



Exploring Utilization Patterns Of The Kisan Credit Card Scheme: A Case Study Of Farmers In Sohna Tehsil Of Gurugram District

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Abstract The Kisan Credit Card (KCC) scheme provides Indian farmers with easy access to low-interest credit for their agricultural and personal financial needs, but challenges such as credit adequacy, repayment difficulties, and inefficient access remain. The objective of this study is to analyze the credit utilization pattern of farmers in Sohna tehsil of Gurugram district (Haryana), under the KCC Scheme to focus on their perceptions of credit adequacy and effectiveness of the scheme and to study their repayment behavior and the challenges faced by them. In this quantitative descriptive study, six villages were selected using a multi-stage stratified random sampling technique in the first phase and 20 farmers were selected in each selected village using a simple random sampling technique in the second phase, resulting in a sample of 120 farmers from Sohna tehsil. The data were collected through a structured questionnaire and analyzed using SPSS using statistical techniques such as percentage, ranking, pie-chart, and t-test to understand the credit usage pattern, repayment behavior, and farmers' perception towards the KCC scheme. The findings highlighted favorable perceptions of the KCC scheme by small farmers. However, significant gaps in meeting the larger financial needs of medium and large farmers were also observed. The study concluded with three major recommendations to address the funding gap for medium and large farmers in the KCC scheme.

Index Terms - Kisan Credit Card Scheme, Farmer Loan, Agricultural Credit, Loan Utilization, Loan Adequacy.

Introduction

Agriculture remains a key sector of the Indian economy, sustaining nearly half of the country's population and contributing significantly (16.5%) to GDP (Gulati & Juneja, 2022). However, one of the most persistent challenges Indian farmers face is access to timely and adequate credit, which is critical for agricultural productivity and sustainability (Yadav & Rao, 2024). To address these challenges, the Government of India introduced the Kisan Credit Card (KCC) Scheme in 1998, which aims to empower farmers by providing them with low-interest credit lines that can be flexibly used for agricultural and personal needs, thereby reducing dependence on informal sources of finance. Over the years, the KCC Scheme has become a lifeline for millions of farmers, helping them maintain and improve agricultural productivity amid unstable farm income and climate uncertainty (Vijayshankar et al., 2024).

The KCC Scheme has been widely adopted in Haryana, one of India's agriculturally rich states, including Sohna tehsil in Gurugram district. Farmers in this region, who are primarily engaged in horticulture and staple crop cultivation, rely heavily on seasonal loans to finance their agricultural activities. Although the KCC scheme has made significant progress in improving access to credit, the effectiveness of the scheme in meeting the broader financial needs of farmers remains questionable (Kambali & Panakaje, 2022). Many

farmers still face challenges related to credit adequacy, repayment difficulties, and complexities of credit utilization (Agarwal, 2023). Understanding the utilization patterns of KCC loans and the constraints faced by farmers is critical to improving the implementation of the scheme and its impact on the farming community in Sohna tehsil.

Research Problem

While several studies have explored the effectiveness of the KCC scheme at the national and state levels, there seems to be a dearth of studies that focus on the micro-dynamics of credit utilization, particularly in smaller districts like Sohna tehsil. Existing studies often highlight broad trends, but gaps remain in understanding how farmers perceive the utility, accessibility, and flexibility of the scheme, as well as the factors that help them overcome financial stressors unique to their context (Sheela & Rajashekar, 2023; Yadav & Rao, 2024). There is also limited understanding of how loan amounts meet farmers' actual needs and what challenges they face in repaying their loans (Singh et al., 2023). This study aims to fill these gaps by examining the specific loan utilization behavior, repayment patterns, and challenges faced by farmers in Sohna tehsil, based on the unique agricultural practices and socio-economic dynamics encountered by the farmers of the region.

Objectives of the Study

The objectives of this study are twofold. First, it aims to analyze the loan utilization patterns of farmers in Sohna tehsil who have availed of the KCC program. Second, it aims to examine the repayment behaviors and challenges faced by farmers, exploring factors such as credit adequacy, timely repayment, and farmers' satisfaction with the credit arrangement. By addressing these objectives, this study will provide a comprehensive understanding of how effectively the KCC scheme is meeting the needs of farmers in the region.

Rationale of the Study

This study is significant for several reasons. Agriculture is the backbone of rural livelihoods, and the effectiveness of schemes such as the KCC is critical to sustaining agricultural production and ensuring the economic well-being of farmers. Sohna tehsil has a unique agricultural context and is a microcosm of the broader challenges faced by farmers in Haryana and India. Understanding the local context can provide insights for policymakers and financial institutions to improve credit schemes to better serve farmers, ultimately leading to increased agricultural productivity and financial inclusion. In addition, the findings of this study can contribute to policy recommendations aimed at refining the KCC scheme to make it more responsive to the evolving needs of farmers.

V. Overview Of Kisan Credit Card Scheme

The Kisan Credit Card (KCC) Scheme was introduced in India in 1998 to provide timely and adequate bank credit support to farmers for their farming needs. The scheme provides short-term credit for crops and other needs such as post-harvest expenses, consumption needs, and working capital for the maintenance of farm assets and related farm activities (Sheela & Rajashekar, 2023). KCC is implemented across the country by public sector commercial banks, RRBs, and cooperative banks to improve farmers' access to bank credit, simplify the credit delivery mechanism, and increase flexibility in the use of credit. By reducing transaction costs for farmers and banks, the KCC scheme encourages the purchase of agricultural inputs such as seeds, fertilizers, and pesticides and allows farmers to withdraw cash for their production needs. The scheme aims to simplify the process of obtaining credit, make it more convenient for farmers to obtain credit, and reduce bureaucracy (Vijayshankar et al., 2024). It includes features such as ATM-enabled RuPay cards that allow farmers to easily withdraw cash and make purchases.

The KCC scheme covers not only agricultural loans but also insurance for crops and other agricultural risks, providing a comprehensive financial package for the farming community (Singh et al., 2023). Interest rates on KCC loans are usually subsidized, with the central and state governments providing interest subsidies to keep interest rates affordable for farmers. The objectives of the KCC scheme include providing adequate and timely credit, meeting short-term production requirements, and addressing emergency expenditure. With features such as revolving cash credit, flexible withdrawals, and itemized limits on term loans and short-term loans, the scheme provides a comprehensive financial package to improve agricultural productivity and farmers' incomes, ultimately contributing to rural economic development (Singh et al., 2023; Yadav & Rao, 2024).

VI. Overview Of Study Area

Geographic Information: Sohna tehsil is the easternmost district of Gurugram district in Haryana state and the most agriculturally dominant among the six tehsils in the district. The tehsil covers an area of 309.4 square kilometers and consists of 61 villages and Sohna town, which is also the administrative center of the tehsil. Geographically, Sohna tehsil is located between 28°23'12" and 28°32'25" north latitude and between 77°06'88" and 77°20'45" east longitude, with an altitude of 219 meters.

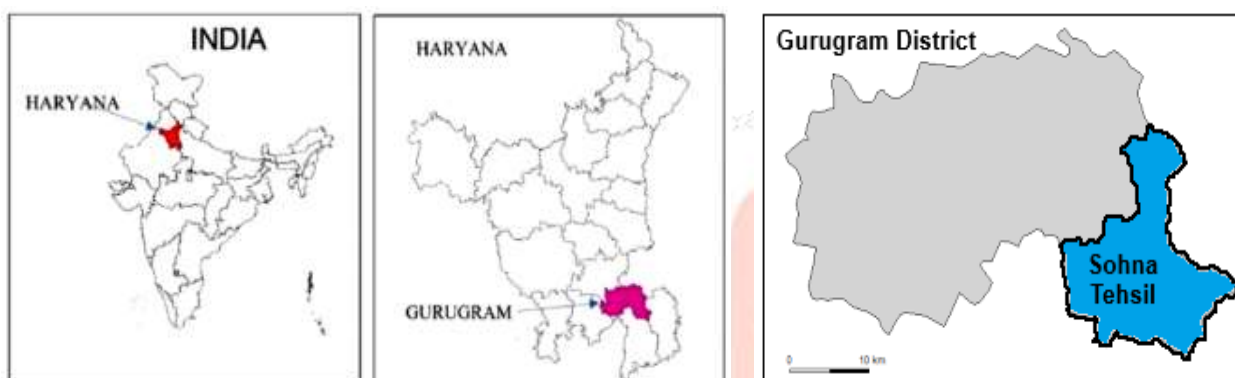


Figure 1: Study Area – Sohna Tehsil, Gurugram District, Haryana

Demographic Information: As of the 2011 census, Sohna tehsil has a population of 165,629 with a population density of 535.3 per square kilometer. The gender distribution shows 53.71% males and 46.29% females. The majority of the population (67.42%) lives in rural areas, while the remaining 32.58% live in urban areas. The overall literacy rate is 65.94%, with 73.5% males and 57.2% females. The literacy rate in urban areas (82.1%) is higher than in rural areas (76.0%). The gender ratio is 862 females per 1,000 males, with 880 females in rural areas and 826 females in urban areas. The working population includes 40,661 main workers, 10,176 cultivators, and 2675 agricultural workers.

VII. Research Methodology

This study adopted a quantitative research design to explore the credit utilization pattern of farmers in Sohna tehsil. The descriptive research approach was adopted keeping the focus of the study in mind. The target population of the study included farmers holding KCC in Sohna tehsil. In the first stage, six villages were randomly selected using a multi-stage stratified random sampling technique while in the second stage, 20 farmers were randomly selected from each village, giving a sample size of 120 farmers. These farmers were further divided into three groups based on land holdings: small farmers (up to 4 hectares), medium farmers (4-10 hectares), and large farmers (more than 10 hectares).

The survey questionnaire consisted of three sections: Section 1 collected demographic information such as gender, age, education level, and land holding size; Section 2 collected data on loan utilization purposes, loan adequacy, repayment behavior, and challenges faced by farmers in utilizing loans; and Section 3 assessed farmers' perceptions on the effectiveness of the KCC scheme. The effectiveness of the scheme was measured at three levels – Highly effective, Moderately effective, and Slightly effective, on a 3-point Likert scale. Data collection was conducted over 2 months (September and October 2024) and the researcher personally administered structured questionnaires to farmers during field visits. The data collection process strictly adhered to ethical considerations to ensure informed consent, confidentiality of responses, and voluntary participation of participants. Data were analyzed using SPSS software (version 23.0) and statistical techniques such as percentages, rankings, pie charts, means, standard deviations, and t-tests were used to interpret the findings.



VIII. RESULTS & DISCUSSION

8.1. ANALYSIS OF DEMOGRAPHIC INFORMATION

TABLE 1 – DEMOGRAPHIC PROFILE OF RESPONDENTS

DEMOGRAPHIC INFORMATION (N=120)		COUNT	PERCENT
GENDER	MALE	96	80.0%
	FEMALE	24	20.0%
AGE	BELOW 30 YEARS	17	14.2%
	30-45 YEARS	64	53.3%
	ABOVE 45 YEARS	39	32.5%
EDUCATION	ILLITERATE	12	10.0%
	UP TO HIGHER SECONDARY	77	64.2%
	ABOVE HIGHER SECONDARY	31	25.8%

The demographic information of the 120 respondents showed that the sample consisted of 80% male farmers and 20% female farmers. Majority of the respondents (53.3%) were between the ages of 30 and 45 years. In terms of education, most of the respondents (64.2%) had completed higher secondary education, while 25.8% had an education level beyond higher secondary, and a small number (10%) were illiterate. This demographic distribution shows that the sample was mainly composed of middle-aged, male-dominated, and moderately educated people.

8.2. Analysis of Land Holding Size

VILLAGES	SMALL	MEDIUM	LARGE	TOTAL
ABHEPUR	6	8	6	20
BANDHWARI	8	5	7	20
GHAMROJ	6	6	8	20
KADARPUR	7	7	6	20
KHERLA	5	8	7	20
RETHOJ	8	6	6	20
TOTAL	40	40	40	N=120

The data shows the random selection of 20 farmers across each of the six identified villages (Abhepur, Bandhwari, Ghamroj, Kadarapur, Kherla, and Rethoj), with an even distribution of small, medium, and large landholders, each category comprising 40 respondents, making a total sample of 120 respondents. This equality suggests a non-dominant landholding size in the study, implying a diverse but balanced distribution of landholding sizes.

8.3. Analysis of Loan Utilization Purposes

Table 3 – Loan Utilization by Respondents

PURPOSE OF CREDIT	SMALL FARMERS			MEDIUM FARMERS			LARGE FARMERS		
	COUNT	PERCENT	RANKING	COUNT	PERCENT	RANKING	COUNT	PERCENT	RANKING
PURCHASE OF AGRICULTURAL INPUTS	23	57.5%	IV	31	77.5%	I	30	75.0%	II
DEVELOPMENT OF IRRIGATION INFRASTRUCTURE	17	42.5%	V	28	70.0%	II	24	60.0%	III
LIVE STOCK PURCHASES/ FEEDING	26	65.0%	III	10	25.0%	VI	3	7.5%	VI
CROP INSURANCE	9	22.5%	VI	15	37.5%	V	34	85.0%	I
REPAYMENT OF PREVIOUS LOANS	33	82.5%	I	20	50.0%	III	17	42.5%	IV
NON-AGRICULTURAL ACTIVITIES	29	72.5%	II	18	45.0%	IV	12	30.0%	V

The data shows that the focus of loan utilization varies greatly depending on the size of land holdings. For small farmers, the top two uses of loans are repayment of previous loans (82.5%) and financing of non-agricultural activities (72.5%), indicating that they rely on credit to manage debt and supplement income outside of agriculture. This indicates that they are financially vulnerable and need to diversify their income sources. Medium-sized farmers prioritize loans to purchase agricultural inputs (77.5%) and develop irrigation infrastructure (70.0%), reflecting their focus on improving productivity and maintaining crop yields. For large farmers, crop insurance (85.0%) and agricultural inputs (75.0%) are the main uses, highlighting their emphasis on risk management and input investment, which is consistent with the need for greater financial protection against potential losses in large-scale operations.

8.4. Analysis of Loan Adequacy

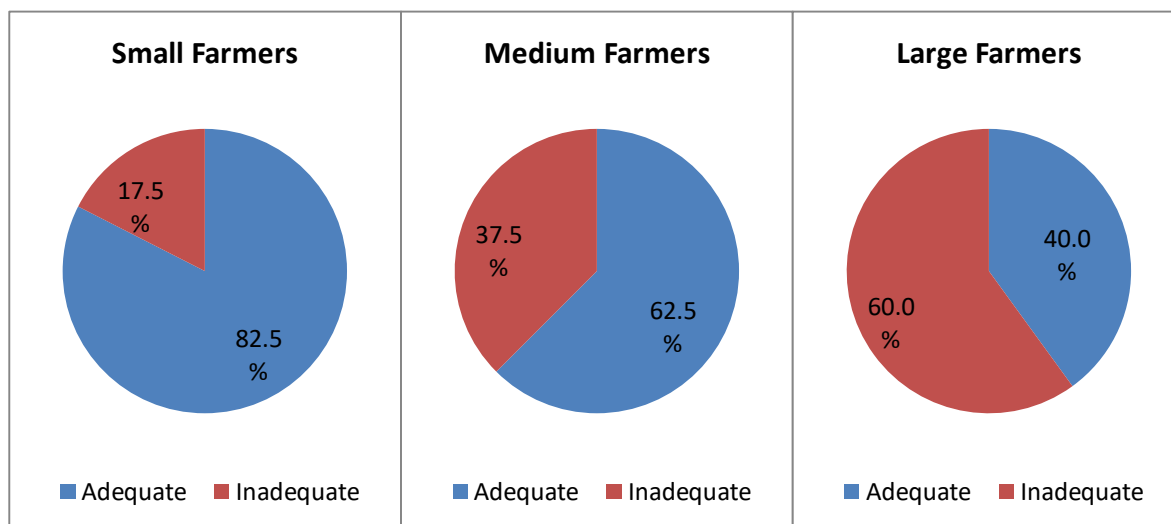


Figure 2: Evaluating Loan Adequacy for different Landholding Sizes

The data shows significant differences in the perception of loan adequacy among farmers of different landholding sizes. Small farmers reported the highest adequacy, with 82.5% believing that their loan amounts were sufficient to meet their needs, suggesting that small farmers have relatively low capital requirements that match the available loan amounts. Medium farmers reported a lower adequacy rate of 62.5%, with 37.5% believing that their loans were insufficient, implying a moderate funding gap as demand grows. Large farmers face the greatest challenges, with only 40% believing that their loans are adequate, with the majority (60%) feeling that they are insufficiently funded. This may reflect the higher demand for funds in large-scale agricultural operations, suggesting that loan amounts may not be able to be effectively scaled up to meet the needs of a wider range of agricultural activities.

8.5. Analysis of Loan Repayment Behavior

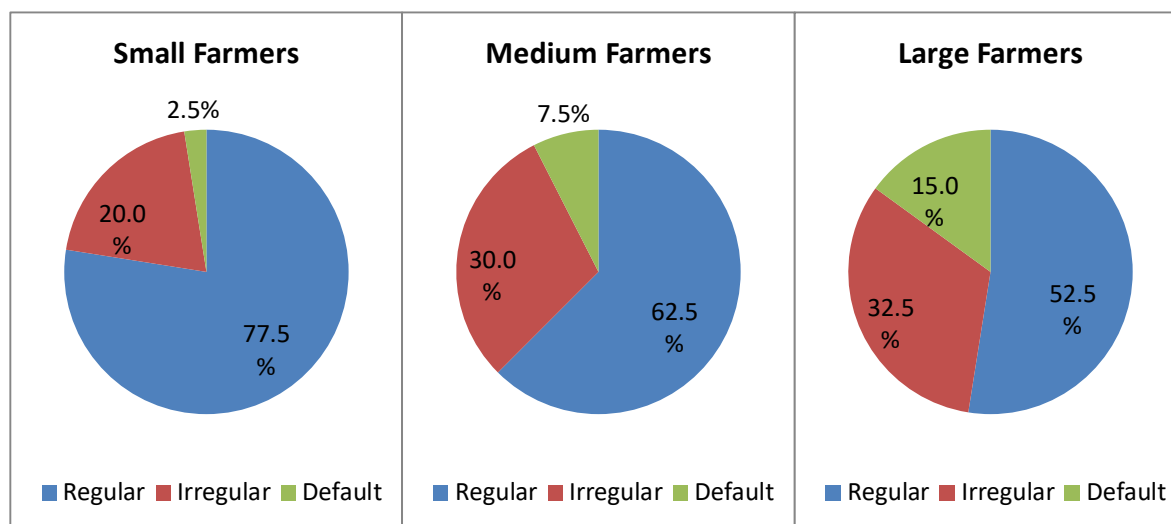


Figure 3: Evaluating Loan Repayment Behavior

The above analysis of loan repayment behavior shows that small farmers have the highest regular repayment rate of 77.5%, followed by medium farmers at 62.5%, while large farmers have the lowest regular repayment rate of 52.5%. This trend suggests that small farmers may be more consistent in managing loan repayments due to smaller loan sizes and simpler financial commitments. Irregular repayments are more common among medium and large farmers (30% and 32.5%, respectively), indicating unstable financial stability due to large operating costs and unstable income. The default rate increases with the size of land holdings: 2.5% for small farmers, 7.5% for medium farmers, and 15% for large farmers, indicating that large farmers face greater financial pressures that affect their ability to continue to meet loan obligations, which may be due to the heavier debt burden and greater risk exposure in large-scale agricultural operations.

8.6. Analysis of Problems in Loan Utilization

Table 4 – Problems in Loan Utilization and/or Repayment

IDENTIFIED PROBLEMS	SMALL FARMERS			MEDIUM FARMERS			LARGE FARMERS		
	COUNT	PERCENT	RANKING	COUNT	PERCENT	RANKING	COUNT	PERCENT	RANKING
INADEQUATE LOAN AMOUNT	6	15.0%	V	10	25.0%	V	30	75.0%	I
DELAY IN LOAN DISBURSEMENT	15	37.5%	IV	17	42.5%	III	26	65.0%	II
CROP FAILURE	28	70.0%	I	12	30.0%	IV	8	20.0%	V
LOAN UTILIZED FOR NON-PRODUCTIVE PURPOSES	25	62.5%	II	23	57.5%	I	22	55.0%	III
PRESSURE TO REPAY EARLIER LOANS	21	52.5%	III	20	50.0%	II	15	37.5%	IV

The data shows that farmers with different land holding sizes face different challenges in loan utilization and/or repayment. For small farmers, the main problems are crop failure (70%) and non-productive use of loans (62.5%), indicating that they are vulnerable to agricultural risks and face financial pressures that cause them to allocate funds outside of income-generating activities. Medium-sized farmers mainly face non-productive use of loans (57.5%) and pressure to repay previous loans (50%), indicating that moderate financial pressures lead to the diversion of resources from productive uses and are accompanied by repeated debt cycles. However, the major problems faced by large farmers are inadequacy of loan amounts (75%) and delayed loan disbursement (65%), reflecting their difficulties in expanding financial resources to meet larger operational needs and the impact of delayed loan disbursement on timely agricultural investment.

8.7. Analysis of Farmers' Perceptions of the Effectiveness of the Scheme

Table 5 – Descriptive Analysis of Farmers' Perceptions

FARMERS' PERCEPTIONS	SMALL FARMERS		MEDIUM FARMERS		LARGE FARMERS	
	MEAN	SD	MEAN	SD	MEAN	SD
TIMELY AVAILABILITY	2.41	0.732	2.19	0.911	1.86	1.243
ADEQUACY OF CREDIT	2.63	0.784	2.06	0.850	1.72	0.978
FLEXIBILITY OF PURPOSE	2.48	0.697	2.33	0.756	2.20	0.893
EASE OF ACCESS	2.35	0.844	2.28	1.082	1.95	1.114
ADVISORY SUPPORT	2.29	0.873	2.17	0.968	1.81	1.096
OVERALL	2.43	0.953	2.21	1.084	1.91	1.253

Farmers' perceptions of the KCC program showed a general trend that smallholders had more positive perceptions of the scheme across all aspects compared to medium and large farmers. Small farmers reported higher mean scores for each aspect, ranging between 2.29 and 2.63, with low SD, indicating that they felt the scheme was relatively effective in meeting their needs. In contrast, large farmers rated these aspects lower, with mean scores ranging between 1.72 and 2.20, with high SD, indicating lower satisfaction, which may be due to the greater financial requirements and complexity of large-scale operations.

Table 6 – Inferential Analysis of Farmers' Perceptions using t-test

FARMER PAIRS	T-SCORE	P-VALUE	RESULTS			
SMALL → MEDIUM	0.964	.338	P>.05	NON-SIGNIFICANT PERCEPTIONS	DIFFERENCE	IN
MEDIUM → LARGE	1.145	.256	P>.05	NON-SIGNIFICANT PERCEPTIONS	DIFFERENCE	IN
SMALL → LARGE	2.089	.041	P<.05	SIGNIFICANT DIFFERENCE IN PERCEPTIONS		

The t-test results show that only small and large farmers have a significant difference in their perceptions of the effectiveness of the KCC scheme ($t=2.089$, $p=.041$), indicating that small farmers are more optimistic about the support of the scheme than large farmers. The differences in perceptions between small and medium farmers ($t=0.964$, $p=.338$) and between medium and large farmers ($t=1.145$, $p=.256$) are non-significant, indicating that these groups have more similar views on the effectiveness of the scheme. This implies that the scheme is not perceived to be well suited by large farmers considering their scale of operation and credit requirements. This finding is in line with the observations of prior studies, such as Sheela & Rajashekar (2023) and Singh et al. (2023).

IX. Conclusion

This study revealed different utilization patterns and challenges among small, medium, and large farmers in Sohna tehsil, reflecting the different impacts of the scheme on farmers, based on their landholding sizes. Small farmers generally had more positive views of the KCC scheme, benefiting from timely and adequate access to credit. However, medium and large farmers faced greater challenges such as inadequate loan amounts and delays in disbursement, especially large farmers who faced large unmet financial needs. Loan repayment behavior also varied, with small farmers having higher regular repayment rates than large farmers,

highlighting the potential financial stress as farm size increases. Thus, the findings highlight significant gaps in meeting the larger financial needs of medium and large farmers.

To address the funding gap for large and medium farmers in the KCC scheme, the researcher provides three major recommendations: First, a tiered credit structure should be implemented to adjust loan limits according to landholding size and specific funding needs, so that large farmers can obtain higher credit ceilings. Second, the loan disbursement process should be simplified through improved digital platforms to speed up access to funds and prioritize loan disbursement during the peak agricultural season. Finally, customized financial and advisory support services should be provided to large and medium farmers, focusing on funding management, risk mitigation, and investment strategies to ensure that loans are effectively used for income-generating activities and improve repayment capacity.

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