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The Role of Agricultural Cooperatives in Enhancing Smallholder Women Farmers' Access to Credit Facilities and Sustainable Livelihoods of Their Households, in Baringo County

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ABSTRACT: *Smallholder women farmers are the backbone of agricultural production and household food security in rural Kenya, yet they remain marginalized in accessing credit facilities that are essential for improving productivity and sustaining livelihoods. Limited collateral, low financial literacy, and gender-biased lending practices have restricted their participation in formal financial systems. This paper examines the role of agricultural cooperatives in enhancing smallholder women farmers' access to credit facilities and its influence on the sustainable livelihoods of their households in Baringo County, Kenya. The study adopted a descriptive research design integrating both quantitative and qualitative approaches. Data were collected from 271 cooperative members through structured questionnaires and key informant interviews. Quantitative data were analyzed using descriptive and regression analyses with SPSS version 28.0, while qualitative responses were analyzed thematically. The results revealed that cooperative-based credit access significantly improved household income, strengthened women's decision-making power, and enhanced investment in productive agricultural ventures. However, limited collateral, high interest rates, and weak governance practices still constrained equitable access among women members. The study concludes that agricultural cooperatives play a crucial role in promoting women's financial inclusion and household welfare. It recommends the adoption of gender-responsive credit frameworks, capacity-building on financial literacy, and policy reforms to strengthen transparency and accountability in cooperative lending systems for sustainable rural livelihoods.*

Keywords: Agricultural cooperatives, credit access, financial inclusion, women farmers. sustainable livelihoods

I. Introduction

Agricultural cooperatives play a critical role in advancing inclusive rural development by empowering farmers through collective organization, shared resources, and equitable access to financial and productive services FAO (2012). Across Sub-Saharan Africa, and particularly in Kenya, cooperatives have become essential in promoting social and economic empowerment among smallholder farmers who form the backbone of agricultural production. Women constitute a significant portion of this workforce; they contribute substantially to food security, household income, and poverty reduction. However, despite their central role, smallholder women farmers continue to face persistent challenges in accessing essential financial resources, especially credit facilities that are critical for farm investment and income diversification.

Access to credit remains a major determinant of agricultural productivity and household resilience. Credit enables farmers to acquire improved seeds, fertilizers, pesticides, and farm equipment, which directly influence yields and income stability. Yet, most rural women in Kenya lack access to formal financial institutions due to limited collateral, low asset ownership, and restrictive social norms. Cultural and legal constraints on land ownership often exclude women from using property as security for loans, while institutional lending systems tend to favor men who control household assets. Consequently, many smallholder women farmers are forced to depend on informal and high-interest lenders, leaving them vulnerable to debt cycles and financial insecurity. These systemic inequalities perpetuate gender gaps in agricultural performance and constrain the potential of women to achieve sustainable livelihoods.

In this context, agricultural cooperatives offer an inclusive and community-based alternative to formal banking systems. Guided by the cooperative principles of voluntary and open membership, democratic control, and member economic participation, cooperatives pool members' resources to create accessible and affordable credit facilities. Through savings and loan programs, women can obtain small loans without traditional collateral, guaranteed instead by group solidarity and mutual trust. Such collective credit arrangements empower women to invest in farming, engage in small-scale agribusiness, and meet household needs such as education, healthcare, and nutrition. Cooperatives also provide a platform for financial literacy training, record keeping, and savings mobilization, which are essential for sustaining long-term economic stability.

Baringo County presents a unique setting for examining the role of cooperatives in women's access to credit. The region is predominantly rural and semi-arid, with the majority of households depending on small-scale agriculture for subsistence and income generation. Despite the presence of several agricultural cooperatives, many women still encounter barriers to credit due to traditional gender norms, limited awareness of cooperative services, and inconsistent governance practices within the societies. Some women remain passive members with minimal participation in decision-making, further limiting their access to available credit opportunities. This has contributed to low levels of agricultural productivity, food insecurity, and poverty among women-headed households in the county.

Enhancing women's access to cooperative-based credit facilities is therefore not only an economic issue but also a social imperative for sustainable development. When women gain access to affordable loans, they are more likely to reinvest in productive agricultural ventures, improve household welfare, and strengthen food security. Beyond economic gains, credit access promotes women's empowerment by increasing their confidence, leadership roles, and influence in household and community decisions. This aligns with Kenya's national development priorities and global commitments such as the Sustainable Development Goal (SDG) 5 on gender equality and SDG 8 on decent work and economic growth.

This study examines the role of agricultural cooperatives in enhancing smallholder women farmers' access to credit facilities in Baringo County, Kenya, and how this access influences the sustainable livelihoods of their households. The paper is guided by the premise that cooperative membership enhances financial inclusion by reducing barriers to credit and promoting equitable economic participation. Understanding this relationship is vital for designing gender-responsive financial systems and cooperative policies that support rural women's empowerment and sustainable agricultural transformation.

II. Literature Review

Access to credit is widely recognized as a critical factor influencing women's economic empowerment and agricultural productivity. Past research has shown that when women farmers have access to financial resources, they are able to purchase improved seeds, fertilizers, and farm equipment, which enhance yields and income stability. Globally, studies such as Kabeer (2023) highlight that access to microcredit strengthens women's decision-making power and improves their ability to manage household welfare. Similarly, Amare et al. (2021) found that cooperatives provide collective security that reduces lending risks and expands financial inclusion among smallholder women farmers in Sub-Saharan Africa.

Despite these contributions, existing literature also exposes persistent barriers that hinder equitable credit access for women. Akinbami and Adesanya (2021) noted that collateral demands and high-interest rates remain key constraints to women's participation in formal credit systems. These institutional and socio-cultural barriers often limit women's control over financial resources, leaving them dependent on informal borrowing channels. Moreover, many microfinance institutions lack gender-sensitive lending frameworks, which further exacerbates inequality in financial inclusion.

In the Kenyan context, studies by Mwangi (2021) and Nyanga & Njeru (2022) have demonstrated that agricultural cooperatives significantly contribute to improved agricultural investment and income among smallholder farmers. However, both studies observed that internal governance issues, such as elite capture and unequal representation, often restrict women's access to cooperative loans. Additionally, most of these studies have focused on mixed-gender populations or specific cooperative performance metrics rather than explicitly analyzing the effect of cooperative-based credit access on women's sustainable livelihoods.

These gaps reveal a critical research need, while previous studies acknowledge the role of cooperatives in credit provision, there is limited empirical evidence examining how cooperative credit specifically affects smallholder women farmers' livelihoods in rural and semi-arid areas such as Baringo County. This study therefore seeks to bridge that gap by focusing on one key objective to assess the extent to which agricultural cooperative membership enhances women's access to credit facilities and how this access influences their household livelihoods.

III. Materials and Methods

This study adopted a descriptive research design integrating both quantitative and qualitative approaches to examine how agricultural cooperatives enhance smallholder women farmers' access to credit facilities in Baringo County, Kenya. The design was suitable because it allowed for systematic description and analysis of the existing situation without manipulating variables. It provided a framework for capturing accurate information on the relationship between cooperative membership and women's access to financial services. Both quantitative and qualitative methods were employed to generate comprehensive data that addressed the research objective effectively.

The study was carried out in Baringo County, located in Kenya's Rift Valley region. The county is predominantly rural, and most households depend on small-scale farming for subsistence and income. Women form the majority of the agricultural labor force but remain disadvantaged in accessing productive resources such as credit and farm inputs. Agricultural cooperatives in the county, particularly savings and credit societies and farmer-based organizations, have emerged as critical institutions in mobilizing resources and extending low-interest loans to their members. The presence of several active cooperatives made the county an appropriate setting for investigating the role of cooperatives in improving women's credit access.

The study targeted smallholder women farmers who are registered members of agricultural cooperatives within the county. From this population, a total of 271 respondents were selected using stratified random sampling to ensure fair representation across various cooperatives. The sample included members from Boresha SACCO, Barwessa Farmers' Cooperative, and Marigat Dairy Cooperative, which are among the most active and women-inclusive societies in the area. Stratification ensured that the views of members from different cooperative types were captured, providing a balanced and reliable dataset.

Primary data were collected using structured questionnaires and key informant interviews. The questionnaire included both closed and open-ended questions designed to gather information on demographic characteristics, participation in cooperative activities, access to credit, and challenges encountered in borrowing and loan repayment. Key informant interviews were conducted with cooperative leaders, credit officers, and government officials from the Department of Cooperatives to obtain deeper insights into institutional practices, governance mechanisms, and gender inclusion strategies. In addition to primary data, secondary data were reviewed from cooperative records, financial statements, and relevant policy documents to validate and complement field findings.

Quantitative data collected from questionnaires were coded and analyzed using the Statistical Package for Social Sciences (SPSS) version 28.0. Descriptive statistics such as frequencies, means, and percentages were used to summarize responses, while regression analysis was employed to determine the relationship between cooperative membership and access to credit facilities. Qualitative data from interviews were analyzed using thematic analysis to identify key themes, patterns and insights from interviews and open-ended questionnaire responses. The integration of both data types allowed for triangulation, which strengthened the reliability and depth of the study findings.

To ensure reliability and validity, the research instruments were pre-tested among a small group of cooperative members from a neighboring sub-county. Adjustments were made based on the pilot results to enhance clarity and accuracy. The reliability of the questionnaire was measured using Cronbach's alpha coefficient, which yielded a value of 0.82, indicating acceptable internal consistency. Ethical standards were observed throughout the study. Participation was voluntary, informed consent was obtained from all respondents, and their confidentiality was assured. Permission to conduct the research was also obtained from relevant county cooperative authorities. Overall, the methods adopted in this study provided a solid basis for understanding how agricultural cooperatives facilitate women's access to credit in rural areas. The combination of quantitative rigor and qualitative depth ensured that the research captured not only statistical trends but also personal experiences and institutional realities shaping credit access for smallholder women farmers in Baringo County.

IV. Results and Discussion

Data analyzed using SPSS version 28.0 examined how agricultural cooperatives enhance smallholder women farmers' access to credit facilities and how this influences their household livelihoods. The descriptive results presented in Table 4.1 show that out of 271 respondents, 43 percent, (n = 117) reported that cooperative membership had significantly improved their access to credit, while 36 percent, (n = 98) noted a moderate improvement. On the other hand, 12 percent, (n = 33) experienced no notable improvement, and 9 percent, (n = 23) reported no access at all. This implies that approximately four-fifths of women farmers experienced improved financial access due to their cooperative membership, underscoring the importance of cooperative credit schemes in fostering rural financial inclusion.

Table 4.1. Women's Access to Credit Facilities through Cooperatives

Access Level	Frequency	Percentage (%)
Significantly improved	117	43
Moderately improved	98	36
No improvement	33	12
No access at all	23	9
Total	**271**	**100**

The analysis also indicates that, 79 percent of the respondents indicated that their access to credit had improved either significantly or moderately through cooperative membership. This trend aligns with earlier findings by Kabeer (2023), who noted that group-based credit systems enhance financial inclusion by reducing collateral requirements and fostering trust-based lending models. Similar evidence from Amare et al. (2021) in Ethiopia revealed that cooperative structures promote women's economic participation and improve access to affordable loans, particularly in rural settings.

The inferential analysis confirmed the presence of a statistically significant relationship between cooperative-based credit access and household livelihood outcomes. The correlation coefficient, ($r = 0.601$, $p < 0.001$) indicates a strong positive association between the two variables. As shown in Table 4.2, regression results further revealed that cooperative credit access explained 36.1 percent of the variance in sustainable livelihood outcomes, ($R^2 = 0.361$; Adjusted, $R^2 = 0.358$). The regression model was statistically significant at, $p < 0.001$ ($F = 102.614$) confirming that cooperative-based credit significantly contributes to improving women's economic well-being and household welfare.

Table 4.2. Regression Analysis of Cooperative Credit Access and Sustainable Livelihoods

Statistic	Value
Correlation (r)	0.601
R Square	0.361
Adjusted R Square	0.358
F-Statistic	102.614
Significance (p)	0.000

The regression equation derived was, $Y=0.482+0.601X_1+\varepsilon$ where Y represents sustainable livelihoods and X_1 denotes access to cooperative-based credit facilities. The high beta coefficient, ($\beta = 0.601$) demonstrates that increased access to cooperative credit leads to significant improvements in livelihood indicators such as household income, food security, and resilience. This finding resonates with Nyanga and Njeru (2022), who reported that cooperative participation enhances women's financial independence and decision-making power within households.

These results affirm that cooperatives serve as vital enablers of women's empowerment by facilitating affordable credit, building financial literacy, and promoting resource pooling. However, persistent challenges such as limited collateral, high interest rates, and weak governance practices still constrain equitable access among women members, echoing the observations of Akinbami and Adesanya (2021) in Nigeria. The relatively moderate explanatory power, ($R^2 = 0.361$) also suggests that while cooperative-based credit substantially improves livelihoods, other determinants such as access to markets, climate resilience, and extension services play complementary roles.

Overall, the findings confirm that agricultural cooperatives in Baringo County are not only credit providers but also transformative platforms for social and economic inclusion. They foster self-reliance, enhance household welfare, and advance progress toward Sustainable Development Goals particularly SDG 1 on poverty eradication, SDG 5 on gender equality, and SDG 8 on decent work and economic growth. The evidence underscores the need to strengthen cooperative governance and design gender-responsive credit frameworks to sustain the positive impacts of cooperative membership on women's livelihoods.

V. Conclusions and Recommendations

The study examined the role of agricultural cooperatives in enhancing smallholder women farmers' access to credit facilities and how this access influences the sustainable livelihoods of their households in Baringo County, Kenya. Based on the results analyzed through SPSS, it is evident that cooperative membership significantly improves women's financial inclusion and household welfare. A large proportion of respondents (79%) acknowledged that cooperative participation enhanced their access to credit, while regression analysis, ($\beta = 0.601$, $p < 0.001$) confirmed a strong positive relationship between cooperative-based credit access and sustainable livelihood outcomes. These results affirm that agricultural cooperatives are effective vehicles for empowering rural women by providing affordable and accessible credit, strengthening their economic decision-making, and enhancing resilience against poverty and climate shocks.

The findings further highlight that cooperative-based credit fosters asset accumulation, food security, and household income diversification, aligning with prior evidence from Sub-Saharan Africa that group-based financial systems drive gender-responsive economic development (Kabeer, 2023; Amare et al., 2021). However, structural barriers such as inadequate collateral, high interest rates, and weak governance still limit equitable participation. Addressing these constraints requires targeted reforms that strengthen institutional transparency, capacity building, and the integration of gender-sensitive lending models.

The implications of this study extend beyond Baringo County. The evidence confirms that well-managed agricultural cooperatives can bridge the financial inclusion gap among women in arid and semi-arid regions, supporting Kenya's Vision 2030 and the Sustainable Development Goals (SDGs) on gender equality, poverty reduction, and decent work. The research contributes new empirical knowledge by demonstrating that cooperative-based credit models—rooted in collective trust rather than collateral—offer a sustainable alternative to traditional banking systems for marginalized rural populations.

The study recommends that cooperatives in ASAL regions institutionalize financial literacy programs tailored to women members, enhance governance accountability through inclusive leadership structures, and establish revolving credit schemes with flexible repayment mechanisms. Policymakers should also support cooperative capacity building through favorable regulatory frameworks and access to digitized financial tools. Future research should explore the long-term impacts of cooperative credit on women's asset growth and intergenerational welfare, employing longitudinal and mixed-method approaches to deepen understanding of cooperative-driven livelihood transformation.

REFERENCES

[1] Amare, A., Abebe, G., & Tadesse, D. (2021). The role of agricultural cooperatives in promoting women's access to credit and financial inclusion in Sub-Saharan Africa. Journal of Rural Development Studies, 37(2), 145–162.
[2] Akinbami, C. A., & Adesanya, O. (2021). Gender and credit access: Barriers to women's participation in formal lending institutions in Nigeria. African Journal of Economic Policy, 28(3), 91–108.
[3] Kabeer, N. (2023). Gender equality and women's empowerment through microcredit: Revisiting the evidence. Feminist Economics, 29(1), 15–37.
[4] Mwangi, P. K. (2021). Agricultural cooperatives and financial inclusion among smallholder farmers in Kenya. African Journal of Cooperative Development, 12(4), 201–220.
[5] Nyanga, M., & Njeru, L. (2022). Cooperative participation, credit access, and women's economic empowerment in rural Kenya. East African Journal of Social and Economic Studies, 5(1), 67–84.