MOSHI CO-OPERATIVE UNIVERSITY

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BY

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A DISSERTATION SUBMITTED FOR PARTIAL FULFILMENT FOR THE AWARD OF DEGREE OF MASTER OF ARTS IN CO-OPERATIVE AND COMMUNITY DEVELOPMENT OF MOSHI CO-OPERATIVE UNIVERSITY – MOSHI

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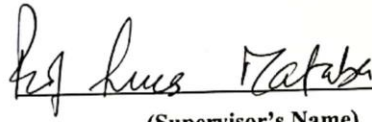
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CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance by the Moshi Co-operative University a dissertation titled *"Savings and Credit Co-Operative Societies' Members' Livelihood Outcomes in Kasarani Sub County, Kenya"* in partial fulfilment of the requirements for the award of a degree of Master of Arts in Co-operative and Community Development of Moshi Co-operative University.

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(Supervisor's Signature)

Date____04-12-2023_____

DEDICATION

This Dissertation is dedicated to the Almighty God and to my dearest family. This work reflects the love, support, and inspiration they have provided me throughout my journey. To mom and dad, whose unwavering belief in me has been my guiding light, and to my sister, whose encouragement has been a constant source of motivation - this achievement is as much yours as it is mine. Thank you for being my pillars of strength and for sharing this journey with me.

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I would like to express my profound gratitude and heartfelt appreciation to all those who played a pivotal role in helping me successfully complete this research. First and foremost, I extend my thanks to the Almighty God for His unwavering mercy, boundless love, and divine providence, which gave me the strength and resilience to navigate through my academic journey.

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I wish to express my deep appreciation to my generous sponsor, the Inter-University Council of East Africa (IUCEA), in collaboration with KFW, for their unwavering financial support. Without the benevolence of IUCEA the completion of my studies might have remained an unattainable aspiration.
However, any criticisms or comments regarding this work should be directed towards the researcher and not the individuals I have acknowledged in this work.

Thank you and God bless you abundantly!

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LIST OF ABBREVIATIONS

%	:	Percentage
ACCOSCA	:	African Confederation of Cooperative Savings and Credit Associations.
CVI	:	Content Validity Index
DFID	:	Department for International Development
ICA	:	International Co-operative Alliance
IEBC	:	Independent Electoral Board Commission
IGA	:	Income-Generating Activities
KI	:	Key Informant
KII	:	Kenya Informant Interviews
KNBS	:	Kenya National Bureau of Statistics
Ksh	:	Kenyan Shillings
NACOSTI	:	National Commission for Science, Technology, and Innovation
PSM	:	Propensity Score Match
SACCOS	:	Savings and Credit Co-operative Societies
SASRA	:	SACCO Societies Regulatory Authority
SD	:	Standard Deviation
SLA	:	Sustainable Livelihoods Approach
SPSS	:	Statistical Package for Social Sciences
UNDP	:	United Nations Development Program
UNSDG	:	United Nations Sustainable Development Goals
VIF	:	Variance Inflation Factor
WOCCU	:	World Council of Credit Unions

ABSTRACT

The study was conducted with the aim of assessing the role of SACCOS in improving members' livelihood outcomes in Kasarani Sub County, Kenya. Three specific objectives guided the research: first, to examine the level of members' participation in the financial services offered by SACCOS; second, to investigate the influence of demographic factors on members' livelihood outcomes; and third, to compare the livelihood outcomes between SACCOS members and non-members in Kasarani. The study adopted a cross sectional research design as it enabled the researcher to examine the relationship between SACCOS services and the livelihood outcomes of its members. Both SACCOS members and non-members in Kasarani Sub County were targeted, facilitating a comprehensive comparison of livelihood outcomes. Fisher's formula determined the sample size, which comprised 385 respondents. Additionally, key informant interviews were conducted with five individuals, including a district manager, two SACCOS employees, one SACCOS board member, and one SACCOS regulator. Data collection involved the use of questionnaires and key informant interviews, with analysis facilitated by the SPSS software, encompassing both descriptive and inferential analysis. The findings indicated active members' participation in SACCOS financial services, underscoring a sense of involvement and investment in SACCOS operations. Furthermore, demographic factors significantly impacted the livelihood outcomes of SACCOS members in Kasarani Sub County, Kenya. Specifically, gender diversity ($\beta=0.221$, $p=0.001$), age ($\beta=0.267$, $p=0.000$), level of education ($\beta=0.340$, $p=0.000$), and occupation ($\beta=0.126$, $p=0.006$) were positively and significantly related to improved livelihood outcomes. In contrast, household size did not exhibit a significant relationship ($\beta=0.034$, $p=0.527$). Moreover, independent t-test results showed a significant difference in livelihood outcomes between SACCOS members and non-members (p-value<0.05). The study concluded that SACCOS played a vital role in shaping the financial landscape of Kasarani Sub County, with active member participation, demographic influences on livelihood outcomes, and a significant positive impact on members' economic well-being compared to non-members. The study recommended that effort should be directed towards promoting the benefits of SACCOS membership through comprehensive awareness campaigns emphasising financial literacy and accessibility to formal financial services to uplift the entire community.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to the Study

People working together for the economic and social development of societies has existed throughout human history. According to Loring (2020), in ancient times, early human societies cooperated by sharing, hunting, farming, and shelter practices to improve their chances of survival. In the modern world, cooperative societies are formal representations of such co-operation. Co-operatives are multiple, diverse, and differentiated and they serve different goals and objectives to their member participants (Shilimi, 2021).

One of the forms in which these co-operatives exist is in Savings and Credit Cooperative Societies (SACCOS). SACCOS are voluntary associations or co-operative financial institutions owned and controlled by their members and operated to promote savings and provide credit services to members at low-interest rates (Shiferaw, 2020). SACCOS provide saving facilities and advance loans at interest rates lower than those charged by other financial providers, and they have the ability and opportunity to reach clients in areas that are unattractive to banks such as in the rural and poor urban areas. SACCOS develop material well-being by raising the standards of living of their members, making possible regular savings and wise use of money, providing loans at low interest rates and by making possible economic emancipation of its members (Shiferaw, 2020).

Globally 87,914 SACCOS served 393,871,631 members in 118 countries (WOCCU, 2021). Notably, countries such as Malaysia and India have implemented SACCOS models that demonstrate remarkable success in improving members' livelihoods. In Malaysia, SACCOS are community-based, have democratic roots, and are flexible and participatory, making them well suited for economic development. These SACCOS promote community spirit, create jobs, foster identity, and social organisation, as well as contribute to the reduction of poverty among their members (Tehrani *et al*., 2014). In India, SACCOS are unique as they were initiated and supported by common business needs and aspirations. They are essentially welfare-driven rather than profit-oriented, functioning as legal institutions supported by the government (Siddaraju, 2012). The Indian SACCOS model illustrates how a member-focused approach and

government support contributes to the socio-economic well-being of their members. Regionally, in East African countries like Tanzania, SACCOS have played a leading role in providing financial services to the poor people who account for 28.2% of the country's population (URT, 2017).

Kenya has about 9,041 SACCOS serving 9.9 million Kenyans with savings and shares of $16 billion and a penetration of 30.42% to the National Income (WOCCU, 2022). Despite their significant presence, SACCOS face challenges such as inadequate financial literacy and governance issues, hindering their effectiveness in poverty reduction and livelihood improvement (SASRA report, 2021). The limitations include members' struggles with access to financial services, insufficient savings facilities, and timely credit, particularly impacting the growth and livelihoods of those in both rural and urban areas (Gogo and Olouch, 2017). To effectively coordinate SACCOS in Kenya, the SACCOS Societies Regulatory Authority (SASRA) was established as the government's principal agency for supervision and regulation of SACCOS societies pursuant to the SACCOS Societies Act of NO. 14 of 2008 (SASRA report, 2021). The SACCOS Societies Regulatory Authority has its functions in providing licences to SACCOS and regulating and supervising all SACCOS in Kenya.

Ideally, the motivation behind the establishment of SACCOS is in promoting savings and making credit available to its members. Access to services including credit, savings and training provided by SACCOS play an important role in the formation of small and micro businesses, therefore, improving the livelihoods of its people (Gogo and Olouch, 2017). SACCOS members can mobilise internal resources and exploit opportunities at their disposal through access to these services to improve their livelihood outcomes (Msuya *et.al* 2022). In urban areas livelihood outcomes may include household assets, household savings, food, and non-food expenditure (Wolde, 2022; Mallya 2020; Maosa 2020).

Various studies have shown positive impacts on the role of SACCOS in improving the livelihoods of its members, and they include Moyo and Gasya (2022) and Ndangizi (2013). Other studies have focused on women and youth as SACCOS members (Rapando *et al.,* 2021; Aketch 2021; Tanusha 2021; Kaaya, 2018). However, there exists scepticism among scholars who question whether SACCOS improve the livelihoods of its members particularly the poor members (Richardson and Finnegan,

2014). SACCOS in Kenya are faced by a myriad of challenges including high illiteracy levels among members and inadequate capital which affects livelihood outcomes (Gogo and Olouch, 2017).

Even though studies have been conducted to assess the role of SACCOS in improving livelihoods in different countries, most of them have focused on individual's income as a livelihood outcome particularly in rural areas. For instance, a study by Wolde (2022) in Ethiopia on factors influencing SACCOS in improving members' livelihood revealed that SACCOS had a positive effect on livelihoods outcomes as 90% of the members in the rural district of Shebidino Chalala in Ethiopia livelihoods were improved. Additionally, a study by Mallya (2020) in the rural district of Moshi, Tanzania, and another by Meli (2020) on the effect of SACCOS products on economic well-being of members' households in Nandi County, Kenya both found out that SACCOS had a positive impact on members household income. Little is known on the role of SACCOS on members' livelihood outcomes in the urban areas as most of the research is centred on rural areas. Therefore, there is a gap in knowledge and this study sought to fill that gap by examining the role of SACCOS' intervention on members' livelihood outcomes in Kasarani Sub County, Kenya.

1.2 Statement of the Problem

Kenya, like most Sub-Saharan African countries, is still characterised by high levels of poverty and inequality (Jimenez *et al.,* 2021; Song and Imai, 2019; Thomas 2019). According to the Kenya National Bureau of Statistics Report (KNBSR, 2021), Kenya's historical roots, political dynamics, and socio-economic structure have contributed significantly to persistent inequality and poverty since the pre-independence era. This multifaceted issue, as highlighted by KNBSR (2021), has led to the exclusion of large segments of the Kenyan society from economic opportunities, severely restricting individual livelihood outcomes. The report emphasised that poverty and high levels of inequality result in social exclusion, depriving marginalised populations of access to income sources, markets, education, and quality health services, thereby profoundly impacting their livelihoods. These circumstances, as highlighted in a comprehensive study by Owino and Muga (2020), showcased the enduring impact of historical, political, and socio-economic factors on limiting economic opportunities, perpetuating social exclusion, and shaping livelihood outcomes in Kenya.

Kenya has been at the forefront of eradicating poverty right from the time of independence when the founding fathers declared poverty as one of the three ills that had to be fought. Despite the concerted efforts, eradicating poverty has been elusive (Odhiambo, 2019). Kenya's vision 2030 – the country's economic blueprint to becoming a middle-income industrialised economy by 2030- envisions poverty levels below 10% by 2030. Indeed, the goal was to reduce poverty rates by 2012 to a range of 30-35% (Odhiambo, 2019). This was not achieved as over 45% of Kenyans still live below the poverty line (UNDP, 2022).

Some scholars assert that SACCOS are the gateway for reduced inequality and better living conditions, indicating a potential positive impact on the poverty welfare of their members (Ermias 2022; Elias 2020; Mallya 2020; Maosa 2020). Wanyama *et al.,* (2008) asserts that in urban areas the proliferation of SACCOS has integrated people from different professional and income categories whereby high -ranking professionals employed in organisations, around which SACCOS are formed, find themselves cooperating with their poor juniors in the same SACCOS. Thus, it is the services rendered by SACCOS that form the basis for membership. In addition, most of the scholars conclude that SACCOS are the financial solutions to their members, and they are the sources of income for improved individual assets, business capital, diet, and food adequacy (Moyo and Gasya 2022; Oluyombo 2016; Mboka, 2014).

However, these conclusions are contradictory with findings of other scholars. Churk (2015) asserts that SACCOS have played a minimal role towards promoting livelihoods due to insufficient credit facilities offered by SACCOS. Some scholars questioned whether SACCOS services really improved the livelihood outcomes of their members particularly small-scale farmers who are continually at the mercy of extreme poverty in both rural and urban areas (Gikuri and Sanka, 2018; Finscope 2017; Habte 2016). This is particularly evident in Kasarani Sub County whereby despite Nairobi County having the highest number of SACCOS in Kenya, poverty rates remain high at 30.5% (KNBS, 2021). Thus, the ultimate question remains whether SACCOS play a significant role in improving the livelihood outcomes of its members. To address this gap in knowledge, the study aimed to assess the role of SACCOS in improving livelihood outcomes in Kasarani Sub County, Kenya. Specifically, this study focused on four key livelihood indicators; value of household

assets, savings, per capita on food expenditures, and per capita on non-food expenditures. By examining these outcomes, the study sought to determine whether SACCOS play a significant role in improving the livelihoods of their members and reducing inequalities in respect to livelihood outcomes in the area.

1.3 Objectives of the Study

1.3.1 Main objective

The main objective of this research was to assess the role of SACCOS in improving members' livelihood outcomes in Kasarani Sub County, Kenya.

1.3.2 Specific objectives

i.   To examine members' participation in financial services offered by SACCOS in Kasarani.

ii.   To examine the influence of demographic factors on members' livelihoods outcomes in Kasarani.

iii. To compare livelihood outcomes between SACCOS members' and non-members in Kasarani.

1.4 Research Question and Hypotheses

The study sought to answer the following research question and hypotheses:

i.   How do members participate in financial services offered by SACCOS in Kasarani, Sub County?

Null Hypotheses

ii   Demographic factors do not influence SACCOS members' livelihoods in Kasarani.

iii. The mean livelihood outcomes between SACCOS members and non-members in Kasarani do not significantly differ.

1.5 Significance of the Study

The findings of this study contribute to the United Nations Sustainable Development Goals (UN SDG) since they are involved in very diverse economic sectors that impact and contribute substantially to the global objectives pursued. SACCOS are highly important to the realisation of SDGs such as; Goal 1- No Poverty (SACCOS help in achieving this goal by identifying economic opportunities for their members and mediating member access to assets thereby supporting sustainable livelihoods), Goal

4- Quality Education (SACCOS play a significant role in facilitating access to education by increasing household incomes, which translates into the ability to meet educational costs) and Goal 8- Decent Work and Economic Growth (SACCOS employ people directly and they indirectly promote employment and self-employment opportunities in areas where the public and private institutions are weak or absent).

Moreover, the findings of this study provide empirical evidence and added new knowledge to the existing writing in the understanding of SACCOS and members' livelihood in an urban setting specifically in Kasarani Sub County. By focusing on an urban area, this study provides knowledge that extends beyond the existing body of literature, providing valuable perspectives for policymakers and practitioners seeking to implement sustainable livelihood improvement initiatives in urban environments.

Furthermore, this study not only identifies key areas for improvement within SACCOS in Kasarani Sub County but also provides actionable recommendations to address these challenges. By emphasising the importance of active member engagement, tailored services for diverse demographics, and broader community outreach, the study offers practical strategies for SACCOS to enhance their impact. The gathered information serves as a roadmap for formulating effective government policies that align with UN SDGs, promoting sustainable development, and addressing socio-economic issues within the community.

1.6 Organisation of the Study

Chapter One: The first chapter laid the groundwork for the study. The chapter introduced the topic, explaining the context and relevance of the research in the realm of SACCOS and members' livelihood outcomes. It set the stage by defining the research problem, stating the objectives, and outlining the research questions. This chapter also provided a brief overview of the methodology and the significance of the study, giving readers a clear understanding of what the research entailed and its importance to various stakeholders.

Chapter Two: The second chapter delved into a comprehensive literature review. This chapter was critical in establishing the theoretical foundation of the study. It encompassed a detailed analysis of existing research and theories related to financial services of SACCOS and demographic factors in improving members' livelihood

outcomes. By reviewing and synthesizing previous studies, this chapter helped in identifying gaps in the existing literature and justifying the need for the research.

Chapter Three: The third chapter detailed the research methodology used in the study. This included a description of the research design, data collection methods, and the analytical techniques employed. The study elaborated on how the sample was selected and the rationale behind choosing Kasarani Sub County as the study area. This chapter served to validate the reliability and validity of the research, ensuring that the findings were grounded in robust and systematic methods.

Chapter Four: The fourth chapter presented the findings of the research. This chapter was structured to systematically address each of the research objectives. The chapter discussed the results in the context of the members' participation in SACCOS financial services namely: savings, loans, investment opportunities and marketing. Additionally, it discussed the influence of demographic factors such as age, gender, education, household size and occupation on members' livelihood outcomes. Finally, it compared the livelihood outcomes between SACCOS members and non-members and compared these findings with the literature reviewed in Chapter Two.

Chapter Five: The final chapter summarized the entire study, drawing conclusions based on the findings from the previous chapter. It presented the implications of the findings for SACCOS members and non-members, improvement in livelihood outcomes and policy makers. Additionally, this chapter offered recommendations for practice, policy, and future research, thereby providing a comprehensive closure to the dissertation while also pointing towards potential areas for further study in this field.

CHAPTER TWO

2.0   LITERATURE REVIEW

2.1   Operational Definitions of Variables

2.1.1 Co-operative societies

Gazda and Ménard (2020) defined Co-operatives as "unique economic entities characterised by member ownership, democratic governance, and a commitment to advancing the collective well-being of their members by jointly owning and managing enterprises." The International Cooperatives Alliance (ICA, 2022) defined a Co-operative as "an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise." This study adopted the Co-operative definition by ICA which is universally acknowledged and forms the hallmarks of their unique identities, and which distinguishes them from other conventional business enterprises.

2.1.2   Savings and Credit Co-operatives Societies (SACCOS)

 The World Council of Credit Unions (WOCCU) defines SACCOS as co-operatives specialised in savings mobilisation and credit provision. SACCOS rely on mobilising resources from members, thereby establishing a pool of funds for lending activities (WOCCU, 2022). The African Confederation of Cooperative Savings and Credit Associations (ACCOSCA, 2018) defines SACCOS, as member-owned and member-controlled financial cooperatives that mobilise savings from their members and provide affordable credit and financial services to support the economic well-being of their members. SACCOS are financial institutions that operate on a cooperative basis, providing their members with a range of financial services such as savings, loans, and other credit-related services (SASRA report, 2021). This study adopted the definition by SASRA which is the SACCOS Societies Regulatory Authority established in Kenya as the government's principal agency for supervision and regulation of SACCOS.

2.1.3   Livelihood

The term livelihood is often used interchangeably with economic strengthening, and it refers generally to economic production, employment, and household income (Hailu, 2020). At its most basic, a livelihood is a means to a living. For this study, the

researcher adopted a popular definition provided by Chambers and Conway (1992), wherein a livelihood comprises the capabilities, assets and activities required for a means of living.

2.1.4 Livelihood strategies and outcomes

Livelihood strategies aim to achieve livelihood outcomes. Livelihood strategies are the ways that individuals and households choose to use, transform, and reproduce their capital stock or resource base in pursuit of livelihood goals (Turner, 2019). Decisions on livelihood strategies inform natural-resource-based activities, non-natural resource-based and off-farm activities, migration and remittances, pensions and grants, intensification versus diversification, and short-term versus long-term outcomes, some of which may compete (Serrat, 2017). Livelihood outcomes are the tangible and intangible results or impacts of these strategies; they encompass a range of dimensions, including economic, social, and environmental aspects (Chambers and Conway, 1992). Potential livelihood outcomes can include household assets, household savings, and increased income, enhanced health, improved food security, more sustainable use of the natural resource base, and recovered human dignity (Serrat, 2017). These outcomes contribute to poverty reduction by enhancing economic stability and resilience, promoting sustainable resource management, and fostering overall community well-being (Ellis, 2000).

2.1.5 Participation

Participation is a term that embraces a wide range of possible meanings. Many different actors in development adopt the language of participation, but with different and sometimes contradictory motivations and objectives. According to the UNDP Human Development Report (2022), Participation refers to the close involvement of people in the economic, social, cultural, and political processes that affect their lives. This is actively engaging in the various activities of the SACCOS, such as saving, borrowing, and investing in the organisation. In the context of this study participation in financial services includes involvement in the use of financial services, involvement in improving financial services, involvement in marketing of financial services and involvement in investment opportunities.

2.2   Theoretical Review

2.2.1 The Sustainable Livelihoods Approach (SLA)

Although the SLA is accredited to the British Department for International Development (DFID) it is recognized that the definition of the framework is traceable from other writers, namely Chambers and Conway (1992). It is a holistic approach that tries to capture and understand the fundamental causes of poverty without collapsing the focus onto just a few factors. It is based on evolving thinking about the way the poor and vulnerable live their lives and the importance of policies and institutions. The approach is aimed to help people achieve lasting livelihood improvements measured using poverty indicators that they themselves define. SLA helps to formulate activities that are people centred, responsive and participatory, multilevel, conducted in partnership with the public and private sectors, dynamic and sustainable (Chambers and Conway, 1992). SLA describes how different factors such as the vulnerability context; household assets (human capital, physical, financial, natural, and social capital), institutions and household strategies affect livelihood outcomes.

According to the British Department for International Development (2001), the SLA is built around five principal categories of livelihood assets, graphically depicted as a pentagon to underline their interconnections and that livelihoods depend on a combination of assets of various kinds and not just from one category. Therefore, an essential part of the analysis is determining people's access to different assets (physical, human, financial, natural, and social) and their ability to put these to productive use. The Approach offers a way of assessing how organisations, policies, institutions, and cultural norms shape livelihoods by determining who gains access to which types of assets and defining what range of livelihood strategies are open and attractive to people.

Regarding this study SLA is employed to evaluate how SACCOS, as external institutions, contribute to improving the livelihood outcomes of their members. The provision of microfinance services, such as financial and non-financial services, by SACCOS supplements and strengthens household assets, including human capital, physical assets, financial resources, natural resources, and social capital. This approach aims to help households attain improved livelihood outcomes, measured using poverty indicators that are defined by the individuals themselves. Specifically, the study

objectives were derived from the SLA framework. Aligned with the SLA's emphasis on assessing access to diverse assets, the first objective of the study was to examine members' participation in financial services provided by SACCOS in Kasarani. By examining members' engagement with SACCOS financial services such as savings and loans, the study aimed to discern how SACCOS contributed to enhancing the financial capital of their members.

The second objective recognized the influence of demographic factors on members' livelihood outcomes in Kasarani. This resonated with the SLA's acknowledgment that livelihood outcomes are shaped by various elements, including demographic factors. The study considered the broader contextual factors in which individuals live, aiming to understand how demographic factors like age, gender, education, household size and occupation influenced the livelihood outcomes of its members.

The third objective sought to compare the livelihood outcomes between SACCOS members and non-members in Kasarani. This objective reflected the SLA's core focus on assets and their productive utilisation. By comparing the livelihood outcomes of SACCOS members and non-members, the study aimed to shed light on how access to specific assets, in this case, SACCOS services, contributed to distinct livelihood outcomes.

2.3 Empirical Review
2.3.1 Demographic factors and participation in SACCOS financial services
SACCOS play a critical role in providing financial services to communities, particularly in developing countries. They help facilitate economic growth and financial inclusion. However, the participation in these institutions can be affected by various demographic factors such as gender, age, level of education, occupation, and household size. Research has shown that gender plays a significant role in the participation in SACCOS. Men and women can have different saving and borrowing behaviours, influenced by socio-cultural factors, income levels, and the gender dynamics within a particular community (Aggarwal *et al.,* 2019). For instance, in some societies, women might have less access to financial resources, or may face cultural restrictions that inhibit their full participation in financial cooperatives.

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Muriithi (2014) further asserts that there is a noticeable difference in the saving and borrowing behaviours of men and women, which is often a result of socioeconomic conditions, cultural norms, and existing gender dynamics within a society. Kituku *et al.,* (2016) also found that in many societies, women might have less access to financial resources due to systemic gender disparities. These limitations can, in turn, lead to lower participation in financial cooperatives such as SACCOS. Societal expectations and roles also greatly affect how men and women interact with financial systems, which can impact their level of involvement in these cooperatives.

Furthermore, a study by Demirgüç-Kunt *et al.,* (2019) found that societal factors and norms may discourage women from participating in SACCOS, despite the potential benefits. The research revealed that women, particularly those in low- and middle-income countries, are less likely to have a bank account or access to formal financial services, including credit, compared to men. This gender gap in financial inclusion suggests a similar gap may exist in the participation in SACCOS, where women face more significant barriers to entry and participation. A study by Asiimwe (2021) indicated that there is need for policies that address these gender-related barriers, to ensure equal participation in financial cooperatives such as SACCOS.

Age can impact one's level of participation in SACCOS. Generally, the middle-aged group is more likely to participate in SACCOS because they are often at the peak of their earnings, and thus have more financial resources to save or invest (Njuguna and Ngugi, 2010). They are also more likely to require loans for investments like housing, business expansion, or education for their children. Age can substantially influence the level of participation in SACCOS. According to a study by Girma (2021), different age groups have varying degrees of participation in these financial cooperatives. The middle-aged group, typically those in their peak earning years, have more financial resources to save or invest, which often translates into higher participation in SACCOS. They are also more likely to take loans for various investment purposes such as housing, business expansion, or their children's education. Consequently, their engagement with the services offered by SACCOS tends to be more substantial.

According to Njoroge *et al.,* (2019), younger individuals may be less engaged because they are often at the beginning of their careers and may not have enough financial

resources to contribute regularly to these cooperatives. Older individuals, who are more likely to be out of the labour market or in retirement, may also participate less due to a reduced income stream. This difference in the degree of participation is not only due to income fluctuations but may also be influenced by the varying needs and priorities across different age groups (Nkundabanyanga *et al.,* 2014).

According to Komba *et al.,* (2020), the level of education has been associated with the understanding of the benefits provided by SACCOS and hence the likelihood of participating. Higher levels of education can lead to better financial literacy, which, in turn, can result in a more profound understanding of the benefits of SACCOS, promoting more significant participation (Cole *et al.,* 2011). The level of education significantly influences participation in SACCOS. A study by Chimdi *et al.,* (2020) indicated that a higher level of education generally leads to better financial literacy, which is integral for understanding the benefits of SACCOS. Individuals with higher education are more likely to have a comprehensive understanding of the role and functioning of SACCOS, as well as the potential advantages they can accrue from their participation, thereby prompting higher involvement.

Additionally, Zins and Weill (2016) found that education can act as an enabling factor for accessing and using formal financial services, including those provided by SACCOS. The research revealed that better-educated individuals are more likely to be financially included, as education enables them to comprehend the potential benefits of using formal financial services and navigate the complexities associated with these services. Thus, the level of education can significantly determine the extent to which individuals participate in SACCOS, underscoring the need to incorporate financial education in efforts aimed at promoting financial inclusion.

Occupation particularly that, which provides a stable income, can influence an individual's participation in SACCOS. Those with stable incomes are more likely to have the financial ability to save and hence join SACCOS. On the other hand, those with irregular income may find it challenging to keep up with the regular contributions required by these institutions (Gugerty, 2007). According to Komba *et al.,* (2020), occupation plays a crucial role in influencing the participation in SACCOS. Individuals with stable occupations or those that provide a consistent income are more

likely to actively participate in SACCOS. These individuals have a regular income stream, making it feasible for them to make consistent contributions required by SACCOS (Chelimo, 2023). For instance, salaried employees, farmers with regular harvests, or small business owners with consistent revenues are more likely to be active members.

On the other hand, Solomon (2022) indicates that individuals in informal sectors or with irregular income streams may face challenges in maintaining consistent participation in SACCOS. According to a study by Aggarwal *et al.,* (2019), individuals in unstable occupations or those who earn daily or seasonal incomes may have difficulties in meeting the regular contribution requirements. This irregularity in income often presents a barrier to access and participate fully in the financial services provided by SACCOS. According to Sirengo (2019) occupation and the nature of income significantly influences the participation of individuals in these financial cooperatives.

2.3.2 SACCOS on members' livelihood outcomes

Studies conducted across various African countries, namely Ethiopia, Uganda, Tanzania, and Kenya, provided valuable insights on the impact of SACCOS on members' livelihoods.

In Ethiopia, a study by Wotasa (2022) aimed to assess the influence of SACCOS on improving the livelihoods of its members in Shebedino Chalala District. Employing a combination of descriptive and explanatory research design, the study, which included 120 SACCOS members as the research sample, revealed that SACCOS played a pivotal role in enhancing members' livelihoods by facilitating easy access to loans, providing savings accounts, and offering sufficient loans to meet members' needs. Notably, the study recommended that SACCOS should provide guidance, especially to new members, before advancing loans.

In Uganda, Basude and Abas (2021) conducted a study on the role of SACCOS in poverty reduction in Ntungamo Municipality. Using a descriptive cross-sectional survey with a sample population of 200 members, the study highlighted that SACCOS significantly contributed to poverty reduction by providing economic and social support through access to credit services. The findings indicated positive changes in

the standard of living among members, enabling them to afford essential services such as education, health, and food. The study suggested the need for SACCOS to offer entrepreneurial skills training and familiarise beneficiaries with loan and savings terms and conditions for optimal utilisation of microfinance services.

In Tanzania, Mallya (2020) conducted a study to explore the impact of SACCOS on improving the livelihoods of clients in Moshi rural district. With a sample size of 120 respondents, the study found that SACCOS served as a significant source of business capital, enabling members to invest in ventures such as motorcycles, cars, and farms. The study concluded that SACCOS had a positive impact on savings mobilisation, assets, education, health, business, and investment. However, these findings contradicted with a study by Churk (2015) on the Contribution of SACCOS in improving the livelihood of Makungu Ward in Iringa, Tanzania, which identified the negative impact of exorbitant interest rates charged by SACCOS, which led to a perception of no benefits among 53.7% of the respondents. The study concluded that SACCOS should lower the interest rates, extend time back for repaying back SACCOS loans, and SACCOS should provide financial support to the activities that meet the needs of rural people.

In Kenya, Meli (2020) conducted a study focusing on the effect of SACCOS products on the economic well-being of households in Nandi County. Utilising a descriptive research design with a sample size of 272 respondents, the study found that SACCOS, through their loan products, improved members' livelihoods by enabling investments in various income-generating activities, ultimately enhancing household income. These findings were consistent with a study by Rapando *et al.,* (2021) in Kisii County, Kenya, which highlighted the positive impact of Youth Bunge SACCOS on economic empowerment through entrepreneurial and business training. The study recommended more extensive entrepreneurship education and training, including financial literacy and business development, to attract more youth to actively participate in SACCOS.

2.4 Literature Gap

While existing literature sheds light on the positive impact of SACCOS in rural areas, a significant research gap exists in understanding their role in urban settings, particularly within Kasarani Sub County, Kenya. This study aimed to address this gap

by assessing how SACCOS contribute to the livelihood outcomes of members in an urban context. The synthesis of theoretical and empirical reviews emphasises the need for a nuanced understanding of demographic factors and their interplay in influencing participation and outcomes. By focusing on an urban area, this research sought to provide insights that go beyond the predominantly rural-centric studies, offering valuable perspectives for policymakers and practitioners striving for sustainable livelihood improvements in urban environments.

2.5 Conceptual Framework

The conceptual framework outlines the relationship between independent variables, which are demographic factors and SACCOS financial services, and the dependent variable, which is the livelihood outcome. There is a casual relationship implied in this framework, as changes in the independent variables are expected to influence the dependent variable. For example, demographic factors such as higher levels of education or income may be associated with higher levels of savings and assets, while larger households may have lower per capita spending on food and non-food items. SACCOS financial services such as participating in savings, loans, fund transfers, and investment opportunities, may also affect members' livelihood outcomes. For example, access to credit through loans may enable SACCOS members to invest in income-generating activities, while participating in savings schemes may increase members' ability to save and accumulate household assets over time.

INDEPENDENT VARIABLES   **DEPENDENT VARIABLE**

Demographic Factors
- Age
- Gender
- Education
- Household size
- Occupation

SACCOS Financial Services
- Participating in savings
- Loans
- Fund transfers
- Investment opportunities

Livelihood Outcomes
- Value of Household assets in Ksh
- Savings in Ksh
- Per Capita on Food Expenditures in Ksh
- Per Capita on Non-Food expenditures in Ksh

Figure 1: Conceptual Framework

Source: Researcher, (2023)

CHAPTER THREE

3.0 METHODOLOGY

3.1 Research Design

This study adopted a cross sectional research design. The cross-sectional design involves collecting data at a single point of time (Wang and Cheng, 2020). In a cross-sectional design, data is collected on the prevalence, distribution, and association of variables of interest within the study population (Otiende *et al.*, 2020). Cross sectional design was suitable for this study because it enabled the researcher to examine the relationship between SACCOS services and the livelihood outcomes of its members.

3.2 Geographical Coverage

The study was conducted in Kasarani Sub County, Kenya. The area was selected for the study because of three main reasons. First, Kasarani is a diverse Sub County with a population of different ages, education level and occupation. The diversity of the population makes it an ideal location to investigate the influence of demographic factors on the livelihood outcomes of SACCOS members. Secondly, the government of Kenya has been emphasising the importance of SACCOS in promoting financial inclusion and economic development in the country. Therefore, researching SACCOS in Kasarani was policy-relevant, and the findings could contribute to the development of policies aimed at improving the livelihoods of Kenyans. Lastly, Kasarani Sub County has a well-established network of SACCOS that play a significant role in the local economy. The concentration of these cooperatives provides a rich environment for studying the variations in SACCOS' structures, operations, and their impact on members' livelihoods. This allowed for a comprehensive understanding of the cooperative landscape and its implications for financial inclusion and economic development.

Map: Kasarani Sub- County

Source: Independent Electoral Board Commission (IEBC), 2022

3.3 Sampling

3.3.1 Target population

The target population of the study area included both SACCOS members and non-members in Kasarani Sub County. This is because it enabled the researcher to compare the livelihood outcomes of SACCOS members and non-members.

3.3.2 Sampling frame

The sampling frame for this study focused on three strategically chosen SACCOS within Kasarani Sub County: Stima SACCO, Mwalimu SACCO, and Kenya National Police SACCO. Each SACCOS represents a unique profile with distinct characteristics contributing to their significance in the local financial landscape. Stima SACCO stands out with a diverse and extensive membership base of 177,260 members and a total asset of Ksh 53.7 billion, comprising savings of Ksh 39.4 billion, loans of Ksh 41.3

billion, and a share capital of Ksh 2.9 billion (Stima SACCO report, 2022). Mwalimu SACCO, characterised by a large and varied membership of 123,000 members, boasts a total asset of Ksh 60.6 billion, with savings amounting to Ksh 44.2 billion, loans of Ksh 38.2 billion, and a share capital of Ksh 1.78 billion (Mwalimu SACCO report, 2021). Kenya National Police SACCO, representing a significant portion of the local population, features a membership base of 72,000 members, along with assets totalling Ksh 44 billion, savings of Ksh 23.5 billion and share capital of Ksh 3 billion (Kenya National Police SACCO report, 2022). The selection of these SACCOS was purposive, driven by their large and diverse membership bases, significant financial assets, and influential roles in the financial landscape of Kasarani Sub County.

3.3.3 Sample size and sampling techniques

3.3.3.1 Sample size

This study used Fisher *et al., (*1998) formula to determine the sample size. Fisher *et al*., (1998) formula is applied because the population is unknown. In addition, the formula has a very high level of accuracy providing for only a 5% margin of error and it determines whether there is a significant association between two categorical variables. As such the sample size of the study under Fisher *et al.,* (1998) formula is 385 as calculated below:

n= ($Z \wedge 2 * p * q$) / $E \wedge 2$

Where:

n: sample size

z: the z-score or critical value corresponding to the desired level of confidence. For example, for a 95% confidence level, z=1.96

p: the estimated proportion of the population with the characteristic of interest (expressed as a decimal).

q: proportion of population without the characteristic (expressed as decimal; q=1-p)

E: margin of error (expressed as a decimal).

Note that the formula assumes that the sample is taken randomly and independently from the population.

n= $(1.96 \wedge 2 * 0.5 * (1 - 0.5) / (0.05 \wedge 2)$ n =384.16

$$\text{Sample size} \cong 385$$

Based on recommendations by Habte (2016), the study adopted a sample size of 385 respondents with a 2-to-3 ratio of members to non-members to yield the best results. The 2-to-3 ratio of members to non-members is in line with the Propensity Score Match (PSM) which is used to reduce confounding biases. PSM requires the selection of more non-members than members to match the observable characteristics of the two groups. During matching, some non-members who did not conform to the desired characteristics were dropped, (Habte, 2016). The study used a survey questionnaire to collect data from 385 respondents comprising 154 members and 231 non-members.

3.3.3.2 Sampling techniques

This study adopted both purposive and simple random sampling (lottery methods) to generate the required sample. Purposive sampling was used to select SACCOS in the study area. The SACCOS selected for the study were: Stima SACCO, Mwalimu SACCO and Kenya National Police SACCO. The selected SACCOS had a large and diverse membership base, which provided a comprehensive sample for the study. Additionally, these SACCOS were significant players in the financial landscape of Kasarani Sub County, and they held a substantial influence over the local economy (SASRA report, 2021). Simple random sampling technique was used to select members and non-members. Members were selected randomly from the register books in respective SACCOS whereas non-members were selected randomly from the census population list of wards where the SACCOS were located.

3.4 Data Collection

3.4.1 Types of data

The study employed a Sequential Explanatory Mixed Methods approach, which collected both quantitative and qualitative data. The two types of data were utilised to complement each other since there were some questions that required both types of data.

3.4.2 Sources of data

The study utilised the primary source of data from the respondents in the study area to achieve the objectives and to answer the research question. Primary data was obtained from Stima SACCO, Mwalimu SACCO and Kenya National Police SACCO using questionnaires. Key informant interviews were conducted to supplement the

questionnaire data, providing valuable insights and context to enhance the depth of understanding. Primary data increased the reliability of the collected data since the data was collected directly from respondents and specifically for this study's objectives.

3.4.2.1 Primary data

Primary data was collected through questionnaires, and key informant interviews, which ensured a comprehensive understanding of the SACCOS and their impact on livelihood outcomes. The process of selecting respondents and key informants was deliberate and systematic. For the questionnaire-based data collection, a two-fold sampling approach was adopted. Firstly, a simple random sampling technique was employed to select members and non-members from the chosen SACCOS namely: Stima SACCO, Mwalimu SACCO, and Kenya National Police SACCO. Members were randomly selected from the membership registers of the respective SACCOS, ensuring a representative sample. Simultaneously, non-members were randomly chosen from the census population list of wards where the SACCOS were located.

This method aimed to capture diverse perspectives within the study area. Key informants, including board members and SACCOS employees, were purposefully selected based on their roles and expertise within the organisations. The selection aimed to encompass individuals with in-depth knowledge of the services and products offered by the SACCOS. These key informants provided valuable insights into the eligibility criteria for membership, the application process for loans, and the repayment terms, contributing essential context to the study.

3.5 Data Collection Methods

3.5.1 Survey

The study used surveys as the primary data collection method with a carefully designed questionnaire (see Appendix I) serving as the key data-gathering tool. The utilisation of this approach allowed the researcher to gather both quantitative and qualitative insights from the respondents. The questionnaire comprised both open-ended as well as closed -ended questions concerned with issues related to the role of SACCOS in members' livelihoods outcome. The use of open-ended questions was to motivate the respondents into answering without holding back any essential information to the researcher. On the other hand, closed ended questions were used to

limit the respondents in the responses they give. Open ended questions (unstructured) gave room for deep and sincere responses whereas closed-ended (structured) questions were meant for easier evaluation.

3.5.2 Key Informant Interviews (KIIs)

Semi-structured key informant interviews (see Appendix II) were conducted to provide additional information on a few items that were not exhausted through the questionnaires. Individuals with in-depth knowledge of the SACCOS operations, services, and memberships were purposely chosen to provide valuable insights. The selection process considered factors such as tenure, expertise, and involvement in decision making processes within the SACCOS. The key informants included 5 respondents: 1 district manager, 2 SACCOS employees, 1 SACCOS board member and 1 SACCOS regulator. Key informants had extensive knowledge on SACCOS, and they provided access to specialised information and insights that were not available through other data collection methods.

3.6 Data Reliability and Validity

3.6.1 Data reliability

The study used multiple data collection techniques involving both questionnaires and key informant interviews to enrich the soundness of the research findings. Prior to data collection, a pilot study of 10 participants was conducted to test the reliability of the study and to detect errors in the data collection process. This helped to discover errors on issues raised such as ambiguous instruction or wording, inadequate time and measurability of variables defined. The 10 participants were chosen according to Connelly's (2008) recommendations that the sample size of the pilot study should be 10% of the actual sample size of the study. Cronbach Alpha coefficient was used to test for the internal consistency of the questionnaire. A value above 0.7 was used as recommended by Creswell (2016), otherwise, the instrument had to be modified. Table 1 shows reliability test results.

Table 1: Data reliability

Variable	Cronbach's Alpha	N of Items
Members' Participation	0.792	8
Members' Livelihoods Outcomes	0.815	22
Average	**0.8035**	**15**

The results revealed a high average Cronbach's alpha value of 0.8035 which was greater than the recommended minimum value of 0.7. The research tool was thus considered reliable.

3.6.2 Data validity

The survey questionnaire was subjected to content validity tests to ensure that the instruments had enough number of items to measure the required subject. This was done by requesting experts to review and make recommendations on recasting poorly phrased or out-of-objective questions. Content validity was then tested using a content validity index (CVI) which was determined by dividing the number of valid questions (26) by the number of total questions (30) leading to CVI of 0.867 which was above 0.5 as Ammari (2022) recommended.

$$\text{CVI} = \frac{Number\ of\ Valid\ Questions}{Total\ Number\ of\ Questions} = \frac{26}{30} = 0.867$$

3.7 Data Analysis

Quantitative data was analysed with the help of Statistical Package for the Social Sciences (SPSS). The study summarised the quantitative dataset using the standard and mean deviation, the independent two-sample t-test for comparison of livelihood outcomes for members and non-members, and multiple regression model was used to analyse the influence of demographic factors on livelihood outcomes. The standard and mean deviation were employed in the study to measure the variability and dispersion within the dataset; therefore, they ensured a comprehensive understanding of the data's spread. These statistical measures provided crucial insights into data consistency (Hair *et al.,* 2022). Furthermore, the study used the two-sample t-test which is a commonly used method for comparing means between two groups. This was particularly useful when comparing the differences in livelihood outcomes between SACCOS members and non-members. This approach is well-established in research, as illustrated by Howell (2019), who emphasised its applicability in hypothesis testing. The study used the multiple regression model as it examined the relationship between multiple independent variables and the dependent variable. Multiple regression explores the influence of demographic factors on outcomes as highlighted by (Tabachnick and Fidell, 2019).

For qualitative data i.e. Data from Key Informant Interviews was analysed using content analysis and was transcribed, coded, and contextualised under the study's specific objectives. The content was systematically analysed, and patterns were identified to derive meaningful information.

For the dependent variable, livelihood outcomes were applied in this study to obtain the value of household assets in Kenyan Shillings (Ksh), annual savings in Ksh, monthly per capita food expenditure in Ksh and annual per capita non-food expenditure in Ksh. These livelihood outcomes were selected because they are common household aspects that might be affected by microfinance services in urban areas of developing countries. Household assets were measured by summing up total values in Ksh of transport-related assets, appliances and electronics, access to modern fuel and electricity assets owned by households for the previous 12 months before the collection of data.

Household savings were measured by summing up total values in Ksh from SACCOS for the previous 12 months before the collection of data. Food expenditure was measured by the per capita value in Ksh of monthly food items consumed by households. Non-food expenditures were measured by per capita value in Ksh of non-food items incurred by households for 12 months before collection of data. The items included in non-food items were school expenses and medical expenses. In the case of qualitative data, all the information collected was used for the purposes of academic research only. The identity of the participants was kept anonymous by using uniquely generated codes, Key Informant Interviews KII 1 to KII 5. Table 2 shows the coding system used to represent key informant interviews.

Table 2: Coding System

In-Depth Interviewee	Code	Themes
1 District Manager	KII 1	SACCOS Financial Services
2 SACCOS Employees	KII 2-KII 3	Demographic Factors
1 SACCOS Board Member	KII 4	Participation in decision-making processes
1 SACCOS regulator	KII 5	Livelihoods outcomes

The assumption tests conducted included: Diagnostic Tests, Test for Normality and Test for Multicollinearity. Variance Inflation Factor (VIF) was used to test for multicollinearity and VIF of below 10 indicated acceptable limits. Data analysis is further explained below:

3.7.1 Objective one: Members' participation in financial services offered by SACCOS.

Members' participation in financial services offered by SACCOS was analysed using descriptive statistics and content analysis. Specific descriptive statistics used included standard and mean deviation hence giving statistical meaning to the raw data. Descriptive statistics comprehensively analysed the financial services offered by SACCOS in Kasarani. The method was used to reveal insights into the nature of participation of members in SACCOS financial services namely, marketing, utilisation of financial services, participation in investment opportunities, and savings and borrowing. Content analysis was used in analysing the qualitative data obtained from key informants' interviews.

3.7.2 Objective two: Influence of demographic factors on members' livelihoods outcomes

Multiple linear regression model was used to analyse the influence of demographic factors on members' livelihood outcomes. Specifically, the study regressed the relationship between demographic factors such as age, gender, level of education, occupation and household variables and livelihood outcomes which included: value of household assets, savings, food, and non-food expenditures. The null hypothesis was that demographic factors do not influence members' livelihood outcomes.

The multiple linear regression model that was used is shown in equation 1

$$Y = \alpha + \beta_1 Ag + \beta_2 Gen + \beta_3 Edu + \beta_4 HS + \beta_5 Op + e \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots. (1)$$

Where:

Y	= Dependent variable (Livelihood outcomes)
α	= intercept
β_1 to β_5	=Predictor variables regression coefficients
Ag to Op	= Predictor variables
Ag	= age
Gen	= gender
Edu	= education

HS   = household size

Op   = occupation

e   = error term

3.7.3 Objective three: Comparison of livelihood outcomes between SACCOS members and non-members

The independent two-sample t-test was used to compare the livelihood outcomes between SACCOS members and non-members. The variables under this objective were the value of household assets, savings, per capita on food expenditures and per capita on non-food expenditures. T-test compared the means of two independent groups and determined whether the difference between the means was statistically significant or not. In this case, the two groups were the SACCOS members and non-members. The null hypothesis in this objective was that the mean livelihood outcomes between SACCOS members and non-members do not significantly differ. The null hypothesis would not be rejected when the probability value is greater than the chosen significance level of 0.05 (i.e., $p < \alpha = 0.05$). The t-test formulation for equation 11:

$$t = (\bar{x}_1 - \bar{x}_2) - (\mu_1 - \mu_2)\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(11)$$

$$/ \sqrt{[(s^2{}_1 / n_{1)} + (s^2{}_2 / n_{2)}]}$$

Where; $x_1 - x_2$ represented the observed difference between sample means and where the expected value $\mu_1 - \mu_2$ equals to zero when no difference between population means is hypothesised. The denominator is the standard error of the difference between means. The decision to reject the null hypothesis would be reached when $p < \alpha = 0.05$; otherwise, there was no basis for rejection.

3.8 Diagnostic Tests

Before testing for the influence of demographic factors on livelihood outcomes, it was necessary to ensure non-violations of the assumptions of the multiple linear regression model. This study conducted tests for normality and multicollinearity.

3.8.1 Test for normality of data

To perform multiple linear regression tests on the data, the dependent variable must be normally distributed. In statistics, if the dependent variable (response variable) in a

dataset follows a normal distribution, then the dataset is normal or approximately normal (Freedman *et al.,* 2007). Kolmogorov Smirnov and Shapiro-wilk tests were used to test for normality for all the dependent variables and the result is displayed in Table 3.

Table 3: Test for Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Members' Outcomes	Livelihoods	.159	346	.113	.915	346	.201

a. Lilliefors Significance Correction

The result in Table 3 indicates the dependent variable was normally distributed since p-values were greater than 0.05 for both Shapiro-Wilk and Kolmogorov tests. These values confirm further that the data was normally distributed.

3.8.2 Test for multicollinearity

Multicollinearity exists when two or more predictor variables in a multiple regression model are highly correlated. A set of variables is perfectly multicollinear if there exists one or more exact linear relationship among some of the variables. For this study, Tolerance of the variable and the VIF value were used to test for multicollinearity where values more than 0.2 for Tolerance and values less than 10 for VIF were taken to mean there is no multicollinearity (Miles, 2014). The results are presented in Table 4.

Table 4: Multicollinearity test results

	Collinearity Statistics	
Variable	Tolerance	VIF
Gender	0.270	3.705
Age	0.421	2.376
Level of education	0.246	4.071
Occupation	0.303	3.306
Household Size	0.401	2.495

The results in Table 4 show that all the variables had a tolerance value >0.2 and VIF values <10 indicating that there was no multicollinearity among the variables.

3.9 Ethical Considerations

Prior to commencing the research, ethical protocols were diligently observed. Approval for the study (see Appendix III) was secured from Moshi Co-operative

University, signifying the researcher's status as a student, and requesting necessary assistance. Furthermore, a research licence (see Appendix IV) was obtained from the National Commission for Science, Technology, and Innovation (NACOSTI), permitting access to the selected SACCOS in Kasarani Sub County for data collection. A Plagiarism Report (see Appendix V) was utilised to cross-check and ensure the originality of the research, underlining the commitment to academic integrity.

CHAPTER FOUR

4.0 FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presents the study findings from analysis of the data collected from the field. This includes the demographic characteristics of the respondents and an in-depth discussion of the findings. The discussion of the findings is based on the main objective of the study in assessing the role of SACCOS in improving members' livelihood outcomes in Kasarani Sub County, Kenya. Specifically, the study sought to examine how members participate in financial services offered by SACCOS in Kasarani, to examine the influence of demographic factors on members' livelihood outcomes and to compare livelihood outcomes between SACCOS members' and non-members in Kasarani.

4.2 Response Rate

The study established the response rate to ascertain the representation and the quality of responses for the study. A total of 385 questionnaires were distributed to the sampled respondents comprising 154 SACCOS members and 231 non-members. Response rate is as shown in Table 5

Table 5: Response Rate

Questionnaires	SACCOS Members		Non-Members	
	Frequency	Response Rate (%)	Frequency	Response Rate (%)
Filled and returned	127	82.5	219	94.8
Not Returned	27	17.5	12	5.2
Total	**154**	**100**	**231**	**100**

Results in Table 5 shows that out of the 154 questionnaires administered to SACCOS members, 127 were duly filled and returned, yielding a response rate of 82.5% which was considered excellent for analysis. In addition, out of the 231 questionnaires administered to non-members, 219 were duly filled and returned, translating to a response rate of 94.8%. These response rates were found to be consistent with the average response rate for empirical studies of 65% of the sample as suggested by Baruch (1999). Similarly, this was in line with Orodho (2009) who observed that a response rate of above 50% contributes towards gathering sufficient data that could be generalised to represent the opinions of respondents about the study problem in the target population. The results can therefore be generalised and considered representative of the population.

4.3 Demographic Characteristics of the Respondents

To comprehend the demographic characteristics of the respondents involved, the study scrutinised the distinguishing aspects of the study's population. The results presented in this section showed key social demographic characteristics such as gender distribution, age composition, occupation representation, education levels and household size. These demographic factors played a pivotal role in assessing the role of SACCOS in improving members' livelihood outcomes in Kasarani Sub County, Kenya. For instance, gender distribution provided insights into distinct patterns observed in responses, while age composition highlighted variations in engagement across different age groups. Occupational diversity among respondents influenced their perspectives on the role of SACCOS in Kasarani. Education levels unveiled layers of knowledge and attitudes that shaped the study. Additionally, household size, with its implications for decision-making, added a familial dimension to the observed trends. By examining these factors, this study aimed to provide a nuanced understanding of the surveyed population's diverse profile, shedding light on their backgrounds, preferences, and potential trends. Such insights can be instrumental in informing decision-making processes and formulating targeted strategies across various domains, making the study an invaluable resource for researchers, policymakers, and organisations alike. Table 6 presents the demographic characteristics of the respondents.

Table 6: Demographic Characteristics of the Respondents

Category	SACCOS Members		Non- Members	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Gender				
Male	86	52.4	101	55.5
Female	78	47.6	81	44.5
Age				
18-28	69	44.5	87	45.5
29-39	44	28.4	54	28.3
40-50	24	15.5	28	14.7
51-60	11	7.1	13	6.8
Above 60	7	4.5	9	4.7
Level of Education				
Primary	15	9.4	18	10.1
Secondary	26	16.4	31	17.4
Tertiary	58	36.5	61	34.3
University	60	37.7	68	38.2
Occupation				
Employed	58	37.4	64	33.5
Self employed	39	25.2	44	23.0
Unemployed	22	14.2	27	14.1
Student	33	21.3	49	25.7
Others(specified)	3	1.9	7	3.7
Household Size				
Less than 3	34	26.8	80	36.5
3-5	70	55.1	93	42.5
More than 5	23	18.1	48	21.0

4.3.1 Gender

The respondents were asked to indicate their gender as this was necessary because gender analysis plays a significant role in the participation in SACCOS. This was important in identifying whether there was under representation or over presentation of a particular gender in the involvement and participation in SACCOS.

The results presented in Table 6 shows that among SACCOS members, 52.4% were male and 47.6% were female. In the non-members group, males accounted for a slightly higher percentage at 55.5%, while females made up 44.5%. This showed that both groups were balanced in terms of gender distribution, although males were slightly more predominant in both cases. This breakdown was essential in providing insights into the gender dynamics within the SACCOS operating in Kasarani Sub County and the extent to which they are inclusive and equitable. This is consistent with assertions by Aggarwal *et al.,* (2019) that gender plays a significant role in the participation in SACCOS and men and women exhibit different saving and borrowing behaviours.

4.3.2 Age

The respondents were also asked to indicate their age brackets. This was important because age can influence the level of participation in SACCOS. Age often correlates with financial goals, responsibilities, and access to financial resources. Younger individuals may be more focused on saving for future needs, while older individuals may prioritise retirement planning. Understanding the age distribution of respondents helps SACCOS in tailoring their services, interest rates, and outreach strategies to better suit the diverse financial needs and preferences of different age groups, ultimately fostering greater financial inclusion and engagement within the community.

Based on results in Table 6, the largest age group for both SACCOS members and non-members was 18-28 years, representing 44.5% and 45.5%, respectively. The percentages across other age categories were almost identical for both groups, suggesting that age was not a major differentiating factor between SACCOS members and non-members. The findings agree with observations by Girma (2021) that different age groups have varying degrees of participation in these financial cooperatives; the middle-aged group, typically those in their peak earning years, have

more financial resources to save or invest, which often translates into higher participation in SACCOS.

4.3.3 Level of education

The level of education of the respondents was categorised into four levels which included primary, secondary, tertiary and university. Regarding the level of education, the findings on table 6 depict a similar trend in both groups. Among SACCOS members, 37.7% had a university education, followed by 36.5% with tertiary education. Non- members had similar percentages, with 38.2% having a university education and 34.3% with tertiary education. The results indicated that higher levels of education were common in both groups. This implies that the majority of the respondents had a robust understanding of financial concepts and services. They may be engaged in skilled work or professions that require higher qualifications.

As a result, their interaction with financial institutions such as SACCOS is likely to involve more complex financial products like investment portfolios, higher-value loans, or planning for long-term financial goals like retirement. This group of respondents is likely having a modest set of literacy and numeracy skills and may be more comfortable using financial services but may still require support in financial literacy, particularly for more sophisticated financial transactions. SACCOS, or similar organisations, serving this group may need to focus on financial literacy initiatives to ensure these individuals can effectively use their services. This analysis is in support of the findings by Komba, *et al.,* (2020) which indicated that the level of education is associated with the understanding of the benefits provided by SACCOS and hence the likelihood of participating.

4.3.4 Occupation

 The respondents were asked to indicate the occupation that they were involved in. Occupation was divided into employed, self-employed, unemployed, student and others. The findings on table 6 show that 37.4% of SACCOS members were employed and 33.5% of non-members fell into the same category. Self-employment was the next highest category for both groups, with 25.2% for SACCOS members and 23% for non-members. Students made up a larger portion among non-members at 25.7%, compared to 21.3% among SACCOS members. These findings indicate that SACCOS were

crucial in serving a diverse demographic with varying economic backgrounds in Kasarani Sub County. From regular wage earners to the self-employed, students, and unemployed, SACCOS had an integral role in promoting financial inclusion and improving the financial health of their members, ultimately contributing positively to their livelihood outcomes. This concurs with assertions by Gugerty (2007) that occupation particularly that, which provides a stable income, influences an individual's participation in SACCOS. Those with stable incomes are more likely to have the financial ability to save and hence join SACCOS.

4.3.5 Household size

The researcher asked the respondents to indicate their household size. Household size can influence the level of participation in SACCOS. By understanding the household size of participants, SACCOS can tailor their financial products and services to address the unique financial challenges and goals of various household sizes, ultimately enhancing their appeal and effectiveness in serving diverse communities.

The results on household size on table 6 revealed that households with 3-5 people were the highest among SACCOS members and non-members with 55.1% and 42.5 % respectively. This suggested that moderate-sized families were more prevalent among the surveyed population. On the other hand, smaller households with less than 3 members were also quite common, constituting nearly a third of the sample. Larger households with more than 5 members were less frequent, making up less than a fifth of the population surveyed. These findings suggest that SACCOS could consider tailoring their services to accommodate the financial needs of both moderate-sized and smaller households, potentially through flexible and diverse product services that cater to varying family sizes, thereby enhancing their inclusivity and impact in Kasarani Sub County, Kenya

4.4 Members' Participation in SACCOS' Financial Services

The first objective of the study was to examine members' participation in financial services offered by SACCOS in Kasarani Sub County, Kenya. The study assessed the nature of participation of members in SACCOS financial services among SACCOS within Kasarani Sub County. The study used four variables namely: marketing, utilisation of financial services, participating in investment opportunities and savings

and borrowings. These variables were measured using a survey questionnaire. Table 7 provides information about the respondents' opinions on various aspects related to SACCOS and their financial services, using a Likert scale where the respondents chose from Strongly Disagree (SD) to Strongly Agree (SA) along with a neutral option (N). The mean represents the average response, and the standard deviation indicates the degree of variability or dispersion in the responses for each variable.

Table 7: Descriptive on Members' Participation in SACCOS' Financial Services

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev.
Marketing of financial services	10.4	25.0	20.1	31.7	12.8	3.12	1.22
Utilisation of financial services	4.2	13.3	12.1	39.4	30.9	3.79	1.14
Participation in investment opportunities	9.9	25.5	18.6	23.0	23.0	3.24	1.33
Saving and borrowing	6.1	9.8	6.7	36.0	41.5	3.97	1.2
Overall Mean						3.53	

Note: **SD-** Strongly Disagree, **D**- Disagree, **N**- Neutral, **A**- Agree, **SA**- Strongly Agree

4.4.1 Marketing of financial services

The findings in Table 7 show that 44.5% of the respondents (31.7% agreed and 12.8% strongly agreed) were involved in the marketing of financial services. This proportion of the respondents agreed with the statement that they were being involved in the marketing of financial services. This implies a moderate level of members' participation in marketing among the SACCOS in Kasarani Sub County. The mean of 3.12 (SD = 1.22) suggested that there was room for improvement in engaging members in this aspect of the SACCOS' operations. Engaging members more in marketing initiatives might lead to more successful member recruitment and retention strategies. This agrees with the observation by the UNDP Human Development Report (2022), that participation entails involvement of people in the economic, social, cultural, and political processes that affect their lives. This is actively engaging in the various activities of the SACCOS, such as saving, borrowing, and investing in the organisation.

4.4.2 Utilisation of financial services

Concerning the utilisation of financial services offered by SACCOS the findings in Table 7 reveal that, the majority (70.3%) of the respondents (39.4 % agreed and 30.9% strongly agreed) utilised a range of financial services. The mean of 3.79 (SD = 1.14)

was one of the highest among the categories, implying high usage and, potentially, satisfaction with the services provided. This suggests that the SACCOS were offering services that were appealing and useful to most of their members. The results were consistent with the statements made by Key Informants, confirming active engagement of members in various financial services in Kasarani. This highlighted a notable level of utilisation and satisfaction among the members. Key services include the provision of secure savings accounts, offering a reliable avenue for members to enhance their financial resources. Additionally, the popularity of loans addressed the challenges members face in their financial journey. The cooperative also extends investment opportunities, enabling portfolio diversification and future planning. Furthermore, insurance services contribute to members' peace of mind, offering protection against unforeseen events for their families. In essence, SACCOS have transformed into a comprehensive financial centre, establishing themselves as trusted partners for members seeking financial security and prosperity.

4.4.3   Participating in investment opportunities

The findings in Table 7 show that 46% of the respondents (23.0% agreed and 23.0% strongly agreed) were actively participating in the SACCOS' investment opportunities. With a mean score of 3.24 (SD = 1.33), this was an area that is likely to see improvement in future. Greater member involvement in investment opportunities might lead to investment choices that better reflect the needs and risk tolerance of the membership. This agrees with a study by Ninsiima (2018) that participation in financial services includes involvement in the use of financial services, involvement in improving financial services, involvement in marketing of financial services and involvement in investment opportunities.

4.4.4   Saving and borrowing

On the issue of saving and borrowing from SACCOS the findings in Table 7 depict that, 77.5% of the respondents (36.0% agreed and 41.5% strongly agreed) were saving and borrowing from their SACCOS. With a mean of 3.97 (SD = 1.2), this result suggested that SACCOS in Kasarani Sub County were a preferred avenue for financial transactions for most respondents, indicating the relevance of these organisations in their financial lives. These findings are supported by several respondents during the Key Informant Interviews. A Key Informant was of the view that:

SACCOS are widely chosen by members for their financial needs due to the trust and community-oriented approach they embody. The prioritisation of members' welfare over profit is a key factor, with SACCOS offering competitive interest rates on savings and affordable loans. The cooperative structure cultivates a sense of belonging, transparency, and accountability, attributes often lacking in traditional financial institutions. Members value the personalised service, financial education, and flexibility provided by SACCOS, making them the preferred choice for both saving and borrowing. Essentially, SACCOS go beyond being mere financial institutions; they are supportive communities genuinely invested in the financial well-being of their members. (KI 1, Kasarani, 15th July 2023).

Similarly, another Key Informant was of the view that:

SACCOS streamlined loan application procedures and reduced transaction costs enhance the accessibility of financial services to a broader demographic, making SACCOS the preferred financial partners for members. The social dimension is also valued, as members have familiarity with their peers and sense genuine concern for their financial well-being. The combination of financial advantages, individualised service, and a feeling of community contribute to SACCOS being the favoured choice for members in managing their financial transactions. (KI 5, Kasarani, 15th July 2023).

The overall mean score of members' participation in SACCOS' financial services was 3.53, showing that on average, members felt involved and invested in their SACCOS' operations. Each of these findings has its implications on the running of SACCOS, suggesting areas of strengths, such as members' trust and service utilisation, and potential areas of improvement, such as members' involvement in marketing and participation in investments. These findings support the assertions by Meli (2020) that participation in SACCOS financial services improves livelihood members through SACCOS loan products which enabled members to invest in various economic generating activities which sublimated household income.

4.5   Influence of Demographic Factors on Members Livelihood Outcomes

The second research objective was to examine the influence of demographic factors on members' livelihoods outcomes. The variables under this objective included gender, age, education, occupation, and household size. Gender was measured categorically, as binary (male/female), age was measured as a continuous variable in years, education was a categorical variable reflecting different education levels, occupation was categorical denoting various employment statuses, and household size was measured as a continuous variable representing the number of individuals in a household. The influence of demographic factors on members' livelihood outcomes was determined using multiple linear regression models. Mugenda and Mugenda (2003) contended that regression analysis helps in generating an equation that describes the statistical relationship between one or more predictor variables and the response variable. Table 8 shows model summary.

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.798a	0.637	0.622	0.46618

a Predictors: (Constant), Household size, Occupation, Age, Gender, Education
Source: Researcher, (2023)

The model fitness results in Table 8 show that gender diversity, age, level of education, occupation, and household size were satisfactory variables in explaining members' livelihoods outcomes. This is supported by a coefficient of determination (R-square) of 0.637. This implies that gender diversity, age, level of education, occupation, and household size explain 63.7% of the variations in members' livelihood outcomes. Table 9 shows the analysis of variance results.

Table 9: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	45.043	5	9.009	41.453	.000b
1	Residual	25.644	118	0.217		
	Total	70.687	123			

a. Dependent Variable: Livelihoods Outcomes
b. Predictors: (Constant), Household size, Occupation, Age, Gender, Education

The ANOVA results in Table 9 indicate that the general model was statistically significant, implying that the demographic factors; gender diversity, age, level of

education, occupation, and household size are good indicators of members' livelihoods outcomes. The significance of the model is supported by an F statistic of 41.453, which is relatively high, pointing to a significant relationship between demographic variables and livelihood outcomes of the SACCOS members. Additionally, the reported p-value is 0.000, which is less than the conventional probability significance level of 0.05. This further confirms that the model is statistically significant.

The regression coefficient results of the influence of demographic factors on livelihood outcome of SACCOS members in Kasarani, Sub County, Kenya are presented in Table 10.

Table 10: Multiple Regression Coefficient Results

Model		Unstandardized Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	0.143	0.286		0.501	0.617
	Gender	0.221	0.063	0.252	3.477	0.001
1	Age	0.267	0.062	0.281	4.331	0.000
	Education	0.340	0.068	0.366	5.018	0.000
	Occupation	0.126	0.045	0.16	2.783	0.006
	Household size	0.034	0.053	0.042	0.634	0.527

a. Dependent Variable: Livelihoods Outcomes

$$Y = 0.143 + 0.221 Gen + 0.267 Ag + 0.340 Edu + 0.126 Op + 0.034 Hs$$

Where:

Y   = dependent variable (livelihood outcomes)

α = intercept

$\beta_1 - \beta_5$ = Regression coefficients

Gen   = Gender

Ag   = Age

Edu   = Education

Op.   = Occupation

HS   = Household size

Table 10 shows that gender diversity and livelihood outcomes were positively and significantly related ($\beta = 0.221$, $p = 0.001 < .05$). The results imply that a one-unit increase in the gender variable is associated with a 0.221 unit increase in livelihood outcomes. The results further indicated that age and livelihoods outcomes were

positively and significantly related (β =0.267, p = 0.000<.05). This implies that a one-unit increase in age is associated with a 0.267 unit increase in livelihood outcomes. This suggests that as individuals get older, there is an expected increase of 0.267 units in their livelihood outcomes, assuming other factors remain constant. Similarly, results showed that the level of education and livelihoods outcomes were positively and significantly related (β=0.340, p = 0.000< .05). This implies that a one-unit increase in education level is associated with a 0.340 unit increase in livelihood outcomes. This indicates that higher levels of education are linked with higher livelihood outcomes, with a 0.340 unit increase for each additional unit of education, while other variables are held constant.

Additionally, Occupation and Livelihoods Outcomes were positively and significantly related (β=0.126, p=0.006<.05). This indicates that a one-unit increase in occupation is associated with a 0.126 unit increase in livelihood outcomes. This implies that, on average, individuals with different occupation statuses (perhaps moving from unemployed to employed) are expected to experience a 0.126 unit increase in their livelihood outcomes, holding other variables constant. However, household size and livelihood outcomes were positively but insignificantly related (β=0.034, p =0.527>.05). This indicates that a one-unit increase in household size is associated with a 0.034 unit increase in livelihood outcomes. However, since the p-value is greater than 0.05, this relationship is not statistically significant. Therefore, it suggests that changes in household size may not have a significant impact on livelihood outcomes.

The results therefore imply that improvements in gender diversity, age, level of education and occupation of SACCOS members are likely to lead to improved livelihood outcomes. Household size, however, does not have a significant impact on livelihoods outcomes. These findings led to the rejection of the null hypothesis that demographic factors do not influence SACCOS members' livelihood outcomes in Kasarani. The study thus adopted the alternative that demographic factors do influence SACCOS members' livelihood outcomes in Kasarani.

These findings were consistent with those of Muriithi (2014) which asserts that there exists a noticeable difference in the saving and borrowing behaviours of men and

women, which is often a result of socioeconomic conditions, cultural norms, and existing gender dynamics within a society. Kituku *et al., (*2016) also found that in many societies, women might have less access to financial resources due to systemic gender disparities. These limitations can, in turn, lead to lower participation in financial cooperatives such as SACCOS. This agrees with the conclusion made by Chimdi *et al.* (2020) that a higher level of education generally leads to better financial literacy, which is integral for understanding the benefits of SACCOS.

4.6 Comparison of Livelihood Outcomes between SACCOS Members and Non-Members

The third research objective was to compare the livelihood outcomes between SACCOS members' and non-members in Kasarani Sub County, Kenya. The variables under this objective were value savings, value of household assets, per capita on food expenditures and per capita on non-food expenditures. The variables were measured using a questionnaire. The T-test was useful when comparing the differences in livelihood outcomes between SACCOS members and non-members. T-test is commonly used in research for comparing means between two groups (Howell, 2019). Presented in this section is descriptive analysis and t-test findings on livelihood outcomes for both SACCOS members and non-members.

4.6.1 Savings

4.6.1.1 Status of savings

The respondents were asked to indicate whether during the last one year their savings had decreased, stayed the same or increased. The findings were as shown in Table 11.

Table 11: Status of Savings

| Status | SACCOS Members | | Non-Members | |
	Frequency	Percentage (%)	Frequency	Percentage (%)
Decreased	34	26.6	91	41.5
Stayed the same	30	24.0	54	24.7
Increased	63	49.4	74	33.8
Total	**127**	**100**	**219**	**100**

Table 11 depicts that for SACCOS members, almost half (49.4%) reported an increase in their savings, indicating a potentially positive influence of SACCOS membership on

personal finance. On the other hand, 26.6% of SACCOS members experienced a decrease in savings, and 24% reported that their savings had stayed the same.

Among non- members, 41.5% reported a decrease in their savings, which was significantly higher than the 26.6% of SACCOS members who reported the same. This suggests greater financial instability or challenges among the non- members. Furthermore, only 33.8% of non-members reported an increase in savings, a lower percentage compared to the SACCOS members. The percentage of those whose savings stayed the same was almost identical for both groups, at around 24%. The results amplify the contrast between SACCOS members and non-members when it comes to savings behaviour. SACCOS members appeared more likely to increase their savings, which can be interpreted as a positive outcome of SACCOS participation. In contrast, a significantly higher percentage of non-members saw their savings decrease, which should be an area of concern for policymakers and organisations looking to improve financial well-being. The above findings were in line with a key informant during an interview who when asked about the financial behaviour of members said that:

> *SACCOS offer immense benefits to their members, SACCOS offer affordable credit products to their members, and they give good returns on investments to the members. For instance, most of the SACCOS paid dividends annually at a rate of 15% on shares in the year 2021/ 2022. Moreover, SACCOS helps members with the opportunity to save where members can receive interest on savings at an average of 11%.* (KI 1, Kasarani, 12th July 2023).

The results however indicate that about a quarter (26.6%) of the respondents had experienced a decrease in their savings. This suggests that despite being part of SACCOS, these respondents faced financial challenges that led to a reduction in their savings. This could be due to factors such as loss of income, increased expenditures, or emergencies that required them to use their savings.

Finally, 24% of respondents said that their savings had remained the same over the year. This indicates that these members managed to maintain their savings level, despite any financial challenges they may have faced. However, it also suggests a need

for further interventions from SACCOS to help these members increase their savings over time. Overall, while a significant number of respondents reported an increase in their savings, the fact that a similar proportion experienced a decrease, or no change suggests that the role of SACCOS in improving the livelihoods of their members in Kasarani Sub County may be more complex. The impact of these organisations varies depending on individual circumstances and external factors. These results indicate the importance of personalised interventions and continuous support to enhance the financial wellbeing of all members.

4.6.1.2 Purpose for savings

Regarding purpose for savings, the respondents were asked to indicate the purpose for which they were saving in SACCOS for the SACCOS members and other saving schemes for non-members. The responses were as shown in Table 12.

Table 12: Purpose for Saving

	SACCOS Members		Non- Members	
Purpose	Frequency	Percentage (%)	Frequency	Percentage (%)
For loan repayment	27	21.3	62	28.3
For safety of cash	33	26.0	31	14.2
For consumption	16	12.6	30	13.7
For interest	19	15.0	43	19.6
Purchasing household assets	24	18.9	14	6.4
For emergency	5	3.9	21	9.6
Others	3	2.3	18	8.2
Total	**127**	**100**	**219**	**100**

The results in Table 12 shows that for the SACCOS members, the most common purpose for saving was for the safety of cash, accounting for 26% of responses. This suggests a significant level of trust in SACCOS as a secure place to keep money. Following closely, 21.3% saved for loan repayment, indicating that some members may be utilising SACCOS primarily to manage debt. Purchasing household assets and for interest were the next most frequent purposes at 18.9% and 15.0%, respectively, showing a spread of financial goals among this group. Least common were saving for emergency and others, which made up 3.9% and 2.3% of the responses, respectively.

On the other hand, the most common purpose for non-members was for loan repayment, with 28.3% of respondents indicating this reason. This was higher than the percentage for SACCOS members, perhaps suggesting that non-members might be

facing more significant debt responsibilities. The next highest category was for interest at 19.6%, indicating that a good portion of this group is motivated by the potential returns on their savings. Interestingly, only 14.2% saved for the safety of cash, which was considerably lower than SACCOS members, perhaps indicating lower levels of trust in other saving schemes. The least common purpose among non-members was purchasing household assets, at only 6.4%.

The findings also revealed specific areas where the two groups differed significantly. For instance, the percentage of those saving for the safety of cash was almost twice as high among SACCOS members compared to non-members. Similarly, far more SACCOS members were saving for purchasing household assets compared to non-members. On the other hand, non-members were more likely to be saving for loan repayment and for interest. Overall, the findings present a clear picture of the various financial goals for which people were saving in SACCOS and other saving schemes. Such information will be invaluable for financial institutions, policymakers, and other organisations looking to tailor their services to the unique needs and preferences of these different groups. The above findings are in line with a key informant during an interview who when asked about the purpose of savings for their members, said that:

> *SACCOS members in Kasarani, are driven to save for various reasons beyond just accumulating wealth. Some of the reasons that we have seen inspire our members to save include access to loans for various purposes, managing day-to-day-expenses, preparing for unforeseen emergencies such as medical illnesses, and striving to generally enhance their overall quality of life*. (KI 5, Kasarani, 13th July 2023).

The findings also agree with Rapando *et al.,* (2021), that the Youth Bunge SACCOS improved the members' livelihood outcomes through entrepreneurial and business trainings which helped to arm the youth with an understanding of and skills necessary in starting and managing a business, embracing a saving culture and seeking additional funding through writing business plans and proposals.

4.6.1.3 Rating current livelihood outcomes

The respondents were asked to rate their current livelihood outcomes. The responses were as shown in Table 13.

Table 13: Rating Current Livelihood Outcomes

| | SACCOS Members | | Non-Members | |
Rating	Frequency	Percentage (%)	Frequency	Percentage (%)
Very poor	27	21.4	59	26.9
Poor	36	28.0	70	32.0
Average	40	31.8	49	22.4
Good	18	13.9	26	11.9
Very good	6	4.9	15	6.8
Total	**127**	**100**	**219**	**100**

The findings in Table 13 show that among SACCOS members, the largest group rated their livelihood as Average, accounting for 31.8% of responses. This was followed by those who rated their livelihood as Poor at 28.0%. Fewer people rated their livelihoods as Good and Very Good, with these categories making up 13.9% and 4.9%, respectively. Interestingly, 21.4% rated their livelihood as Very Poor, which suggests that despite SACCOS membership, a significant proportion of respondents were struggling.

In the non-members group, the most common rating was Poor, given by 32.0% of respondents. This was followed by Very Poor at 26.9%. Only 22.4% rated their livelihood as Average, which was notably lower than the SACCOS group. Similarly, Good and Very Good categories were less frequent among non-members, making up 11.9% and 6.8%, respectively. Based on these results, it is evident that both SACCOS members and non- members had a high percentage of respondents who rated their livelihood as either Poor or Very poor, though these categories were slightly more prevalent among non-members. This indicates that despite the differences in their savings behaviour and purposes, many in both groups face challenges that impact their overall well-being.

Additionally, a higher percentage of SACCOS members rated their livelihood as Average compared to non-members. This implies that SACCOS membership is associated with better livelihoods. Moreover, the proportion of respondents who rated their livelihoods as either Good or Very Good was relatively low in both groups, suggesting that there is room for improvement in the overall living conditions for both SACCOS members and non-members. These results are supported by one Key Informant during an interview who said that:

Over the years, we have seen SACCOS playing a vital role in the livelihood outcomes of its members. There has been an upward trajectory of people who initially faced very poor economic conditions before joining SACCOS. These members overtime have experienced a change in their financial stability, eventually rating their livelihood outcomes as average. This has largely been attributed to SACCOS whereby people have transitioned from dire economic circumstances to a more stable and relatively satisfactory financial position. (KI 5, Kasarani, 12th July 2023).

Unfortunately, a significant portion of the respondents indicated that they considered their livelihood outcomes to be either very poor (21.4%) or poor (28%). This accounted for almost half of the respondents, suggesting that despite being members or non-members of SACCOS, they still faced considerable challenges in their financial and overall well-being.

On a more positive note, 13.9% of the respondents rated their current livelihood outcomes as good, indicating that they were relatively satisfied with their economic circumstances. Moreover, a small but notable portion of the respondents (4.9%) rated their livelihood outcomes as very good, suggesting that these respondents found their membership in SACCOS to be highly beneficial for their livelihoods. Overall, while the findings indicate that a significant portion of the respondents were struggling, there is also a good number of respondents experiencing satisfactory to excellent livelihood outcomes. This mixed response suggests that while SACCOS are having a positive impact on some members in Kasarani Sub County, others are still facing challenges. It is thus important for SACCOS to examine the specific issues facing their members who are struggling and consider targeted interventions to help them improve their livelihood outcomes.

4.6.2 Value of household assets

The study further sought to establish the value of household assets among the respondents within Kasarani Sub County including SACCOS members and non-members. By analysing the worth of household assets, the research sought to understand the financial position and wealth accumulation of respondents. This

examination provided valuable insights into how participation in SACCOS influenced the ownership and growth of household assets, shedding light on the potential impact of cooperative savings on overall financial stability and prosperity.

4.6.2.1 Total value of household assets

The researcher sought to establish the average total value of household assets owned by the respondents before 12 months (for example, land, home, car, commercial property). The study found out that the minimum value of assets was reported at Ksh 1000 for SACCOS members. This suggests that the least economically advantaged members of the SACCOS had very limited valuable assets. This reflects either individuals who were new to the SACCOS, those facing significant financial hardship, or those who had only small amounts of lower-value assets. The maximum value of assets, on the other hand, was Ksh 125,000,000. This indicated that at least one member of the SACCOS held assets of considerable value, showing that SACCOS catered to a wide spectrum of economic statuses, including those with substantial wealth. In addition, the minimum value of assets was reported at Ksh 900 by non-members. The maximum value of assets, on the other hand for the non-members was Ksh 100,000,000. The above findings are in line with a key informant during an interview who when asked whether SACCOS cater to different people with varying financial status said that:

> *Our SACCOS exemplify financial inclusivity by welcoming members from diverse backgrounds. Some members, having accumulated substantial wealth, own multiple properties, valuable vehicles, and significant investment portfolios. These individuals actively participate in cooperative activities, sharing their financial expertise to benefit others and serving as community role models. This illustrates that SACCOS cater not only to those seeking financial assistance but also provide a secure platform for managing wealth and investments collaboratively. Conversely, there are members joining with the aim of improving their financial situations. While they may not have significant assets initially, disciplined saving, responsible borrowing, and access to affordable credit help them gradually build financial stability. Our cooperative equips them with the necessary tools and resources for long-term wealth growth* (KI 5, Kasarani, 12th July 2023).

The mean or average value of assets was 5,044,873, indicating that, on average; members of SACCOS had a moderate level of assets. It is crucial to note, however, that the average can be significantly influenced by outliers, especially those on the higher end of the scale. The standard deviation was 13,706,202, a figure higher than the mean itself. This is a measure of dispersion that indicates how spread out the values are. The high standard deviation in this case implies a significant variation in the value of assets among the members within Kasarani Sub County, with some having much higher or lower values than others. This reinforces the conclusion that SACCOS in Kasarani Sub County comprises members with a diverse range of financial standings.

4.6.2.2 Assets possessed

The respondents were presented with a list of assets and were asked to indicate if they had been in their possession for more than one year or not. The respondents were at liberty to select more than one asset and the results are presented in Table 14.

Table 14: Assets Possessed by Respondents for more than 1 Year.

Asset possessed by respondents	SACCOS Members		Non-Members	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Land	56	43.9	86	39.2
Home	45	35.3	75	34.1
Car/motorcycle/bike	48	37.9	74	33.8
Commercial property	23	18.5	97	44.1
Household appliances e.g., refrigerator, gas, radio	103	81.2	182	83.3
Furniture	101	79.5	146	66.8

Based on the results in Table 14, for SACCOS members, the asset most commonly in possession was household appliances, with a high of 81.2% indicating they had items like refrigerators, gas, and radios. This was closely followed by furniture, owned by 79.5% of the respondents. These two categories suggest that a majority of SACCOS members have basic home amenities. Furthermore, land and car/motorcycle/bike were possessed by 43.9% and 37.9%, respectively, indicating a substantial level of property and transportation asset ownership. Home ownership was owned by 35.3%, and the least common asset was commercial property at 18.5%.

For non- members the predominant asset held was household appliances, with a notable 83.3% indicating ownership of items such as refrigerators, gas appliances, and radios. This suggests a high prevalence of basic home amenities among this group. Additionally, furniture is owned by 66.8% of non-members, reinforcing the notion of a significant portion having access to essential household furnishings. Unlike SACCOS members, the ownership of land and car/motorcycle/bike among non-members is slightly lower, with 39.2% and 33.8%, respectively, indicating possession of these property and transportation assets. Home ownership is reported by 34.1% of non-members, showing a comparable percentage to SACCOS members. Interestingly, commercial property emerged as a more common asset among non- members at 44.1%, contrasting with SACCOS members. This suggests a potentially different approach to investments or property acquisition strategies within the non-members.

Secondly, the ownership of more substantial assets like land, homes, and vehicles was less common but still significant among SACCOS members. These are viewed as long-term investments and could indicate a certain level of financial planning and security. The relatively low percentage for commercial property among SACCOS members could suggest that fewer individuals were engaged in business ventures that require such assets, or it might indicate a focus on other types of investment. Overall, this information could be incredibly useful for financial institutions, policymakers, and other organisations aiming to understand the asset profiles of these different groups. This aids in creating targeted financial products and services that cater to the specific asset ownership and investment needs of SACCOS members and non-members. This suggests that the respondents, to varying degrees, have managed to accumulate valuable assets, which can enhance their quality of life and provide a degree of financial stability. However, the variation in the types and rates of asset ownership also implies diverse financial capabilities and priorities among the members.

The findings were consistent with insights shared by Key Informants during interviews, highlighting the pivotal role of SACCOS in facilitating the community's acquisition and diversification of assets. The SACCOS impact was evident in its provision of affordable credit, cultivation of a savings culture, and the empowerment of individuals to invest in various assets. Notably, SACCOS have played a crucial role in providing members with credit for the purchase of essential household items,

thereby elevating overall living standards. Furthermore, SACCOS have been instrumental in assisting members in acquiring assets such as land, vehicles, and homes. Loans at favourable rates have facilitated significant investments in these valuable assets, with land ownership offering security and serving as a long-term investment. The accessibility of vehicles has not only improved mobility and economic opportunities but has also contributed to homeownership, enhancing living conditions and allowing for wealth accumulation through property appreciation.

4.6.3 Food expenditure

The study also examined food expenditure among the respondents. By analysing these expenditure patterns, the research sought to gain insights into how individuals allocated their financial resources and the relative importance of food expenditure in their overall spending habits.

4.6.3.1 Average monthly food expenditure

The respondents were asked to indicate the average monthly food expenditure of their households in Kenyan shillings. The findings are presented in Table 15.

Table 15: Average monthly food expenditure

Expenditure	SACCOS Members		Non-Members	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Below 5,000	31	24.3	56	25.4
5000-10,000	49	38.4	98	44.8
10001-15000	26	20.5	30	13.8
15001-20,000	12	9.8	15	6.8
Above 20,000	9	6.9	19	9.2
Total	**127**	**100**	**219**	**100**

The results show that among SACCOS members, the most common expenditure range was between 5,000 and 10,000 shillings, accounting for 38.4% of respondents. This was followed by those spending below 5,000 shillings, making up 24.3%. In the higher expenditure brackets, 20.5% spent between 10,001 and 15,000 shillings, while fewer respondents reported spending between 15,001 and 20,000 shillings (9.8%) or above 20,000 shillings (6.9%).

For non- members, the largest group also fell within the 5,000-10,000 shillings range but at a slightly higher percentage of 44.8%. Those spending below 5,000 shillings made up 25.4%, which was almost that of the SACCOS members. Fewer non-

members fell into the 10,001-15,000 shillings category at 13.8%, and 6.8% spent between 15,001 and 20,000 shillings. Interestingly, a higher percentage of non-members (9.2%) reported spending above 20,000 shillings compared to SACCOS members. The results imply that both groups had many of the households spending between 5,000 and 10,000 shillings, although this was more common among non-members. This suggests that many in both groups have similar spending habits when it comes to food.

In addition, non-members had a slightly higher percentage of people spending above 20,000 shillings than SACCOS members. This implied a segment within the non-members who had higher earning or spending power, but it also could be an artefact of the sample size or other factors. Moreover, the findings show a decent percentage of people in both groups spending below 5,000 shillings, which might indicate financial stress or frugality in food expenditure among a quarter of respondents in each group. Finally, it is evident that both groups had fewer people in the higher expenditure brackets (above 15,000 shillings), indicating that more extravagant spending on food is less common among respondents, irrespective of SACCOS membership. These insights will be valuable for stakeholders such as policymakers, businesses, and SACCOS, allowing them to make more informed decisions, whether it is targeting products to certain demographics, tailoring financial assistance, or creating food security policies.

4.6.3.2 Balanced meals per day

The respondents were asked to indicate the number of times their households were having balanced meals per day. The responses are as shown in Table 16.

Table 16: Balanced meals per day

Meal Per Day	SACCOS Members		Non-Members	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Once	12	9.5	56	25.6
Twice	38	30.1	109	50.0
Thrice	61	48.3	45	20.5
More than three times	16	12.1	9	3.9
Total	**127**	**100**	**219**	**100**

Results in table 16 showed notable differences in the meal patterns between SACCOS members and non-members. Among SACCOS members, a substantial 48.3% reported

consuming three balanced meals a day, indicating a comparatively stable financial situation or diverse lifestyle choices. This was followed by 30.1% who had two balanced meals daily, signifying a significant portion prioritising a balanced diet. Fewer members reported having only one balanced meal a day (9.5%), and a small percentage (12.1%) consumed more than three balanced meals, suggesting varied nutritional habits within the group.

In contrast, non-members predominantly consumed two balanced meals a day (50%), possibly indicating a middle-ground where individuals balanced financial constraints with nutritional needs. A noteworthy 25.6% reported having only one balanced meal daily, indicating potential financial strain or differing spending priorities. Additionally, 20.5% reported having three balanced meals, and a smaller fraction (3.9%) consumed more than three, reflecting diverse dietary practices.

The findings suggested that SACCOS members had a more varied meal schedule, potentially influenced by better financial stability or distinct lifestyle choices. In contrast, non-members faced a higher prevalence of consuming only one balanced meal, pointing to potential financial challenges or different spending priorities. These insights deepened our understanding of respondents' daily lives and showed the close relationship between financial well-being and nutritional habits. For SACCOS, policymakers, and organisations focused on community welfare, understanding these eating habits could be instrumental in tailoring financial and nutritional programs to better meet the needs of these different groups.

4.6.3.3 Change in per capita on food expenditure

In addition, SACCOS members within Kasarani Sub County were asked to indicate the extent to which they felt their per capita on food expenditure changed since joining the SACCOS. The results as shown in Table 17.

Table 17: Change in per capita on food expenditure

Meal Per Day	Frequency	Percentage (%)
Reduced	16	13.0
Neutral	72	58.0
Increased	36	29.0
Total	**124**	**100**

The findings show that the majority (58%) of the SACCOS members indicated a neutral impact on their per capita food expenditure since joining the SACCOS. This

points to the fact that their financial position regarding food spending had remained stable since joining the SACCOS. It is also possible that these members had seen changes in other areas of their financial lives that have not directly affected their food expenditure. Additionally, the results show that 29.0 % of the respondents noted an increase in their per capita food expenditure since joining their SACCOS. This suggests that joining SACCOS had a positive impact on their economic status, allowing them to afford more or higher quality food, which increased their overall food expenditure. These results also suggest that the respondents were now better able to meet their dietary needs than they were prior to their SACCOS membership.

On the other hand, 13.0% of respondents reported a reduction in their food expenditure per capita since joining SACCOS. This reduction can be attributed to several factors. Perhaps these members became more financially literate and therefore better able to budget and control their expenses, including food expenditure. Alternatively, it indicates that these members have had to reduce their food expenditure to meet their SACCOS financial obligations or savings targets.

In general, these findings imply that, while joining SACCOS had led to increased food expenditure for some members, and decreased it for others, the majority did not see a significant change. It shows that SACCOS in Kasarani Sub County have different impacts on different individuals and suggests that while SACCOS membership can influence financial behaviours, it does not universally or uniformly impact all aspects of personal finance, such as food expenditure.

4.6.4   Non-food expenditure

The study also delved into non-food expenditures among the respondents. Through an analysis of these spending patterns, the research aimed to gain insights into how individuals allocated their financial resources and assess the significance of non-food expenses within their overall spending habits.

4.6.4.1   Educational expenditure per year

Regarding educational expenditure, the researcher sought to find out the average educational expenditure per year among the respondents. The findings showed that for the SACCOS members, the minimum education expenditure was Ksh1000, while the maximum was Ksh 700,000. On average, the annual education expenditure stood at Ksh 102,463.64, with a standard deviation of Ksh 109,280.219. The standard deviation

is a measure of the dispersion or spread of the values from the mean, and a high standard deviation indicates that the values are spread out over a large range. This high value of standard deviation in expenditure on education suggests a significant disparity among the respondents in Kasarani Sub County in terms of their annual educational expenditure, reflecting differing personal circumstances, such as the number of dependents, the type of schools they attend, the level of schooling, and the financial capacity of each individual or family. Conversely, for the non-members, the minimum education expenditure was Ksh1, 200, while the maximum was Ksh 600,000. On average, the annual education expenditure stood at Ksh 100,523.00, with a standard deviation of Ksh 105,109.16.

4.6.4.2 Health expenditure

The researcher asked the respondents to indicate the average amount of money they were spending on medical expenses. Descriptive statistics showed that for the SACCOS members, the average monthly expenditure in medical expenses was Ksh 3,986.07. The results revealed a wide variation in medical expenses, with medical expenditures ranging from Ksh 0 to a high of Ksh 100,000. The results revealed a standard deviation of Ksh 9,852.413 indicating that there existed dispersion from the mean, reflecting the diverse nature of medical expenditure patterns among the respondents in Kasarani Sub County.

In addition, descriptive statistics results depicted that for the non-members, the average monthly expenditure in medical expenses was Ksh 3,289.85. The results revealed a wide variation in medical expenses, with medical expenditures ranging from Ksh 0 to a high of Ksh 80,000. The results revealed a standard deviation of Ksh 8,112.65 indicating that there existed dispersion from the mean, reflecting the diverse nature of medical expenditure patterns among the respondents in Kasarani Sub County. This points out the importance of understanding the financial burden of medical costs and the need for appropriate financial planning to accommodate potential fluctuations in healthcare expenses.

4.6.5 T-test findings

The livelihood outcomes for SACCOS members and non-members were evaluated in terms of amount saved, value of household assets, average monthly expenditure on food and average monthly expenditure on non-food items.

Table 18: Livelihood outcomes

SACCOS Membership	Amount Saved (Ksh)	Value of Assets (Ksh)	Amount on Food (Ksh)	Amount on non-food (Ksh)
Members	394,717.39	5,044,873	15,000	106,449
Non-members	219,842.24	4,954,511	12,750	105,032

The results in Table 18 show that SACCOS members saved an average of Ksh 394,717.39 while non-members saved an average of Ksh 219,842.24. This implies that SACCOS members in Kasarani Sub County had a significantly higher savings rate compared to non-members. This difference reflects the impact of being a SACCOS member, leading to better financial discipline and saving strategies, resulting in improved livelihood outcomes. Additionally, there was a slight difference in the value of assets between SACCOS members and non-members, with members owning Ksh 5,044,873 worth of assets on average, and non-members with an average of Ksh 4,954,511 worth of assets. Though the difference is not significant, it shows that SACCOS members tend to own slightly more valuable assets.

Moreover, SACCOS members spent more on food (Ksh 15,000) on average per month compared to non-members with an average expenditure of Ksh 12,750. This difference indicates different consumption patterns, or higher income among SACCOS members, allowing for a higher expenditure on food. Spending on non-food items was quite similar between the two groups, with SACCOS members spending Ksh 106,449 and non-members spending Ksh 105,032 on average. This suggests that both groups have similar expenses on other necessities or leisure activities. To compare the livelihood outcomes between SACCOS members and the non-members, the study conducted an independent two-sample t-test. An independent samples t-test was conducted to compare the means of SACCOS members and non-members in as it is shown in Table 19.

Table 19: Independent two-sample t-test results

Group	Mean	Std. Deviation	T-statistics	Std. Error Mean	P-value
Non-Members	19.49	1.885	-0.964	1.678	0.377
SACCOS Members	21.11	1.527	5.251	1.502	0.000*

Significant at (p<0.05)

The independent t-test results in Table 19 show that there was a significant difference in the livelihood outcomes between the two groups (SACCOS members and non-members). The mean livelihood outcome for non-members was 19.49 with a standard deviation of 1.885, while the mean for SACCOS members was 21.11 with a standard deviation of 1.527. This suggests that, on average, SACCOS members in Kasarani Sub County have better livelihood outcomes than non- members. The results further revealed T-statistics (or t-value) for the non- members to be -0.964, whereas for SACCOS members it was 5.251, showing a larger difference between the groups.

These findings agree with the conclusion made by Wotasa (2022) that SACCOS improved members' livelihood by enabling them to obtain loans with ease, providing them with a savings account, and sufficient loans to meet members' needs. The findings also support the conclusion by Basude and Abas (2021) that SACCOS supports the poor by contributing economically and socially through access to credit services. The study concluded that SACCOS have brought about positive changes in the standard of living of members, and improved people's ability to pay for social services such as education, health, and food.

The findings show that the p-value, which is crucial in understanding the statistical significance of the result, was 0.377 for non-members and 0.000 for SACCOS members. In this case, the P-value for SACCOS members is less than 0.05, indicating that the difference in livelihood outcomes between SACCOS and non- members is statistically significant. The results thus imply that being a SACCOS member in Kasarani Sub County tends to be associated with better livelihood outcomes compared to not being a member, and that this difference is statistically significant. These findings led to the rejection of the null hypothesis which stated that the mean livelihood outcomes between SACCOS members and non-members in Kasarani do not significantly differ. The study thus adopted the alternative hypothesis that the mean livelihood outcomes between SACCOS members and non-members in Kasarani significantly differ.

The findings were consistent with the Sustainable Livelihoods Approach (SLA), as proposed by Chambers and Conway (1992). Through the lens of SLA, livelihoods are viewed as multifaceted, encompassing various dimensions beyond mere income. The

obtained p-values of 0.377 for non-members and 0.000 for SACCOS members signify statistical significance, indicating a substantial difference in livelihood outcomes between the two groups. This aligns with the SLA's emphasis on assets, capabilities, and vulnerability. SACCOS membership, viewed as an asset, appears to contribute significantly to improved livelihoods in Kasarani Sub County. The SLA's recognition of diverse assets, including social capital, is reflected in the positive association between being a SACCOS member and experiencing better livelihood outcomes. Furthermore, the rejection of the null hypothesis in favour of the alternative hypothesis underscores the distinctive and statistically significant disparity in mean livelihood outcomes, further reinforcing the applicability of SLA principles in understanding and interpreting the dynamics of livelihoods in this context.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

In this chapter, the researcher summarises the findings of the study as per the specific objectives. The chapter concludes in line with the findings of the study. The recommendations of the study are also presented in this chapter with relevant implications to theory, policy, and practice. The chapter further gives areas for further studies to help future scholars and academicians in expanding the knowledge base.

5.1 Summary

The first objective of the study was to examine how members participate in financial services offered by SACCOS in Kasarani Sub County, Kenya. The study was analysed using descriptive statistics and content analysis. The method was used to reveal insights into the nature of participation of SACCOS members in financial services namely: marketing, utilisation of financial services, participation in investment opportunities and saving and borrowing. The study found out that 44.5% of the respondents were involved in the marketing of the financial services as indicated by a mean of 3.12 (SD= 1.22), 70.3% of the respondents agreed that they used SACCOS financial services as indicated by a mean of 3.79 (SD= 1.14), 46% of the respondents were actively participating in the SACCOS investment opportunities with a mean of 3.24 (SD= 1.33), 77.5% of the respondents were saving and borrowing from SACCOS with a mean of 3.97 (SD= 1.2). The overall mean score of members' participation in SACCOS financial services was 3.53 showing that members felt involved and invested in their SACCOS. The SACCOS' role in their members' financial lives is undeniable, with many utilising the financial services offered.

The second objective was to examine the influence of demographic factors on members' livelihood outcomes. The study used the multiple regression model to analyse the objective. Multiple regression examines the relationship between independent variables and the dependent variable (Tabachnick and Fidell ,2009). The study regressed the relationship between demographic factors such as age, gender, level of education, occupation and household variables and livelihood outcomes which included: savings, value of household assets, food, and non-food expenditure. The study found out that demographic factors significantly influenced the livelihood outcomes of SACCOS members in Kasarani Sub County, Kenya. Specifically, gender

diversity (β=0.221, p=0.001), age (β=0.267, p=0.000), level of education (β=0.340, p=0.000), and occupation (β=0.126, p=0.006) were found to be positively and significantly related to improved livelihood outcomes. In contrast, household size did not show a significant relationship (β=0.034, p=0.527). These findings are supported by an R-square value of 0.637, indicating that these variables explain 63.7% of the variability in livelihood outcomes. The findings led to the rejection of the null hypothesis that demographic factors do not influence SACCOS members' livelihood outcomes in Kasarani. The study thus adopted the alternative that demographic factors do influence SACCOS members' livelihood outcomes in Kasarani. The findings align with prior research, suggesting that social and economic factors, including gender norms and educational level, influence people's financial behaviours and participation in financial cooperatives like SACCOS.

The third objective was to compare the livelihood outcomes between SACCOS members and non-members. The study used descriptive statistics and the independent two-sample t-test to compare the livelihood outcomes between SACCOS members and non-members. T-test is commonly used when comparing means between two groups (Howell, 2019). The variables under this objective were savings, value of household assets, per capita on food expenditure and per capita on non-food expenditure. The t-test findings show that the p-value, which is crucial in understanding the statistical significance of the result, was 0.377 for non- members and 0.000 for SACCOS members. In this case, the P-value for SACCOS members was less than 0.05, indicating that the difference in livelihood outcomes between SACCOS members and non- members was statistically significant. The results thus imply that being a SACCOS member in Kasarani Sub County tends to be associated with better livelihood outcomes compared to not being a member, and that this difference is statistically significant. These findings led to the rejection of the null hypothesis which stated that the mean livelihood outcomes between SACCOS members and non-members in Kasarani do not significantly differ. The study thus adopted the alternative hypothesis that the mean livelihood outcomes between SACCOS members and non-members in Kasarani significantly differ. The findings stress the importance of advocating for SACCOS membership and financial inclusion as potent tools for boosting the economic resilience and prosperity of the area's residents.

5.2 Conclusions

Based on the study objectives and findings the following conclusions were drawn in relation to assessing the role of SACCOS in improving members' livelihood outcomes in Kasarani Sub County, Kenya. Regarding the first objective the study concludes that members actively participated in the utilisation of financial services, participated actively in savings, and borrowing. The study concludes that there are areas of improvement regarding members' participation particularly in members' engagement with marketing and investment opportunities.

Concerning the second objective, the study concludes that demographic factors, including gender, age, education level, and occupation, significantly influences the livelihood outcomes of SACCOS members. Gender disparities, for instance, imply that men and women have different access to resources, highlighting the need for strategies that promote gender equality. Additionally, variations in outcomes based on age and education emphasise the importance of tailored financial products and continuous financial literacy programs, ensuring members across all demographic spectrums are catered for and empowered. On the other hand, household size does not have a significant impact on member's livelihood outcomes. The study rejected the null hypothesis that demographic factors do not influence SACCOS members' livelihood outcomes in Kasarani. The study concluded that demographic factors do influence SACCOS members' livelihood outcomes in Kasarani.

On the third objective, the study concludes that SACCOS members have better livelihood outcomes compared to non-members in Kasarani Sub County, Kenya. This implies that SACCOS have a profound impact on the economic status of their members in Kasarani Sub County. Their role in enhancing members' livelihoods is undeniable, offering better financial prospects compared to non-members. The study refutes the initial hypothesis suggesting that the mean livelihood outcomes between SACCOS members and non-members in Kasarani do not significantly differ. Instead, it provides substantial evidence pointing towards the fact that the mean livelihood outcomes between SACCOS members and non-members in Kasarani significantly differ. Furthermore, this research stresses the importance of advocating for SACCOS membership and financial inclusion as potent tools for boosting economic resilience and prosperity of the area's residents.

5.3 Recommendations

Based on the findings and the conclusion presented above, this study makes several recommendations. First, the study recommends that SACCOS in Kasarani Sub County should prioritise active member engagement particularly in marketing and investment opportunities. To enhance members' engagement, the study recommends that SACCOS in Kasarani Sub County should focus on strengthening their marketing strategies. This can be achieved through implementing targeted campaigns, educational programs, and community outreach to increase awareness and participation. Additionally, comprehensive financial literacy programs are essential to guide members on effective saving, borrowing, and investing strategies, ensuring they are well-equipped to make informed financial decisions.

Secondly, based on the findings of the influence of demographic factors on members' livelihood outcomes such as age and education the study recommends that SACCOS should adopt gender-responsive approaches to ensure equal access to resources for both men and women. This could involve designing financial products and services that cater to the specific needs of each gender and promoting gender equality through targeted programs. Additionally, SACCOS should tailor their financial products and literacy programs to cater to the diverse needs of their members. Continuous financial literacy programs can empower members across different age groups and educational backgrounds, promoting inclusivity. This approach not only ensures better engagement but also promotes loyalty within the institution. Bridging gender disparities, offering competitive financial products, and maintaining clear communication are pivotal steps in building trust and ensuring the widespread utility of SACCOS services.

Finally, based on the positive correlation between SACCOS membership and improved livelihood outcomes the study underscores the importance of wider community engagement. The study recommends that effort should be directed towards promoting the benefits of SACCOS membership through comprehensive awareness campaigns. Collaborative initiatives with local governments and community organisations can amplify outreach, drawing in underserved populations. While the benefits of SACCOS membership are evident, it is equally vital to support non-members, emphasising financial literacy and accessibility to formal financial services to uplift the entire community.

5.4 Suggestions for Further Studies

The current study assessed the role of SACCOS in improving members' livelihood outcomes in Kasarani Sub County, Kenya.   Comparatively, thus the findings of the study are only applicable to this study area and may not apply to other SACCOS in other regions within Kenya. This study therefore suggests that comparative studies be conducted by future studies across multiple sub-counties in Kenya to assess the role of SACCOS in improving livelihood outcomes. By comparing results from different regions, future researchers will be able to identify regional variations in SACCOS effectiveness and uncover factors that contribute to successful SACCOS interventions in specific contexts. This broader analysis will be able to provide a more comprehensive understanding of the role of SACCOS on livelihood outcomes and could inform targeted strategies for different regions.

REFERENCES

Adalbertus, K. (2018). Studies Microfinance for Empowerment: An Experience from SACCOS Beneficiaries in a Selected District of Tanzania, Institute of Rural Development Planning,

Adom, D.,Hussein, E. K. and Joe, A.2018). Theoretical and Conceptual Framework: Mandatory Ingredients of Quality Research, International Journal of Scientific Research, 5(1), 438–441.

African Confederation of Cooperative Savings and Credit Associations (ACCOSCA). (2018). About ACCOSCA. Retrieved from https://www.accosca.org/about-us/.

Aggarwal, S., Klapper, L., and Singer, D. (2019). Financing businesses in Africa: *The role of microfinance. World Development, 112,* 26-39.

Alonso, J. A., and Clifton, J. (2017). The evolution of the theories of public savings and the role of public savings banks. *Journal of Economic Surveys, 31*(2), 491-511.

Amin, M. E. (2005). *Social Science Research: Conception, Methodology and Analysis*. Makerere University Printery: Kampala. 462pp.

Anania, P., and Gikuri, A. (2015) SACCOS and Members' Expectations: Factors Affecting SACCOS Capacity to Meet Members' Expectations.

Asiamah, N., Mensah, H., and Oteng-Abayie, E. F. (2017). General, Target, and Accessible Population: Demystifying the Concepts for Effective Sampling. *The Qualitative Report.* https://doi.org/10.46743/2160-3715/2017.2674

Asiimwe, P. (2021). *Assessing the contribution of Savings and Credit Cooperative Societies (SACCOS) on improving people's standards of living in Kebisoni sub-county Rukungiri district: a case study of Kebisoni SACCO Limited (Ltd)* (Doctoral dissertation, Makerere University).

Barasa, L., Ikamari, L., Kiplang'at, J., and Oladipo, R. (2015). General Research Methods. Nairobi: Oxford University Press.

Basnet, D.M. and Regmi, M.P. (2019) The Correlational Study of the Personality Traits, Organisational Commitment and Self-Efficacy of Saving and Credit Co-Operative Societies (SACCOS) Employees of Kathmandu.

Basude, E., and Abas, R. (2021). The Role of Savings and Credit Cooperative Society in Poverty Reduction in Ntungamo Municipality: *A Case Study of Kajara People's Cooperative Savings and Credit Society Ltd*, *6*(3), 2456–2165.

Bell, E., and Bryman, A. (2007). The Ethics of Management Research: An Exploratory Content Analysis. *British Journal of Management*, *18*(1), 63–77. https://doi.org/10.1111/j.1467-8551.2006.00487

Bendickson, J. Muldoon, J. Liguori, E. W. and Davis, P. E. (2016). Agency theory: background and epistemology, Journal of Management History, 22(4), 437– 449.DOI:10.1108/JMH06-2016-0028.

Chambers, R.D., and Gordon, C. (1992). "Sustainable Rural Livelihoods: Practical Concepts for the 21st Century." IDS Discussion Paper 296. Brighton: Institute of Development Studies. https://www.ids.ac.uk/files/ Dp296 .pdf (accessed December 8, 2022).

Chelimo, S. (2023). Influence of Education Levels Based on Gender on Decision-Making Process in Deposit Taking Saccos in Uasin Gishu County, Kenya. *African Journal of Education, Science and Technology*, *7*(3), 221-233.

Chimdi, S., Abafita, J., and Shallo, L. (2020). Participation in saving and credit cooperatives (SACCOS) and its impact on households' wellbeing in Gurage zone, Southern Ethiopia. *International Journal of Current Research*, *12*(5), 11629-11640.

Churk, J. P. (2015). Contributions of Savings and Credit Cooperative Society on Improving Rural Livelihood in Makungu ward Iringa, Tanzania, Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB) An Online International Research Journal, 4 (1), 1–14.

Cohen, L., Manion, L., and Marrison, K. (2018). Research Methods in Education (8the Edition). Routledge: New York.

Cole, S., Sampson, T., and Zia, B. (2011). Prices or knowledge? What drives demand for financial services in emerging markets? *The Journal of Finance, 66*(6), 1933-1967.

Cooperative identity, Values and Principles. ICA. (n.d.). Retrieved December 8, 2022, fromhttps://ica.coop/en/whats-co-op/co-operative-identity-values-principles

Creswell J. W., and Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approach.* Sage publications.

Demirgüç-Kunt, A., Klapper, L., and Singer, D. (2019). Financial inclusion and inclusive growth: A review of recent empirical evidence. *World Bank Research and Policy Briefs, 12840.*

Ermias, S. (2022). The Impact of Saving and Credit Cooperative Societies Participation on Members Livelihood: A case study of Awach SACCOS. *Master's Thesis.*

Gazda, G. M., and Ménard, C. (2020). The cooperative advantage: Member ownership and firm performance. Journal of Co-operative Organization and Management, 8(1), 100156.

Gikuri, A. and Sanka, M.B. (2018), "Status of SACCOS growth before and during JK billion fund in Tanzania mainland", International Journal of Community and Cooperative Studies, Vol. 6 No. 2, pp. 8-18

Girma, T. (2021). *Determinants of Savings and Credit Cooperatives Societies (Saccos) Outreach in Debre Berh* (Doctoral dissertation).

Gogo, P., and Olouch, O. (2017). International Journal of Social Sciences and Information Technology. *Effect of Savings and Credit Co-operative Societies' Financial Services on Demand for Credit by Members- a Survey of Deposit Taking SACCOS in Nairobi.*

Golafshani, N. (2013). Understanding reliability and validity in qualitative research. The qualitative report, 8(4), 597-606.

Gugerty, M. K. (2007). You can't save alone: Commitment in rotating savings and credit associations in Kenya. *Economic Development and cultural change, 55*(2), 251-282.

Habte, A.T. (2016), "The impact of microfinance on household livelihoods: evidence from rural Eritrea", A Thesis Submitted in Partial Fulfilment of Requirements for Degree of Doctor of Philosophy at, University of the Western Cape, p. 2

Hair, J. F., Hult, G. T. M., Ringle, C., and Sarstedt, M. (2022). A Primer on Partial Least Squares Structural Equation Modelling (PLS-SEM) (3rd ed.). Sage Publications.

Howell, D. C. (2019). Fundamental Statistics for the Behavioural Sciences. Cengage Learning

Jiménez, S., Mainar-Causapé, A. J., and Ferrari, E. (2021). Analysis of the Kenyan economy: an input-output approach. *Agrekon*, *60*(4), 480–495. https://doi.org/10.1080/03031853.2021.1984957

Kamau, C. W. (2014). Effect of SACCO services on investments by households in Kiambu County, Kenya. *Master's Thesis, University of Nairobi*.

Kavulya, P. W., Muturi, W., Rotich, G., and Ogollah, K. (2018). Effect of customer focus strategy on the performance of Saccos in Kenya. *International Journal of Business Strategies*, *3*(1), 1-16.

Kenya National of Bureau Standards, African Centre of Excellence for Inequality Research, University of Nairobi, Kenya, & European Union. (2021, July 20). *KNBS Inequality Trends and Diagnostics in Kenya 2020: A joint report on multidimensional inequality in Kenya*. Inequality Trends and Diagnostics in Kenya. Retrieved December 13, 2022.

Kenya National Police SACCO. (2022). Annual report. Retrieved from https://policesacco.com/downloads/2021.

Kituku, A. M., Amata, E., and Wachira, M. (2016). Determinants of the uptake of NHIF medical cover by informal sector workers: A case of UNAITAS SACCO members in Muranga County.

Komba, C. K., Mahonge, C. P., and Metto, W. K. (2020). Effects of members' education types on their participation in savings and credit co-operative societies: Evidence from Uasin-Gishu County, Kenya.

Loring, P. A. (2020). *Finding Our Niche: Toward a Restorative Human Ecology*. Fernwood Publishing.

Mallya, T.M. (2020). The Impact of Saving and Credit Cooperatives in improving the livelihood of Clients in Moshi Rural District: The Open University of Tanzania. *MA Thesis*

Maosa, A. O. (2020). The contributions of SACCOs in Enhancing Household livelihoods among members in Bungoma County Western Kenya. *Master's Thesis*.

Mboka, O. (2014). Societies (SACCOS) on the Growth Sustenance of Small Business in Tanzania: The Case of Mbeya City, Master of Business Administration (Finance) of the Open University of Tanzania. Dar es Salaam, Tanzania

Meli, N. (2020). Effects of Savings and credit cooperatives products on economic wellbeing of members' households in Nandi County, Kenya. *Master's Thesis*.

Mersland, R., and Strøm, R. Ø. (2019). Performance and trade-offs in microfinance organisations—does ownership matter? *Journal of International Development, 21*(5), 598-612.

Msuya, R. I., Kazuzuru, B., Mataba, L., and Kshsy, S. (2022). Impact of savings and credit co-operative societies' services on household livelihood outcomes in Mwanza and Tabora rural areas, Tanzania. *International Journal of Social Economics*. https:// doi.org/10.1108/ijse-01-2021-0028

Muhanguzi, K. B. (2019). An Empirical Test of the Agency Theory in Corporate Governance of SACCOs in Uganda. *SSRN Electronic Journal*. https://doi. org/10.2139/ssrn.3454396

Muleta, M. (2021). The Impact of Savings and Credit Cooperatives on Households Livelihood Income: The Case of North Shewa Zone, Oromia Regional State. *Master's Thesis*.

Muriithi, M. (2014). *Influence of gender in the saving culture of Sacco members in Nyandarua County* (Doctoral dissertation, University of Nairobi).

Mwalimu SACCO. (2022). Financials 2022. Retrieved from https://www.mwalimu national.coop/images/docs/2022/Mwalimu_National_-_Financials_2022 .pdf.

Ndangizi, J. (2013). Evaluating the Contribution of Umurenge Saving and Credit Cooperatives (USACCOS) to Socio Economic Status of members in Nyagatare District in Rwanda. *MA Thesis*.

Ngige, L., and Njuguna, C. (2020). Impact of Public, Private and Non-Governmental Organisations' Financial Interventions on Youth Livelihood Outcomes in Kenya. East African Journal of Arts and Social Sciences, 2(1), 73-86. https://doi.org/10.37284/eajass.2.1.204

Ninsiima, B. J. (2018). *Factors affecting youth participation in Savings and Credit Cooperative Societies (SACCOS) activities among Selected SACCOS in*

Kiruhura district, Western Uganda (Doctoral dissertation, Uganda Management Institute).

Njoroge, E. M., Muhoho, J. and Kibuine, M. (2019). Influence of customer relationship management system on performance of deposit taking SACCOs in Nairobi County. International Academic Journal of Human Resource and Business Administration, 3(6), 179-202

Njuguna, S. N., and Ngugi, K. (2010). Influence of microfinance services on the performance of small and microenterprises (SMEs) in Kenya. *International Journal of Business and Public Management, 1*(1), 33-43.

Nkundabanyanga, S. K., Kasozi, D., Nalukenge, I., and Tauringana, V. (2014). Lending terms, financial literacy, and formal credit accessibility. *International Journal of Social Economics, 41*(5), 342-361.

Nyadera, I. N., and Onditi, F. (2020). COVID-19 experience among slum dwellers in Nairobi: A double tragedy or useful lesson for public health reforms? International Social Work, 63(6), 838–841. https://doi.org/10.1177/0020 872820944997

Odhiambo, S. P. O. (2019). Determinants of financial performance of savings and credit cooperative societies in Nakuru town, Kenya. *Reviewed Journal International of Business Management [ISSN 2663-127X], 1*(1), 42-53.

Oluyombo, O. (2016). The Role of Co-operative Loans in Rural Finance: Evidence from Ogun State, Nigeria, Ssrn, (December). DOI:10.2139/ssrn.2885366.

Otiende, O. P. M., Mose, G. N., and Otieno, R. (2020). Impact of the Youth Empowerment and Development Fund (YEDF) on Livelihood Improvement of Youths in Nairobi County – Kenya. *International Journals of Academic and Research*, *ISSN: 2617-703X*. https: //doi.org/10.32898/ihssj .02/3.1article 0

Owino, J., and Muga, T. (2020). Historical Perspectives on Inequality and Poverty in Kenya. Journal of African Studies, 15(2), 123-145.

Panda, B. and Leepsa, N. (2018). Agency theory: Review of Theory and Evidence ER, Indian Journal of Corporate Governance, 10(1), 74–95. DOI: 10.1177/0974 686217701467.

Pasara, M. T., Makochekanwa, A., and Dunga, S. H. (2021). The Role of Savings and Credit Cooperatives (Saccos) on Financial Inclusion in

Zimbabwe. *Eurasian Journal of Business and Management*, *9*(1), 47–60. https://doi.org/10.15604/ ejbm.2021.09.01.004

Rapando, R. W; Achieng, L. A and Munyua, J. (2021). Contribution of Youth Bunge Savings and Credit Cooperative Societies on Economic Empowerment of Youth in Kisii County, Kenya. Journal of African Interdisciplinary Studies, 5(8), 173 - 188.

Richardson, H. R. and Finnegan, G. (2014). The Challenges of Growing Small Businesses: A Theory of Organisational Transition. Continuum London.

Scoones, I. (2009). "Livelihoods Perspectives and Rural Development." Journal of Peasant Studies, 36: 171–196.

Sebhatu, T. K. (2012). The Impact of Savings and Credit Cooperatives in Ofla Wereda Tigray Region of the Impact of Savings and Credit Cooperatives in Ofla Wereda Tigray Region of Ethiopia, European Journal of Business and Management, 4 (12), 3–13.

Serrat, O. (2017). The Sustainable Livelihoods Approach. *Knowledge Solutions*, 21–26. https://doi.org/10.1007/978-981-10-0983-9_5

Shilimi, M. (2021) Examining Challenges Leading to Low Integration of Savings and Credit Co-Operative Societies (SACCOs) in National Economies: A Study of Zambia. *Open Journal of Business and Management*.

Sibonginkosi, M. (2013) Understanding underdevelopment through the sustainable livelihoods approach, Community Development, 44:2, 173-187, DOI: 10.1080/15575330.2012.683798

Siddarju, V.G (2012). Co-operatives and financial inclusion: Issues and challenges. International NGO Journal, 7 (3): 10-23

Singh, K. K. (2022). *Research Methodology in Social Science.* K.K. Publications: New Delhi. 284 pp.

Sirengo, K. S. (2019). *Demand For NHIF Cover among Commercial Motorcyclists in Kanduyi, Bungoma County* (Doctoral dissertation, University of Nairobi).

Solomon, E. (2022). *The Impact of Saving and Credit Cooperative Societies (SACCOs) Participation on Members 'livelihood: A Case of Awach Saccos* (Doctoral Dissertation, St. Mary's University).

Song, S., and Imai, K. S. (2019). Does the Hunger Safety Net Programme reduce multidimensional poverty? Evidence from Kenya. *Development Studies Research*, *6*(1), 47–61. https://doi.org/10.1080/21665095.2019.1582347

Statistical Report. (n.d.). World Council of Credit Unions https://www.woccu. org/our network/stat report

Stima SACCO. (2022). Annual report for the year ended 31 December 2022. Retrieved from https://www.stima-sacco.com/download/annual-report-for-the-year-ended-31-december-2022/.

Sumari, G. (2016). Credit rationing and loan repayment performance: the case study of Victoria savings and credit cooperative society. Master's Thesis, Moshi Cooperative University. Kilimanjaro, Tanzania.

Suzuki, K. (2021). Issues and perspectives of sustainable development and gender. Japanese Journal of Environmental Education, 31(3), 43–48 https://doi. org/10.5647/jsoee.31.3_43.

Tabachnick, B. G., and Fidell, L. S. (2019). Using Multivariate Statistics (7th ed.). Pearson.

Tanusha, R. (2021) Role of economic development cooperatives in improving the livelihoods of women in Gauteng, South Africa, Development Southern Africa, 38:4, 591-606, DOI: 10.1080/0376835X.2021.1906628

Tehrani, R., Mehragan, M. R. and Golkani, M. R. (2014). A model for evaluating financial performance of companies by data envelopment analysis : A case study of 36 corporations affiliated with a private organisation. International Business Research, 5 (8).

The Saccos Societies Regulatory Authority. (2022). The SACCO Supervision Annual Report, 2021. *The Annual Statutory Report on the Operations and Performance of Regulated SACCO Societies in Kenya*. https://www. sasra.go.ke/

Thomas, B. P. (2019). Politics, Participation, and Poverty. *Development through Self Help in Kenya.* https://doi.org/10.4324/978042930249

Turner, S. (2019). Defining Livelihoods and Sustainable Livelihoods. *Livelihoods*.

URT (2017). The National Microfinance Policy. Tanzania.

Virendra, K. G. Wankhede, and H. C. Gena, "Role of Cooperatives in Improving Livelihood of Farmers on Sustainable Basis." American Journal of

Educational Research, vol. 3, no. 10 (2015): 1258-1266. doi: 10.12691/education-3-10-8

Wang, X. F., and Cheng, Z. (2020). Cross-Sectional Studies. *Chest*, *158*(1), S65–S71. https://doi.org/10.1016/j.chest.2020.03.012

Wanyama, F. O., Develtere, P., and Pollet, I. (2008). Encountering the Evidence: Cooperatives and Poverty Reduction in Africa. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1330387

Waweru, K. M. (2011). An Investigation into the Cash Balance Management Challenges in Saccos in Nakuru County, Kenya. Journal of Research in International Business and Management, 1, 130-135.

Wolde, W.W. (2022). Factors influencing saving and Credit Cooperatives in improving members livelihood: The case study of Shebedino District, Sidama Regional State, Ethiopia. *MA Thesis*.

Wondimu, H., Delelegn, W., and Dejene, K. (2022). What do female-headed households' livelihood strategies in Jimma city, Southwest Ethiopia look like from the perspective of the sustainable livelihood approach?

Yirga, B. (2021). The livelihood of urban poor households: A sustainable livelihood approach in urbanising Ethiopia. The case of Gondar City, Amhara National State. Poverty & Public Policy, 13(2), 155–183. https:// doi.org /10.1002/pop4.

Zins, A., and Weill, L. (2016). The determinants of financial inclusion in Africa. *Review of Development Finance, 6*(1), 46-57.

APPENDICES

Appendix I: Questionnaire

INTRODUCTION

Dear respondent, I, Ann Wambui Mburu, a student at Moshi Co-operative University (MoCU). I am pursuing a Master of Arts in Co-operative and Community Development (MA-CCD). I am conducting a research study on '**Savings and Credit Co-operative Societies' Members' Livelihood Outcomes in Kasarani Sub County, Kenya.** 'Your participation is very important for the success of the study. Confidentiality will be assured, and the information provided during this interview will be used only for the research purposes. Participation in this study will not affect one's membership or role in SACCOS. The purpose of this study is simply to gain a better understanding of the role of the SACCOS service in the society, so that its efforts may be improved to better serve its members. Therefore, we ask you to feel at ease and to provide frank and honest answers without fearing any persecution or disclosure. Researchers are only interested in analysis of collective feedback and not individual respondent information.

Thank You for Your Cooperation!

This is voluntary participation.

SECTION 1:

DEMOGRAPHIC FACTORS

Instructions: Kindly select your answer by checking/ticking in the appropriate box

1. What is your gender?
    i.   Male …………
    ii.   Female………

2. What is your age in years?
    i.   18-28…..............
    ii.   29-39……….
    iii.   40-50………….
    iv.   51-60………...
    v.   61 and above….

3. What is your occupation?
    i.   Employed………

    ii.   Self Employed……….

    iii.   Unemployed

    iv.   Student….

    v.   Others, specify………

4. Level of education (in years)

    i.   Primary …………….

    ii.   Secondary ………

    iii.   Tertiary…………

    iv.   University………

5. Are you a SACCOS member?

    i.   Yes…………………

    ii.   No………….

6. If **NO**, why have you not joined SACCOS? (You can tick more than one answer)

    i.   High registration costs……

    ii.   Lack of consistent income….

    iii.   Delayed service delivery to members….

    iv.   Poor governance…

    v.   Lack of awareness towards the benefits of SACCOS….

    vi.   Mismanagement of funds by SACCOS….

    vii.   Unfavourable terms and conditions…

    viii.   Lack of SACCOS in my locality….

    ix.   Other (please specify) ..……

7. What is your household size? (People living together/ sharing the same space in a house)?

SECTION 2: (FOR SACCOS MEMBERS)

MEMBERS' PARTICIPATION IN SACCOS FINANCIAL SERVICES

8.   Please rate your level of agreement with the following statements. S= Strongly Agree, A= Agree, N= Neutral, D= Disagree, SD= Strongly Disagree.

STATEMENT	SA	A	N	D	SD
I am involved in the marketing of financial services					
I utilise a range of financial services offered by the SACCOS					
I actively participate in SACCOS investment decisions					
I feel that my contributions in the SACCOS are valued					
I save and borrow from the SACCOS					

SECTION 3:

SACCOS AND LIVELIHOOD OUTCOMES (FOR BOTH SACCOS MEMBERS AND NON-MEMBERS)

Part A: SAVINGS

(Tick where appropriate)

1. Do you regularly save in the SACCOS? Yes ---- No -----

2. If YES, does your SACCOS have a compulsory average monthly saving amount in Ksh.? Yes…. No….

If YES, specify the compulsory average monthly saving amount in Ksh…….

If NO, where do you save? (Tick more than one answer)

     i.   Bank ….

    ii.   Money market Funds….

   iii.   Treasury bills/ bonds….

   iv.   Other (Please specify) ….

3. How has your savings helped improve your livelihood?

4. During the last one year would you say whether your savings have (For both SACCOS members and non-members)

   a) Decreased? ----

   b) Stayed the same? ----

   c) Increased? ----

5. For what purpose do you save? (You may tick more than one where applicable)

   a) For loan repayment ----

   b) For safety of cash ----

c) For consumption ----

d) For interest ----

e) Purchasing household assets ----

f) For emergency ----

g) Others (Please specify) --------

6. How would you rate your current livelihood outcomes?

  i. Very poor…..

  ii. Poor……

  iii. Average…..

  iv. Good……

  v. Very good…..

7. In your opinion, do you think SACCOS positively impacts livelihood outcomes?

  i. Yes

  ii. No

  iii. Not sure

8. What are the attractive features of SACCOS? (You may tick more than one where applicable)

a) Good interest rate ----

b) Safe for savings ----

c) Convenient and nearby to withdraw ------

d) Other (Please specify) ------

9. What do you think about the interest rate your SACCOS pays on saving?

a) Less than the market rate -----

b) Greater than the market rate -----

c) No information about other rates -------

d) I am not a SACCOS member……

PART B: Value of Household Assets (FOR BOTH SACCOS MEMBERS AND NON-MEMBERS)

1. What is the total value of your household assets owned before 12 months (e.g. land, home, car, commercial property)?

2. To what extent do you feel that your household assets have helped improve your livelihoods? (Tick where appropriate)

a) Provided economic stability.

b) Increased income potential…

c) Access to credit….

d) Wealth accumulation

e) Others (specify)……

Have the following assets been in your possession for more than one year. Please tick ✓ where appropriate, you can choose more than one answer.

ASSET	POSSESSION
Land	
Home	
Car/ motorcycle/ bike	
Commercial property	
Household appliances e.g. refrigerator, gas, TV, radio	
Furniture	
Others (specify)	

PART C: Expenditures (Food)- Tick where appropriate (FOR BOTH SACCOS MEMBERS AND NON-MEMBERS)

1. What is the average monthly food expenditure of your household in KSH?

a. Below 5,000….

b. 5,000-10,000….

c. 10,000-15,000….

d. 15,000-20,000….

e. Above 20,000….

2. How many times does your household eat meals in a day?

a) Once…

b) Twice….

c) Thrice…

d) More than three times….

3. To what extent do you feel that your per capita on food expenditure changed since joining the SACCOS.

a) Increased…

   b) Reduced….

   c) Neutral…

   d) I am not a SACCOS member…

Non-Food Expenditures

1.Do you have children and other school aged household members? Yes ---- No -----

2. What is the average educational expenditure per year?

3.Has the number of your household members attending school in the last one year?

   a) Increased…

   b) Neutral ……

   c) Decreased…….

If increased, what is the main reason? (Tick where appropriate)

   a. New school building in your locality -----

   b. Increased income-----

   c. Increased awareness towards education ----

   d. School fees loans provided by SACCOS….

   e. Loans from banks…

   f. Others (Please specify) ------------------

If it decreased, what is the main reason?

   a. High cost of living...----

   b. Lack of access to schools in the locality ----

   c. Inability to get School fees loans provided by SACCOS----

   d. Lack of interest towards education-----

   e. Others (Please specify) ------

   4. Have you been sick or injured during the last two years? Yes -- No ……

If YES, did you get medical treatment? Yes ---- No -----

If YES, where did you get the money to pay for medical treatment? (Tick where appropriate)

   a. Employment income……

   b. Business……

   c. Medical loans from SACCOS…...

   d. Friends and relatives' contributions

   e. Medical insurance cover….

f. Others (please specify) ….

5. If you did not get medical treatment, what is the main reason?

a. Lack of medical facilities ……

b. Low level of income …….

c. Inability to access medical loans from SACCOS?

d. Others (please specify) ……

6. Has your access to get medical facilities changed since joining SACCOS?

a. Decreased ----

b. Stayed the same ----

c. Increased -----

d. I am not in SACCOS….

7. What is your average monthly expenditure in medical expenses?

8. Does your SACCOS provide medical insurance cover for its members?
   Yes…. No…. I am not in a SACCOS….

9. Are there any improvements you would like to see in your SACCOS put in place regarding access to medical loans? Yes…. No….

If yes, mention them!

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

Appendix 11: Key Informant Guide.

1.Which financial services does your SACCOS provide?

2. How do members participate in the financial services offered by your SACCOS?

3. How has the services provided by your SACCOS improved the livelihood outcomes of your members?

4. What is your view on the loan amounts provided by SACCOS?

5. What is your view on the interest rates provided by SACCOS? Both loan and savings interest rate?

6.What are some of the reasons why members save in SACCOS?

7. What is your comment on saving amounts, types, and periods?

8. How do SACCOS cater to different people with varying financial status?

9. Do you like the services provided by SACCOS? What do you like? What do you dislike?

10. What is your recommendation to better enhance SACCOS services?

CLOSING:

Is there anything else you would like to add that has not been discussed?

Thank you for your time and cooperation!!!!

Appendix III: Approval letter

UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

MOSHI CO-OPERATIVE UNIVERSITY (MoCU)
CHUO KIKUU CHA USHIRIKA MOSHI

OFFICE OF THE VICE CHANCELLOR

06 Sokoine Road, 25121 Mfumuni,
P. O. Box 474, Moshi, Tanzania, Tel: +255 272751833,
Email: vc@mocu.ac.tz, Website: www.mocu.ac.tz

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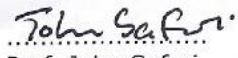
To Whom It May Concern

RE: ANN WAMBUI MBURU

Please refer to the above heading.

I am writing to introduce Ms. Ann Wambui Mburu who is a bonafide student persuing Masters of arts in Co-operative and Community Development (MA-CCD) at Moshi Co-operative University in Tanzania

As part of the requirements for her studies, the named candidate *is* planning to undertake a research project titled "Savings and Credit Co-operative Societies and Members' Livelihood Outcomes in Kasarani Subcounty, Kenya"

Any assistance accorded to her will be highly appreciated. Please do not hesitate to contact the undersigned for any information you may require.

Sincerely,

Prof. John Safari
FOR: VICE CHANCELLOR

General: Moshi Co-operative University, 06 Sokoine Road, 25121 Mfumuni, P. O. Box 474, Moshi, Tanzania,
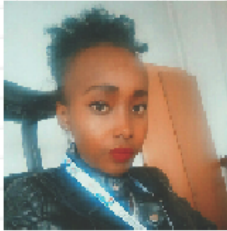Tel: +255 272751833 Email: info@mocu.ac.tz, Website: www.mocu.ac.tz

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This is to Certify that Miss.. **Ann Wambui Mburu** of **Moshi Co-operative University**, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: **SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES AND MEMBERS' LIVELIHOOD OUTCOMES IN KASARANI SUB-COUNTY, KENYA** for the period ending : **31/May/2024**.

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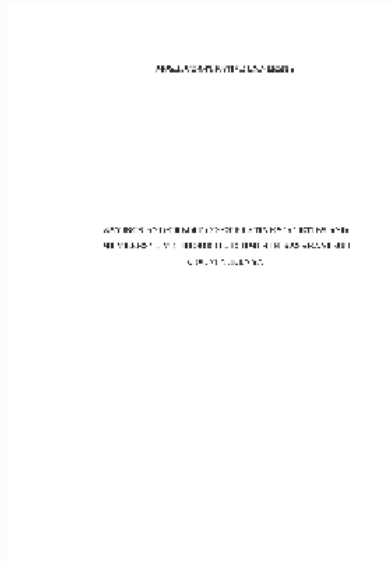
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