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AWARENESS AND UTILISATION OF AGRICULTURAL CREDIT UNDER PRIORITY SECTOR LENDING WITH SPECIAL REFERENCE TO KISAN CREDIT CARD: A STUDY OF FARMERS IN CHIKKABALLAPUR DISTRICT, KARNATAKA

K.R. Nithiya Shree, Dr. Sangana Gauda
Economics Department, Sri Sathya Sai University for Human Excellence,

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ABSTRACT----------
Access to formal agricultural credit remains a persistent challenge for small and marginal farmers in India's semi-arid districts. This study examines the awareness and utilisation of the Kisan Credit Card (KCC) scheme under Priority Sector Lending among 124 farmers in Chikkaballapur district, Karnataka. Using chi-square tests and correlation analysis on primary survey data, three hypotheses were tested. Results reveal a statistically significant relationship between education level and KCC access (χ^2=11.801, p=.019), a strong association between KCC access and farm productivity (χ^2=116.247, p<.001), and a significant link between scheme awareness and difficulty in accessing institutional credit among non-users (χ^2=18.023, p<.001). Key barriers include lack of awareness, complex documentation, and procedural challenges. Policy interventions targeting financial literacy, simplified processes, and expanded banking infrastructure are recommended.

KEYWORDS: *Kisan Credit Card, Priority Sector Lending, agricultural credit, financial inclusion, Chikkaballapur, chi-square analysis*----------

1. INTRODUCTION

Agriculture in India employs approximately 54 percent of the total workforce and contributes around 18–20 percent of GDP. Yet the sector's productive potential continues to be constrained by one of its oldest and most enduring problems the gap between the credit that farmers need and the credit they can actually access. Institutional credit was intended to be the answer. Decades of policy effort, including the PSL mandate and creation of NABARD, aimed to expand formal credit access.

The Kisan Credit Card (KCC) scheme, launched in 1998 on the recommendation of the R.V. Gupta Committee, was perhaps the most farmer-friendly innovation in this long policy trajectory: a revolving credit line that replaced the cumbersome seasonal loan application process and brought ATM-accessible credit to rural India. Despite these interventions, the reach of the KCC scheme remains incomplete. Aggregate account numbers have grown substantially outstanding credit under KCC doubled from approximately Rs. 4 lakh crore in 2014 to Rs. 10 lakh crore in 2024 (IMPRI, 2025) but headline figures mask significant heterogeneity at the district level. Studies from Maharashtra, Odisha, and Uttar Pradesh consistently report that smaller farmers are disproportionately excluded. Whether this pattern holds in the semi-arid interior of Karnataka, and specifically in Chikkaballapur district, is the central question this study seeks to answer.

Its proximity to Bengaluru creates market linkages but does not automatically translate into improved credit access for its farming communities. Carved from the erstwhile Kolar district in 2007 and situated in the southeastern semi-arid zone of Karnataka, the district is characterised by small and marginal landholdings, dependence on bore-well irrigation, and significant cultivation of rose flowers, grapes, ragi, and mulberry. Its proximity to Bengaluru creates market linkages but does not automatically translate into improved credit access for its farming communities. No prior primary data study has examined KCC awareness, utilisation, and barriers specifically in this district.

This paper addresses three research questions: (i) Does the education level of farmers significantly influence their access to the KCC scheme? (ii) Is there a significant association between KCC access and farm productivity? (iii) Among non-KCC users, does awareness of institutional credit schemes relate to the difficulty experienced in accessing such credit? The paper contributes to the sparse district-level evidence on agricultural credit in Karnataka's dryland zones and offers grounded policy recommendations for improving scheme penetration.

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1. OBJECTIVES OF THE STUDY

- To examine the extent of awareness among farmers in the study area about agricultural credit schemes under Priority Sector Lending, with particular focus on the KCC scheme.
- To analyse how farmers in this study area actually utilise credit obtained through the Kisan Credit Card whether for agricultural inputs, household needs, or both.
- To assess the relationship between KCC access and farm productivity among the sampled farmers.
- To investigate the role of educational background in shaping farmers' access to and utilisation of institutional agricultural credit.
- To identify the major problems and barriers that farmers in Chikkaballapur district face in accessing and utilising institutional credit under the Priority Sector Lending.

3. STUDY AREA AND METHODOLOGY

3.1 Study Area

Chikkaballapur district is situated in the southeastern part of Karnataka. The district encompasses six taluks Chikkaballapur, Bagepalli, Chintamani, Gauribidanur, Gudibanda, and Sidlaghatta with a total geographical area of approximately 4,206 square kilometres and a rural population of approximately 70 percent of its 12.5 lakh residents (Census 2011).

The district's agro-climatic profile is semi-arid, characterised by erratic and insufficient rainfall and heavy dependence on bore-well irrigation. Principal crops include ragi, groundnut, tomato, mulberry, and rose flowers, with the last two supporting the district's significant sericulture and floriculture industries. Agriculture is predominantly practised by small and marginal landholders facing acute financial constraints. These characteristics make the district representative of Karnataka’s interior dryland farming communities.

3.2 Research Design and Data Collection

The study adopts a mixed-methods research design combining a structured questionnaire survey with focused group discussions and key informant interviews with bank officials and NABARD district development managers. Primary data was collected from 124 farmers drawn from villages across the six taluks of Chikkaballapur district through stratified random sampling. The stratification was based on land-holding size (marginal: below 1 hectare; small: 1–2 hectares; medium and above: over 2 hectares) and KCC status (holders and non-holders). Small and marginal farmers were intentionally over-represented in the sample, consistent with their status as the primary target group for the KCC scheme. The sample comprised 47 KCC holders (43 percent) and 77 non-holders (57 percent), providing a balanced basis for comparative analysis.

3.3 Variables and Hypotheses

Five variables were operationalised in this study: Education Level (five-point ordinal scale from no formal schooling to graduate level); Access to KCC (binary: 1=No, 2=Yes); Farm Productivity (four-level ordinal scale: 0=no change, 1=slight improvement, 2=moderate improvement, 3=significant improvement); Awareness of Agricultural Credit Schemes (binary: 1=No, 2=Yes); and Difficulty in Accessing Institutional Credit (binary: 1=No, 2=Yes). Three hypotheses were formulated:

H_1: There is no significant relationship between farmers' education level and access to the KCC scheme. H_2: There is no significant relationship between KCC access and farm productivity. H_3: There is no significant relationship between awareness of agricultural credit schemes and difficulty in accessing institutional credit among non-KCC users.

3.4 Statistical Analysis

Descriptive statistics were computed using SPSS to profile the sample. Given the categorical nature of all variables, Pearson Chi-Square tests were the primary analytical tool for hypothesis testing, executed through the SPSS Crosstabs procedure. Symmetric Measures including Pearson's R, Spearman's Correlation, and Kendall's tau-b were computed to assess the strength and direction of associations. For Hypothesis 3, which involved a 2×2 contingency table, Fisher's Exact Test and the Mantel-Haenszel statistic were additionally computed. The significance level was set at $\alpha = 0.05$.

4. RESULTS AND DISCUSSION

4.1 Descriptive Profile of the Sample

Table 1 presents the descriptive statistics for all study variables. Farm productivity showed a mean of 0.60 on a four-point scale, indicating modest reported productivity improvements overall. Among the full sample, 62.10 percent were aware of at least one agricultural credit scheme, while 59.68 percent reported difficulty in accessing institutional credit.

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Table 1: Descriptive Statistics of Study Variables

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Education Level	124	1	5	3.25	1.273
Access to KCC	124	1	2	1.57	.497
Farm Productivity	124	0	3	.60	.794
Awareness of Agricultural Schemes	124	1	2	1.36	.483
Difficulty in Accessing Credit	124	1	2	1.34	.475

Source: Primary Survey Data, SPSS Output.

Regarding credit sources, 29.03 percent of all respondents relied on friends, relatives, or Self-Help Groups (SHGs) as their primary source of farming credit, while 22.58 percent used their own savings, and 21.77 percent accessed other bank loans. Moneylenders still served 16.94 percent of the sample a finding that underscores the continued relevance of informal credit despite decades of institutional intervention. Among non-KCC holders, the dominant barrier to scheme access was lack of awareness (44.16 percent), followed by complex bank procedures (25.97 percent), absence of perceived need (14.29 percent), documentation challenges (9.09 percent), and fear of repayment failure (6.49 percent).

4.2 Hypothesis 1: Education Level and KCC Access

The Pearson Chi-Square test yielded $\chi^2=11.801$ with 4 degrees of freedom and $p=.019$, confirming a statistically significant relationship between education level and KCC access (Table 2). All cells met the minimum expected frequency threshold (minimum expected count = 5.98, with zero cells below 5), ensuring the reliability of the chi-square approximation. Symmetric Measures produced Pearson's R=0.196 (p=.029) and Spearman's Correlation=0.187 (p=.037), indicating a modest but statistically significant positive association. The null hypothesis H_1 is rejected.

Table 2: Chi-Square Tests — Education Level and KCC Access

Test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.801[a]	4	.019
Likelihood Ratio	11.945	4	.018
Linear-by-Linear Association	4.731	1	.030
N of Valid Cases	124		

[a] 0 cells (0.0%) have expected count less than 5. Minimum expected count = 5.98.

Source: SPSS Crosstabs Output, Primary Survey Data.

The direction of the association confirms that higher educational attainment is positively associated with KCC access. The modest magnitude of the correlation (r=0.196) indicates that education is one of several contributing factors rather than a decisive determinant.

4.3 Hypothesis 2: KCC Access and Farm Productivity

The chi-square test for the association between KCC access and farm productivity yielded $\chi^2=116.247$ with 3 degrees of freedom and $p<.001$ one of the strongest associative findings obtainable in social science research (Table 3). Symmetric Measures indicate Pearson's R=−0.844 (p<.001) and Spearman's Correlation=−0.942 (p<.001). The null hypothesis H_2 is decisively rejected.

Table 3: Chi-Square Tests — KCC Access and Farm Productivity

Test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	116.247[a]	3	.000
Likelihood Ratio	153.501	3	.000
Linear-by-Linear Association	87.517	1	.000
N of Valid Cases	124		

[a] 2 cells (25.0%) have expected count less than 5. Minimum expected count = 1.71.

Source: SPSS Crosstabs Output, Primary Survey Data.

The negative direction of the correlation requires interpretive care. In the coding scheme used, lower KCC access scores correspond to non-access (coded 1) and higher productivity scores correspond to greater improvement. The negative correlation therefore indicates that farmers without KCC access report lower productivity levels, while those with access report higher productivity a finding consistent with the direction of the hypothesis. This

relationship reflects the KCC's core purpose: providing timely input financing that enables farmers to adopt better seeds, fertilisers, and cultivation practices.

4.4 Hypothesis 3: Awareness and Difficulty in Accessing Credit Among Non-KCC Users

The third hypothesis examined whether, among non-KCC users, awareness of agricultural credit schemes is associated with difficulty in accessing institutional credit. The Pearson Chi-Square test yielded $\chi^2=18.023$ (df=1, p<.001), while Fisher's Exact Test produced a two-sided p=.000, confirming a statistically significant relationship (Table 4). The null hypothesis H_3 is rejected.

Table 4: Chi-Square Tests — Awareness and Difficulty in Accessing Credit (Non-KCC Users)

Test	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	18.023[a]	1	.000	—
Continuity Correction	16.387	1	.000	—
Likelihood Ratio	17.859	1	.000	—
Fisher's Exact Test	—	—	—	.000
N of Valid Cases	124			

[a] 0 cells (0.0%) have expected count less than 5. Minimum expected count = 15.24.

Source: SPSS Crosstabs Output, Primary Survey Data.

This finding describes a counterintuitive but theoretically important phenomenon: farmers who are more aware of agricultural credit schemes are also those who more acutely experience difficulty in accessing them. This is not a paradox but a reflection of informed exclusion those who know enough to seek credit discover that structural, procedural, and institutional barriers prevent access. Farmers who are entirely unaware of the schemes do not even attempt access and therefore do not register difficulty. This finding has significant policy implications: awareness campaigns alone are insufficient; they must be accompanied by parallel reforms in credit delivery mechanisms.

4.5 Additional Descriptive Findings

Beyond hypothesis testing, several descriptive findings from the primary survey illuminate the ground-level operation of the KCC scheme in Chikkaballapur. Table 5 summarises key awareness and utilisation indicators.

Table 5: Key Awareness and Utilisation Indicators

Indicator	Category	Frequency	Percentage (%)
Overall scheme awareness	Aware	77	62.10
Overall scheme awareness	Not aware	47	37.90
Difficulty in accessing credit	Yes	74	59.68
Difficulty in accessing credit	No	50	40.32
Primary reason for non-access (non-users)	Not aware of scheme	34	44.16
Primary reason for non-access (non-users)	Difficult bank procedure	20	25.97
Primary type of difficulty	Lack of awareness	31	41.89
Primary type of difficulty	Complex procedures	20	27.03
Willingness to apply in future (non-users)	Yes	59	76.62
Willingness to apply in future (non-users)	No	18	23.38

Source: Primary Survey Data.

Significantly, only 12.99 percent of aware non-users knew specifically about the KCC scheme a striking finding given its status as India's flagship agricultural credit instrument. This suggests that KCC-specific outreach has been considerably less effective than direct benefit transfer programmes. The willingness among non-users to apply for KCC in the future (76.62 percent) is an encouraging finding. It suggests that the untapped potential user base is substantial and that demand-side barriers uncertainty, lack of guidance, and procedural complexity rather than fundamental disinterest are the primary obstacles.

5. SUMMARY OF HYPOTHESIS TESTING

Table 6: Summary of Hypothesis Testing Results

Hypothesis	Test	χ^2 Value	p-value	Correlation	Decision
H_1: Education & KCC Access	Chi-Square	11.801	.019	r=.196	Rejected
H_2: KCC Access & Productivity	Chi-Square	116.247	<.001	r=−.844	Rejected
H_3: Awareness & Credit Difficulty	Chi-Square / Fisher's	18.023	<.001	τ=.381	Rejected

Source: SPSS Crosstabs Output, Primary Survey Data.

6. CONCLUSIONS AND POLICY RECOMMENDATIONS

6.1 Conclusions

This study has examined the awareness and utilisation of the Kisan Credit Card scheme under Priority Sector Lending among farmers in Chikkaballapur district, Karnataka. The empirical findings consistently support the view that the KCC scheme is a well-conceived policy instrument whose benefits are real but unevenly distributed. Both supply side and demand side interventions are necessary. The near-perfect association between KCC access and farm productivity (H_2, χ^2=116.247, p<.001; r=−0.844) confirms that the scheme delivers tangible agricultural benefits when it reaches its intended beneficiaries. The moderate positive association between scheme awareness and reported difficulty in access among non-users (H_3, χ^2=18.023, p<.001; τ=0.381) reveals an informed exclusion phenomenon that awareness campaigns alone cannot resolve.

Taken together, these findings paint a consistent picture: the KCC scheme has significant unrealised potential in Chikkaballapur district. The 44.16 percent of non-users who cited simple unawareness as their primary barrier, combined with the 76.62 percent of non-users expressing willingness to apply in the future, suggest that a large, reachable population of potential beneficiaries exists. What stands between them and the scheme is not unwillingness but a combination of informational, procedural, and institutional barriers that demand targeted, multidimensional responses.

6.2 Policy Recommendations

Based on the empirical findings, six policy recommendations are offered. First, targeted financial literacy campaigns should be conducted at the village level in Chikkaballapur's more remote taluks, particularly Gudibanda and Bagepalli. These must go beyond general awareness to provide practical guidance on the KCC application process, documentation requirements, and repayment obligations. Second, documentation requirements for KCC applications should be simplified. Complex paperwork disproportionately disadvantages small and marginal farmers with limited education and constitutes the second most commonly cited barrier to scheme access. Third, banking infrastructure in underserved areas should be expanded, either through additional branch openings or through strengthened Business Correspondent networks; digital KCC processing through mobile banking should be actively promoted. Forth, the Lead Bank and NABARD should strengthen monitoring to track not just KCC issuance numbers but actual utilisation, repayment rates, and productivity changes. Sixth, a dedicated facilitation mechanism potentially through Krishi Sahayaks, gram panchayats, or Farmer Producer Organisations should be established to guide eligible farmers through the KCC application process end-to-end, addressing the awareness-access gap identified in Hypothesis 3.

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