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Access to Formal Agricultural Credit and Barriers Among Farmers in Kathmandu Valley, Nepal

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ABSTRACT

Agriculture remains one of the key sectors in Nepal's economy. However, many farmers struggle to access formal credit to enhance their farm productivity and sustainability. This study assessed farmers' access to formal credit in Kathmandu Valley and identified the main barriers limiting its use. A sample of 105 farmers from Kathmandu, Bhaktapur, and Lalitpur districts was selected using stratified sampling, based on the proportion of farmers in each district. Data were collected using structured questionnaires. The analysis was conducted using descriptive statistics. The results showed that although 70% of the farmers reported awareness of formal credit institutions, only 27% of them had successfully accessed credit. Among those who accessed credit, most relied on commercial banks and cooperatives with little assistance during the application process. The most significant barriers were long processing times and strict collateral requirements, while high interest was surprisingly not seen as a major issue, possibly due to more pressing concerns. The findings highlight the need to simplify credit procedures, reduce collateral requirements, and provide better guidance and awareness programs for farmers. Addressing these issues is essential for improving financial inclusion and supporting the agricultural sector in Kathmandu Valley.

Keywords: Descriptive statistics, farmers, financial inclusion, formal credit, significant barriers

INTRODUCTION

Agriculture has always been the most important economic sector in the majority of developing countries, not only for its role in supplying food and employment but also as a significant factor in the overall economic development. The sector has changed its role from being passive to being an active partner in industrial expansion (Thorbecke, 1969). In Nepal, agriculture is the backbone of the country's economy and society; it employs 66 percent of the population and contributes 25.8% of the GDP (MoF, 2021). It supports rural livelihoods and continues to impact the country's economic performance (Dahal & Thapa, 2020; Chaudhary & Chaudhary, 2023). Agricultural development, on the other hand, depends on a variety of interrelated factors such as the landholding system, access to credit, availability of modern technologies, socio-economic conditions, and the development of infrastructure, including irrigation and marketplaces (Dumre et al., 2020). Despite its importance, agricultural productivity in developing countries, including Nepal, remains low due to limited financial capacity among smallholder farmers. According to Oni et al. (2009), smallholder farmers generally do not have enough money to spend on modern technologies, which limits their income potential. In this case, agricultural credit plays a vital role. Access to credit enables farmers to obtain seeds, fertilizers, irrigation equipment, and machinery, thereby strengthening food security and supporting the sustainability of rural livelihoods (Mishra, 2021; Irshad et al., 2021). Formal credit, in particular, has been linked to improvements in agricultural productivity and modernization (World Bank, 2018; Zabatantou et al., 2023). Although formal financial institutions, including banks, cooperatives, and microfinance organizations, are trying to provide credit facilities with lower interest rates and easier application processes (Rastra Bank, 2014; Irshad et al., 2021), access remains limited. Farmers commonly face barriers such as high interest rates, strict collateral requirements, lengthy and complicated loan processes, low awareness of credit schemes, and limited financial literacy (Rastra Bank, 2014; Ali et al., 2023). These challenges are further intensified in the Kathmandu Valley, where rapid urbanization has led to shrinking agricultural land and increasing land prices. Farmland has been replaced by housing, factories, highways, and other construction works (Zurick & Rose, 2010; Bapak, 2017). Because of this, farmers in the Valley face more challenges compared to those in rural areas. Previous reports indicate that farmers in the Valley struggle with high borrowing costs, lack of information, collateral-related issues, and slow loan approval processes (Mishra, 2021; Rastra Bank, 2014). While many studies have examined formal credit access in rural Nepal, little is known about farmers' access and the barriers they experience in the rapidly urbanizing and peri-urban areas of Kathmandu Valley. Understanding farmers' access to credit and the challenges they encounter is essential for improving financial inclusion in these transitioning areas. Therefore, this article concentrates on access to formal credit and the barriers faced by farmers within the study area.

MATERIALS AND METHODS

The study was conducted in Kathmandu Valley, covering the Kathmandu, Bhaktapur, and Lalitpur districts. The sample size was calculated using Cochran's formula (Cochran, 1953), with a 95% confidence level, a 7.5% margin of error. Based on a study by Shakya et al. (2020), it is estimated that 19% of farmers in Nepal have access to formal credit. Given these parameters, the calculated sample size for this study is 104, and a total of 105 farmers were surveyed. A stratified sampling method was used to ensure fair representation of the three districts in Kathmandu Valley, with samples proportionally distributed based on the number of farm holdings: 50 from Kathmandu, 29 from Lalitpur, and 26 from Bhaktapur. Before the main survey, a pilot test with about 10% of the sample was conducted to improve the clarity and relevance of the questionnaire. Primary data were collected through structured and semi-structured interviews. Secondary information was obtained from reports, journals, books, and official publications from sources such as NRB, MoALD, and CBS, which supported the background and analysis of the study.

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RESULTS AND DISCUSSION

Overview of demographic influence on credit access
Gender and credit access

This section highlights the gender composition of the respondents. It provides insight into the participation of male and female farmers in agricultural activities. The result shows, 68 were male (65%) and 37 were female (35%). Thus, the participation of male and female farmers was remarkably unequal. This gap highlights how agricultural decision-making in Nepal is still largely dominated by men. Research backs this up, showing that traditional patriarchal norms often restrict women's financial independence. In most cases, it's men who control the money and make the major decisions (International Organization for Migration, 2018). However, a closer analysis reveals a detailed picture. Women applied for credit more often and had a higher success rate than men. This is possibly due to targeted support from cooperatives and microfinance institutions, as well as policy incentives such as tax exemptions for women-led enterprises (Government of Nepal, 2020). On the other hand, the small number of female respondents means this high success rate should be interpreted cautiously and may not hold with a larger sample.

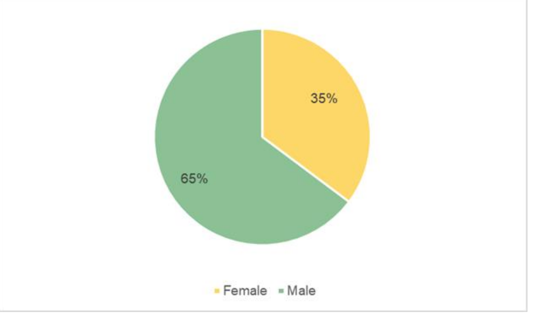

Figure 1. Gender-wise application and access to agricultural credit

Education and credit access

The findings in terms of level of literacy revealed that the majority (49%) had completed their high school, followed by 42 individuals (40%) with education up to SEE (Secondary Education Examination). Only 10 respondents (9%) had no formal education, while just 2 respondents (2%) had a university-level qualification. This finding suggests that most participants had at least a basic level of education. The results show a clear positive relationship between education level and access to agricultural credit. Farmers with no formal education had the lowest application and approval rates, while those with higher levels of education were increasingly more likely to apply for and receive credit. Overall, education appears to enhance awareness, confidence, and ability to access formal agricultural credit, a finding consistent with Mishra (2021), who reported that higher education significantly increases farmers' use of formal credit.

Age and credit access

The age distribution revealed that 43% of the respondents were aged between 35 and 45 years, highlighting that middle-aged farmers are most active in agriculture. While 30% of the respondents were aged below 35 years, 27% belonged to the age group over 45 years. Farmers aged 35–45 years were the most active in agricultural credit use, with 35.56% applying and 31.11% receiving credit.

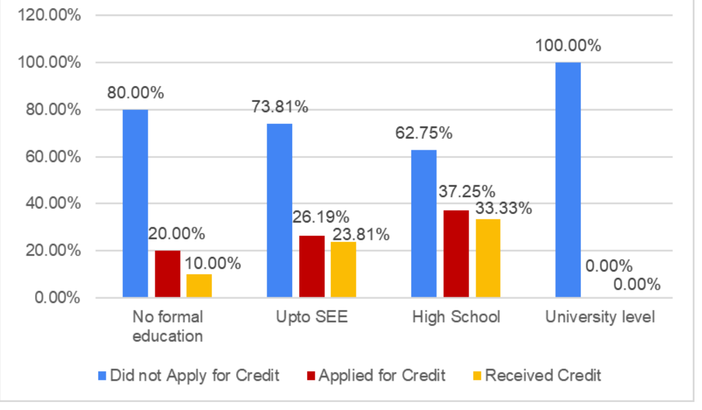

Figure 2. Education-wise application and access to agricultural credit

Younger farmers (below 35 years) had a lower application rate (25%) but a 100% success rate among applicants, suggesting greater awareness of credit procedures. Farmers aged over 45 years were the least involved, with 28.57% applying and only 21.43% receiving credit. Overall, age influences both credit application and approval, though its effect varies across contexts, as supported by Pandey and Timilsina (2024) and contrasting findings by Singh et al. (2023). The chart compares farmers' access to agricultural credit across Bhaktapur, Kathmandu, and Lalitpur districts. In all three districts, around 30% of farmers applied for credit. Bhaktapur showed the most favorable outcome, as all applicants (30.77%) successfully received credit. In Kathmandu, although 30% applied, only 24% of respondents received credit, indicating some rejections. Lalitpur performed moderately well, with 31.03% applying and 27.59% receiving credit. Overall, while application rates were similar across districts, credit approval varied, with Bhaktapur performing best and Kathmandu the weakest, possibly due to lower levels of formal farm registration in Kathmandu.

Annual income of the respondents

The distribution of annual income of respondents shows that 38% of the farmers earned between 3 to 5 lakhs, constituting the largest income group. 23% reported earnings of less than 3 lakhs annually.

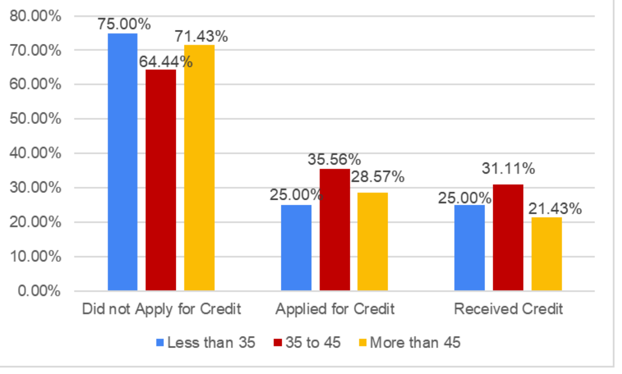

Figure 3. Age-wise application and access to agricultural credit District-wise credit access

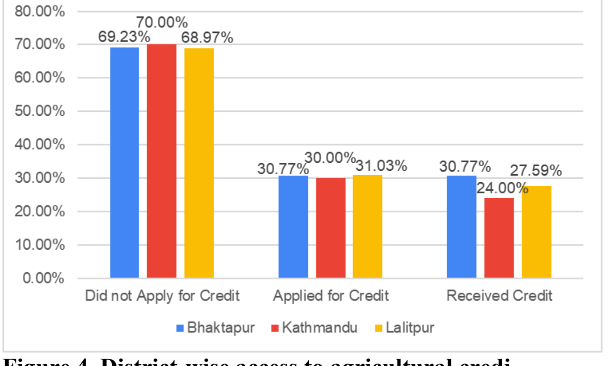

Figure 4. District-wise access to agricultural credi

About 22% and 8% of farmers reported income between 5 to 7 lakhs, and 7 to 10 lakhs respectively while, 9% earned more than 10 lakhs per year. Overall, this indicated that about 61% of respondents had an annual income below 5 lakhs, suggesting that the majority of farmers in Kathmandu Valley operate with limited financial resources. This may restrict their ability to access credit or adopt new technologies. Similarly, Zulfiqar et al. (2020) found that off-farm income had a negative and significant effect on agricultural credit access.

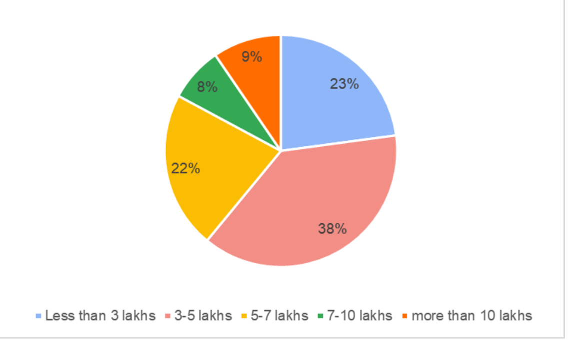

Figure 5. Annual income of the respondents

Land under cultivation

The results show that about 38% of the respondents reported having between 2 to 5 ropani (0.10 to 0.25 ha) of land, making it the most common landholding size among the surveyed farmers. Around 22% of farmers cultivated more than 10 ropani (> 0.51 ha), while another 20% farmers cultivated between 1 to 2 ropani (0.05 to 0.10 ha). 19% of respondents cultivated in the 5 to 10 ropani (0.25 to 0.51 ha) range, and only 1% had less than 1 ropani (< 0.05 ha).

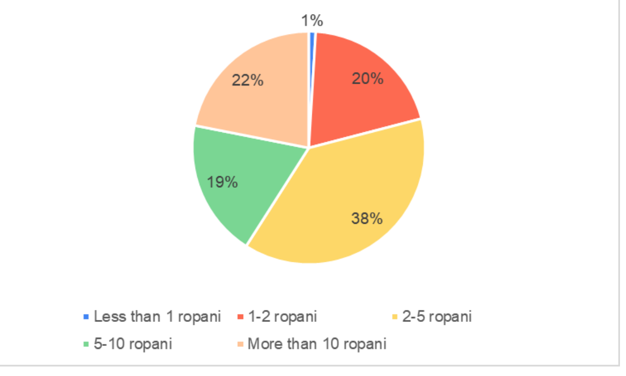

Figure 6. Land under cultivation by respondents

Overall, small to medium landholdings are most common, though some farmers cultivate larger areas. Similar patterns of smallholder dominance have been reported in Nepal. Mishra (2021) noted that most farmers in Western Nepal have less than 0.5 ha, limiting credit access. Pandey and Timilsina (2024) also found that land size affects productivity and access to credit.

Farm registration

The survey results show that 60% of the farms were not registered, while 40% were registered. This shows a gap in formal agricultural documentation among farmers in Kathmandu Valley.

Awareness of formal credit institutions among farmers

The survey revealed that 70% of the farmers were aware of formal credit institutions that provide agricultural credit, while 30% of them were not aware of it. This shows a high level of exposure to formal credit sources among the farming community. This aligns with Campero and Kaiser (2013), who found that awareness is a key factor influencing the use of formal credit. Efforts to improve awareness appear to be effective, but the 30% of farmers who are still unaware need to be reached to improve access to formal credit.

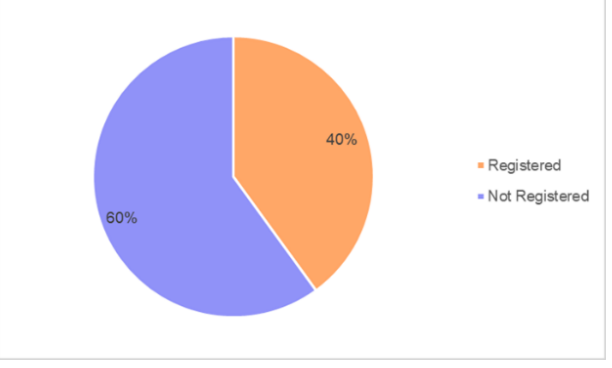

Figure 7. Farm registration ***Credit awareness and use***

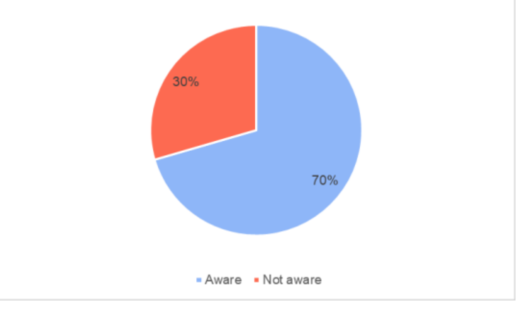

Figure 8. Awareness of Formal Credit Institutions

Access to and ease of formal agricultural credit

The survey shows that out of 105 respondents, only 28 farmers (27%) had access to formal credit, while the majority, 77 respondents, did not. The finding shows a relatively lower level of credit access among the farmers in the Kathmandu Valley, suggesting that formal credit use in the agriculture sector is still at a low level. However, this is slightly higher than the 19% reported by Shakya et al. (2020) for farmers in Nepal, suggesting that while access may be better in Kathmandu Valley, formal credit remains largely underutilized in the agricultural sector. Among those who successfully received credit, perceptions of the application process varied. Most respondents found it challenging: 64% rated it very difficult, 18% difficult, 14% neutral, and only 4% considered it easy, with none finding it very easy. These results highlight that not only is access to credit limited, but the process itself is difficult, reflecting structural barriers within Nepal's agricultural credit system. Such difficulties can directly reduce credit utilization and discourage future applications, consistent with findings from Rastra Bank (2014).

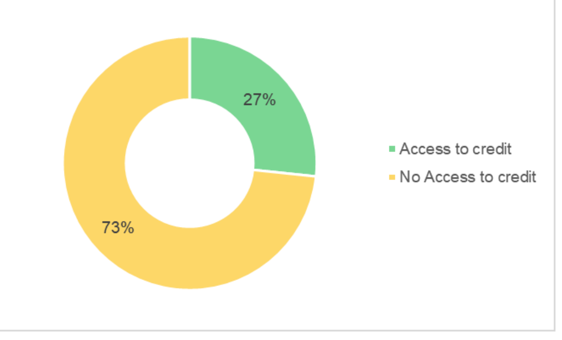

Figure 9. Access to credit

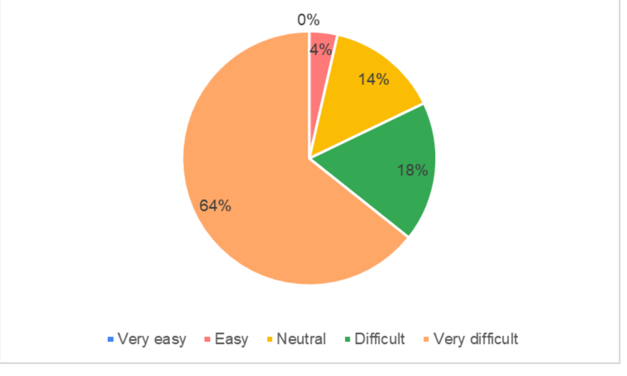

Figure 10. Ease of accessing credit

Source of credit

The survey indicates that among the 28 respondents who had access to credit, the majority of them (57.14%) received credit from formal sources such as commercial banks, cooperative institutions (28.57%), and microfinance institutions (14.29%). None of the respondents reported receiving credit through government schemes or subsidies. This aligns with Gupta et al. (2015), who noted that formal sources of agricultural credit in Nepal included development banks, farmers' cooperatives, and other financial institutions. This shows the important role of banks and cooperatives in supporting agricultural activities and suggests that enhancing farmers' access to these institutions could improve credit availability.

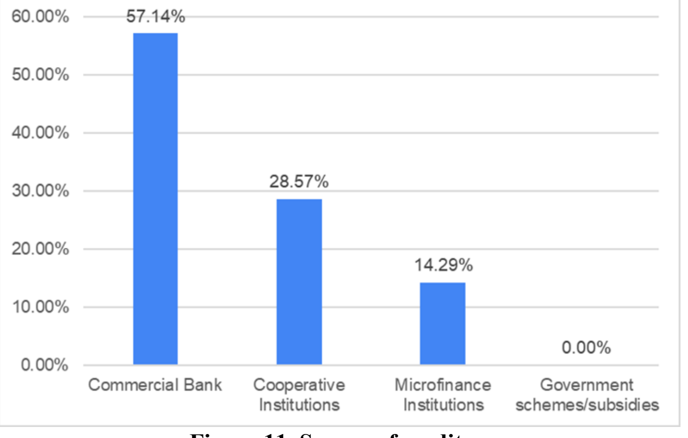

Figure 11. Source of credit

Assistance while applying for credit

Among the respondents who received credit, only 11% received any form of training or guidance during the application process, while 89% did not receive it. This shows that most of the farmers applied for credit without any guidance or support from the institutions. Because of this, many farmers probably struggled to understand the steps involved. This could also explain the reason why many farmers found the process to be very difficult. The findings highlight that assistance is important for easing credit access. This aligns with NRB (2020), which stresses the need for guidance and awareness for financial consumers, including farmers. The low support seen in this study suggests a gap between what policies promote and what farmers actually experience in practice.

Source of information about agricultural credit

The survey reported that 32% of the respondents received information about agricultural credit from friends, family, or neighbors. This was followed by social media (25%) and radio/TV (18%). A few of them got information from newspapers (14%), while only 11% reported learning about credit through a formal training program. This aligns with Ukwuaba et al. (2020), who reported that farmers mainly relied on informal networks for credit information because it is easier and faster. Few farmers use formal channels, showing that awareness programs are not enough, and many farmers might not be getting complete or reliable information about formal credit. Therefore, enhancing awareness campaigns and educational efforts by credit institutions and government agencies could help improve farmers' understanding and access to formal credit.

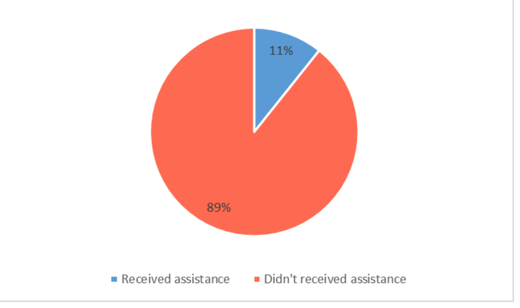

Figure 12. Assistance while applying for credit

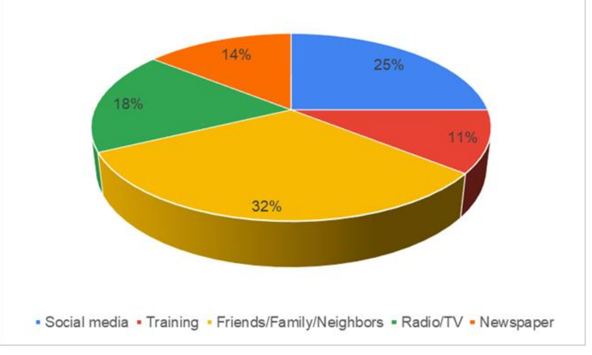

Figure 13. Source of information Perceived barriers to credit access

To analyze the barriers faced by farmers in accessing formal credit, a five-point Likert scale was used, ranging from "Not a challenge" to "Major challenge." Respondents were asked to rate five barriers based on their experience and perception. The results are presented in the table below. Among the barriers listed in Table 1, long processing time was found to be the greatest barrier, with 71.4% citing it as a big challenge and having a high mean score of 4.69, and ranked first. Collateral requirement came second, where 58.1% rated it as a moderate challenge and 31.4% a major challenge (mean = 4.20). Limited knowledge about credit availability was the third most reported challenge (mean = 3.46), showing that some farmers lack awareness of existing credit options. Fear of repayment burden was ranked fourth (mean = 3.30) and was mostly rated as a moderate or neutral challenge. High interest rates, though frequently cited in more general policy discussions, were lowest (mean = 3.17), and no farmers indicated it as a significant issue.

Table 1. Farmers' perception of barriers in accessing credit

Challenge	Not a challenge	Minor challenge	Neutral	Moderate challenge	Major challenge	Mean	Rank
Long processing time	0	0	3 (2.9%)	27 (25.7%)	75 (71.4%)	4.6857	1
Collateral requirements	0	1 (1%)	10 (9.5%)	61 (58.1%)	33 (31.4%)	4.2	2
Limited knowledge about credit availability	1 (1%)	21 (20%)	34 (32.4%)	27 (25.7%)	22 (21%)	3.4571	3
Fear of repayment burden	2 (1.9%)	16 (15.2%)	45 (42.9%)	33 (31.4%)	9 (8.6%)	3.2952	4
High interest rates	1 (1%)	11 (10.5%)	62 (59%)	31 (29.5%)	0	3.1714	5

(Source: Field Survey, 2025)

The data show that farmers face significant barriers to credit access due to procedural and structural problems such as lengthy processing times and high collateral requirements. Similar challenges have been highlighted in earlier studies, where delays in loan approval and disbursement remain major barriers to effective credit access for farmers (Ayegba & Ikani, 2013; Asogwa et al. 2014). Thus, while credit schemes may exist, access often remains restricted, particularly for those without substantial assets, as lengthy procedures limit timely availability.

A variety of information-related challenges, including limited knowledge and personal concerns such as fear of repayment, contribute to the issue, but their impact is less significant. However, high interest rates were not identified as a major challenge, ranking lowest among the reported barriers, indicating that they may be more urgent access-related issues or that they are relatively manageable. This contrasts with the findings of Pandey et al. (2025), who reported that high interest rates were among the leading constraints faced by farmers in accessing credit. The difference suggests that the nature of challenges varies by context and institutional setting. Overall, the research outcomes show a need to simplify credit procedures while decreasing collateral demands and expanding awareness initiatives to improve credit accessibility for farmers.

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CONCLUSION

This study aimed to examine farmers' access to formal credit in Kathmandu Valley and to identify the major barriers that limit their access to credit. The results show that although most farmers are aware of formal credit institutions, only a small proportion actually access credit. This shows a clear gap between awareness and real credit use.

The findings reveal that accessing credit is still a difficult and time-consuming process for many farmers. Long processing times and strict collateral requirements were found to be the most serious obstacles, discouraging farmers from applying for loans even when they need financial support. The fact that most borrowers rely mainly on commercial banks and cooperatives while receiving little to no assistance during the application process shows that credit institutions are still falling short in providing farmer-friendly services. Likewise, farmers' heavy reliance on informal sources such as friends, family, and neighbors for credit information suggests that formal awareness campaigns are not reaching the target groups effectively.

Overall, the study concludes that improving access to formal credit in Kathmandu Valley requires more than simply increasing the availability of loan programs. Credit institutions must simplify procedures, reduce collateral burdens, and provide proper guidance throughout the application process. Strengthening reliable information channels and ensuring supportive, accessible services are crucial steps toward making formal credit more inclusive and responsive to the needs of the farming community in Kathmandu Valley.

AUTHORS'CONTRIBUTIONS

Brishti SUWAL: Investigation; data curation; writing-original draft; software; formal analysis; writing-review and editing; visualization.

Rojan KARKI: Conceptualization; validation, methodology, writing review, and editing

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