

**ANALYSIS OF COLLECTIVE ACTION AND ACCESS TO FINANCE FOR WOMEN
SMALLHOLDER CHICKEN FARMERS IN MAKUENI COUNTY, KENYA**

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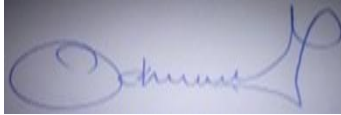
**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF
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DECLARATION

Declaration by the candidate

This research project is my original work and has not been presented for award of a degree in any other University or for any other award



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DEDICATION

I dedicate this project with thanksgiving to the Almighty God and to my family for their moral and financial support.

LIST OF ABBREVIATIONS AND ACRONYMS

ACD	Access to capacity development
ACF-USA	Action against Hunger, United States of America
AMCOs	Agricultural Marketing Cooperatives
AMSPI	African Mobile Services Policy Initiation
ASAL	Arid and semi-arid Lands
CI	Confidence Interval
DID	Difference in difference
DRC	Democratic Republic of Congo
Eos	Extension officers
FA	Farmers Associations
FGDs	Focus Group Discussions
FIs	Financial Institutions
FOs	Finance Officers
GDP	Gross Domestic Product
GIVE	Gender Inclusive Vaccine Ecosystem
GoK	Government of Kenya
IDRC	International Development Research Centre
JOYWO	Joyful women Organization
KIIs	Key Informant Interviews
MFI	Microfinance Institutions
NACOSTI	National Commission for Science, Technology and Innovation
NGOs	Non-governmental Organizations
NIE	New Institutional Economics
PSM	Productivity of small and medium
SACCOs	Savings and Credit Cooperatives
SCFGs	Smallholder Chicken Farmer Groups
SHGs	Smallholder Groups
SMEs	Small and Medium Enterprises
TFP	Total Factor Productivity
UNDP	United Nations Development Program
WSHFs	Women smallholder farmers

OPERATIONAL DEFINITION OF TERMS

Access to capacity development

Process by which individuals, groups, organizations, institutions and societies increase their abilities: to perform functions, solve problems and achieve objectives; to understand and deal with their development need in a broader context and in a sustainable manner(UNDP, 2017)

Collective action

Collective action is the exploit undertaken by a group of individual where the aim is to improve their financial position and attain a communal goal (Bati, 2020).

Financial inter mediation

Process by which financial institutions accept deposits, advance loans and give information on loans to support investment in the economy. (Gwilym, 2018).

Social collateral

Social collateral are those resources inherent in social relations which facilitate collective action and whose elements include trust, savings, norms and networks of association (Putman, 2019).

Table banking

Table banking refers to group funding where members pool their savings together and borrow immediately from those savings on the table for a short period or a long period(Chemutai,2017)

ABSTRACT

Collective action refers to the actions taken by a collection of people; acting based on a collective decision. The main purpose of this study was to analyze collective action and access to finance for smallholder women chicken farmers. The study was guided by two objectives; to determine the influence of social collateral on access to finance, to establish the relationship between access to capacity development and access to finance and to explore the financial intermediating role of table banking activities on access to finance. It was anchored on; Collective action theory and Theory of social learning. Pragmatism research philosophy and descriptive research design were adopted by the study. Target population was 2,090 groups in the three sub-counties within Makueni County. A two-stage sampling technique was employed: Simple random for groups and purposive sampling for members from each group. A sample size of 418 farmer group members was selected for the study. The study adopted a mixed methods approach involving a quantitative survey and qualitative data in the form of KIIs, And FDGs. Logistic regression models were used to analyze quantitative Data with the aid of STATA version 16. Qualitative data was coded and analyzed with the aid of Nvivo version 16. Promotion of savings via group membership was found to be a statistically negative predictor of the perception of financial access. Findings revealed that social collateral indicators of trust and savings have a negative influence on access to finance (44.2%) (CI,-0.821,-0.028). Financial intermediation had a positive mediating effect on the influence of social collateral on access to finance. The study also revealed that individual access to training as an indicator of capacity development was a negative predictor of access to finance 17.9% (CI,-0.280-0.078). Financial intermediation mediated the effect of the relationship between social collateral indicator, access to capacity development and perception of access to finance. Training on financial management, vaccine administration and record keeping were some of the major benefits gained as demonstrated by women farmers through KIIs and FDGs.

CHAPTER ONE

1.1 Introduction

This chapter encompasses the introduction section of the study, the background of the study; statement of the problem; study objectives; research questions; significance of study, study scope, limitations of the study and assumptions of the study.

1.1.1 Global Context

The concept of collective action has become one of the most prevalent methods of accessing finance for smallholder farmers in a number of countries globally. The World Bank's triennial Global Findex Data (2017) indicates that about 86 percent of the poor in low-income countries still remain to a higher extent excluded from financial access. Collective action involves the organization of individuals into groups with the aim of achieving a common objective and is an important form of social collateral in the world (Malinga,2019).There has been an evolution in the forms of collective action in different countries around the world with changes in the financial policies of different institutions(Bhanot et al., 2012).

Collective action among smallholder farmers which emerge under opportunity to coordinate farmer group actions, and the power to reward contributors and punish free-riders can result to financial services access that in turn leads to economic prosperity (Desai & Joshi, 2012). Moreover, collective action in rural networks and groups with shared interests potentially reduces transaction cost and information asymmetry hence improving the living standard through the various investments made by women chicken farmer groups (Meinzen-Dick, 2020).

Women farmers are known to form farmer groups that enable them to pool resources together and work collectively on women empowerment activities, in particular, chicken farming (Lydia, 2021). Cherotich et.al (2021) reveals that some of the collective action activities include merry-go-round/ table banking and other community responsibilities assigned to women. Mutumba (2018) implies that farmer groups are believed to be able to reduce transaction costs and lower the risk of default payment through the collective action activities of table banking.

Collective action that promotes the empowerment of farmer groups will allow them to overcome specific barriers to becoming part of market economy. In many sub-Saharan countries including Ethiopia, DRC, Chad, Tanzania, and Uganda less than half of the population have access to formal and informal financial services and approximately 60% of the population in the world lives below

the poverty line(ACF-USA,2012).It is also observed that the majority of the women entrepreneurs have benefitted from the village savings and credit associations which offer credit at affordable and flexible interest rates in form of a table banking model (Anderson,2012).

1.1.2 Local Context

Collective action has recently re-emerged to organize smallholder chicken farmers in developing countries in the wake of liberalization of agricultural market. It is significant since large parts of populations in developing countries are found in the rural areas where access to finance is a constraint factor (Bongoman,2019).In Kenya statistics show that 70% of women chicken farmers have minimal access to finance (GoK, 2010).This is often the critical mechanism for generating persistent income inequality, as well as slower growth. In emerging economies where individualism dominates collective action, social collateral has been known as an attribute of individualism in women farmer groups and their relationships which enhance the ability to solve collective-action issues (Ostrom, 2013).Social collateral forms, such as trustworthiness, networks, and institutions are incorporated into a collective-action framework that enhances smallholder chicken women farmers, to accessing finance. Women in many rural areas come together to form groups that enable them to get access to financial support services. This boosts their chicken farming activities by enabling them to access farming inputs such as vaccines, drugs, feeds among others.

As a collective action activity, table banking has been practiced for quite some time, and from the outset seems to have socially and economically empowered the society (Ngumbau, 2017).The failure of formal financial institutions to address and meet the credit needs of the low-income chicken farmers has resulted in the popularity of informal banking groups in most of the rural areas (De Andrews et.al,2021).Kabir and Flath (2021) argues that table banking has contributed to financial intermediation for smallholder farmers in enhancing access to finance.

In the view of Khan (2021) financial intermediation is a process by which financial institutions accept deposits and advance loans to support business activities in the economy. Apart from reducing liquidity barriers, financial intermediation can enhance access to finance for smallholder women chicken farmers. It can therefore be argued that the collective action activities of table banking/merry-go-round plays a financial intermediation role function. Thus the current study sought to determine the financial intermediating role of collective action activities of table banking and access to finance in Makueni County, Kenya.

Collective action has also been demonstrated to contribute to financial access through social collateral, a functional approach or tactic which smallholder farmers use in their respective groups to access financial services. According to Papadimitri et.al (2021) collective action approach that involves social collateral will be able to create more human and economic capital due to the effective teamwork and collaboration, supports each other and more affected by group pressure. In addition he points out that women borrower are capable of developing more social collateral because they are able to build strong network connection between the individuals in the group to secure the informing borrowing.

Group lending approach has shown better performance and continuously increasing concern among members of the group. It is due to the fact that the organizations have built social collateral created through trust, social ties and network (Smets, S.2022). By preserving a close networking with the relatives and friends and those involved in business group farming activities, members are able to extract the information about the market opportunities and thus reduce the cost of screening and monitoring (Aliyu, 2019). Similarly, Samanta *et.al* (2021) implies that networking is heavily embedded in financial institutions program as it improves the efficiency of society by facilitating coordinated actions which contribute to social collateral. Furthermore, Atwell and Nathan (2022) points out that there is significant association between network and repayment loan through social ties that exist within the farmer groups. This implies that the strong networking leads to better access of finance, as a medium to business opportunity, and ensure repayment are on schedule through the pressure and trust within members.

In spite of that, Mokhtar (2011) found that members in the group will exert pressure to ensure that each of the group members meets the loan repayment period and to improve income household. The social collateral model offers guidelines to the formal lending institutions and other financial institutions in advancing loans to the borrowers effectively and assesses the ability of the borrowers in repaying back the loan amount the loan repayments. This would ensure survival of the borrowers in their programs and enhances access to finance. A vital social collateral model would contribute to financial institutions in terms of financial and managerial sustainability of those institutions and lower the default rate among borrowers. The link between social collateral where trust, group pressure, saving and network of associations are the main factor and collective action among farmer groups enhances access to finance among smallholder women chicken farmers (Ayieko, 2014). However, many women chicken farmer groups in rural areas find it a challenge in accessing finance

and thus low productivity due to inadequate finances or limited capital. One of the main constraints of collective action is collateral requirement and thus it can be hypothesized that social collateral enhances access to finance. Thus, the current study sought to determine the effect of social collateral on access to finance among smallholder women chicken farmers in Makueni County, Kenya.

Collective action also encompasses access to capacity development as one of its activities which enhances access to finance among smallholder chicken women farmers. In the view of Motta and harma (2020) group lending approach provides training to borrowers on financial literacy, business skills and management capabilities. Drawing from Griffin (2012) reveals that the women borrowers that engage in group lending approach are more motivated to increase the human capital by putting more effort to learn and to gain more knowledge in business management.

Access to capacity development entails indicators such as access to Training and information centers, Information on markets, prices and professional training access centers. In addition, access to capacity development promote women's and youth leadership, as well as leadership in indigenous and most vulnerable segments of society and creation of linkages with international organizations to promote equity and progressive thinking about individual and collective rights (Bosc,2018). Based on the studies above, none has addressed access to capacity development and access to finance among women chicken farmers.

In Kenya, women mobilize themselves into groups to address issues that are common to them. This has been achieved through collective action activities of; social collateral, access to capacity development and table banking. In Makueni County, majority of chicken farmers have no access to finance and thus are credit constrained (Barongo, 2022). Thus it can be hypothesized that through collective action activities, women chicken farmers are able to trust each other, secure loans, make savings and access training.

1.2 Statement of the Problem

In the recent past women have been facing challenges in accessing finance from financial institutions. This has necessitated a collective action in building borrowing power for women in rural areas marked by minimal agricultural activities. Women farmers have seen the need to form groups and engage in collective savings as social collateral for the purpose of accessing finance from lenders.

Financial access is identified as the main factor in determining smallholder farmer growth and survival, in particular, women chicken farmers. In addition, it enables them to make viable investments and to enlarge their chicken farming activities. Griffin (2012) argues that women smallholder farmers secure loans and are capable of developing more social collateral since they are able to build strong networks, maintain high levels of trust and make savings in their respective groups to secure loans from informal lenders.

Several studies have been done on collective action and access to finance; Hadi *et.al* (2015) conducted a study on social collateral, repayment rates and the creation of capital among the clients of microfinance. Results indicated that social collateral contribute to the financial institutions in terms of advancing loans, financial and Managerial sustainability.

In a study conducted by Desai and Joshi (2014) on collective action and community development among smallholder women chicken farmer self-help groups in rural India, results revealed that women who were members of self-help groups could get access to government financial services and support as opposed to those who were non-members. Results of a study by Sriary and Nyoman (2021) indicated that collective action led to access to financial services from microfinance institutions by women chicken farmers in South India and Bangladesh. Microfinance institutions were found to offer financial services to women chicken farmers who were members of farmer groups. In his study Bati (2020) on the determinants of success and coping strategies of collective action among smallholder women chicken farmers in rural Ethiopia reveals that farmers in chicken farming cooperatives had more returns on their farming activities. Tom (2020) conducted a study on influence of Micro-credit institutions on women empowerment in Homa-bay county, Kenya. Findings revealed that micro credit institutions success in terms of penetration and development depends on developing institutional and policy framework concerning poverty reduction directed to women needs and aligning such policies to vision 2030.

Chemutai (2017) conducted a study on influence of table banking in livelihood of women; A Case Study of Joyful Women Organization Uasin Gishu County. The findings revealed that there is an increase in credit accessibility leading to a rise in livelihood of women. Mwaniki (2015) conducted a study on impact of Women Enterprise Fund in promoting women empowerment on governance in Bondo district, Kenya. The findings indicate that increasing women's access to microfinance in Bondo district enabled women to make greater contributions to household income which had eventually led to improved well-being and ensuring wider changes in the existent gender inequality. In spite of all the studies carried out, very little has been done to analyze collective action and access to finance among women chicken farmers. Women farmers find it challenging to access financing from financial institutions and are thus credit constrained. It is apparent therefore that a gap exists which the study sought seeks to fill.

1.3 Objectives of the study

The study was guided by the following objectives;

1.3.1 General Objective

To analyze collective action and access to finance for women smallholder chicken farmers.

1.3.2 Research Objectives

- i. To determine influence of social collateral on access to finance by women chicken farmers.
- ii. To establish the relationship between access to capacity development and access to finance by women chicken farmers.
- iii. To explore the financial intermediating role of table banking activities on access to finance by women chicken farmers.

1.4 Research Questions

- i. To what extent does social collateral enhance access to finance by women chicken farmers?
- ii. To what extent does access to capacity development determine access to finance by women chicken farmers?
- iii. What is the relationship between financial intermediation role of table banking activities and access to finance by women chicken farmers?

1.5 Significance the Study

Scholars who are interested in understanding and examining collective action in relation to access to finance will find the results of this study very enriching.

Findings will offer relevant policy insights to stakeholders such as development practitioners and programmers, researchers, GIVE project, Ministry of Agriculture, policy makers, agricultural marketing firms, group members and county government in enhancing farmer group's performance. Information on collective action will help to facilitate NGOs in their decisions regarding planning, organizing and provision of group trainings, funding and other incentives. Results will also add knowledge to dynamics of collective action which will enable group members to overcome the challenges and be well set to take advantage of their farmer groups in enhancing their economic standards. The study findings will also aid in relevant policy insights, strategic planning and resource allocation as regards to promoting chicken rearing practices within the devolved system of government.

1.6 Scope of the Study

The study was conducted between March and September 2022. It included 2090 women chicken farmer groups in the sub-counties of Makueni, Kibwezi East and Kibwezi West. The constructs of variables of the study were social collateral, access to capacity development, and the mediating variable of table banking activities.

1.7 Limitation of the study

The study, though carefully planned, was not free from certain limitations. The variables under study were affected by external factors such as cultural practices and social factors which the study may not have anticipated. Judgmental errors, personal bias as well as possible reluctance to disclose information was seen as a sensitive matter also affected the results of this study. In addition, time, language barrier and other resources restricted the selection of respondents.

1.8 Assumptions of the Study

The study assumed that social collateral indicators of trust and savings had positive influence on access to finance. Findings of the study were contrary to this assumption. In addition the study assumed that access to capacity development indicators influence access to finance. The study revealed a mixed findings; negative for individual access to training but positive and significant for access to training via membership in a group. It also assumed that role of table banking activities would influence access to finance. However, it was found that the two indicators of financial intermediation were insignificant to the access of finance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents review of literature that has been published on collective action and access to finance. It reviews theoretical literature, empirical literature, and the researchers' conceptualization of the study variables.

2.2 Theoretical framework

The study was grounded on two theories;

2.1.1 Collective Action Theory

The theory proposed by Olson (2002) under the NIE is concerned with information asymmetries and high transaction costs. According to this theory, there are enormous challenges facing groups of individuals who form groups to pursue common objectives despite the fact that they get some benefits. The theory further suggests that, a smallholder farmer group should be taken as a collection of rational individuals and not as a firm. The assumption implies that, even if such individuals stand to gain as a group, if they acted to achieve the common goal, still they will not voluntarily act to achieve the same. The theory, however, suggests that the individuals have to set aside their individual interests and work as a group to achieve better results.

The ability to identify inactive members in a group depends on the extent to which each individual action are visible and are likely to affect the utility of others (Olson, 2002). It further pointed out group size and selective incentives as free rider problems. The selective incentives entail additional or supplementary incentives to reward member cooperation or punish non-cooperation. In this case, rewards to encourage group membership and participation include free inputs and training whereas coercive incentives include imposing of fines for not participating especially in group meetings.

Cshec, (2016) expressed that if the entire group members would gain from collective action, then there is no particular incentive for an individual to participate in the collectives. On the other hand, group formation and behavior should be viewed under the lens of costs and benefits on an individual level, not at group level. This theory was important in this study since it highlighted the importance of individuals forming groups where they have activities such as table banking. It also linked collective action and access to finance through a financial intermediation role of table banking.

The study therefore used this theory to advance the variables of social collateral and the moderating role of financial intermediation on access to finance among smallholder women chicken farmers in Makueni County, Kenya.

2.2.2 Theory of Social Learning

This theory is proposed by Bandura and Walters, (1963) and proposes that individuals are social entities who learn from observing others' actions and behaviors. According to Lee and Lee (2018) the theory is based on three concepts; observational learning, imitation, and modeling. Learning can also be done through training and development programs that are organized to enhance the skills. This relates to access to capacity development through training, a collective action activity that enhances access to finance. According to this theory training and development programs have not addressed all learning types as there are some social elements which cannot be taught but learned from the environment.

The environment should be very professional and the surroundings should be in such a way that the people (employees) learn from them. This theory also suggests that it is not necessary that the behavior is changed after learning something. It is expected that a person's behavior changes after learning something, but it is not in all cases. Individuals tend to change or do things or make informed decisions based on learning that is associated with the environment and the interactions in terms of networks of associations.

There is a dearth of studies on the role played by social learning in the financial education and financial access domain in developing countries such as Kenya. The few existing studies have mostly examined individuals rather than the environmental aspects of social learning where members in a group can learn from each other. For instance, Mindra and Moya (2017) and Mu'izzuddin *et al.* (2017) explored the effects of self-efficacy an individual level dimension of social learning.

Self-efficacy as defined by Amatucci and Crawley (2011), is the level of confidence in one's aptitude to deal with financial circumstances without being incredulous. Research attention on the effects of social learning's environmental dimensions, such as interaction and collaborative learning in the financial education and financial access domain, has been insufficient for instance studies like Gutter *et al.* (2010) examined the interactive influences of social learning opportunities of discussions and observations on consumer decision-making and subsequent practices.

They highlight social interactions, including discussions (direct teaching) and observations (modeling) among financial socialization.

The theory relates to social collateral and training, the indicators of collective action. It was crucial in explaining how learning takes place; it also highlights access to capacity development and training programs. The study borrowed this concept to advance the variable of access to capacity development in relation to access to finance.

2.3 Empirical Review

Various studies have been carried out on collective action and access to finance. The empirical literature review in this section was guided by the study objectives;

2.3.1 Social Collateral and Access to Finance

Raj & Joshi, (2018) alludes that a collective action approach develops social collateral creates more human capital and economic capital due to the effective teamwork and collaboration, support in each other and group pressure. Nawaz F. (2018) examined Social Collateral, Collective Action and Women's Empowerment in Micro-finance Groups in Bangladesh. The study employed which used both primary and secondary data found out that women respondents came forward not only to participate in collective social welfare actions but also in community activities.

According to Agahi and Karami (2012), a study on the role of social collateral management on success and development of farmer groups, Social collateral was found to be a powerful concept for understanding the emergence, growth and functioning of network of linkages. The study employed correlation research design where a sample of 220 respondents was taken through random sampling. Questionnaires were administered to the respondents. The findings revealed that there was a high correlation of 83% on the Alpha Cronbach's coefficient scale. However, the study did not consider the effects of social capital on access to credit. Therefore; we sought to determine the influence of social collateral on access to finance for women chicken farmers.

Nguyen and Danga (2020) showed that social disclosure treatment significantly reduces delinquency, by 19% of the base rate, that borrowers are willing to pay 9% of their monthly income to preserve their social image. The study focused on the borrowers of a retail bank unlike the current study which will concentrate on table banking and group lending. Thus the current study sought to determine influence of social collateral on access to finance with specific reference to women chicken farmers in Makueni County.

According to a study conducted by Mogaka and Hilario (2016) on factors influencing access to finance by SMEs in Mozambique, findings revealed that there is a relationship between the structure of the financial sector and access to finance by SMEs; there is a relationship between awareness of funding and access to finance by SMEs; there is a relationship between collateral requirements and access to finance by SMEs; and there is a relationship between small business support and access to finance by SMEs. The study did not focus on social collateral and access to finance among smallholder farmers. In spite of the studies carried out by the scholars, none of them clearly articulated social collateral on access to finance. It is apparent therefore that a gap exists which the study sought to fill.

2.3.2 Access to Capacity Development and Access to Finance

Access capacity development is concerned with organizational development, analysis and intervention function through enhancement of access to finance. Bhalla et.al.,(2018) conducted a study on partnering with women collectives for delivering essential women's nutrition interventions in tribal areas of eastern India. The findings showed vast network, governance structure, bank linkage and regular interface have made self-help group and their federations more productive community collective.

Anania and Rwekeza (2018) on the same note conducted a study on co-operative Education and Training as a means to improve performance in Co-operative Societies. The study used a sample of 70 people comprising ordinary members, SACCO's staff and leaders. The study showed that education and training is following the guiding principle and policies. It was further shown that members rarely receive education and training. The study focused on SACCOS, ordinary members and leaders while the current study will focus on training and access to finance among smallholder women chicken farmers in Makueni County, Kenya. From the previous studies much has been done on capacity development but not on how it influences access to finance. Thus, the current study sought to fill the existing gap.

2.3.3 Financial Inter mediation and Access to Finance

Financial intermediaries such as banks rely on informal local networks of information created by collective action among the smallholder farmers to market their financial products and services in order to scale-up the scope of financial inclusion. The following studies have been done on financial inter mediation role of table banking and access to finance.

According to a study conducted by Bongomin *et al.*, (2017) a cross-sectional study on collective action among the poor in Uganda, collective action significantly affects financial inclusion of the poor. The study further revealed that inclusion of collective action in the relationship boosts the impact of financial inter mediation on financial inclusion of poor households in rural Uganda.

The study employed correlation research design, and semi-structured questionnaires were used to collect primary data.

Chemutai (2017) examined Influence of Table Banking on Livelihood of Women; A Case Study of Joyful Women Organization Uasin Gishu County. The results showed that credit accessibility, capacity building and market accessibility positively influence livelihood of women in Uasin Gishu County. The study employed correlation research design, and semi-structured questionnaires were used to collect primary data. The target population was 431 women self-help groups in Uasin Gishu County beneficiaries of JOYWO. A sample of 81 women SHG was determined through simple random sampling. The study focused on impact of table banking in livelihood of women but didn't exhaust on role of collective action and access to finance.

Wagoki *et al.*, (2016) on the other hand conducted a cross-sectional survey on self-help groups in Rongai on effect of table banking on economic empowerment of self-help groups. The study targeted a population 210 self-help groups from the sub county and 81 self-help groups were sampled through a simple random sampling procedure. Results indicated that group guarantee was an important factor in enhancing economic empowerment of SHGs members. The study focused on effect of table banking on self-help group`s economic empowerment and not the access to finance. Based on the above studies, very little has been done on the financial intermediation role of table banking and access to finance. Thus the current study sought to fill the existing gap.

2.3.4 Access to Finance

As a collective action activity, access to finance is vital for strengthening the degree of success, competitiveness and performance of smallholder farming activities in particular, women chicken farming. All forms of groups require finances to boost their operations hence achieving economic objective. Access to finance is identified as the most important factor in determining women chicken farmer growth and survival in most developing countries. Several studies have been done on access to finance and women economic empowerment activities.

Giang *et al.*, (2019) conducted a study on The Causal Effect of Access to Finance on Productivity of Small and Medium Enterprises in Vietnam. The empirical results specified that improving the financial accessibility could directly enhance firm productivity. The study indicated that access to a bank loan by firms significantly improve TFP. The study recommended that the government puts more effort into assisting SMEs in generating bankable projects, and create a sound and healthy financial environment to stimulate firms' access to finance, which will ensure their sustainability and growth. The study focused on causal effect of access to finance on productivity of SMEs but didn't highlight on role of collective action on access to finance among smallholder farmers.

Uronu and Ndiege (2018) conducted a study on Rural Financial Inclusion: Prospects and Challenges of Collective Action in Extending Financial Services among Rural Smallholders Farmers in Tanzania. The study was based on data collected through (FDGs) from 11 cases of Savings and Credit cooperatives (SACCOs), Primary Agricultural Marketing Co-operatives (AMCOS) and Farmers Associations (FA) in Dodoma and Morogoro regions in Tanzania. The study used simple random sampling and correlation research design. The study's results indicated groups have significant role on strengthening the ability of the smallholder farmers to access financial services. It further showed that there is huge default of loans by smallholder farmers that they obtained through wholesale borrowing which led to ineptness which leads to debt frightening. It was concluded that loan defaults increases financial burden as interest and fine enlarge the loan size. Consequently, affecting cooperation, sustainability of groups and deepening poverty among smallholder farmers, in particular, women. It was further observed that, the main reason for poor repayment of the loans is poor group lending implementation arrangements.

Simeline *et al.*, (2019) on the hand, conducted a study on collective action for access to inputs, finance, markets and extension for smallholder farmers in Eswatini. A sample of 82 smallholders was done; the study alluded that most smallholder farmers are elderly women who generally have low levels of education. It further showed that collective operation for farmers is key to market and extension access but not finance. Therefore, as much as EOs should encourage and assist smallholders to form formal groups like cooperatives, they still need to go further to create strategies to assist the farmer cooperatives to raise capital. The study focused on cooperatives and market and extension access but not access to finance.

Many studies have been done on access to finance but few have been done to analyze collective action activities of social collateral, financial inter mediation and access to capacity development

and access to finance .Thus this study sought to fill the existing gap, while at the same time incorporating additional variables.

2.4 Summary of Literature Review

This chapter reviewed empirical, theoretical literature, the researchers' conceptualization of the study variables, an illustration of conceptual framework and research gaps. The study adopted two theories collective action theory and theory of social learning. The theories were found appropriate in the study as they guided on the theme of collective action. Collective activities of social collateral, access to capacity development and role of table banking activities enhance access to finance. Moreover, through social collateral indicators of trust, savings, financial institutions and other informal financial service providers advance loans and give grants to group members. Access to capacity development through training of WSHFs and table banking activities preference facilitate access to finance.

2.5 Conceptual Framework

Conceptual framework is a schematic representation of the relation between the independent and dependent variables. The conceptual framework of a study is developed from the research objectives and the literature review (Mwasaa, 2018).The independent variables include social collateral, access to capacity development and the mediating variable of table banking activities against the dependent variable of access to finance.

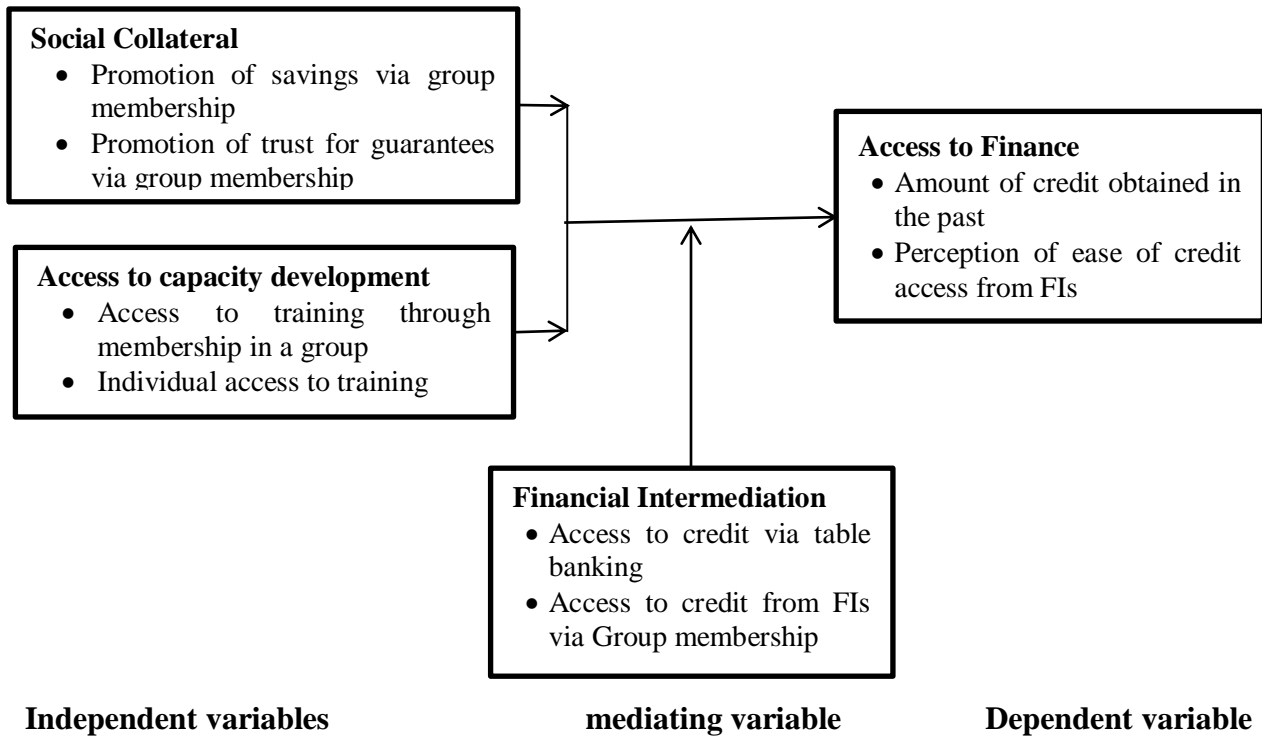


Figure 2. 1: Conceptual Framework

Research gaps

Table 2. 1 Summary of Gaps in Knowledge

Title	Author	Methodology	Knowledge Gap	Comment
Role of management of social collateral management on development of farmer groups.	Agahi & Kara mi(2012)	Correlation research design was employed by the study. A sample of 220 respondents using surveys was taken through random sampling.	Study didn't consider the effects of social collateral on access to finance	The study adopted quantitative research design.
Social Collateral, Collective Action and Women's Empowerment: An Empirical Study on Micro-finance Groups in Bangladesh	NAWAZ F.(2018)	Both primary and secondary data were used .	Focuses was on the relationship between social Collateral and women empowerment	Current study focused on analysis of collective action and access to finance on women chicken farmers.
Rural Financial Inclusion: Prospects and Challenges of Collective Action in Extending Financial Services among Rural Smallholders Farmers in Tanzania.	Uronu &Ndi ege (2018)	The study is based on data collected through FDGs from 11SACCOs, Primary AMCOS and FA in Dodoma and Morogoro regions in Tanzania. A simple random sampling and correlation research design was adopted.	The study was carried out in a different set up other than Kenyan.	This study was conducted in Kenya
Influence of Table Banking in Livelihood of Women; A Case Study of Joyful Women Organization Uasin Gishu County.	Chem utai, R(2017)	Correlation research design, and semi-structured questionnaires were used to collect primary data. The target population was 431 women self-help groups in Uasin Gishu County beneficiaries of JOYWO. A sample of 81 women SHG was determined through simple random sampling	The study focused on market access and not access to finance.	The current study focused on collective action and access to finance

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents research philosophy adopted, a description of the study research design, population of study, sample population and sampling procedure, methods of data collection, and data processing and analysis strategies and ethical considerations.

3.2 Research Philosophy

The study adopted pragmatism research philosophy. The philosophy supported a mixed method approach; qualitative, quantitative, action research and emphasizes on practical solutions and outcomes (Shusterman, 2016). This aligned with the mixed method design adopted by this study.

3.3 Research Design

The study employed a mixed method research design; the qualitative and quantitative data used synergistically. The method was more appropriate because the study sought to build a profile about the relationship between collective action and access to finance. It sought not only to conduct a descriptive survey but also to explore deeper meaning and explanations on the variables under study (Leavy, 2022).

3.4 Study Area

The County is former Eastern Province of Kenya and its capital and largest town is Wote. It lies between Latitude 10 35', South and Longitude 370 10' East and 380 30' east. The county covers 8,009 km² with an altitude of 600m – 1,900m above sea level. It has rainfall variability with an annual range of 800 – 1,200mm per year in the hilly areas and less than 500mm per year in the other regions. The annual mean temperature range in the county is 20.20C – 24.60C.

3.4.1 Location and Size of Makueni

Makueni county borders Machakos to the North, Kitui to the East, Taita Taveta to the South and Kajiado to the West and covers an area of 8,008.9 km².

3.4.2 Social Demographic Profile

Total population is 459,785 of which 243,548 are males, 216,219 females and 18 intersex persons. The county comprise of 77,495 household with an average size per household of 5.8 persons and a population density of 6 people per square kilometer.

3.4.3 Economic Activities

The county has a comparative advantage in the production of chicken since it is found in an ASAL area. The area is characterized by erratic rainfall and crop failures (ACF-USA, 2012). Main economic activities in the county include dairy farming, chicken farming, and ranching and mixed crop production. Production of crops is mainly under rain fed systems with irrigation in some areas.

3.5 Target population

The study targeted smallholder women chicken farmers. There are a total number of 2,090 women chicken farmer groups in the sub counties of Makueni, Kibwezi West and Kibwezi East with an average membership of 29 people per group. (GoK, 2018). The study sites were as follows; Makueni sub county (Kitise and Kathonzweni wards), Kibwezi East sub county (Masongaleni and Mtito Andei wards) and Kibwezi West sub county (Kikumbulyu North and Makindu Wards).

3.6 Sample Design

The study employed a two-stage sampling technique. Stage 1 involved simple random sampling technique to select farming groups. Different groups were allocated serial number in their respective sub-counties and random picking was done to give an equal chance of selection and three- women chicken farmers were identified purposively. For each member, the researcher then identified women chicken farmers who do not belong to a group with the same characteristics.

Table 3. 1: Farmer groups per Sub-County

Sub-County	Groups	Membership per group	Percent
Makueni	926	26,854	44%
Kibwezi East	401	11,629	19%
Kibwezi West	763	22,127	37%
Total	2,090	60,610	100

Source, Makueni county government, 2019

3.6.1 Sample size determination

The sample was drawn from the three sub-counties of Makueni; Makueni, Kibwezi East and Kibwezi West. According to Lukman (2015), a representative sample can be obtained using lukmans sample size determination formula.

$$n = \frac{N}{(1 + Ne^2)}$$

Where;

n =Representative sample

N =population size

e =Significance level 0.05 at 95% confidence interval

$$= \frac{60610}{(1+60610 \times 0.05^2)} = 398$$

A 5% nonresponse inflation of the sample size was added to the sample

leading to a sample size of 418 respondents.

3.6.2 Sample Selection

Based on the population, a sample size of 418 respondents was selected for the study, proportionate strata allocation of 418 respondents was done by stratifying the target population into two strata, those in groups and those that are not in the proportion of 50%-50% out of which 209 respondents were those in groups and 209 those that are not. The sample size per sub-county was based on the ratio of membership per group.

Table 3. 2: Sample Size of farming groups per Sub-County

Sub-County	Groups	Membership per group	Percent	Sample Size	In Group	Not in Group
Makueni	926	26,854	44%	181	91	91
Kibwezi East	401	11,629	19%	82	41	41
Kibwezi West	763	22,127	37%	155	77	77
Total	2,090	60,610	100%	418	209	209

3.7 Data Collection Instruments

The study employed a mixed method approach. Quantitative data was collected through a survey while qualitative data through Focus Group Discussions and Key Informant Interviews.

3.7.1 Quantitative Data

Quantitative data was collected using structured questionnaires that were administered face to face and collected.

3.7.2 Key Informant Interviews and Focus Group Discussions

Interviews with audio recording were used in both FGDs and KIIs with group members and cooperative officers in the three sub counties. The Key informant interviews were spread as follows; 1 Cooperative officer, 1 Group member for each ward totaling to 2*6 wards=12KIIs. FGDs were conducted to supplement information from the household level. The focus group were made of selected farmers from farmer groups found in Makueni County. The study adopted FGDs spread as follows; Makueni Sub county=4, Kibwezi East=2 and Kibwezi West=2. Total number of FGDs conducted totaled to 8. Qualitative research was carried to supplement on the quantitative data and to get more information on the variables under study.

3.8 Validity and Reliability of Tools

3.8.1 Pilot Study

A pilot test was conducted in order to determine the reliability and validity of research instruments. This aimed at identifying potential challenges in answering the research questions; assess the clarity of the data collection tools and understanding research constructs. A 10 % of the sample projected for the larger parent study for the pilot study was used as shown in the table.

Table 3. 3: Pilot Study Sample

Sub-County	Groups	No. of respondents
Makueni	128	13
Kibwezi East	55	6
Kibwezi West	103	10
Total	286	29

3.8.2 Validity Measurement

According to Borg and Gall (1989) validity of an instrument is improved through expert judgment. To achieve validity, the researcher sought the assistance of the supervisors to assist in enhancing validity of the instrument. Cross-checking data collected from farmer groups with research assistant was also done to ensure instrument validity. Furthermore, a pilot study was carried out by administering the questionnaires to the farmers in one group to assess the ability of the respondents to interpret and answer the questions asked correctly.

3.8.3 Reliability of Instruments.

According to Orodho (2014), reliability of instrument concerns the degree to which a particular measuring procedure gives similar results over a repeated trial. The study endeavored to use reliable instruments to analyze collective action and access for smallholder women chicken farmers.

3.9 Data Collection Procedure

Approval and authorization was sought from the university to conduct research. Authorization permit was obtained from NACOSTI before the commencement of the data gathering exercise. The researcher primarily relied on data which was primary in nature. An interview guide and a survey were used. The focus was to collect data from 418 respondents; half of the members were drawn from the groups and the half for those who didn't belong to any group.

3.9.1 Operationalization and Measurement of Variables

Table 3. 4 Operationalization and Measurement of Variables

S/N	Variable	Indicator	Type of data	Measure
1	Social collateral(Independent variable)	Ability of a group to promote savings through enhanced level of trust ,peer pressure, and members contribution.(Karlan et al,2019) <ul style="list-style-type: none"> Promotion of savings via group membership Promotion of trust for guarantees via group membership 	Ordinal	Likert scale
2	Access to capacity development (Independent variable)	Taken as trainings resources, processes, output and outcomes in relation to access to finance (Brown,2011) <ul style="list-style-type: none"> Access to training through membership in a group Individual access to training 	Ordinal	Likert scale
3	Financial Intermediation (Mediating variable)	Taken as experience of table banking, Weekly contributions as a financing option for women farmers (Akinyi,V.L,2018). <ul style="list-style-type: none"> Access to credit through table banking services Access to credit from FIs via group membership 	Ordinal	Likert scale
4	Access to finance(dependent variable)	Taken as the amount of money borrowed by members within a specified period (Akinyi,V.L,2018) <ul style="list-style-type: none"> Amount of credit obtained in the past Perception of ease of credit access from FIs 	Nominal Ordinal	Binary Likert

3.10 Data Analysis

Qualitative data collected from KIIs and FGDs were audio recorded, transcribed, reviewed and coded using *NVivo version 12* after which thematic analysis was done. Analysis of quantitative data involved first performing descriptive statistical analysis consisting measures of central tendencies and measure of dispersion. This was followed by inferential statistical analysis that consisted of logistic regression. Quantitative data was analyzed using *Stata Version 16*. The study employed a convergent approach of mixed methods for integration of qualitative and quantitative results.

3.10.1 Model Specification

The study employed two sets of logistic models for inferential statistical analysis. Logistic models are appropriate for the discrete type of data collected in this study because they are not subject to Gauss-Markov assumptions.

In the first model access to finance is modeled as a binary response variable where 1 represent previous access to finance and 0 otherwise. The predictor variables tested were 1) Social collateral with two Likert scale indicators (Promotion of savings via group membership and Promotion of trust for guarantees via group membership); 2) Access to capacity development with two Likert scale indicators (Access to training through membership in a group and Individual access to training); and 3) Financial intermediation also with two Likert type indicators (Access to credit through table banking services and Access to credit from FIs via group membership). More formally, let \mathbf{Y} be the binary outcome variable indicating lack of access/success with $\{0,1\}$ and p be the probability of y to be 1, $p = P(Y=1)$. Let X_1, \dots, X_k be a set of predictor variables. Then the logistic regression of \mathbf{Y} on X_1, \dots, X_k estimates and parameter values for $\beta_0, \beta_1, \dots, \beta_k$ following equation is specified as follows:

$$\text{logit}(p) = \log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 \dots + \beta_k x_k + \varepsilon_i \quad (1)$$

and $P(Y=1)$ reduces to:

$$P_i = \frac{\exp(\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 \dots + \beta_k x_k)}{1 + \exp(\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 \dots + \beta_k x_k)} \quad (2)$$

The study calculated the marginal effects at the mean as follows:

$$\frac{\partial P_i}{\partial x_{ij}} = \beta_j P_i (1 - P_i) \quad (3)$$

Where the effect of the j -th predictor on the probability P_i depends on the coefficient β_j and the value of the probability.

In the second model, the perception on easy of access of credit financial institutions is tested using an ordered logit regression. The rationale being that where the perception is negative the farmer is unlikely to pursue financing from FIs. This model therefore tests whether collective action as revealed through the same predictor variables the first model has an influence on the response variable. The response variable in this case is of a Likert type variable measuring the perception of ease of credit access from FIs with five categories leading to a multi-response specification. Specifically, the response variable was specified as:

$$y_i = \begin{cases} 1 \text{ Very low} \\ 2 \text{ Low} \\ 3 \text{ Moderate} \\ 4 \text{ High} \\ 5 \text{ Very high} \end{cases} \quad (4)$$

The response variable y_i is ordinal with 1 revealing low perception of access to finance from financial institutions and 5 revealing high perception of the ease of access to finance from FIs. The multi-response and ordinal nature of the response variable required that the model be discrete but also ordinal. The ordered logistic model for the effect of predictor variables on perception of each of access of finance from FIs is specified as follows:

$$y_i = \Lambda(\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 \dots + \beta_k x_k + \varepsilon_i) = \frac{e^{\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 \dots + \beta_k x_k + \varepsilon_i}}{1 + \sum_{i=1}^k e^{\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 \dots + \beta_k x_k + \varepsilon_i}} \quad (5)$$

To get the marginal effects first the probability that the response is in category j is calculated as in equation (6)

$$P(Y_i = j | X) = \Lambda(\alpha_{j-1} \leq \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 \dots + \beta_k x_k + \varepsilon_i \leq \alpha_j) \quad (6)$$

Where α_j is some perceived ease of access to credit from FIs.

From (6) the change in the probability of an individual i choosing alternative j (ΔP_{ij}) representing average marginal effects is given by:

$$\frac{\partial P_{ij}}{\partial x} = P_{ij}(\beta_j - \bar{\beta}) \quad (7)$$

Where β_j is the coefficient of dimension j and $\bar{\beta}$ is the mean of the β_j 's.

3.11 Ethical Considerations in Research

Prior to the study the researcher sought approval clearance from NACOSTI. Nature and purpose of study was explained to the respondents when they sought informed consent. The study respondents read and signed informed consent. The researcher explained to those who were not able to read and sign. Voluntarily was observed whereby participants were allowed to participate at their own wish. Privacy and Confidentiality was assured to the respondents. Pseudonyms were used to ensure Anonymity and information was only to be used for academic purposes. Copies of final project were also availed at the University library for academic reference.

CHAPTER FOUR

RESULTS

4.1 Introduction

This chapter presents data analysis, findings, presentation, and interpretation. The first section (4.2) is on descriptive statistics of study respondents, second section (4.3) Results of inferential statistics, third section (4.4) Relationship between collective action and access to finance, the fourth section (4.5) Mediating effect of financial intermediation on social collateral and access to finance and the fifth section (4.5.1) Mediating effect of financial intermediation on collective action and perception on access to finance.

4.2 Descriptive Statistics

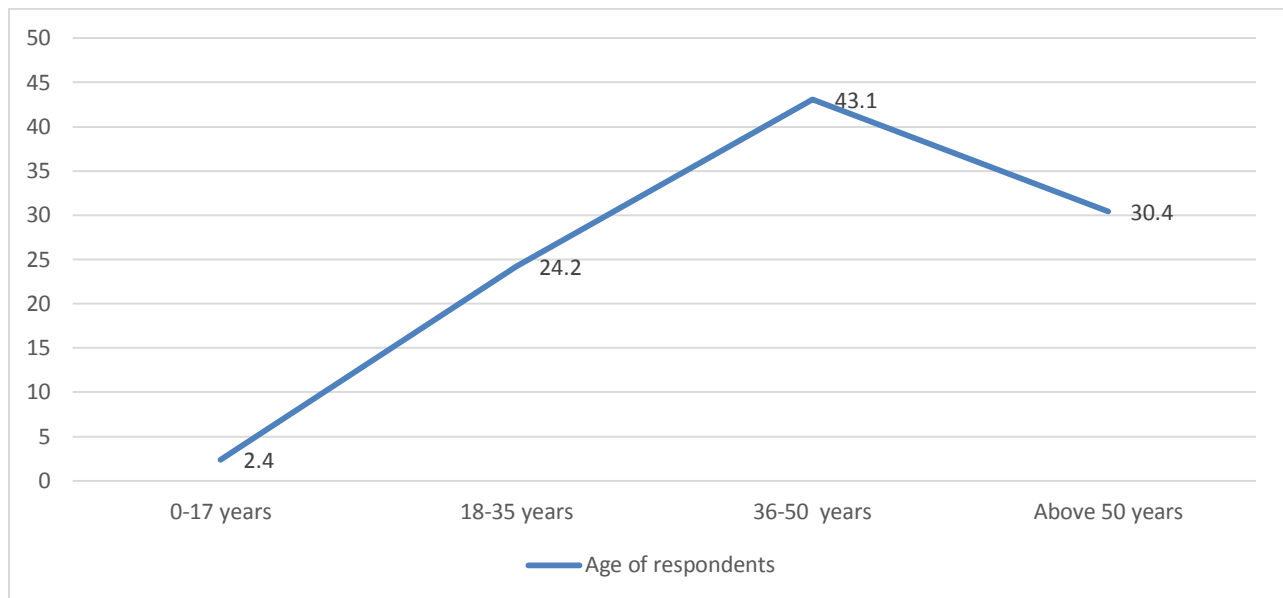
4.2.1 Demographics

From the descriptive analysis done, the highest number of respondents belonged to the 36 to 50 years age bracket at 43.1%. Respondents above 50 years of age were 30.4%, those between 18 to 35 years of age were 24.2% while 2.4% of the respondents did not respond. This implies that majority of the respondents were women above the youth stage, have settled in life and are focused on matters economic and social development. It is evident that many chicken farming activities are practiced by respondents between the age of 36%-50% and those above 50 year

4.2.1 Age of respondents

From the data in figure 4.1 below, majority of respondents have an age bracket of 36-50 years implying that they have already gone past the youth stage, settled in marriage and they are now focused in practicing farming activities in the County. The second category was above 50 years constituting of respondents that have attained maturity stage, with a wide range of experience and lastly the youth (18-35 years) with whom in most cases are more concerned with White collar jobs and others perceive chicken rearing activities as an occupation for their seniors in family ranks.

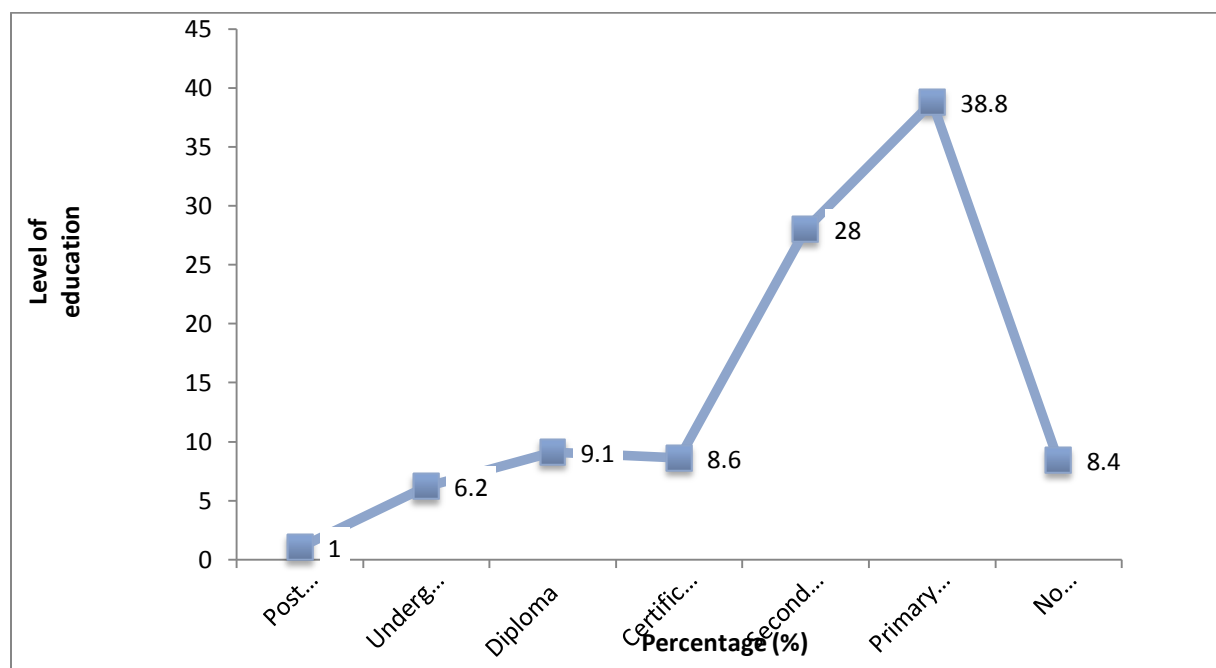
Figure 4. 1: Age of respondents



4.2.2 Level of Education

Majority of respondent's level of education was at 38.8%, the respondents who reported secondary school were 28%. For the 8.4% of the respondents, they reported lacking any formal education and only 1% reported having post graduate studies. This implies that a good number of the respondents have accessed formal education and therefore informed decisions can be made on matters chicken farming, managing groups, attending to trainings to be trained as trainers and can practice financial management. In addition, record-keeping and proper identification of inputs, vaccines and diseases can easily be identified by this class of people in the society. Members argued that through knowledge and skills gained through training and life experiences they can make informed decisions on matters chicken farming as captured in the following excerpts from interviews.

Figure 4. 2: Level of education



4.2.3 Group membership and chicken farming

Out of the 418 respondents that participated in this study, 39.7% reported being members of chicken groups while 90.7% reported being members of other groups that were not involved in chicken rearing. This implies that majority of the respondents belong to other groups hence are able to access many benefits from collective action activities

Table 4. 1 Chicken group membership

	Frequency	Percent (%)
Chicken group membership		
Yes	166	39.7
No	252	60.3
Membership to other groups		
Yes	379	90.7
No	37	8.9
No response	2	0.5

4.6.1 Response Rate

Structured questionnaires were used to collect the primary data from respondents. The response was 398 plus 5% non-response inflation which totals to 418 equivalent to 100% response rate. The rate implies that the findings obtained from the analysis of the primary data set were based on the entire population.

4.3 Results of Inferential Statistics

4.3. Summary Statistics for independent variables

Table 4.2 below shows the mean for each indicator for the three study variables Being in a group enhances saving=4.450, By being in a group members can trust each other =4.172 for social collateral variable, By being in a group I can access training=4.455, Training is available irrespective of being in a group or not=3.316 for the Access to capacity development variable, and Financial institutions are able to advance loans to members in a group=4.122 and through the collective action activity of table banking members can access finance=4.451 for Financial Intermediation variable. These scores approximate a value of 5 on five point Likert scale adopted by the study.

Table 4. 2 Summary Statistics

Variable	Indicators	Respondents	Mean	Std. Dev.	Min	Max
Social collateral	Promotion of savings via group membership	418	4.450	0.861	1	5
	Promotion of trust for guarantees via group membership	418	4.172	0.894	1	5
Access to capacity development	Access to training through membership in a group	418	4.455	0.692	1	5
	Individual access to training	418	3.316	1.327	1	5
Financial intermediation	Access to credit from FIs via group membership	418	4.122	1.035	1	5
	Access to credit through table banking services	417	4.451	0.786	1	5

Table 4.3 above shows the mean for each indicator for the three study variables ,Being in a group enhances saving=4.450, By being in a group members can trust each other =4.172 for social collateral variable, By being in a group I can access training=4.455, Training is available irrespective of being in a group or not=3.316 for the Access to capacity development variable, and Financial institutions are able to advance loans to members in a group=4.122 and through the collective action activity of table banking members can access finance=4.451 for Financial

Intermediation variable. These scores approximate a value of 5 on five point Likert scale adopted by the study.

4.4 Relationship between collective action and access to finance

The objective of the study was to analyze collective action and access to finance for women smallholder chicken farmers. Using the model (1) the binary variable for yes(1) or no(0) for farmers who had accessed credit previously was regressed against independent variables social collateral and access to capacity development each with two 5 scale likert type indicators study first the explored whether. The indicators of social collateral were “promotion of savings via group membership” and “promotion of trust for guarantees via group membership”, while the indicators of capacity development were “access to credit from FIs via group membership” and “individual access to training”. Equation (3) was used to calculate the marginal effects of the variable indicators.

Relationship between collective action and access to finance

Table 4. 3: Relationship between collective action and access to finance

Variable	Indicator	Indicator levels	dE(y/x)dx	Std. Err	P>z	95%CI	
Social Collateral	Promotion of savings via group membership	Low	0.177	0.353	0.615	-0.515	0.870
		Moderate	-0.051	0.355	0.886	-0.746	0.644
		High	0.269	0.341	0.430	-0.399	0.937
		Very high	0.377	0.339	0.266	-0.287	1.042
	Promotion of trust for guarantees via group membership	Low	0.057	0.098	0.559	-0.134	0.249
		Moderate	-0.049	0.114	0.669	-0.273	0.175
		High	-0.132	0.108	0.219	-0.344	0.079
		Very high	-0.062	0.106	0.558	-0.269	0.145
Access to capacity development	Access to training via membership in a group	Low	0.256	0.466	0.583	-0.657	1.169
		Moderate	0.455	0.320	0.155	-0.172	1.083
		High	0.453	0.308	0.142	-0.151	1.057
		Very high	0.463	0.307	0.132	-0.139	1.066
	Individual access to training	Low	-0.172***	0.058	0.003	-0.285	-0.058
		Moderate	-0.091**	0.044	0.040	-0.179	-0.004
		High	-0.110***	0.042	0.008	-0.192	-0.028
		Very high	-0.179***	0.051	0.000	-0.280	-0.078

Pseudo R2 = 0.1298, Prob > chi2 = 0.0001

*** p<0.01, ** p<0.05, * p<0.1

Table 4.4.1 shows both indicators of social collateral were not statistically significant factors in predicting the probability the financial access a woman small holder farmer in Makeni County on

account of her group membership or through group guarantee resulting from trust or group bonds. Results however show that “individual access to training” as an indicator of capacity development was a statistically significant negative predictor the probability of a woman smallholder access to finance. Specifically, when a respondent’s response indicator levels of “individual access to training” changes from low to very high the probability observing a farmer having accessed credit reduces. For instance, the probability that a woman farmer whose response was low for “individual access to training” reduced by 17.3 % (CI, -0.285-0.058) while that woman smallholder farmer who responded very high reduced by 17.9 % (CI, -0.280-0.078). The overall model predictive ability as indicated by Pseudo R was 12.7 %.

The study’s qualitative findings majority of the women smallholder farmers had accessed to training irrespective of and therefore access to the trainings though beneficial to the farmers did not positively predict access to finance as demonstrated by the following statements. . *“We have been trained on how to use money and how to uplift one another. The county government has also been facilitating trainings by sending county veterinary officers, cooperative officers and professional experts to come and train us on a wide range of things pertaining o chicken farming” (FGD Female)*. WSHFs also argued that through trainings they have been able to expand on production and proper record keeping through training sessions. *“I have benefited from the group more so on chicken farming. I have been able to get trainings on chicken rearing, vaccine uptake, record keeping and chicken feeding. I have also gained knowledge of increasing production, in the past, as at the start of this year, I had around 15 chickens but right now I have more than 100 chickens...” (KII Female)*

The study also explored the perception of ease of access to finance for woman small holder famers who had not previously accessed credit based on the assumption that a woman smallholder famers perception of access of was likely to influence her decision to seek credit from financial institutions. Perception of ease of access to finance was operationalized as a five-point ordinal likert type dependent variable. The two independent variable indicators of social collateral and access to capacity development are as defined in table 4.4.1. The study used equation (5) for this analysis and calculated the marginal effects using equation (7)

Table 4. 4: Relationship between collective action and perception of access to finance.

Variable	Indicator	Indicator levels	dE(y/x)dx	Std. Err	P>z	95% CI	
Social Collateral	Promotion of savings via group membership	Low	-0.262	0.214	0.222	-0.681,	0.158
		Moderate	-0.313	0.215	0.146	-0.734,	0.109
		High	-0.424**	0.202	0.036	-0.821,	-0.028
		Very high	-0.487**	0.203	0.017	-0.885,	-0.089
	Promotion of trust for guarantees via group membership	Low	0.026	0.086	0.760	-0.141,	0.194
		Moderate	0.109	0.089	0.223	-0.066,	0.283
		High	0.016	0.079	0.841	-0.139,	0.171
		Very high	0.064	0.079	0.417	-0.091,	0.220
Access to capacity development	Access to training via membership in a group	Low	-0.012	0.012	0.318	-0.035,	0.011
		Moderate	0.069**	0.034	0.043	0.002,	0.137
		High	0.119***	0.022	0.000	0.075,	0.163
		Very high	0.174***	0.025	0.000	0.124,	0.223
	Individual access to training	Low	-0.142**	0.070	0.042	-0.279,	-0.005
		Moderate	-0.209**	0.067	0.002	-0.341,	-0.077
		High	-0.224***	0.066	0.001	-0.354,	-0.094
		Very high	-0.313***	0.061	0.000	-0.432,	-0.193

Pseudo R2 = 0.0967, Prob > chi2 = 0.0001

*** p<0.01, ** p<0.05, * p<0.1

The ordinal logistic results presented in table 4.4.2 reveal that while “promotion of trust for guarantees via group membership” as an indicator of social collateral was a positive predictor perception of access to finance for women smallholder farmers it was not a statistically significant factor. On the other hand, “promotion of savings via group membership” was found to be a statistically negative predictor of the perception of financial access. In particular, when a respondent’s response indicator levels of “promotion of savings via group membership” changes from high to very high the probability a farmer perception on accessed credit reduces from high to low. The results indicate that the probability that a woman farmer whose response was high for “promotion of savings via group membership” reduced by 44.2 % (CI, -0.821, -0.028) while that woman smallholder farmer who responded very high reduced by 17.9 % (CI, -0.885, -0.089). Similar results were reported for “individual access to training” as an indicator of access to capacity development but positive and significant for “access to training via membership in a group” as an indicator of the same variable where for example the probability that a woman farmer whose response was high for “promotion of savings via group membership” increased by 17.4 % (CI 0.124, 0.223). The overall model predictive ability as indicated by Pseudo R was 9.67 %.

4.5 The mediating effect of financial intermediation on social collateral and access to finance

To determine the mediating effect of financial intermediation the study added financial intermediation variable indicators of “access to credit from FIs via group membership” and “access to credit through table banking services” to the two independent variable indicators for social collateral and access to capacity development to model (1) with a the binary variable for yes (1) or no(0) for farmers who had accessed credit previously was regressed against three variable’s indicators . The indicators of social collateral were “promotion of savings via group membership” and “promotion of trust for guarantees via group membership”, while the indicators of capacity development were “access to credit from FIs via group membership” and “individual access to training”. Equation (3) was used to calculate the marginal effects of the variable

Table 4. 5: Mediating effect of financial intermediation on social collateral and access to finance.

Variable	Indicator	Indicator levels	dE(y/x)dx	Std. Err	P>z	95%CI	
Social Collateral	Promotion of savings via group membership	Low	0.148	0.361	0.682	-0.560,	0.856
		Moderate	0.008	0.366	0.983	-0.710,	0.726
		High	0.204	0.353	0.563	-0.487,	0.895
		Very high	0.352	0.349	0.312	-0.331,	1.036
	Promotion of trust for guarantees via group membership	Low	0.033	0.069	0.627	-0.101,	0.168
		Moderate	-0.120	0.093	0.197	-0.303,	0.063
		High	-0.155**	0.078	0.046	-0.308,	-0.003
		Very high	-0.094	0.077	0.225	-0.245,	0.058
Access to capacity development	Access to training via membership in a group	Low	0.437	0.410	0.286	-0.366,	1.241
		Moderate	0.586**	0.272	0.032	0.052,	1.119
		High	0.560**	0.257	0.029	0.057,	1.064
		Very high	0.590**	0.255	0.021	0.090,	1.090
	Individual access to training	Low	-0.208***	0.054	0.000	-0.315,	-0.102
		Moderate	-0.136***	0.039	0.001	-0.212,	-0.059
		High	-0.159***	0.036	0.000	-0.229,	-0.089
		Very high	-0.234***	0.050	0.000	-0.332,	-0.136
Financial Intermediation	Access to credit from FIs via group membership	Moderate	0.455**	0.181	0.012	0.101,	0.810
		High	0.557***	0.167	0.001	0.230,	0.885
		Very high	0.587***	0.166	0.000	0.262,	0.912

Pseudo R2 = 0.1732, Prob > chi2 = 0.0001
*** p<0.01, ** p<0.05, * p<0.1

A comparison of Pseudo R Squared results of table 4.41 and table 4.5.1 reveals that the model predictive ability increases from 12.98% to 17.32 % on account of the addition of the mediating variable of financial intermediation. The Pseudo R Squared change is 4.34% indicating that the

financial intermediation has a positive mediating effect on the influence of social collateral on access to finance. Results show that “access to credit from FIs via group membership” positive as an indicate of the mediator variable of financial intermediation was a positive mediator for social collateral and access to finance access for example the probability of access to finance of woman farmer whose response was moderate for indicator.“ access to credit from FIs via group membership” increased by 4.5 % (CI0.124, 0.223) to 58.7% for a woman small holder farmer whose response was very high for the same indicator of financial intermediation.

The qualitative findings of the study supported the positive mediating role of financial intermediation. The role of group membership in access to credit from formal financial institutions was captured in this statement from one of the FGDs *“We secure loans from the group and from banks; our group also lends money to members provided they pay back what is required.” (FGD Female)*. This was also supported by findings from other FGDs as indicated by this view that some financial institutions advance loans to only those members in a group: *“We do table banking and also work hand in hand with a financial institution. We get loans which help us to pay school fees and in building houses. Some members have never gotten a loan to start chicken rearing but they are planning to do so. We get money as a group. One has to be a group member in order to get a loan from a financial institution”.* (FGD Female)

In addition, the qualitative findings also shed insights into the quantitative finding in relation to the positive role played by training in access to finance as expounded by this statement from one of the FGDs *“Financial management training has been enhanced through groups. The group is of help to us because we contribute money, get loans, pay back and share the money at the end of the year. We have been trained on how to use the money and increasing ones shares. The group accesses ones financial status before giving loans.” (FGD Female)*. The following statement from the qualitative findings also further reinforces this finding. *Training on financial access from financial institutions and our table banking practice has enhanced access to finance. For some banks, it’s hard to secure a loan as an individual because they normally ask for guarantors and securities of which many of us can’t afford”.* (FGD Female).

4.5.1 Mediating effect of financial intermediation on collective action access to finance.

To determine the mediating effect of financial intermediation on collective action and the perception of access to finance the study added financial intermediation variable indicators of

“access to credit from FIs via group membership” and “access to credit through table banking services” to the two independent variable indicators for social collateral and access to capacity development to equation (5). The dependent variable in equation (5) is a Likert scale type variable for easy of credit access from financial institutions with 5 categories labeled (1) for very low, (2) for low, (3) for moderate, (4) for high and (5) for very high for perception. It was regressed against the two original independent variables of social collateral and access to capacity development and the mediating variable of financial intermediation. Indicators of social collateral of capacity development remained as defined in section 4.4.1. Equation (7) was used to calculate the marginal effects of the variable

Table4. 6: Mediating effect of financial intermediation on collective action and access to finance.

Variable	Indicator	Indicator levels	dE(y/x)dx	Std. Err	P>z	95% CI	
Social Collateral	Promotion of savings via group membership	Low	-0.065	0.240	0.787	-0.535,	0.405
		Moderate	-0.222	0.236	0.348	-0.685,	0.242
		High	-0.283	0.231	0.220	-0.736,	0.169
		Very high	-0.353	0.231	0.127	-0.807,	0.100
	Promotion of trust for guarantees via group membership	Low	-0.005	0.085	0.956	-0.171,	0.162
		Moderate	0.109	0.088	0.214	-0.063,	0.281
		High	0.012	0.078	0.877	-0.141,	0.165
		Very high	0.057	0.078	0.465	-0.096,	0.209
Access to capacity development	Access to training via membership in a group	Low	-0.014	0.013	0.293	-0.039,	0.012
		Moderate	0.076**	0.035	0.031	0.007,	0.144
		High	0.125***	0.023	0.000	0.079,	0.170
		Very high	0.170***	0.025	0.000	0.120,	0.219
	Individual access to training	Low	-0.120*	0.069	0.081	-0.255,	0.015
		Moderate	-0.184***	0.067	0.006	-0.314,	-0.053
		High	-0.193***	0.067	0.004	-0.325,	-0.060
		Very high	-0.286***	0.061	0.000	-0.406,	-0.166
Financial Intermediation	Access to credit from FIs via group membership	Low	-0.282**	0.132	0.033	-0.542,	-0.023
		Moderate	-0.251	0.134	0.060	-0.513,	0.011
		High	-0.217	0.132	0.100	-0.476,	0.042
		Very high	-0.202	0.131	0.124	-0.460,	0.055
	Access to credit through table banking services	Low	-0.248	0.211	0.241	-0.661,	0.166
		Moderate	-0.102	0.208	0.625	-0.510,	0.306
		High	-0.245	0.214	0.253	-0.664,	0.175
		Very high	-0.234	0.215	0.276	-0.655,	0.187

Pseudo R2 = 0.1071, Prob > chi2 = 0.0001
*** p<0.01, ** p<0.05, * p<0.1

A comparison of Pseudo R Squared results of table 4.4.2 and table 4.5.2 reveals that the model predictive ability increases slightly from 9.67% to 10.71% on account of the addition of the mediating variable of financial intermediation. The Pseudo R Squared change is 1.04%. The mediating effect was of financial intermediation for both of the indicators of financial intermediation (“access to credit from FIs via group membership” and “access to credit through table banking services”) were not statistically significant save for the “low” response level of the “access to credit from FIs via group membership” indicator. The mediating variable however had a reductive effect on both indicators of access to capacity development variable

Findings show that financial intermediation reduced the effect of the relationship between social collateral indicator, access to capacity development and perception of access to finance. A comparison of tables 4.4.2 and table 4.4.5 reveals for instance probability that a woman farmer whose response was very high for “individual access to training” changed from 31.3% to 28.2% while that woman smallholder farmer who responded very high for "access to training via membership in a group” changed slightly from 17.4% to 17%. Similar results were reported for other indicator levels of the "access to training via membership in a group” and "individual access to training”.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of key findings, conclusions and recommendation based on specific research objectives; Influence of social collateral on access to finance, relationship between access to capacity development and access to finance and financial intermediating role of table banking activities on access to finance. It also provides suggestions for further research.

5.2 Discussions

Findings revealed that financial intermediation reduced the effect of the relationship between social collateral indicator of access to capacity development and perception of access to finance. This implies that members in a group access finance by either making savings or guaranteeing each other because of the level of trust. Statistical significance is observed on the access to capacity development indicators; specifically the indicator being in a group I have accessed training. Statistics indicated that majority of the respondents, rated high, that by being in a group, they can access training suggesting that trainings are mainly conducted through groups.

From the ordered logistic regression, financial intermediation effect for both of the indicators of financial intermediation access to credit from FIs via group membership and access to credit through table banking services were not statistically significant. Save for the low response level of the access to credit from FIs via group membership indicator. The mediating variable however had a reductive effect on both indicators of access to capacity development variable.

Women farmers demonstrated from FGDs and KIIs conducted that collective action activities of table banking supplement loan portfolio, enhances access to finance to meet extra needs. The higher interest charged by financial institutions hinders smallholder women chicken farmers from accessing loans and thus table banking activities acts as a lender of last resort. Chicken farming inputs should be made available and distribution made across the county were some of the views raised from qualitative data. Failure to get access to important chicken farming inputs like quality feeds, vaccines and drugs thereby achieving low output because of the death rate also emerged during the FGDs sessions.

5.2.1 Relationship between collective action and access to finance

Indicators of social collateral were not statistically significant factors in predicting the probability of financial access on account of group membership or through group guarantee resulting from trust. Results however showed that individual access to training as an indicator of capacity development was a statistically significant negative predictor on the probability of a woman smallholder farmer having accessed finance. The findings concurs with Mogaka and Hilario (2016) which elucidates that there is a relationship between access to finance and social collateral by SMEs and informal groups; and there exists a relationship between small business financial support and SMEs financing. They further posit that financial literacy is critical on investments carried out by small scale farmers, in particular, women farmers.

5.2.2 The mediating effect of financial intermediation on social collateral and access to finance

Results show that access to credit from FIs via group membership as an indicator of financial intermediation was a positive mediator for social collateral and access to finance. The probability of access to finance of woman farmer whose response was moderate for indicator. This study concurs with that of Bhalla et.al,(2018) on partnering with women collectives for delivering essential women's nutrition interventions in tribal areas of eastern India. The findings showed vast network, governance structure, bank linkage and regular interface have made self-help group and their federations more productive community. Drawing from Griffin (2012) reveals that the women borrowers that engage in table banking activities are more motivated to increase the human capital by putting more effort to learn and to gain more knowledge in business management. This concurs with the findings of this study that training is achieved in groups and effect is positive on the marginal effect of a farmer having borrowed money in the past.

5.2.3 Mediating effect of financial intermediation on collective action and perception of access to finance

The mediating effect was of financial intermediation for both of the indicators of financial intermediation, access to credit from FIs via group membership and access to credit through table banking services. The two indicators were not statistically significant save for the "low" response level of the "access to credit from FIs via group membership" indicator. The mediating variable however had a reductive effect on both indicators of access to capacity development variable Findings show that financial intermediation reduced the effect of the relationship between social

collateral indicator of access to capacity development and perception of access to finance. This concurs with a study done by Chemutai(2018) on the influence of table banking in livelihood of women. Results revealed that credit accessibility, capacity building and market accessibility positively influence livelihood of women in Uasin Gishu County. Bongomin *et. al.*, (2017) conducted a Cross-sectional study on collective action among the poor in Uganda. Study findings revealed that inclusion of collective action in the relationship boosts the impact of financial inter mediation on financial inclusion of poor households in rural Uganda. This concurs with the current study in that collective action activities of table banking enhance access to finance for smallholder women chicken farmers.

5.3 Conclusion

Conclusion was done based on the research objectives as follows;

5.3.1 Relationship between collective action and access to finance

By members being in a group they Co-own assets, sell assets and share cash which becomes a source of income and helps in other social activities. Some of the benefits derived include Joint signature, ability to access loan through signing on behalf of each other and increasing the ability of the group to borrow more and expand. Through trust and savings members are able to cooperate and secure loans from their respective groups. The social ties in the group enable members to adhere to group rules and regulations and expand on their chicken farming activities. By being in a group, members can contribute and do savings, trust is developed and hence members can borrow, share their thoughts and ideas. Members joins groups to access inputs, knowledge and skills on farming and access market for their products.

5.3.2 The mediating effect of financial intermediation on social collateral and access to finance.

Study findings show that financial inter mediation indicators of financial institutions being able to advance credit to members in a group and by coming together through table banking members are able to access finance have no statistical influence on a farmer having accessed money in the past. Women chicken farmers form groups for their own benefits,by pooling resources together through action activities of table banking they are able to access finance.

5.3.3 Mediating effect of financial intermediation on collective action and perception on access to finance.

WSHFs need finances to purchase of inputs, vaccines and increase of chicken production. Collective action of table banking supplement loan portfolio, enhances access to finance to meet extra needs. The higher interest charged by financial institutions hinders smallholder women chicken farmers from accessing loans and thus this activity acts as a lender of last resort.

5.4 Recommendations

Table banking as a collective action activity enhances access to finance through pooling resources together and sharing based on the approach WSHFs agree on. The county government and other relevant parties should empower women through financial support, training and chicken household distribution through the established groups.

Chicken farming inputs should be made available and distribution made across the county. Women Chicken farmers fail to get access to important chicken farming inputs like quality feeds, vaccines and drugs thereby achieving low output because of the death rate. Farmers should also be trained on vaccine administration in order to be able to do it on their own.

Women groups should be supported by the county government on offering veterinary officers, entrepreneurial experts and other educators to teach women on efficiency and effective chicken farming; skills and knowledge on new technology in chicken production.

Externalities have happened before and that chicken farmers need to have prior knowledge to address such issues. Some parts of the county are too hot and there is need to develop on the eye vaccine to be administered before 8 weeks (fowl fox). Women chicken farmers should be informed of alternative income generating activities. There is need for women empowerment financially, training on financial literacy, record keeping and vaccinations.

5.5 Suggestions for further research

Further research can be conducted as suggested below:

Relationship between Social collateral and access to finance for women chicken farmers in Makueni County, Kenya.

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APPENDIX 1: RESEARCH QUESTIONNAIRE

This research questionnaire is structured to obtain information on collective action and access to finance among individual women chicken farmers in Makueni County. The information will be used only for academic and research purposes. Kindly respond objectively to the best of your knowledge.

NB: Do not provide any personal identification details.

SECTION I: DEMOGRAPHIC INFORMATION

Name of sub-county

Age in completed years

18 – 35 Years []

36 – 50 Year []

Above 50 Year []

What is your Gender? [1] Male [] [2] Female []

Are you a member of a chicken group? [1] Yes [] [2] No []

If yes, name the group(s) where you are a member.....

What is your highest level of education?

[1] Post graduate []

[2] Undergraduate []

[3] Diploma []

[4] Certificate []

[5] Secondary school []

[6] Primary school []

[7] Did not attend any formal education. []

Are you a member of a group? [1] Yes [] [2] No []

If yes, for how long have you been a member in this group?

[1] 1-3 years

[2] 3-5 years

[3] 5-7 years

[4] 7-10 years

[5] Over 10 years

If No, Reasons as to why you don't belong to a group-----

What is your position in the group?

[1] Chairperson []

[2] Treasurer []

[3] Secretary []

[4] Member []

Have you borrowed money in the past? [1] Yes [] [2] No []

If yes, what level of financing?

[1]0-199,199 []

[2]200,000-299,999 []

[3]300,000-399,999 []

[4]400,000-499,999 []

[5]Above 500,000 []

If no, reasons for not accessing finance-----

Do you have an account with a Financial Institution? [1] Yes [] [2] No []

If Yes, do you use the account for borrowing? [1] Yes [] [2] No []

If No, do you borrow through table banking? [1] Yes [] [2] No []

Have you ever been trained on financial management? [1] Yes [] [2] No []

If Yes, was the training facilitated through groups or individuals?[1]groups] [2]Individuals

How long have you been involved in chicken farming?

[1] 1-3 years

[2] 3-5 years

[3] 5-7 years

[4] 7-10 years

[5] Over 10 years

What do you keep Chicken for?

- [1] Home consumption [] [2] Commercial reasons []
 [3] Home consumption and commercial reasons [4] Others (Specify).....

What type(s) of chicken do you keep?

- [1] Local types [] [2] Improved local types []
 [3] Hybrid commercial (kuku wa Gredi) [] [4] Others (specify) []

SECTION B

SOCIAL COLLATERAL AND ACCESS TO FINANCE AMONG SMALLHOLDER WOMEN CHICKEN FARMERS IN MAKUENI COUNTY, KENYA.

Please indicate the level of your agreement with each statement

5=Strongly Agree 4=Agree 3=Neither agree nor disagree 2=Disagree 1=Strongly disagree

	Social collateral indicators	5	4	3	2	1
1	Being in a group promote a saving culture.					
2	By being not in a group, I can still save.					
3	Members in a group generally trust others in matters of lending and borrowing money.					
4	Being in a group the level of trust is high compared to not belonging to any.					
5	People always care about others when in groups.					

FINANCIAL INTERMEDIATION AND ACCESS TO FINANCE AMONG SMALLHOLDER WOMEN CHICKEN FARMERS IN MAKUENI COUNTY, KENYA.

Please indicate the level of your agreement with each statement

5=Strongly Agree 4=Agree 3=Neither agree nor disagree 2=Disagree 1=Strongly disagree

	Financial intermediation indicators	5	4	3	2	1
6	Financial institutions are able to advance credit to members in a group.					
7	Process of getting financial services					

- from the financial institution is easy for members who are not in groups.
- 8** By coming together through table banking members are able to access finance.
- 9** Belonging to a group facilitate access to finance from financial institution on a regular basis.
- 10** Terms set by the financial institutions on use of its products and services are favorable to members in a group.
- 11** I can get more loans by being in a group through table banking.

ACCESS TO CAPACITY DEVELOPMENT AND ACCESS TO FINANCE AMONG WOMEN CHICKEN FARMERS IN MAKUENI COUNTY,KENYA.

Please indicate the level of your agreement with each statement below

5=Strongly Agree 4=Agree 3= Neither agree nor disagree 2=Disagree 1= Strongly disagree

Kindly tick (✓) where appropriate.

	5	4	3	2	1
Access to Capacity Development Indicators					
12 Training enhances access to finance at individual level.					
13 Being in a group enhances access to training.					
14 Training is available irrespective of being in a group or not.					
15 Training is achieved by members					

who belong to a group only.

- 16 By being in a group I have accessed training on financial management.

ACCESS TO FINANCE AMONG SMALLHOLDER WOMEN CHICKEN FARMERS IN MAKUENI COUNTY, KENYA.

Please indicate the level of your agreement with each statement below

5=Strongly Agree 4=Agree 3= Neither agree nor disagree 2=Disagree 1= Strongly disagree

Kindly tick (√) where appropriate.

	Financial access indicators	5	4	3	2	1
17	Process of getting financial services from financial institutions and other financial agencies is easy when one is in a group.					
18	The loan products provided by the financial institution are useful to members in a group.					
19	The saving product provided by the financial institution satisfies members in a group.					
20	I am able to get a loan irrespective of whether I am in a group or not.					
21	Fees charged by the financial institution on use of its services are favorable when a member is in a group compared to those without.					
22	I have gotten financing even before I got into a group.					

THANK YOU

APPENDIX 2 : KII AND FGD PARTICIPANT INFORMATION SHEET

COLLECTIVE ACTION AND ACCESS TO FINANCE AMONG SMALLHOLDER WOMEN CHICKEN FARMERS IN MAKUENI COUNTY, KENYA.

KEY INFORMANT INTERVIEWS and FOCUS GROUP DISCUSSIONS PARTICIPANT INFORMATION SHEET

Who is doing the research project:

Collective action and access to finance for women smallholder chicken farmers in Makueni County, Kenya .The study is being conducted by the researcher from the cooperative university of Kenya through the give project .The study is supported by funds from GIVE project through the Canadian government.

Purpose of this study:

The aim of the study is to investigate influence of collective action on access to finance for women smallholder chicken farmers. Specifically the study aim to; determine influence of social collateral on access to finance for women chicken farmers, investigate the relationship between access to capacity development and access to finance for women chicken farmers and establish the financial inter mediating role of collective action activities of table banking on access to finance for women chicken farmers.

What I seek to establish: I seek to investigate how collective action influence enhances access to finance among smallholder women chicken farmers in Makueni County. Thus, I would like to ask questions related to advantages of being and not being in a group in relation to access to finance. The interview should not last no more than 40 Mins. If you are participating in an FGD the session will not last beyond 60Mins

Risks for being in the study: I do not anticipate any risks for you in participating in this study. Participation in any research study will, however, take some of your time, in this case estimated at about 40 minutes (and for the FGD no more than 60 minutes).

Benefits of participating in the study: There is no direct and immediate benefit for participating as a respondent in this study. However, the study will explore whether collective action influences access to finance by focusing on members in groups and those that are not.

How we will use the data: The data collected from the study will be used to advance knowledge on role of collectives in enhancing access to finance among women chicken farmers.

Anonymity: The data collected from you is fully anonymized. No one other than the research team will be able to link information collected directly to you

Use in research: If you agree to participate in this study, the results will be included in the feedback sessions, in future publications and in face-to-face meetings with stakeholders. The report will also be filed with GIVE Project donors, the National Council for Science, Technology and Innovations (NACOSTI) and the libraries of supporting academic institutions. The reports and ensuing publications will be made freely available through open access.

Data access: The Co-operative University will securely hold the Survey/ FGD and KII data and store it in electronic files secured with passwords which can only be accessed after filling out data request forms. In the event of such request, all identifiers will be removed before the data is shared.

APPENDIX 3: INFORMED CONSENT FOR FGDS AND KII

COLLECTIVE ACTION AND ACCESS TO FINANCE AMONG SMALLHOLDER WOMEN CHICKEN FARMERS IN MAKUENI COUNTY, KENYA.

INFORMED CONSENT FOR FGDS/KIIs

The purpose and details of this study has been explained to me/us. I understand that this study is designed to further scientific knowledge and that the project has received relevant ethical approval.

- I have read/been explained and understood the information sheet and this consent form.
- I have had an opportunity to ask questions about my participation. I understand that I am under no obligation to sign up to take part in the study.
- I understand that I have the right to withdraw from this study at any stage for any reason, and that I will not be required to explain my reasons for withdrawing.
- I understand who will have access to personal data provided.
- I understand how data will be stored and published.
- I understand that all the information I provide will be treated in strict confidence unless I agree otherwise and will be kept anonymous and confidential to the researchers unless it is judged that confidentiality will have to be breached for the safety of the participant or others.
- I understand how to raise concerns or make complaints.
- I voluntarily agree to participate in this study.

For any further questions about the study, I will contact:

Peter.mogaka@cuk.ac.ke/pmogaka1@gmail.com, Tel.No.0707819743

I understand that this project has been reviewed and received ethics clearance and the contact details of the approving body (Strathmore University – Institutional Ethics Review Committee (SU-IERC) have been given to me in the “Participant Information Sheet for Key informant interviews and Focus Group Discussions”.

Name: _____ Signed: _____ Date: _____

Study Participant

Name: _____ Signed: _____ Date: _____

Researcher

APPENDIX 4: KEY INFORMANT INTERVIEW GUIDE

KII GUIDE

Name of Interviewer _____

Date _____

Name of Interviewee _____

Name of Sub-County _____

Notes for the Interviewer

Note 1: For interviewer: Interview starts by salutations/ greetings and self-introduction.

Note 2: Interviewer provides information about the study, its purpose and the focus on the three sectors and assures confidentiality following the approved information sheet provided.

Note 3: Interviewer seeks consent of the interviewee to participate in the interview.

Note 4: Questions will structure the interview. The interviewer will have to probe for information, while focusing the discussion to the theme and focus of questions

Note 5: In interviewing, the relevant sector of focus for the particular sub-county should be clearly indicated in the questions

OBJECTIVES GUIDING THE INTERVIEW

SOCIAL COLLATERAL AND ACCESS TO FINANCE

1. Do you belong to a group?

If yes, what benefits do you derive from being a member of a group?

2. With or without a group, what's your view in relation to access to finance?

3. Can one access a loan individually without the help of other group members?

4. How does a member being in a group contribute to loan access?

FINANCIAL INTERMEDIATION AND ACCESS TO FINANCE

1. In your own view, does table banking enhance access to finance?

If yes, does it bridge the access to finance gap?

2. Do you practice table banking as a collective action activity?

If yes, how does it enhance individual group member's access to finance?

3. What financial benefits do you obtain as a group from this collective action activity?

ACCESS TO CAPACITY DEVELOPMENT AND ACCESS TO FINANCE.

1. Do you as a member of a group attend training?

If yes, what kind of training and how do they enhance access to finance

2. What benefits do groups derive from these training? How do these training enhance group access to finance?

3. Does training enhance access to finance?

4. In your own view, is it easier when conducting capacity building in a group or individually?

THANK YOU FOR YOUR TIME

APPENDIX 5: FOCUS GROUP DISCUSSION GUIDE

FGD GUIDE

Date of FDG.....

Name of the Sub-County.....

Sector

Instructions

Facilitator Note 1: Welcome and introduction

Welcome participants to session by greeting them (Good morning/afternoon/evening) and welcome to our session.

Thank participants for offering to participate in the study and availing themselves for the session in which Collective Action and Access to finance will be the focus of discussion.

Inform them who you are (your name as facilitator), and assistant.

Inform participants the goal of the study and what you will be talking with them about.

Inform participant the focus of FGD (We are seeking their experiences, thoughts, and ideas to help us understand Collective action and access to finance– Use the provided information sheet). Be sure that each participant understands why the FGD is organized and that each wants to participate voluntarily.

Facilitator Note 2: Consent process

Take participants through signing of consent form or record the verbal consent if that is preferred.

Facilitator Note 3: About the focus group

Enquire if participants have participated in an FGD before.

Inform participants how the FGD will proceed (Inform that we will seek to learn from you positive and negative aspects).

Point out that views of each participant are valid and valued (that we appreciate that each participant has important knowledge and experiences, needs, or perspectives that we will want to learn more about through the FGD).

Inform participants that in the discussion we are not trying to get everyone to agree or achieve consensus, rather, we are gathering information so they should air their views freely.

Inform participants that it is okay if a participant has different opinions and ideas from those of other participants in the group.

Facilitator Note 4: Logistics and ground rules

Inform participants the duration the FGD will take (This group discussion will last approximately 90 minutes)

Inform the group on ground rules (Everyone to participate, only one person talks at a time , pay attention to each other's ideas and opinion; no judging a members contribution to a question as right or wrong, that each contribution is valid; and that the discussion will be audio recorded to help us capture all that is said compared to handwritten notes that will be taken by investigators, and it will allow us to double check our data for accuracy.

Ask participants to kindly not have side conversations and speak clearly and audibly to increase recording quality.

Ask them to switch their mobile phones or have them on silent mode to minimize interruptions..

Ask if there are any issues that require clarification or if they are ready to get started.

Facilitator Note 5: Starting of the discussion

If participants do not have questions and indicate readiness to get started with discussion, turn on recorder and begin the discussion. Ask your questions clearly and do not rush participants in their answers.

OBJECTIVES GUIDING THE DISCUSSION

SOCIAL COLLATERAL AND ACCESS TO FINANCE

1. Do you belong to a group?

If yes, what benefits do you derive from being a member of a group?

2. We have those in groups and those without groups; let's begin by asking ourselves, does being in a group enhance access to finance?

3. How does being in a group enhance access to finance from financial institutions and other agencies? - As individual group members and as a group

4. Does the group offer loans to members from group savings? On what basis?

FINANCIAL INTERMEDIATION AND ACCESS TO FINANCE

1. As a member of a group, do you obtain loans from group savings or from financial institution and other agencies, If Yes, give reasons

2. Do you practice table banking as a collective action activity?

If yes, how does it enhance individual group member's access to finance? What financial benefits do you obtain as a group from this collective action activity?

ACCESS TO CAPACITY DEVELOPMENT AND ACCESS TO FINANCE

1. Do you as a member of a group attend training?

If yes, what kind of training and how do they enhance access to finance

2. What benefits do groups derive from these training? How do these training enhance group access to finance?

THANK YOU FOR YOUR TIME

APPENDIX 6: INTRODUCTORY LETTER

PETER OCHORA MOGAKA,

MBAC01/0006/2017

THE CO-OPERATIVE UNIVERSITY OF KENYA

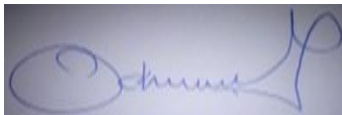
Dear Sir/ Madam,

RE: REQUEST FOR RESEARCH PARTICIPATION

I am a postgraduate student at The Co-operative University of Kenya undertaking a master's degree in Business Administration (FINANCE OPTION). I am currently carrying out a research **on ANALYSIS OF COLLECTIVE ACTION AND ACCESS TO FINANCE AMONG WOMEN CHICKEN FARMERS IN MAKUENI COUNTY** as part of my course requirement. I therefore invite you to participate in the study by responding to the attached questionnaire.

Your identity will be treated with confidentiality and the information provided will be used for purpose of the study only. Kindly read each question carefully and give you most objective response my making a tick in the provided area. Looking forward to your co-operation.

Yours Faithfully,

A handwritten signature in blue ink, appearing to read 'Peter Ochora', is shown within a rectangular box.

Peter Ochora

APPENDIX 7: LETTER FROM POSTGRADUATE



CUK is ISO 9001: 2015 Certified

THE CO-OPERATIVE UNIVERSITY OF KENYA

P. O. Box 24814-00502 Karen, Kenya

Telephone: (020)-2430127/2679456/8891401 Fax (020)-8891410

www.cuk.ac.ke

12th October, 2021

The Director,
National Commission for Science, Technology & Innovation
Utalii House,
Nairobi.

Dear Sir/Madam,

PETER OCHORA MOGAKA. MBAC01/0006/2017

This is to introduce the above named Master in Business Administration student in the School of Business and Economics at The Co-operative University of Kenya.

He has successfully completed his course work and is proceeding to the field to collect data from Smallholder Chicken Farmers in Makueni County.

The title of his research project is **“Analysis Of Collective Action And Access To Finance For Women Smallholder Chicken Farmers In Makueni County, Kenya”**

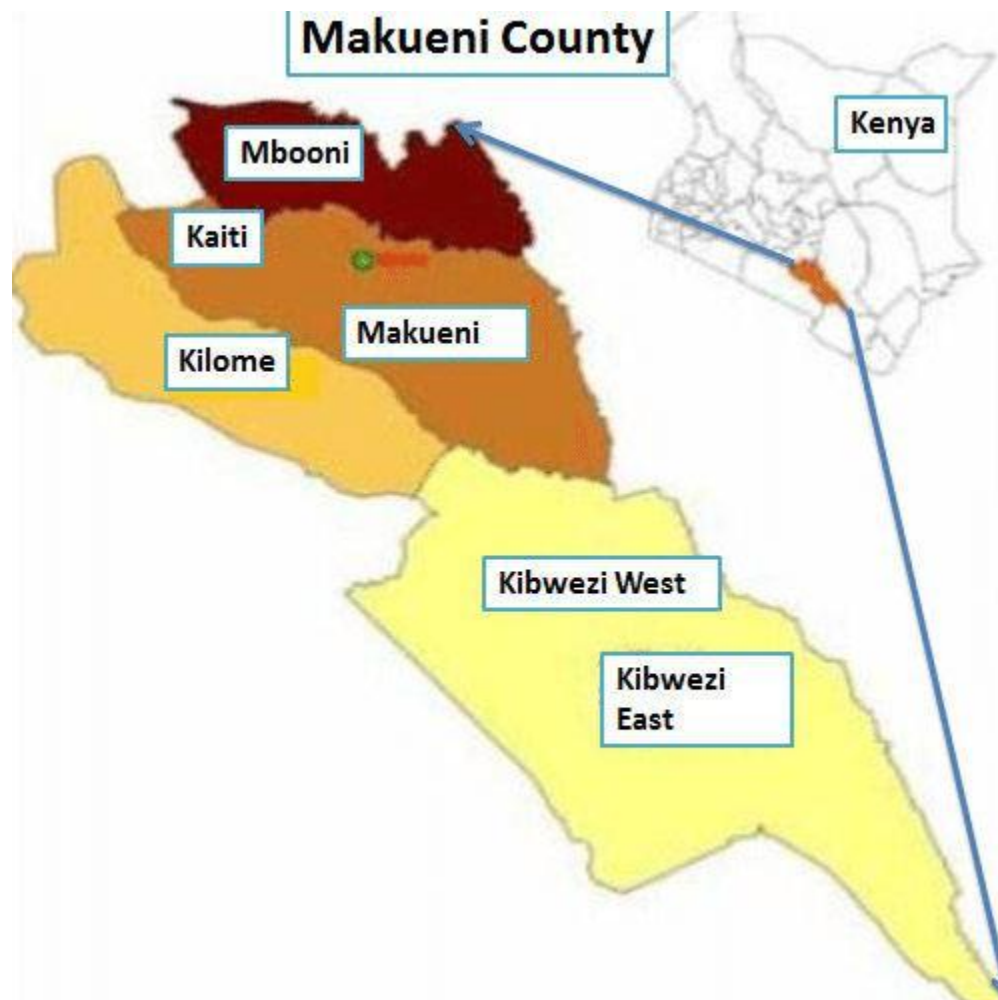
Kindly accord him the necessary assistance.

Yours faithfully,

Lucy Maina Kiganane (PhD)

Director Post Graduate Studies

APPENDIX 8: RESEARCH STUDY SITE



APPENDIX 9: RESEARCH BUDGET

S/No.		ITEM	QUANTITY	RATE	TOTAL
1.0	TOOLS AND MATERIALS				
1.1	Stationery	Biro Pens	3	20	60.00
1.2		Pencils	3	15	45.00
1.3		Notebooks	3	50	150.00
1.4		Box File	1	500	500.00
1.5		Stapler	1	400	400.00
1.6		Staple pins	1	200	200.00
SUB TOTAL					1,355.00
2.0	RESEARCH SERVICES				
2.1	Research allowance	research assistants	2	54,000.00	108,000.00
2.2	Transport cost	Field trips	3 months	21,300.00	63,900.00
2.3	Health measures	Sanitizers & face masks	3 months	2,166.66	6,500.00
2.4	Facilitation for respondents	FGD -9 meetings per sub-county (i.e. 30 meetings for 6 wards).	30	500.00	100,000.00
		KII respondents -5 per sub county (for 6 wards)	20	500.00	10,000.00
2.5	Internet	internet services	3	3,500.00	10,500.00
2.6	Printing	FGD-5 copies	5	10.00	50.00
2.7	Printing	KII	5	10.00	50.00
SUB TOTAL					299,000.00
3.0	COPY OF PROPOSAL AND FINAL RESEARCH				
3.1	Binding	Proposal and Final Research	6	500.00	3,000.00
3.2	Publication		1	20,000.00	20,000.00
SUB TOTAL					23,000.00
GRAND TOTAL					322,000.00

APPENDIX 10: SCHEDULE OF ACTIVITIES

Time Activity	JULY 2021				AUG 2021				SEP 2021				OCT-DEC 2021				MARCH- APRIL 2022				MAY- JULY 2022				OCT- NOV 2022				DEC 2022			
Research proposal																																
Proposal Defense																																
Data Collection																																
Data Analysis																																
Chapter 5 writing																																
Thesis Defense																																
Submission of Error-free Copies																																
Graduation																																