to cultivation requirements (60.61) were also ranked among the major constraints. Substitution of KCC by Agricultural Gold Loans ranked seventh (54.54), suggesting that some respondents considered alternative credit arrangements when KCC access was perceived to involve greater procedural or operational difficulty. The findings indicate that the major reported constraints were predominantly procedural, informational and institutional in nature. The study highlights the need for simplified documentation, improved awareness of KCC provisions, careful examination of procurement-related credit-record issues, and better alignment of credit limits with local cultivation requirements.

Keywords: Kisan Credit Card, Garrett ranking technique, paddy farmers, perceived constraints, agricultural credit, Kerala

Introduction

Agriculture continues to underpin rural livelihoods across India, and timely access to institutional credit is widely regarded as an important means of supporting farm production and reducing dependence on informal lending (Singh & Sharma, 1998) ^[14]. The Kisan Credit Card (KCC) scheme was introduced by the Government of India in August 1998 on the recommendation of the R.V. Gupta Committee, with a model scheme prepared by the National Bank for Agriculture and Rural Development (NABARD) and operationalised through scheduled commercial banks, regional rural banks and co-operative credit institutions (NABARD, n.d.). Under the Modified Interest Subvention Scheme, short-term crop loans routed through KCC are available at a concessional rate of 7 per cent per annum, with a further 3 per cent prompt-repayment incentive that brings the effective cost of credit down to 4 per cent per annum for farmers who repay on schedule (Press Information Bureau, 2024) ^[8]. The collateral-free limit for such loans was also enhanced from ₹1.6 lakh to ₹2 lakh with effect from January 2025 (Press Information Bureau, 2025) ^[9].

Kerala provides a distinctive setting for examining constraints in agricultural credit access because paddy cultivation is undertaken under relatively high production costs and specific institutional arrangements. The present study focuses on selected paddy growing areas of Thrissur and Palakkad districts, where timely access to working capital is important for meeting cultivation expenses. Despite the availability of institutional banking facilities, farmers in the

study areas may face practical difficulties in accessing and using KCC facilities.

Earlier studies on KCC and agricultural credit have commonly identified procedural complexity, inadequate awareness, processing delays, repayment-related concerns and limited access to formal credit as important barriers. However, the relative importance of such constraints may vary across regions because institutional arrangements and local farming conditions differ. In Kerala, the interaction between paddy procurement arrangements and formal credit has also been publicly discussed in relation to PRS-linked advances and farmers' credit records. Alongside this, Agricultural Gold Loans may provide an alternative source of credit for some farmers because they are perceived to involve different documentation, processing and repayment arrangements.

Against this backdrop, the present study examines and ranks the perceived constraints associated with KCC access and use among paddy farmers in selected areas of Thrissur and Palakkad districts of Kerala using the Henry Garrett Ranking Technique. Major constraints were identified through focus group discussions, expert consultation and field-level probing and were incorporated into the final ranking exercise. The specific objective of the study was to identify and rank the perceived constraints associated with accessing and using KCC facilities among paddy farmers in the selected study areas.

Materials and Methods

A. Study area and sampling

The study was conducted in Thrissur and Palakkad districts of Kerala. One paddy-growing block with a significant area under paddy cultivation was randomly selected from each district. From each selected block, 30 KCC beneficiaries and 30 non-beneficiaries were randomly selected, yielding a total sample of 120 respondents comprising 60 beneficiaries and 60 non-beneficiaries. The specific villages represented in the final sample were Adat in Puzhakkal block of Thrissur district and Vithanassery in Nemmara block of Palakkad district.

B. Data collection and development of the constraint list

Primary data were collected through personal interviews using well-structured and pre-tested interview schedules designed for KCC beneficiaries and non-beneficiaries. Focus group discussions and field-level probing were used to identify major issues influencing access to and use of KCC facilities and to refine the list of perceived constraints. The final constraint list contained sixteen items. All sixteen constraints were subsequently presented to all 120 respondents, and each respondent ranked the complete list in descending order of perceived severity. Two issues that emerged prominently during the qualitative stage the reported PRS-related credit-record issue and the use of Agricultural Gold Loans as an alternative to KCC were included in the final sixteen-item list and were therefore ranked by all respondents.

C. Garrett Ranking Technique

The perceived severity of the constraints was assessed using the Henry Garrett Ranking Technique (Garrett & Woodworth, 1969)^[2]. The technique converts respondents' ordinal rankings into Garrett scores, which are used to compare and rank the constraints. Each respondent ranked all sixteen constraints in descending order of perceived severity. The rank assigned to each constraint was converted into a percentage position using the following formula:

$$\text{Per cent position} = 100 \times (R_{ij} - 0.5) / N_j$$

where R_{ij} is the rank given to the i th constraint by the j th respondent, and N_j is the total number of constraints ranked by that respondent. The percentage positions were converted into Garrett scores using the standard Garrett and Woodworth (1969)^[2] conversion table. For each constraint, the Garrett scores obtained from all 120 respondents were averaged to obtain the mean Garrett score. The constraints were then arranged in descending order of mean score, with a higher score indicating greater perceived severity.

D. Statistical Tests

The socio-economic characteristics of the sample were summarised using descriptive statistics, including frequencies, percentages, means and standard deviations, to describe the composition of KCC beneficiaries and non-beneficiaries. Independent-samples t-tests were used to compare selected continuous characteristics between the two groups, while chi-square tests of independence were used to examine differences in selected categorical characteristics. These comparisons were used for descriptive context and were not interpreted as evidence of causal determinants of KCC participation.

E. Statistical software used

RStudio IDE (Posit) and the R programming language were used for data management and statistical analysis.

Results and Discussion

Socio-economic profile of the sample

Tables 1a and 1b summarise the continuous and categorical socio-economic characteristics of KCC beneficiaries and non-beneficiaries, respectively. The two groups did not differ significantly in age, education, farming experience, total land holding, paddy area operated, distance to the nearest bank or frequency of extension contacts (Table 1a). Household size was significantly higher among KCC beneficiaries than among non-beneficiaries, with mean household sizes of 4.60 and 3.75 persons, respectively ($p = 0.022$). Membership in self-help groups or farmer groups was also significantly more common among KCC beneficiaries (50.0%) than non-beneficiaries (30.0%; $\chi^2 = 4.20$, $df = 1$, $p = 0.040$; Table 1b).

Table 1a: Continuous socio-economic characteristics of the sample (N = 120)

Variable	KCC holders (n = 60)	Non-holders (n = 60)	p-value
Age (years), mean $\pm$ SD	56.72 $\pm$ 8.78	55.65 $\pm$ 8.72	0.506
Education (years of schooling), mean $\pm$ SD	12.02 $\pm$ 2.91	12.00 $\pm$ 3.11	0.976
Farming experience (years), mean $\pm$ SD	35.28 $\pm$ 11.00	34.73 $\pm$ 9.48	0.770
Household size (persons), mean $\pm$ SD	4.60 $\pm$ 2.01	3.75 $\pm$ 1.99	0.022*
Total land holding (acres), mean $\pm$ SD	0.79 $\pm$ 0.56	0.82 $\pm$ 0.49	0.784
Paddy area operated (acres), mean $\pm$ SD	0.68 $\pm$ 0.47	0.69 $\pm$ 0.43	0.837
Distance to nearest bank (km), mean $\pm$ SD	2.07 $\pm$ 1.92	2.83 $\pm$ 2.51	0.065
Extension contacts (per year), mean $\pm$ SD	2.50 $\pm$ 1.81	2.27 $\pm$ 1.45	0.437

Note: p-values from independent samples t-tests (Welch's, unequal variances assumed). *Significant at $p < 0.05$.

Table 1b: Categorical socio-economic characteristics of the sample (N = 120)

Variable	Category	KCC holders (%)	Non-holders (%)	χ^2 test (p-value)
Gender	Male	80.0	73.3	$\chi^2 = 0.42$, df = 1, p = 0.517
	Female	20.0	26.7	
Social category	General	40.0	40.0	$\chi^2 = 0.69$, df = 2, p = 0.707
	OBC	43.3	48.3	
	SC/ST	16.7	11.7	
Land tenure	Owner-cultivator	83.3	81.7	$\chi^2 = 0.00$, df = 1, p = 1.000
	Tenant / leasehold	16.7	18.3	
SHG / farmer-group membership	Member	50.0	30.0*	$\chi^2 = 4.20$, df = 1, p = 0.040*
	Non-member	50.0	70.0*	
Bank type accessed	Nationalised	48.3	46.7	$\chi^2 = 1.84$, df = 2, p = 0.398
	Co-operative	38.3	46.7	
	Regional Rural Bank	13.3	6.7	

Note: χ^2 is Pearson's chi-square (Yates' continuity correction applied for 2×2 comparisons: gender, land tenure, SHG membership). *Significant at $p < 0.05$.

The remaining categorical characteristics - gender, social category, land tenure and bank type accessed did not differ significantly between the two groups (Table 1b). Overall, the descriptive comparison indicates that the two groups were broadly similar with respect to most measured characteristics, while household size and group membership differed significantly. These results are presented to provide context for the respondent profile and should not be interpreted as evidence that these characteristics causally determine KCC participation.

Garrett ranking of perceived constraints in accessing and using KCC facilities

Table 2 and Figure 1 present the mean Garrett scores and ranks

of the sixteen perceived constraints. The highest-ranked constraints were dominated by procedural and informational difficulties associated with accessing and using institutional credit. Complex documentation procedures, lack of awareness of scheme features, the reported PRS-related credit-record issue and processing delays occupied the first four positions. The next group of constraints included credit-limit inadequacy, land-tenure-related difficulties and the use of alternative credit sources. These results represent respondents' relative perceptions of severity rather than direct estimates of the causal effect of any constraint on KCC participation.

Table 2: Garrett ranking of constraints in KCC adoption among paddy farmers (N = 120; 16 items)

Constraint	Mean Garrett score	Rank
Complex documentation procedures	74.11	1
Lack of awareness of sub-limits & subvention	70.86	2
Automatic credit-score lock from Supplyco (PRS) payment delays	70.84	3
Processing delays in loan sanctioning	66.06	4
Inadequate credit limit (scale-of-finance mismatch)	60.61	5
Ambiguous land titles and oral tenancy restrictions	57.50	6
Substitution by Agricultural Gold Loans (AGL displacement)	54.54	7
Complex application forms & intermediary dependency	54.02	8
High effective interest risk / fear of institutional debt	53.18	9
Inadequate guidance from rural bank staff	45.46	10
Inflexible bullet repayment schedules	41.27	11
Distance and transaction cost of bank-branch visits	35.82	12
Prior personal loan default history	35.19	13
Informal moneylender intermediation ("Kai Vayappa")	29.39	14
Inadequate agricultural extension integration	26.87	15
Social and category discrimination	24.46	16

The lower-ranked constraints included inadequate guidance from bank staff, repayment-related rigidity, branch distance and transaction costs, prior personal default history, informal borrowing, limited integration with agricultural extension services and perceived social or category discrimination (Table

2; Figure 1). Their lower ranks should be interpreted only as indicating lower relative severity within the sixteen-item list; they should not be interpreted as evidence that these issues are absent in the study areas.

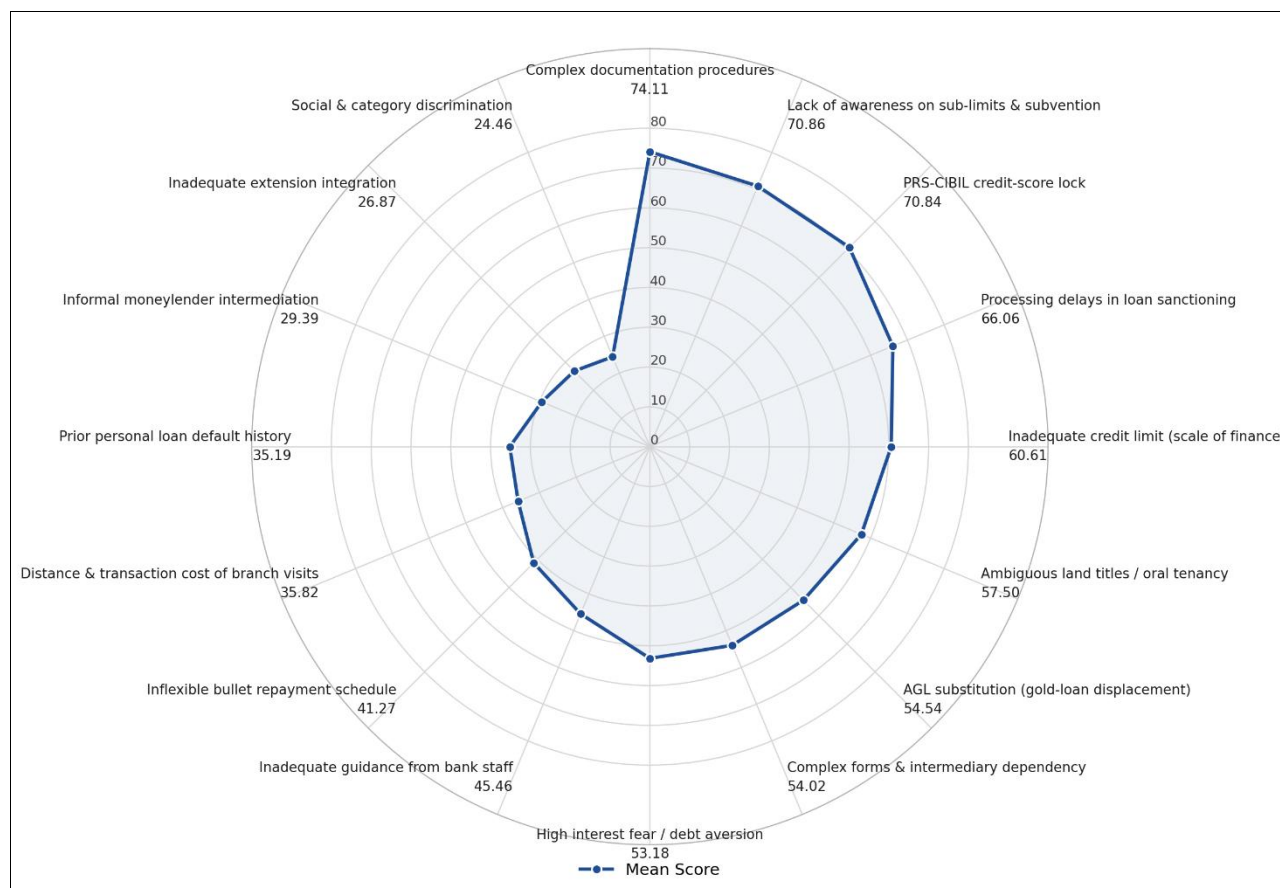


Fig 1: Mean Garrett scores of perceived constraints in accessing and using KCC facilities

(Insert figure based on the final Garrett-ranking results.)

Since all 120 respondents ranked the complete list of sixteen items, the results in Table 2 represent pooled perceptions of KCC holders and non-holders. They should be interpreted as a relative ordering of reported constraints rather than as a direct estimate of their causal effect on KCC adoption.

The predominance of documentation, awareness and processing-related constraints is broadly consistent with earlier research on institutional agricultural credit. In the selected study areas, these issues received higher perceived severity scores than the remaining constraints. The relatively high position of the reported PRS-related credit-record issue further suggests that farmers' experiences with agricultural credit may be shaped by interactions between paddy procurement arrangements and formal credit systems. This issue should, however, be interpreted primarily as a respondent-reported institutional concern and warrants further verification using banking and administrative records.

Documentation complexity and awareness gaps (ranks 1–2)

Complex documentation procedures emerged as the single most severe constraint (mean Garrett score 74.11). Respondents frequently associated KCC access with the need to obtain and submit multiple documents and complete formal verification procedures. Such requirements were perceived as increasing the time and transaction costs involved in accessing institutional credit. This finding, together with the second-ranked awareness constraint, indicates that both procedural simplification and clearer communication of KCC provisions may improve the practical accessibility of the scheme.

Lack of awareness of KCC sub-limits and prompt-repayment subvention ranked second (70.86). Respondents reported gaps in their understanding of certain operational and financial features

of the scheme. The result suggests that awareness programmes should focus not only on the availability of KCC but also on the terms, repayment conditions, sub-limits and other features relevant to its effective use.

The reported PRS-related credit-record issue (rank 3)

The reported PRS-related credit-record issue emerged as the third most severe perceived constraint overall (mean Garrett score 70.84). During field-level discussions and probing, some respondents described situations in which delays associated with paddy procurement settlements or PRS-linked advances were believed to have affected their credit records and, in turn, delayed or complicated subsequent credit transactions. The present study does not independently verify the banking or credit-bureau mechanism behind each reported case; rather, it documents the issue as perceived and reported by respondents in the selected study areas.

The issue has also received public and judicial attention in Kerala in relation to the treatment of farmers availing PRS-linked facilities (Bar and Bench, 2023; LiveLaw, 2023) ^[1, 5]. In the present ranking, respondents clearly distinguished the reported PRS-related issue from ordinary personal default history: the former ranked third, whereas prior personal default history ranked thirteenth. This distinction suggests that respondents perceived procurement-related credit-record problems and personal repayment failures as different types of constraints. Further research using bank and credit-report records would be required to establish the precise institutional mechanism and scale of the problem.

Processing delay and the scale-of-finance mismatch (ranks 4–5)

Processing delays in loan sanctioning ranked fourth (66.06).

Respondents perceived delays in completing verification and sanction procedures as problematic because agricultural production activities require funds within specific cultivation periods. When formal credit is not available at the required time, farmers may need to consider temporary or alternative sources of finance. The finding therefore highlights the importance of timeliness, in addition to the availability and nominal cost of institutional credit.

Inadequate credit limits in relation to cultivation requirements ranked fifth (60.61). Respondents perceived the sanctioned amount available through KCC as insufficient to meet their actual cash requirements during important stages of paddy cultivation. This result suggests a possible gap between the scale of finance and locally experienced cultivation costs. The issue warrants periodic review using current, location-specific cost information rather than assuming that a uniform credit limit will adequately meet *all* farmers' requirements.

Land-tenure exclusion (rank 6)

Ambiguous land titles and difficulties associated with oral or informal tenancy arrangements ranked sixth (57.50). Respondents perceived the absence of clear documentary evidence of cultivation or land rights as a barrier to accessing formal agricultural credit. The finding highlights the practical difficulty that can arise when active cultivators do not possess the documentation expected during formal credit assessment.

The Agricultural Gold Loan substitution paradox (rank 7)

Substitution of KCC by Agricultural Gold Loans (AGL) ranked seventh (54.54). Respondents indicated that alternative credit arrangements could sometimes be preferred when KCC access was perceived to involve greater documentation, verification or processing delays. This finding is important because it suggests that farmers' credit choices may depend not only on the nominal interest cost of a loan but also on the time, documentation and transaction costs associated with obtaining it.

The moderate Garrett score suggests that the use of Agricultural Gold Loans was not perceived as the most severe constraint in itself, but rather as an alternative response to difficulties encountered in formal agricultural credit access. The result should therefore be interpreted as evidence of a possible substitution pattern within the study sample, rather than as proof that all farmers systematically replace KCC with gold loans.

Lower-ranked constraints (ranks 8–16)

The remaining constraints, though lower in relative rank, are not necessarily unimportant. Complex application forms and dependence on intermediaries (rank 8, 54.02), fear of institutional debt or repayment-related financial consequences (rank 9, 53.18), inadequate guidance from bank staff (rank 10, 45.46) and repayment-related rigidity (rank 11, 41.27) indicate additional operational concerns associated with the use of formal credit.

Distance and transaction costs associated with branch visits (rank 12, 35.82), prior personal default history (rank 13, 35.19), informal borrowing (rank 14, 29.39), inadequate integration with agricultural extension services (rank 15, 26.87) and social or category discrimination (rank 16, 24.46) received lower relative severity scores. These findings indicate that respondents in the selected study areas considered these issues less severe than the higher-ranked procedural and institutional constraints, not that such issues were absent.

Policy implications

The ranking suggests that policy responses should be prioritised according to the severity of constraints reported by respondents. Documentation and verification procedures could be simplified where possible, and repetitive requirements during renewal could be reduced. Awareness programmes through agricultural extension agencies, banks and farmer organisations could focus on the practical features of KCC, including repayment conditions and available facilities. The reported PRS-related credit-record issue warrants coordinated examination by the relevant procurement, banking and regulatory institutions so that farmers are not adversely affected by administrative delays beyond their control. Periodic review of the scale of finance using current local cultivation costs may also help improve credit adequacy. Finally, faster and simpler KCC processing could reduce the perceived need to rely on alternative credit arrangements when working capital is urgently required.

Conclusion

This study examined and prioritised the perceived constraints associated with accessing and using Kisan Credit Card facilities among paddy farmers in selected areas of Thrissur and Palakkad districts of Kerala. Based on the Henry Garrett Ranking Technique, complex documentation procedures, inadequate awareness of KCC provisions, the reported PRS-related credit-record issue and processing delays emerged as the most severe constraints. Inadequate credit limits, land-tenure-related difficulties and the use of Agricultural Gold Loans as an alternative source of credit were also important concerns.

An important contribution of the study was the identification and inclusion of two issues that emerged during the qualitative stage of the research: the reported PRS-related credit-record concern and the use of Agricultural Gold Loans as an alternative to KCC. These findings highlight the value of combining structured data collection with focus group discussions and field-level probing to capture context-specific institutional concerns. Overall, the results indicate that the major barriers reported in the selected study areas were predominantly procedural, informational and institutional in nature. Improving agricultural credit access therefore requires not only the availability of KCC but also reducing the practical frictions that prevent eligible farmers from accessing and using it effectively.

Declarations

Ethics approval and informed consent: Informed consent was obtained from all respondents before data collection, and participation was voluntary throughout the study.

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Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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