



Gender Dynamics: A Study of the Differing Experiences of Women in Formal and Informal Cooperatives

Prof. Isaac K. Nyamongo

Deputy Vice Chancellor, Academic, Cooperative Development, Research and Innovation
The Co-operative University of Kenya

Dr. Lydia Mutua

Acting Deputy Registrar, Co-operative Development, Research and Innovation
The Co-operative University of Kenya

Victor Wambua

Graduate Assistant,
The Co-operative University of Kenya

Dr. Judith A. Hermanson

Director, International Cooperative Research Group
U.S. Overseas Cooperative Development Council

Silas Maiyo

Lecturer & Researcher,
The Co-operative University of Kenya



USAID
FROM THE AMERICAN PEOPLE



U.S. Overseas
Cooperative
Development
Council



Attribution

Nyamongo, I. K., Hermanson, J., Mutua, L., Maiyo, S., & Wambua, V. (2024). Gender Dynamics: A Study of the Differing Experiences of Women in Formal and Informal Cooperatives. U.S. Overseas Cooperative Development Council International Cooperative Research Group and The Co-operative University of Kenya. <https://ocdc.coop/resource-center/gender-dynamics-a-study-of-the-differing-experiences-of-women-in-formal-and-informal-cooperatives>

Acknowledgment

We thank the respondents and informants in the Kisii, Nandi, and Machakos counties for providing data for this study. Thanks also to the county commissioners in Kisii, Nandi, and Machakos, State Department of Co-operatives; State Department for Social Protection; and Cooperative Departments at the county level for logistical support.

This study is co-authored and supported by the International Cooperative Research Group (ICRG) of the US Overseas Cooperative Development Council (US OCDC) through contract no. 7200AA18CA00029. Ethical clearance was granted by the Strathmore University Institutional Ethics and Research Committee (no. SU-IERC1272/22), while NACOSTI issued the research permit (license no. NACOSTI/P/22/15691).

Table of Contents

Executive Summary	1
Introduction	3
Methods	6
Discussion	10
Summary of Findings	33
Conclusion	36
Recommendation	37

List of Tables

<i>Table 1:</i> Target population, sample size	6
<i>Table 2:</i> Summary characteristics of study participants	8
<i>Table 3:</i> Distribution of respondents	10
<i>Table 4:</i> Perceived value of information provided by colleagues	14
<i>Table 5:</i> Summary of network map statistics	28

List of Figures

<i>Figure 1:</i> Benefits for members in SACCOs or Chamas	12
<i>Figure 2:</i> Frequency of information provided to members: SACCOs vs. Chamas	13
<i>Figure 3:</i> How close are you to each other? SACCOs vs. Chamas	14
<i>Figure 4:</i> Network analysis for SACCOs and Chamas	27
<i>Figure 5:</i> Betweenness centrality distribution for SACCOs and Chamas	29
<i>Figure 6:</i> Harmonic closeness centrality distribution for SACCOs and Chamas	29
<i>Figure 7:</i> Eigenvector centrality distribution for SACCOs and Chamas	30
<i>Figure 8:</i> Network maps by gender and group	31

Abbreviations and Acronyms

FGD	Focus Group Discussions
KII	Key Informant Interview
NACOSTI	National Commission for Science, Technology and Innovation
SACCOs	Savings and Credit Cooperative Organizations
SU - IERC	Strathmore University – Institutional Ethical Review Committee



Executive Summary

This study examines and explains why more women join informal groups (Chamas) compared with SACCOs (formally organized cooperatives) and characterizes gender-specific bonding in the two types of social networks. It adopts a mixed-methods approach to answer the following four research questions: (1) What are the reasons more women join informal groups (Chamas) compared with SACCOs? (2) What are the perceived benefits of being in an informal group (Chama) compared with a SACCO? (3) What barriers do women face joining SACCOs? and (4) What are the characteristics of the social bonds among members in informal groups (Chamas) and in SACCOs?

Primary quantitative data were collected from women in Chamas and SACCOs from which comparative descriptive and inferential analysis are performed. The qualitative data generated information on why women join Chamas and SACCOs, along with the perceived benefits. It also informed the development of the questionnaire for the social network data.¹ The social network data consisted of information on intra- and intergroup dynamics.

The study was focused in three counties, Kisii, Machakos and Nandi. Data was collected from a representative sample of 1,349 respondents, with approximately the same number of respondents from each county and evenly divided between Chamas and SACCOs.

Both Chamas and SACCOs have members from all works of life. However, SACCOs are on the whole larger and have members that are engaged with the formal economy. Chamas, on the other hand, tend to be smaller, less structured and have members who are more often associated with the informal economy, the preponderance of whom are women, and with a smaller resource base. Trust, goodwill and closeness of members in Chamas are stronger than in SACCOs, and the study confirmed that women face barriers in joining SACCOs and sometimes also Chamas. This study acknowledges that the two types of organizations provide different financial products to their members, each of which fulfills a demand.

¹ Social network analysis is a research method of understanding relationships and connections among individuals, groups, and things. It helps us to understand who is working with whom, how information is given or acquired, how power is concentrated or shared within an organization, and how special interest groups form and function.



Policies and legislation are in place to support the growth and development of SACCOs in Kenya. However, few women join SACCOs compared with Chamas and are under-represented as SACCO members in relation to their the proportion of the population that they represent. ICRG research² shows that women SACCO members reap economic benefits from this membership. The outcomes of this study can be grouped into major recommendations for county and national governments, SACCOs, Chamas and other stakeholders:

COUNTY/NATIONAL GOVERNMENTS

- Intensify education and training at the grassroots, community level applying a gender lens.
- Explore the means and mechanisms of transitioning Chamas to SACCOs so as to yield greater economic benefit to their members.

SACCOS/CHAMAS

- Redress the continuing imbalance of women members (in relation to their proportion of the population) by exploring opportunities provided by the law to develop innovative and competitive products to attract more women members. To extend the greater economic benefits of SACCO membership to women, seek help from women leaders, administrators and social development officers who could promote positive culture of women's socio-economic empowerment and investment at the community level. Through training, sensitization, and public participation forums, Chamas should be encouraged to transit into SACCOs as appropriate to their aspirations. SACCOs should broaden their businesses and diversify their products and services relevant to women's needs so as to attract more women members.

² Hermanson, J.A., Lucas L.M., Czachorska-Jones, B., & Holst, A. (2021) What Difference Do Cooperatives Make? Kenya Country Study. U.S. Overseas Cooperative Development Council. Washington, D.C. <https://ocdc.coop/resource-center/what-difference-do-cooperatives-make-kenya>

Introduction

Access to finance in Kenya continues to grow; however, despite the growth registered over the years, women are more excluded from access compared with men. According to the 2021 Financial Access Household Survey report, fewer women compared with men accessed formal financial resources. Conversely, more women (6%) compared with men (3.2%) accessed financial resources through informal channels, leaving a gap of 2.8% between the two groups (FinAccess, 2021).³ This is an improvement from 2019. The 2019 Kenya financial access survey reported that, despite the narrowing of the gender divide (the gap narrowed from 20% in 2016 to 14% in 2019), there is still a noticeable difference in the proportion of women to men who save through informal groups,⁴ while in formal groups (SACCOs) there are 34.23% women compared with 60.65% men.⁵ Further, about 70% of Kenyans accessed financial services from a Chama in 2019,⁶ buttressing the important role played by these groups in Kenya's economy. The informal sources identified in the financial access report includes informal groups (e.g., Chamas), credit facilities from shopkeepers, employers, money lenders, and unregistered online lenders. Comparatively, the report notes, more men than women had access to financial resources from SACCOs.

Chamas and SACCOs are identified through a number of basic differences between them. First, Chamas are less formalized groups with members who come together often because they have a common physical location or relationship. This is in contrast with membership in SACCOs, which is not necessarily linked to a common physical location or relationship. Second, Chamas are not regulated by any specific legislation, unlike the SACCOs, which are managed under the SACCO Societies Act No. 14 of 2008 of the Laws of Kenya and are regulated by the SACCO Societies Regulatory Authority (SASRA). Third, Chamas have less formal risk management practices, including less rigorous auditing requirements. Fourth, the financial transactions of Chamas often escape the taxation regime largely because the transactions are operated informally. For example, group members will operate an account in the bank under the names of some members of the group. Last, Chamas are generally not under government oversight. Chamas are also sometimes regarded as pre-cooperatives. Although there is no established definition of a pre-cooperative, the State Department of Cooperatives in its strategic plan documents defines pre-cooperatives as groups that are under training (incubates) to be promoted to fully fledged cooperatives. Indeed, some Chamas have transitioned into cooperatives.

³ FinAccess. (2021). FinAccess Household Survey. Nairobi: CBK, KNBS, & FSD Kenya. <https://tinyurl.com/2p8fm42z>.

⁴ FinAccess. (2019). FinAccess Households survey: Access, usage, quality and impact. Nairobi: CBK, KNBS, & FSD, Kenya.

⁵ SASRA. (2019) The SACCO subsector demographics study report. Nairobi.

⁶ FinAccess. (2019). FinAccess Households survey: Access, usage, quality and impact. Nairobi: CBK, KNBS, & FSD, Kenya.

Differences between Chamas and SACCOs

Chamas	SACCOs
Informally organized based on personal relationships or shared interests or purpose.	Formal financial institutions established and regulated under specific legal frameworks.
Primarily engage in group savings and investments, such as property purchases and starting businesses.	Provide comprehensive financial services, including savings accounts, loans, insurance, and investment products.
Generally, not subject to government oversight.	Regulated by government, particularly by SACCO Societies Regulatory Authority.
Have less formal risk management practices with members often being collectively responsible for individual and group obligations.	Implement advanced risk management strategies to protect members' funds usually with limited liability.
Do not typically have direct access to formal financial markets.	Can engage in financial market activities and investments on behalf of members.
Generally small in terms of membership size.	Have a larger membership base, sometimes hundreds or thousands of members.
Have less formal record-keeping practices and often do not benefit from professional auditors.	Maintain rigorous record-keeping systems and as required by law are regularly audited.
Due to the nature of operations, the financial transactions often escape taxation.	Financial transactions are taxed as stipulated in law.

Importance of the Study ▶

We seek to understand the reasons and perceived benefits for Chama membership and possible barriers to formal cooperative membership.

This study explains why more women join informal groups (Chamas) instead of SACCOs and characterizes gender-specific social networks. Informal groups, i.e., Chamas or pre-cooperatives, are small voluntary groups typically used as instruments for economic empowerment,⁷ especially among women. They consist of individuals with common interests who come together voluntarily with the purpose of attaining either an economic or social agenda or both. Unlike financial cooperatives, a Chama is more loosely bound and less defined by strict structures and legal considerations found in the Cooperative Societies Act, which makes a Chama more fluid. To attain their economic and social agenda, members make regular fixed contributions and assign the total amount, or a portion, to one or more members on rotation.⁸ Over 300,000 registered Chamas exist in Kenya⁹; however, there is gender disparity in membership. Generally, more women belong in Chamas compared with men (see Elliott, 2014).¹⁰

Primary data are drawn from 20 formal cooperatives (SACCOs) and 20 informal groups (Chamas) from three counties—Kisii, Machakos, and Nandi—which represent varied socio-economic and cultural diversity and also have the highest number of Chamas.¹¹

In addition, policymakers, women leaders in Chamas and SACCOs, and administrators were interviewed. Specifically, the study: (1) explores the economic and social reasons why more women join Chamas compared with SACCOs; (2) explores perceived benefits of being in a Chama compared with a SACCO; (3) identifies barriers women face joining SACCOs; and (4) characterizes the gender-specific social networks in Chamas and SACCOs.

RESEARCH QUESTIONS

- 1** Why do more women join informal groups (Chamas) compared to SACCOs?
- 2** What are the benefits of being in a Chama compared with a SACCO?
- 3** What barriers do women face joining SACCOs?
- 4** What is the nature of social bonds in Chamas and SACCOs?

⁷ Chitere, P. (2018). Self-help groups as a means for development and welfare: Their characteristics, membership and performance in Kenya. *International Journal of Social Work & Human Services Practice*, 6(2): 30-45.

⁸ Osuntogun, A., Adeyemo, R. and Osuntogun, A. (1981). Mobilization of rural savings and credit extensions by pre-cooperative organizations in Southwestern Nigeria. *Savings and Development*, 5(4): 247-261. Retrieved July 21, 2021 from www.jstor.org/stable/25829786.

⁹ Kenya Association of Investment Groups (KAIG), (2016). *The Chama Handbook 2016*. 3rd Ed.

¹⁰ Elliott, H. (2014). *An ethnographic study of local institutionalisation of savings groups in Malanga, Coast region*. Nairobi, Kenya: FSD Kenya.

¹¹ KNBS (Kenya National Bureau of Statistics) (2019). *National Study Survey*

Methods

DESCRIPTION OF STUDY DESIGN

A mixed-methods approach, starting with qualitative then quantitative, was used to collect data from Chamas and SACCOs. The qualitative data generated information on why women join Chamas and SACCOs, along with the perceived benefits. It also informed the development of the questionnaire for the social network data¹². Primary quantitative data were collected from women in Chamas and SACCOs from which comparative descriptive and inferential analysis are performed. The social network data consisted of information on intra- and intergroup dynamics. From these data, the strength of relationships within the network was computed. We employed the social network analysis approach to characterize the gender-specific social networks in Chamas and SACCOs.

The study population was 246 SACCOs, and 10,417 Chamas, in the three counties, representing 2% and 4% of the national population, respectively.¹³ The average size of Chamas ranges between 10–20 members. Using 15 as the middle number, from 20 Chamas, it yields 300 respondents in each county, which was matched with SACCOs (Table 1).

¹² Social network analysis is a research method of understanding relationships and connections among individuals, groups, and things. It helps us to understand who is working with whom, how information is given or acquired, how power is concentrated or shared within an organization, and how special interest groups form and function.

¹³ Constantin (2021) has shown that a sample size of between 250 to 350 respondents is generally acceptable to observe sensitivity when networks are sparse with 20 or fewer nodes. [Constantin, M. A. (2021). Sample size recommendations for estimating cross-sectional network models. University of Tilburg. <http://arno.uvt.nl/show.cgi?fid=149724>. Accessed July 20, 2021.]

TABLE 1: TARGET POPULATION, SAMPLE SIZE

County	Number of		Sample Size			
	Chamas	SACCOs	Chamas		SACCOs	
			No. of Chamas	No. of respondents	No. of SACCOs	No. of respondents
MACHAKOS	4,976	73	20	300	20	300
NANDI	3,641	90	20	300	20	300
KISII	1,800	83	20	300	20	300
Total	10,417	246	60	900	60	900



DATA COLLECTION TECHNIQUE AND TOOLS

Qualitative data were collected using focus group discussion (FGD) and key informant interview (KII) guides. Nine FGDs per county targeted management or leaders of Chamas and SACCOs. KIIs targeted county cooperative officers, SACCO and Chama leaders, local administrators such as chiefs, and women leaders in each selected county. The 21 KIIs included three county cooperative officers, three local administrators, three women leaders, six SACCO leaders, and six Chama leaders.

Survey questionnaire: A survey questionnaire produced relational, sociodemographic, and economic data. The data were collected in binary form, e.g., yes/no, connected/not connected, or like/dislike; categorical data, e.g., social roles, kinship ties, affective indicators (like, dislike, respect, etc.); actions (talk with, meet with,

collaborate with); and co-occurrence (same work space, same church, etc.); and interval data, e.g., number of times A communicates with B, number of events A and B attend together, and number of engagements between A and B.

We used **Gephi** to analyze social networks data and SPSS for the other quantitative data. Qualitative data were transcribed, coded, and analyzed thematically using NVivo software.

Characteristics of study participants: A total of 1,349 respondents (668 from SACCOs and 681 from Chamas) were interviewed in Kisii (438 respondents), Machakos (426 respondents), and Nandi (485 respondents). Summary characteristics of the respondents are presented in Table 2.

TABLE 2: **SUMMARY CHARACTERISTICS OF STUDY PARTICIPANTS**

Characteristic		SACCOs (n=662)		Chamas (n=679)		Combined (N=1341)	
		No.	%	No.	%	No.	%
County	Kisii	215	32.5	219	32.3	434	32.4
	Machakos	199	30.1	225	33.1	424	31.6
	Nandi	248	37.5	235	34.6	483	36.0
Gender	Female	529	79.9	609	89.7	1138	84.9
	Male	133	20.1	70	10.3	203	15.1
Age (yrs)	18-35	106	16.0	175	25.8	281	21.0
	36-50	257	38.8	314	46.2	570	42.6
	Over 50	299	44.2	189	27.8	489	36.4
	No response	0	0	1	0.1	1	0.07
Education	No formal education	44	6.6	27	4.0	71	5.3
	Primary	230	34.7	261	38.4	491	36.6
	Secondary	221	33.4	264	38.9	485	36.2
	Tertiary	114	17.2	95	14.0	209	15.6
	University	53	8.0	29	4.3	82	6.1
	No response	0	0	3	0.4	3	0.2
Marital status	Single	69	10.4	75	11.0	144	10.7
	Married	579	87.5	596	87.8	1175	87.6
	Widow	12	1.8	0	0	12	0.9
	No response	2	0.3	8	1.2	10	0.7



Gender distribution: As expected, we interviewed more women (85%) than men (15%). There is a higher number of women in Chamas compared with SACCOs.

Age distribution: Despite minor variations within counties, those between 36–50 years were the majority (42.6%) of the interviewed; within SACCOs, a higher proportion (44%) of respondents were over 50 years compared with those between 36 and 50 years (46%) for Chamas (Table 2). There are fewer youths (21%) in either SACCOs (16%) or Chamas (25.8%).

Level of education: About three-quarters (72.8%) of the respondents had either a primary (36.6%) or secondary (36.2%) level of education, with a smaller proportion (21.7%) reporting either tertiary (15.6%) or university (6.1%) level of education (Table 2).

Those with no formal education accounted for 5.3% of the respondents. Overall, Chamas compared with SACCOs had more respondents with a primary and secondary level of education, while SACCOs had more respondents with a tertiary or university level of education.

Marital status: Most of those interviewed (87.6%) identified themselves as married compared with 10.7% who identified themselves as single. Under 1% identified themselves as widowed.

Discussion

MEMBERSHIP DURATION IN CHAMAS/SACCOS

A majority (56%) of the members (SACCOS at 70.8% compared with Chamas at 42.4%) remained active in their SACCOS or Chamas for more than five years, followed by one to three years (18%) and three to five years (14%) (Table 3). This reflects the fluid nature of membership in Chamas. In SACCOS, a member remains even if they are transferred to another station; for Chamas, relocation creates complications because of regular in-person meetings.

TABLE 3: **DISTRIBUTION OF RESPONDENTS**

		HOW LONG HAVE YOU BEEN A MEMBER OF SACCOS/CHAMAS? (N=1341)				
County/Membership Duration		< 6 months	6–12 Months	1–3 Years	3–5 Years	> 5 Years
County	Kisii (n=432)	33 (4.64%)	27 (6.25%)	67 (15.51%)	80 (18.52%)	225 (52.08%)
	Machakos (n=424)	16 (3.8%)	43 (10.1%)	73 (17.2%)	38 (9.0%)	254 (59.9%)
	Nandi (n=482)	14 (2.9%)	23 (4.77%)	104 (21.58%)	65 (13.49%)	276 (57.26%)
Membership Type	SACCO (n=661)	14 (2.1%)	23 (3.48%)	81 (12.25%)	75 (11.35%)	468 (70.80%)
	Chamas (n=677)	49 (7.24%)	70 (10.34%)	163 (24.08%)	108 (15.95%)	287 (42.39%)
Total		63 (4.71%)	93 (6.95%)	244 (18.27%)	183 (13.68%)	755 (56.43%)

WHAT MEMBERS OF CHAMAS AND SACCOS DO OR WHERE THEY WORK

Box 1 shows a list of activities in which members are engaged. Generally, those in regular income jobs are more likely to list themselves as SACCO members; those in low paying or who have irregular income were more likely to identify themselves with a Chama.

BOX 1: WHAT MEMBERS DO/WHERE THEY WORK

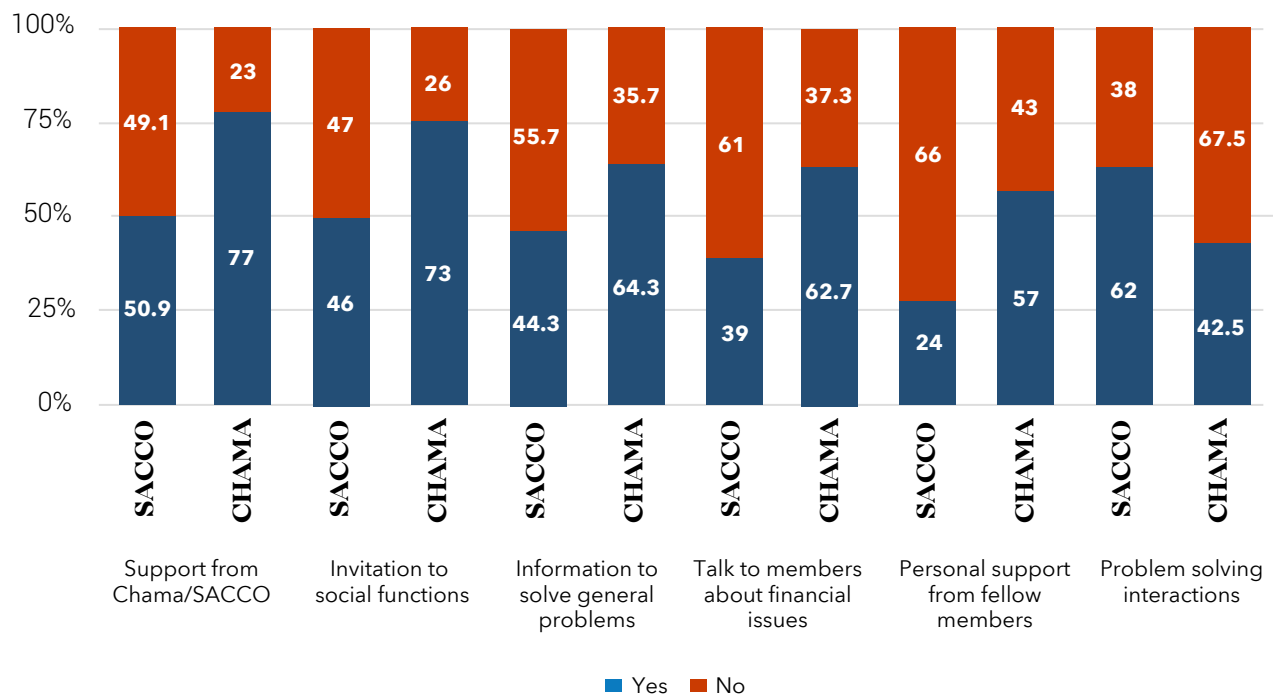
SACCOS		Chamas	
Male	Female	Male	Female
• Teacher • Civil servant • Cooperative leader, chairperson, secretary, treasurer • Farmer: coffee, tea, dairy, subsistence farming • SACCO employee • Accountant, Bursar • Banker • Doctor • Agricultural extension officers	• Teacher • Civil servant • Cooperative leader, chairperson, secretary, treasurer • Farmer: coffee, tea, dairy, subsistence farming • SACCO employee • Boutique/saloon • Nurse • Administrative assistant	• Pastors • Drivers • Mechanic • Mason • General business, e.g., shopkeepers, selling cloths, supply shops, cosmetic shops, fruit vendors • Laborers/casual workers, cleaners • Security guard • Catering • Subsistence farming • Cereals dealer	• Pastors • Housewives • Receptionist • Cereals dealer • General business, e.g., shopkeepers, selling cloths, supply shops, cosmetic shops, fruit vendors • Laborers/casual workers, cleaners • Security guard • Catering • Subsistence farming

BENEFITS FOR MEMBERS IN CHAMAS/SACCOS

Respondents reported benefits they received from fellow Chama and SACCO members during the preceding six months. Benefits ranged from how to resolve general problems, support when services are needed from a SACCO or Chama, problem-solving interactions, personal support among members, talking to other members about financial matters or concerns, and whether members invite each other to social functions (see Figure 1).

Three in four (77%) Chama members and 51% of SACCO members *receive required support from fellow members when they needed services from their Chamas/SACCOs*. It points to greater closeness and trust, both suggestive of strong bonds, among members in Chamas compared with those in SACCOs. The close social ties exhibited among Chama members are also demonstrated when dealing with social issues involving members; moreover, 73% of those in Chamas indicated that they receive invitations to social functions organized by fellow Chama members, while only 46% reported the same for those in SACCOs. This is a further indication of the stronger social bonds among Chama members.

FIGURE 1: **BENEFITS FOR MEMBERS IN SACCOS OR CHAMAS**



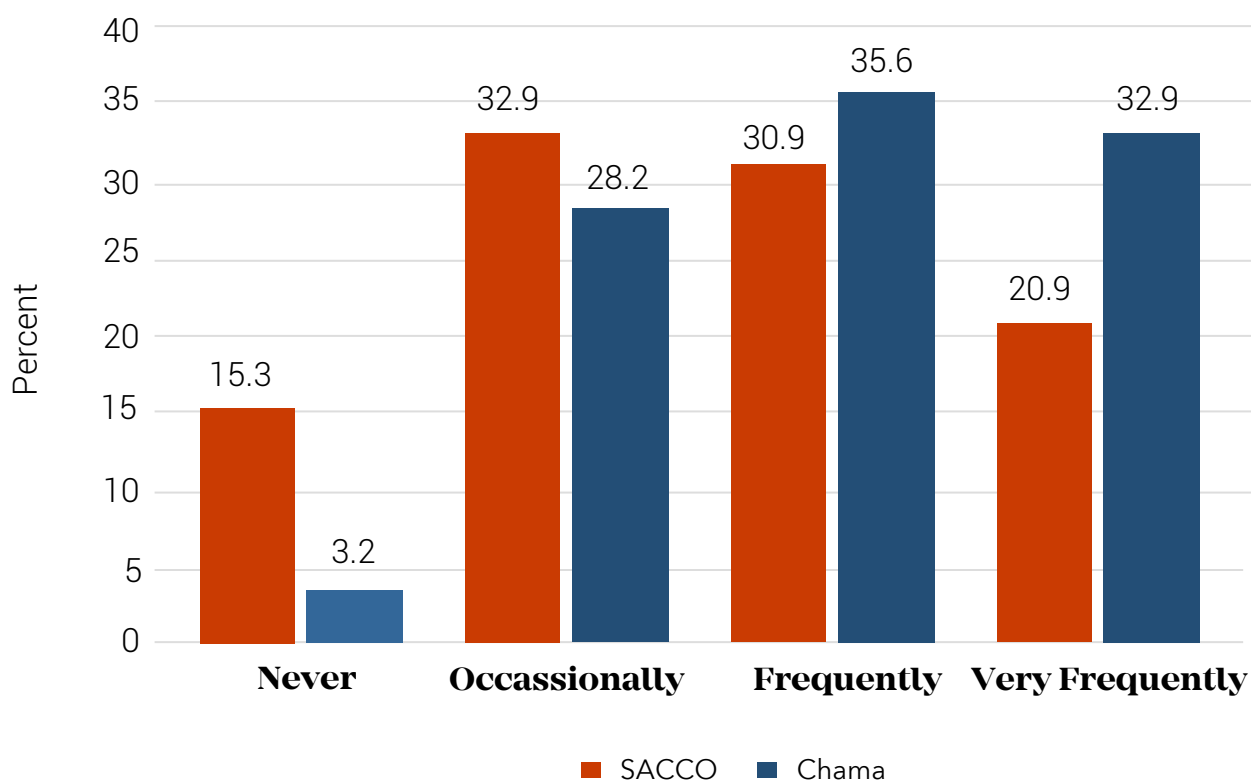
In Chamas, 64.3% of respondents reported that they *receive information from members that helps them solve general problems* compared with 44% in SACCOs who reported the same (Figure 1). Therefore, members in Chamas were more likely to share information to tackle challenges faced by fellow members. Chamas recorded a high proportion (62.7%) of those who *talk to colleagues about financial matters or concerns* compared with SACCO members (39%).

One in four (24%) of SACCO members reported *receiving personal support from fellow members* compared with one in two (57%) in Chamas. This reflects the loose social bonds among SACCO members compared with Chama members. Last, more SACCO members (62%) indicated that they *get involved in problem-solving interactions* compared with 42.5% of Chama members. In summary, the data point to strong bonds between Chama members compared with the bonds among SACCO members.

FREQUENCY OF PROVIDING INFORMATION TO MEMBERS

Respondents were asked how often they received information used to perform their work from each of the friends they identified in the SACCO or Chama. This question produced a total of 6,448 responses (i.e., 303 for SACCOs and 3,418 for Chamas). Whereas members were provided with information by their colleagues, those in Chamas (68.5%) received information either frequently or very frequently compared with those in SACCOs (51.8%). Significantly more SACCO (15.3%) than Chama (3.2%) members reported that they never receive information from their colleagues (Figure 2).

FIGURE 2: **FREQUENCY OF INFORMATION PROVIDED TO MEMBERS: SACCOS VS. CHAMAS**



In terms of the value of information received, there were 6,494 unique responses (i.e., 3,059 for SACCOs and 3,435 for Chamas). More Chama members considered the information provided as either very valuable (46.6%) or just valuable (43.1%) compared with SACCO members (very valuable at 26.3% or valuable at 49.0%). No respondent felt that the information was not valuable at all (Table 4).

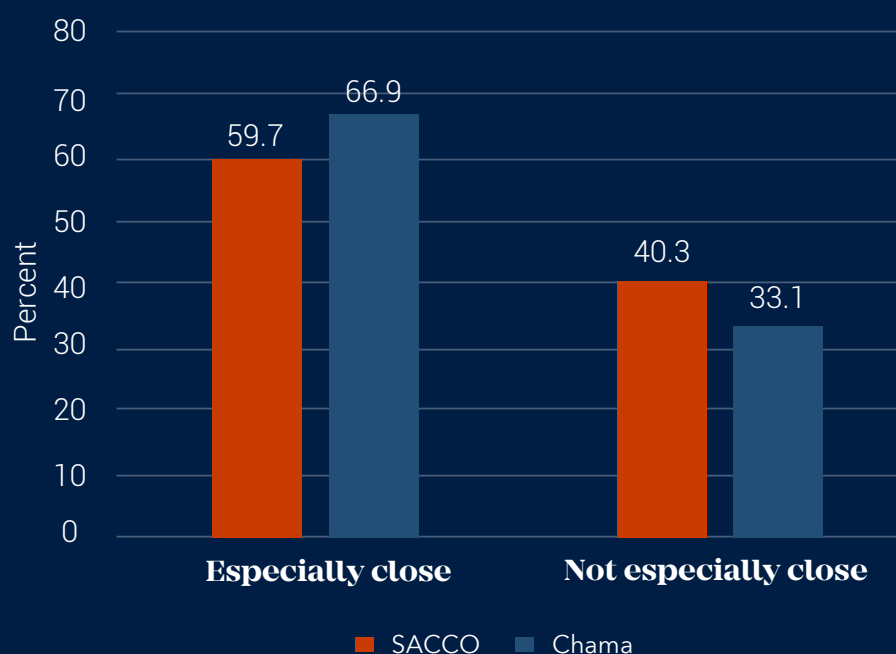
TABLE 4: **PERCEIVED VALUE OF INFORMATION PROVIDED BY COLLEAGUES**

	Very valuable	Valuable	Occasionally valuable	Not valuable
SACCOs (n=3059)	805 (26.3%)	1,498 (49.0%)	756 (24.7%)	0 (0%)
Chamas (n=3435)	1,602 (46.6%)	1,480 (43.1%)	353 (10.3%)	0 (0%)

PERCEPTIONS ABOUT CLOSENESS TO EACH OTHER

How close do you feel to each of the people you identified? Members of Chamas reported that they felt especially close (66.9%) to other members compared with those in SACCOs (59.7%) (Figure 3).

FIGURE 3: **HOW CLOSE ARE YOU TO EACH OTHER? SACCOS VS. CHAMAS**





MEMBERSHIP, ECONOMIC AND SOCIAL REASONS, PERCEIVED BENEFITS AND BARRIERS

MEMBERSHIP IN CHAMAS AND SACCOS

A majority of Chama members in the three counties were women. However, unlike Machakos and Nandi, in Kisii County the number of women in Chamas and SACCOS was nearly even. Most of those in Chamas were farmers (70%), with the remaining engaging in off-farm businesses. Most members in Chamas were above 35 years (Table 2). For the mixed-gender Chamas, like in Kisii, over 60% of registered members were women. On the other hand, men accounted for a larger proportion of SACCO members in the three counties. The Chama membership ranged between 10 and 20 in Machakos to as big as 15 to 40 in Nandi. Unlike SACCOS, the Chamas were relatively more recently formed, e.g., in Nandi, where Chamas were on average less than seven years. The Chamas were composed of self-employed men and women and those in full-time jobs.

Participation of youth in Chamas and SACCOS was minimal. There is no county in which the youth membership in either a Chama or SACCO was more than that of the other age categories. The reason cited is that the youth were unemployed or often itinerant, both of which hindered active participation in either Chamas or SACCOS.

Low participation of women and youth was attributed to limited access to finances, and women were considered to be more risk-averse than men. Most SACCO members reported being active for at least three years, with a few mentioning active membership of over 10 years. Members of SACCOS are often full-time employees working in different sectors such as education, county governments, security, and health.

REASONS FOR JOINING SACCOS AND CHAMAS

According to respondents, the main reasons for joining Chamas include empowering themselves (the women) financially; supporting each other in buying household stuff through pooling of resources; buying livestock; addressing social issues affecting members; supporting each other during social functions, e.g., burials, weddings, bride-wealth negotiations, or during sickness; and mutual support in paying school fees for their children. In Nandi, for example, Chamas help women to manage resources: *"Having loans in Chamas motivates women to work to pay their loans in time. Also, it disciplines and helps women to [economize] and save in order to pay their loans"* (FGD, #ND01, female, Chama, Nandi). Further, women said they joined Chamas to share ideas and for emotional support during difficult times. Also, *"Women join Chamas with an aim of getting encouragement from each other and solve problems"* (FGD, #ND02, female, Chama, Nandi). Chamas act as a stress-free environment for women to meet and share ideas and help each other solve social problems. This view is captured in the three counties. In Machakos County, for example, women said they joined Chamas for mutual support, especially during social events such as burials, weddings, dowry negotiations, and visiting and helping a sick member. Some women said they joined Chamas because of companionship *"Why would someone sit alone in their homestead? Women join Chamas to know each other's problems and help each other"* (FGD, #MK02, female, Chama, Machakos). Summing the benefits that make women join Chamas, a participant said, *"In the Chamas, we lift each other both economically and socially"* (FGD, #ND03, female, Chama, Nandi).

In the case of SACCOs, motivation for joining was captured as the need to boost business through access to more money through short- and long-term loans, something that a Chama cannot do; payment of dividends by the SACCOs; to receive SACCO support in time of need, e.g., in the event of a death; and because SACCOs provide education and training to members. In Nandi County, women said they receive training from SACCOs, particularly regarding good farming practices. This was also captured in FGDs conducted in Machakos and Kisii. SACCOs help registered members to open accounts to save through their front office service activities (FOSA). One of the SACCO leaders reported, *"We do offer education to our members, though we had a challenge during the time of Corona, we stopped. We used to have field days, education days, and annual general meetings where members are sensitized. But, due to that challenge, this has not been happening for (the last) two years"* (KII, #ND01, female, SACCO leader, Nandi).





In Machakos, it was reported that, ***"In a SACCO, one can borrow a loan individually and make personal investments. You can also borrow a larger amount [of money] at a lower interest compared to a Chama"*** (FGD, #MK03, SACCO, Machakos). The money is used for personal development. Some SACCO leaders spoke of the ability of their SACCO to help members' access loans through refinancing, cofinancing existing loans, or asset financing to acquire farm machinery or inputs. As in Nandi, women in Machakos spoke positively of SACCO dividends in which they invested. SACCOs also sponsor members' children for studies, particularly those from needy families.

In addition to the above reasons for joining, in Kisii County, SACCOs are also seen as an avenue for improving livelihoods and avoiding poverty. Peer pressure influenced decisions to join SACCOs. An FGD participant said, ***"Most women are challenged and encouraged to join SACCOs by friends who have benefitted from SACCOs a lot by even buying property"*** (FGD, #KS01, female, SACCO, Kisii).

Overall, SACCOs are seen as an avenue for empowering women through accumulation and access to greater resources unlike for Chamas.

PERCEIVED BENEFITS OF BEING A CHAMA OR SACCO MEMBER

Women reported that Chamas helped them access loans at low interest rates. They reported that it was easier to get a loan in a Chama than in a SACCO, as Chamas did not require lengthy procedures for guaranteeing loans borrowed. For Chamas, members are presumed guaranteed by those who introduce them into the group. Due to the membership setup, in the case of default, members were not threatened with auctioning of their property. The women said there is greater flexibility in repaying Chama loans compared with SACCO loans. An FGD participant captured this view, thus, *"There is flexibility in Chamas; for example, you can save with two names as one person, and at the end of the year, during sharing out, you will get savings and interest in both names"...* [furthermore] *"Decision-making in Chamas is fast compared to SACCOs; for example, Chama is reliable if you need a loan urgently, e.g., to pay school fees, unlike in SACCO where it can even take three months to get help, yet the need was urgent"* (FGD, #ND04, female, Chama, Nandi). This view is also reflective of data from Machakos.

SACCOs have strict and tough repayment conditions compared with Chamas, where members know and understand each other. In Chamas, a member can request an extension if he or she fails to receive money on time or as promised. In SACCOs, you must save for a period before you can access loans; in Chamas, you can join and access a loan the same day. In terms of Chama functions, women in Nandi County noted they usually acquire soft loans, which they use to support their families.

Women in Machakos preferred Chamas to SACCOs because, apart from financial benefits, Chamas help in handling social issues, like during a member's bereavement. A woman Chama member in Machakos said, *"Many women are motivated to join Chamas because the members of the Chama are readily available in times of need."* Also, *"Women love Chamas because in Chamas they get money (loan) easily. It does not take a process like for acquiring a loan from a SACCO"* (FGD, #MK04-FGD, female, Chama leader, Machakos).

Women stated that there is flexibility in sharing Chama benefits. For example, a Chama member said, *"A member comes and tells their chairlady that she has a problem and needs money to solve it. For example, if it was not her time to be given money, the chairlady requests the person who was supposed to collect money that day to give the member with the problem"* (FGD, #MK05-FGD, Chama, Machakos).

Some women in Machakos County said their Chamas have a "merry-go-round" and "table banking," where members are given loans at affordable interest rates. Further, in case of a social problem such as bereavement, bride-wealth payment, or sickness, they usually support each other emotionally and financially. Some of the Chamas have bought plastic chairs that they rent and use the money to support Chama members. Other Chamas help members access water by providing water storage tanks and training them on water use and management. Chamas act as a social platform, where members interact and share ideas and offer help during bereavement.

In Kisii County, women reported that mismanagement of SACCO funds by the executive as a disincentive to joining. This is aptly captured: ***"What motivates women to get to Chamas instead of SACCOs is theft/mismanagement of members' monies"*** (FGD, #KS04-FGD, female, Kisii). Participants reported what it takes to refund their shares/deposits, which discouraged them from joining SACCOs. Some of the groups educated their members on financial management; nonetheless, most of the KIIs noted training of Chama members on financial management was not a common practice.

The overriding benefit cited by respondents in the three counties is security of the money in SACCOs and the fact they could borrow large sums of money from SACCOs compared with Chamas. The loans accessed from the SACCOs are secured through guarantors provided by the SACCO member. Furthermore, SACCO members can buy quality products using the loans from their SACCOs, unlike Chamas, where individuals obtain small loans. Women said it is easier for one to make long-term savings in SACCOs than in Chamas. Moreover, savings in a SACCO are more secure because the money borrowed is insured or has guarantors, unlike in the case of Chamas. Women also spoke about the advantage of receiving end-of-year dividends in SACCOs.

A SACCO leader in Machakos said, ***"SACCOs help us save our money. Before we used to do table banking, and the money could go with one woman who kept it for the Chama, which would tempt her to use the money"*** (KII, #MK03-KII, SACCO leader, Machakos). SACCOs also enable women to access capital intensive household assets like water tanks. A woman FGD participant in Machakos said, ***"The reason why some women like ourselves have joined a SACCO is that, unlike Chamas, SACCO helps us to save money, for instance, we can say we want tanks, the SACCO will give us the tanks, and we will repay the loan slowly"*** (FGD, #MK05-FGD, Machakos). Further, women said they benefit from SACCOs' financial education, a component missing in Chamas.

As in Nandi and Machakos, women in Kisii County also pointed to issues relating to security of loans through guarantors. SACCO members receive training on financial management and are able to receive bigger loans compared with what Chamas offer. Women said SACCOs offer training and even capacity-building activities that do not exist in Chamas. Most Chamas are not registered, but SACCOs are registered and can trade internationally.

BARRIERS FACED BY WOMEN IN JOINING CHAMAS OR SACCOS

Women face various challenges that hinder them from joining Chamas and SACCOs. In particular, women who join Chamas have to seek for permission to do so, e.g., in Nandi County or because their partners do not support their desire to join a Chama as in the case of Kisii County. Refusal or lack of support from partners is linked to the financial support needed as an initial joining fee as well as in the monthly contributions to the Chamas. In Kisii County, it was reported that *"There's no special requirements for joining this group, though one must have 100 Kenyan shillings for registration. Women find it hard getting registration fees"* (KII, #KS020-KII, female, Kisii). Women reported that they faced challenges in making monthly contributions or in creating time to participate in Chama meetings because the times set for a meeting competed with other critical chores at home or at the workplace. These challenges were aptly captured from KII interviews; thus,

"In our Chama, we contribute Kshs. 2,000 per month, but there are women who may be interested in our Chama, but they may not be able to raise that amount every month after vetting her" (KII, #MK015-KII, female, Machakos)

"Lack of time, for example; most Chamas in my area meet on Thursdays so working class members cannot make it to join such Chamas" (KII, #MK011-KII, female leader, Machakos)

On the other hand, for the SACCOs, the women lacked steady income, e.g., from tea growing, which made it difficult for them to make regular contributions.

One of the key informants reported that, *"Women are not empowered financially to make their own choices whether to join a SACCO or not"* (KII, #KS09-KII, female, Kisii). Some women in Nandi, Kisii, and Machakos reported that they sought spousal consent to join a SACCO, which was not always guaranteed. Lack of awareness regarding SACCOs was reported as a factor contributing to women not joining SACCOs in Machakos County. Besides, women were reported to be resource-constrained, as men control the key resources; this made it difficult for women to join SACCOs.





CHARACTERISTICS OF SOCIAL BONDS AMONG MEMBERS OF CHAMAS AND SACCOS

The FGDs and KIIs in the three counties revealed that groups are formed based on a common purpose or some common bond (e.g., working in the same agricultural value chain such as growing tomatoes, kales, or poultry). The groups mostly have female members, although a few had either mixed membership or male members only (e.g., those in the **boda boda** business). Married women were the majority in Chamas compared with single women, because married women are settled in the same location where Chamas are established. Youth-led Chamas were often transient compared with Chamas led by those above 35 years, which is associated with youth having not settled and are still pursuing their careers in life. Having a similar economic interest unites Chama members. This view was also captured in Nandi County: **"Women selling groceries in the market have a Chama because they have the same business, which is the same for farmers"** (KII, #ND011-KII, female, Nandi). Some of the Chamas picked members from a particular geographical location. In Kisii County, for example, **"... all members should come from 'Getongo' location. We do not allow people from outside the area"** (KII, #KS14-KII, female, Kisii). Some of the Chamas were for people from the same job professions/activities, e.g., boda boda riders. These requirements are usually spelled out in a group's bylaws.

A KII said, **"We have a project whereby we give each member of our Chama a water storage tank; this particular project makes our Chama so unique, considering the fact that many people in our area lack enough water storage facilities. This project attracts other women to want to join our group"** (KII, #MK016-KII, female, Machakos). A few Chama members said they have uniforms for special occasions to differentiate themselves from other Chamas.

Unlike the Chamas, SACCOs were more defined in their membership. The major categorization is based on professional categories, for example, teaching or dairy, or tea farmers, or even focusing on an activity such as the **boda boda business**. The key defining characteristic is having a steady income. Further, many SACCO members do not come from the same location nor do they know each other in person; their engagements are guided by the SACCO bylaws and rules.





KEY DECISION-MAKING

Leaders play a role in the management of Chamas and SACCOs. They make the critical decisions, which are later brought to members for ratification. The meetings are documented through minutes. This was expressed by FGD and KII participants in the three counties. The fact that decisions by leaders are brought to members for ratification implies that leaders have delegated responsibility from the members.

In Machakos County, it was reported that key decisions are proposed by leaders and presented to members; for example, when SACCOs want to purchase land, they have to obtain approval from the members during the AGM (women leader, Machakos). On the other hand, key decisions in Chamas are presented to group members during their regular meetings. A Chama leader from Kisii reported that, *"The members determine the activities; they are documented in minutes. The Chama doesn't participate in social activities, but members team up to assist one another based on the personal friendship levels"* (KII, #KS11-KII, Kisii).

MECHANISMS AVAILABLE FOR CONFLICT RESOLUTIONS IN CHAMAS AND SACCOS

Three main sources of conflict were identified by members in SACCOs, namely, default in loan repayment, mismanagement of SACCO funds by the management, and mistrust among members. To deal with these challenges, SACCOs have supervisory committees to handle conflicts and disagreements. SACCO leaders in Nandi County reported that credit defaulters are handled by credit committees, which ensure the amount borrowed is recovered as stipulated in the constitution of the SACCOs. In most cases, conflicts arise when the securities attached to the loans are seized. One of the SACCO leaders reported that a credit committee usually gives loan defaulters additional time to repay the loan. The defaulters are required to write a letter committing themselves to pay the loan in question within the specified additional time. Women in SACCOs in Kisii County said they usually avoid internal conflicts by conducting a proper background check before admitting a member, and they usually give loans based on salary as a security.

Some conflicts are resolved by county officials. A county cooperative commissioner in Nandi reported, *"There are conflicts in SACCOs, like if you act as guarantor to someone and flee, you have to pay. I listen to both parties and get to a consensus by writing in an agreement the way forward, and each party signs. My duty as the cooperative commissioner is to ensure it's implemented."* In Machakos, a SACCO official said, *"We have never had any conflicts before because all members respect our bylaws everyone is committed"* (KII, #MK20-KII, Machakos).

Not so for Chamas. A leader of a Chama reported, *"We experience conflicts in our Chama; in our Chama, we save a certain amount of money every month and share it annually, but there are members who stop saving at some point, but when it is time to share the savings at the end of the year, you will find they want equal share with other members, which is impossible, since they have a pending debt. This becomes a major conflict. We are forced to take strong measures or remind them of our rules of the Chama when such a conflict arises"* (KII, #MK016-KII, Machakos). Another one noted, *"Mostly conflicts are always about governance. We help resolve the conflicts by going back to the bylaws that govern the Chama"* (KII, #MK15-KII, Machakos).

The conflicts noted in Chamas are similar to those of SACCOs. These include mismanagement of funds by officials, loan defaulters by members, and disagreement between members. The mechanisms used to resolve conflicts in Chamas were similar in the three countries. In Nandi County, for example, enforcement of any infractions by members was done through social sanctions. *"It is written in the bylaws. When one fails to contribute, when their turn comes, no one contributes also"* (KII, #ND016-KII, Nandi).

Government officials also play a role in resolving conflicts. In Kisii County, for example, *"Conflicts are resolved with mediation. Where the area chief is the mediator of the parties and brings the conflict to an end"* (KII, #KS017-KII, Kisii).



An assistant chief said, *"As area assistant chief, I have solved many conflicts. I try listening to both parties, and with that it's easier to notice the source of the misunderstanding and come up with a fair solution. Most of Chamas lacks a proper constitution to guide their operations"* (KII, #MK08-KII, Machakos). However, women noted that there were minimal conflicts experienced since they come from same community, and they know each other well.

In Machakos, Chama officials reported experiencing problems related to misappropriation of funds. A Chama leader said, *"We experience conflicts in our Chama. We had an issue with our previous treasurer. There was a huge amount of money, which was lost and unaccounted. We arranged a meeting with her and other officials. She repaid the money to the members and was also eliminated"* (KII, #MK013, Chama leader, Machakos).

TRANSITIONING CHAMAS TO SACCOS

Are there plans to transition the Chamas into SACCOS? In all the three counties—Nandi, Machakos, and Kisii—women and Chama leaders expressed a wish to join SACCOS. Nonetheless, not all wanted to transition their Chamas into SACCOS. One SACCO female leader, whose group had transitioned into a SACCO, said, *"We started as a merry-go-round then later thought about SACCO, we got interested and formed a SACCO. We now involve men and also allow any gender to join the SACCO"* (KII, #ND012-KII, SACCO, leader, Nandi). Chama leaders in Nandi and Machakos said there is a need to train Chama members on the importance and benefits of SACCOS to motivate them to transit their Chamas into SACCOS.

"The most important thing is capacity-building because most of them are not aware of how SACCOS operate, how to join and the benefits. Because those women at the village level do not have information" (KII, #ND016-KII, social development officer, Nandi).

"What I can say is education. They are supposed to be educated on the benefits of a SACCO, they need to be given an education sensitization and hence differentiate the benefits in a SACCO and that of a Chama... So yes, they are supposed to be educated on interest, dividends and long-term projects" (KII, #ND013-KII, SACCO leader, female, Nandi).

"Women should be educated on the importance of SACCOS because most of them are not learned and are not aware of the existence of the SACCOS" (KII, #MK009-KII, Chama leader, Machakos).

One of the Chama leaders said that, although some Chama members are in SACCOS, they do not really understand the benefits of being in a SACCO; they would love to be trained. She said, *"Some of us are in tea SACCOS, but if we get education, we will understand more about SACCOS."*

Those groups that have no plans to transition to SACCOS cited the stringent SACCO conditions in accessing benefits.

"Although we are interested in forming SACCOS, some conditions in SACCOS are not favorable. Example, you are required to have more than four guarantors to access a loan, and hence women in my Chama were afraid that their money will go missing" (KII, #ND017-KII, female, Chama chairlady, Nandi).

Women could be motivated to join SACCOS through positive experiences. For example, one of the SACCO leaders said, *"If a member is given some amount, you do a project and sell the idea that is used for that project, for example, buying land, which is from SACCO, and bring in the idea of interest, which is little compared to other places where you can get money, for example, banks and micro finance. When members in the SACCO get money and use it wisely, it will attract women from groups and build positive attitudes for SACCO"* (KII, #KS014-KII, SACCO leader, Kisii).



The social protection development officer in Nandi said bylaws and guidelines usually check on progress of the smaller Chamas and advise them to transition to SACCOs; she gave an example of a **boda boda** Chama, which transited to a SACCO. A cooperative officer in Nandi County said there are plans where agricultural officers have been mandated to train Chama members and encourage them to join or form SACCOs.

A county cooperative commissioner said the office works closely with the Department of Social Services and the Department of Agriculture to help women transform their Chamas into SACCOs. However, she noted, information on the benefits of a SACCO lacks among women. The county cooperative commissioner further noted that the sensitizing of the Chamas to transit to SACCOs is bearing fruit.

SOCIAL NETWORK ANALYSIS (NETWORK MAPS) FOR CHAMAS AND SACCOS

The network of relations among members of Chamas and SACCOs was assessed using structured network maps. The number of nodes (connected members) for SACCOs is 698 with 656 (94%) connections; for the Chamas, there are 734 nodes or connected members with 679 (92.5%) connections. The network analysis maps for SACCOs and Chamas are shown in Figure 4a, Figure 4b, and network map statistics in Table 5.

Clearly, the SACCO members have fewer connections amongst themselves compared with Chama members (Figures 4a and 4b). Individuals' nodes in the SACCO network map (Figure 4a) have fewer lines (connections) going out to other nodes; in the case of Chamas, there are more nodes with many connections (Figure 4b).

In the SACCOs network map, the average path length is 1.9862; that for the Chamas is 1.805. This implies that the amount of influence in information sharing amongst members is lower in SACCOs than in Chamas (Table 5). Thus, the amount of influence members in Chamas have over each other in terms of sharing information is higher than in SACCOs.

FIGURE 4: **NETWORK ANALYSIS FOR SACCOS AND CHAMAS**

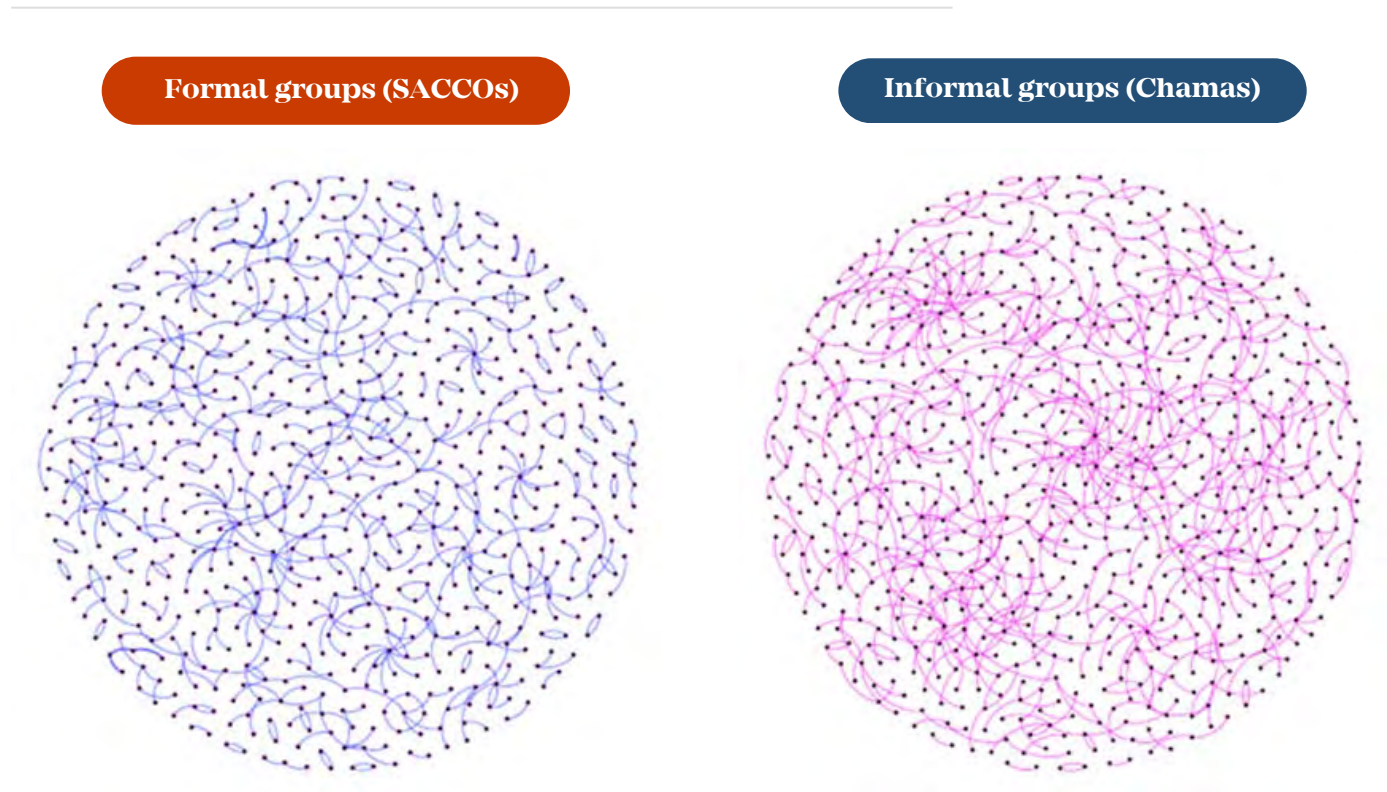


Figure 4a: Social network analysis map for SACCOs

Figure 4b: Social network analysis map for Chamas

TABLE 5: **SUMMARY OF NETWORK MAP STATISTICS**

	Combined		SACCOs		Chamas	
	SACCOs	Chamas	Female	Male	Female	Male
Number of nodes	698	734	581	175	670	120
Number of edges	656	679	521	136	596	83
Average weighted degree of distribution (=edges/nodes)	0.949	0.926	0.909	0.777	0.891	0.692
No. of weakly connected components/nodes (or path length)	136	125	131	52	134	41
No. of strongly connected components	605	649	511	163	600	112
Average path length	1.9862	1.805	1.9581	1.754	1.7112	1.8881
Network diameter	9	7	9	6	7	6
Eigenvector centrality (100 iterations)	0.0630	0.2081	0.0520	0.0169	0.1149	0.0078
Graph density	0.001	0.001	0.002	0.004	0.001	0.006
Modularity	0.985	0.987	0.983	0.962	0.988	0.948
Average clustering coefficient	0.01	0.015	0.009	0.007	0.016	0.000

The members (nodes) are sparsely distributed for the SACCOs, indicating weak bonds among members. On the other hand, the betweenness centrality¹⁴ among the Chama groups is closely packed (compare Figures 5a and 5b). Thus, the spread of information to all other members in SACCOs is reduced; for the Chamas, information flow is enhanced.

FIGURE 5: **BETWEENNESS CENTRALITY DISTRIBUTION FOR SACCOS AND CHAMAS**

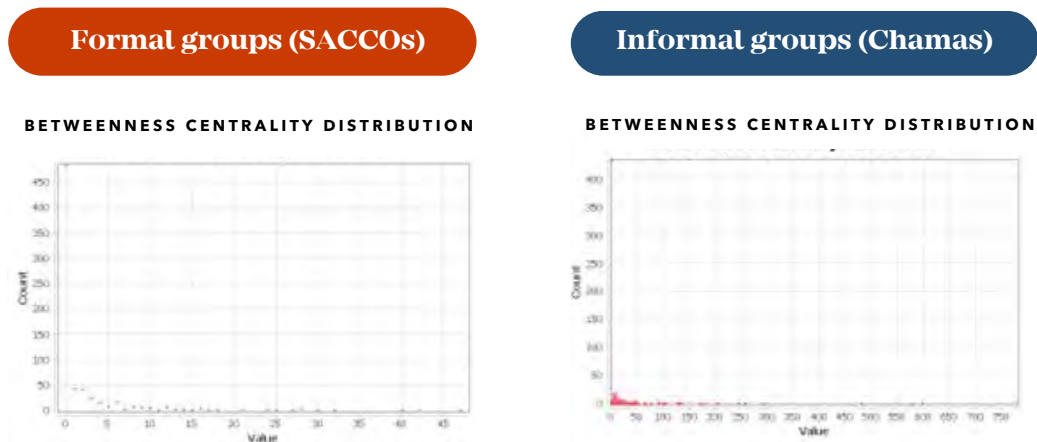


Figure 5a: Betweenness distribution in SACCOs network.

Figure 5b: Betweenness distribution in Chamas network.

Compared with Chamas, SACCOs depict a close harmonic closeness centrality¹⁵ distribution (Figures 6a and 6b). This means that there are more nodes unconnected (looped) to each other. This reduces the degree of the flow of information (inward and outward). On the other hand, harmonic closeness centrality in Chamas is sparsely distributed, implying the majority of the nodes (members) are connected and looped together, hence easing the flow of information (inward/outward) in the social network map.

FIGURE 6: **HARMONIC CLOSENESS CENTRALITY DISTRIBUTION FOR SACCOS AND CHAMAS**

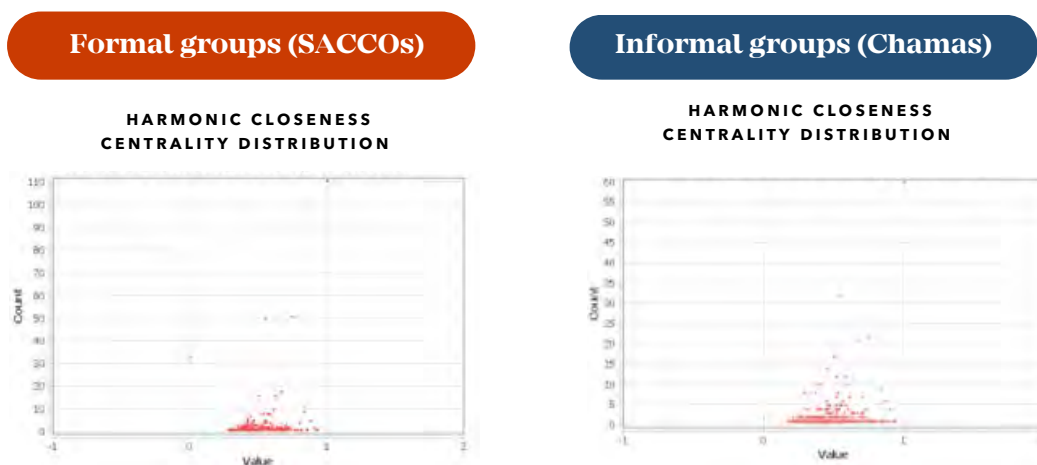


Figure 6a: Harmonic distribution in SACCOs.

Figure 6b: Harmonic distribution in Chamas.

¹⁴ Closeness centrality defines how long it will take to spread the information to all other members (nodes) sequentially. The measure calculates the shortest paths between all nodes. The more central a node is, the lower its total distance is to other nodes. Closeness centrality is used to find the individuals best placed to influence the entire network most quickly.

¹⁵ This is linked to closeness centrality, but harmonic closeness centrality is used to measure values of unconnected notes in a map.

Eigenvector centrality defines a node's importance¹⁶ based on the function of its neighboring nodes. If a node is linked to or surrounded by highly important nodes in a network, it ought to have a high eigenvector centrality score. SACCOs showed a lower (sum change) eigenvector centrality score (0.063) compared with Chamas (0.208); hence, they have a comparatively lower number of important/influential members on the social network (Figures 7a and 7b) and Table 5. One would argue that, among Chamas, based on the eigenvalues, there are more individuals who are influential in the Chama networks compared with the SACCO networks.

FIGURE 7: **EIGENVECTOR CENTRALITY DISTRIBUTION FOR SACCOS AND CHAMAS**

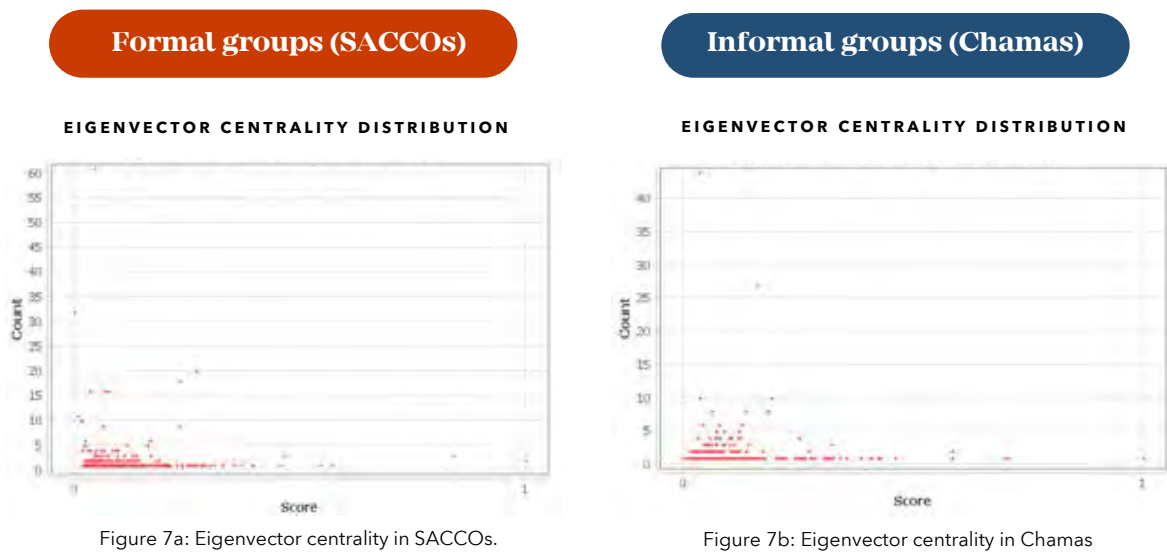


Figure 8 reveals gender differences in the social networks of SACCO and Chama groups. Men are less networked compared with women, irrespective of whether they are in SACCOs or Chamas. The most networked women are those in Chamas (Figure 8d) followed by women in SACCOs (Figure 8c), followed by men in Chamas (Figure 8b) and men in SACCOs (Figure 8a). These differences are clearly shown by loosely connected nodes and less congested connections between members/nodes.

Compared with Chamas, in SACCOs, the social bond is loosely tied since the majority of the loops or connections between members (nodes) are not complete; that is, there is no continuous connection. Some members (nodes) have no connections with other members.

The gender differentiated network maps (Figure 8) and Table 5 provide important insights. In general, the most networked members are women in Chamas (with an average path length of 1.7112) followed by men in SACCOs (with an average path length of 1.754) and then by men in Chamas (with an average path length of 1.888) and last by women in SACCOs (with an average path length of 1.958). These findings are shown in Table 5.

¹⁶ The higher the score, the greater the level of influence within the network.

From the SACCOS' social network map, the average weighted degree is 0.95 in terms of degree distribution of connections, while the number of weakly connected components is 126. Equally, the betweenness centrality and closeness centrality of SACCOS indicate that there is no tight connection between members (nodes), i.e., the path between nodes (members) comparatively is not close. With a diameter of 9 and average path length of 1.9862, it demonstrates how weak the bond is between members in SACCOS as compared with Chamas (Table 5).

FIGURE 8: **NETWORK MAPS BY GENDER AND GROUP**

Formal groups (SACCOS)

Informal groups (Chamas)

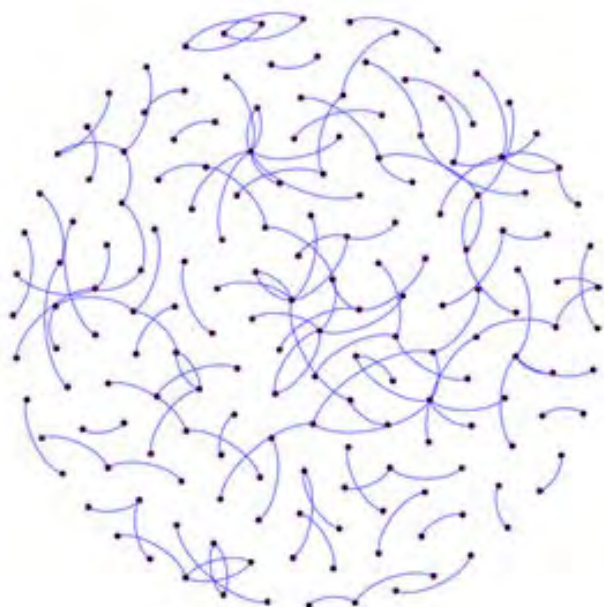


Figure 8a: SACCOS network map: male.



Figure 8b: Chamas network map: male.

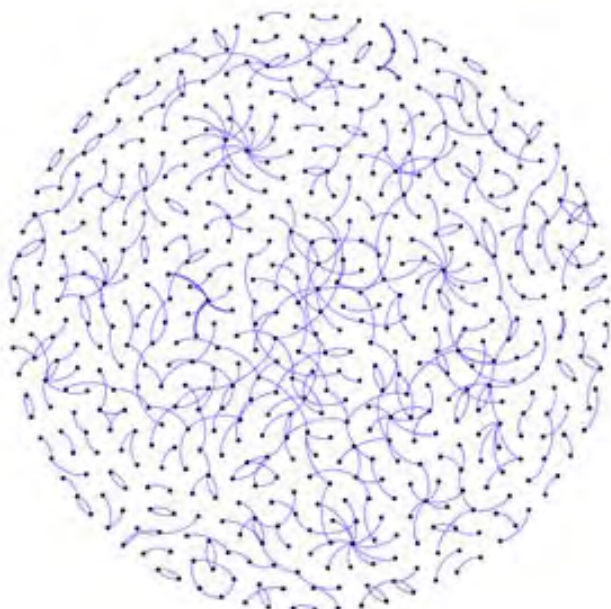


Figure 8c: SACCOS network map: female

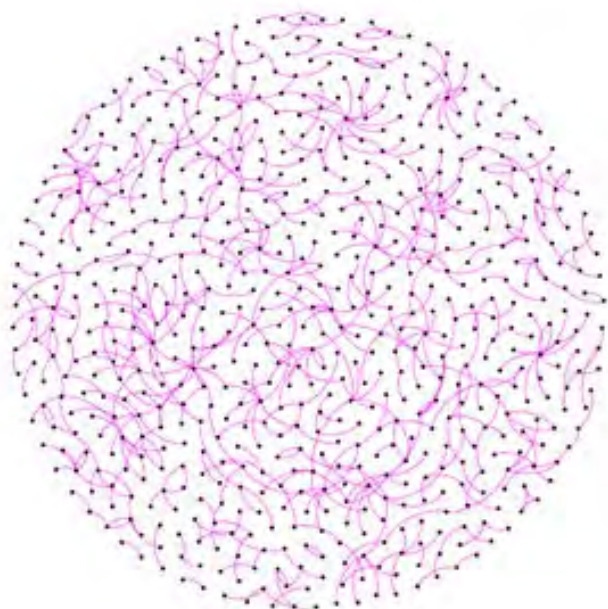
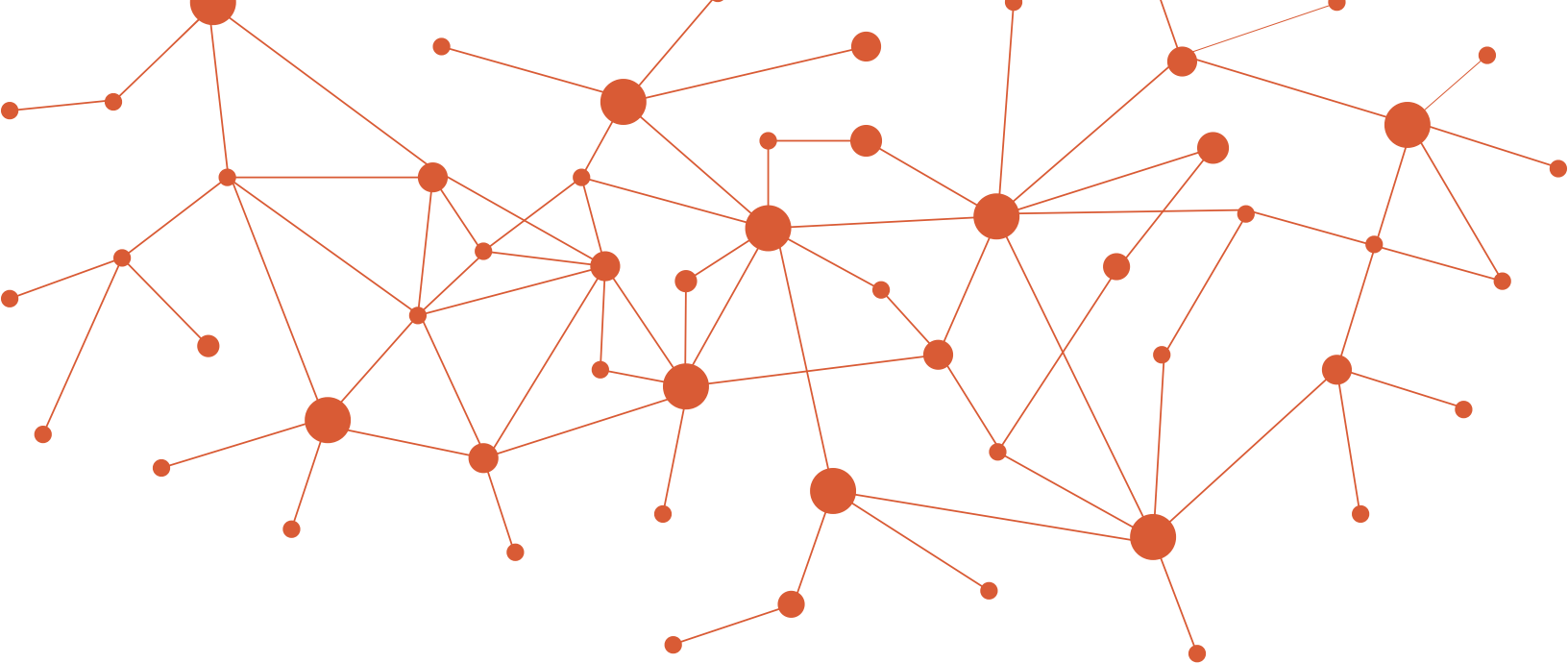


Figure 8d: Chamas network map: female



In Chamas' social network maps, compared with SACCOs, the bond is tighter since the majority of the loops or connections between members (nodes) are complete. The average weighted degree of distribution is 0.926, and the number of weakly connected components is 125. There is congestion (closeness) in the network loop, with continuous connection amongst members (nodes). The indicators on betweenness centrality and closeness centrality of Chamas show there is tight connection between nodes compared with SACCOs, i.e., the path between members (nodes) is close. A diameter of 7 and average path length of 1.805 demonstrates a stronger bond between members in Chamas as compared with SACCOs (Table 5).

DEFINITIONS OF TERMS

Centrality indices rank actors according to their position in the network and are interpreted as the prominence of actors embedded in a social structure.

Degree centrality assigns an importance score based simply on the number of links held by each node. It tells us how many direct "one hop" connections each node has to other nodes in the network.

Betweenness centrality distribution is determined in two ways: (a) compute the length and number of shortest paths between all pairs; (b) sum all pair-dependencies. Betweenness centrality measures the number of times a node lies on the shortest path between other nodes. This measure shows which nodes are "bridges" between nodes in a network.

Closeness is as a measure of how long it takes to spread information from one to all other nodes sequentially. Betweenness centrality quantifies the number of times a node acts as a bridge along the shortest path between two other nodes.

Summary of Findings

REASONS MORE WOMEN JOIN INFORMAL GROUPS (CHAMAS) COMPARED WITH SACCOs

Trust, goodwill, and closeness of members in Chamas are stronger than in SACCOs. This is also illustrated by the network maps. The major reasons given are as follows:

- At the household level, women have responsibilities in contributing to the social and economic well-being of the households/family. Men, on the other hand, tend to focus on the **bigger** investments, which require more financial outlays and drive the resources away from the household. This has pushed women to form or join Chamas as vehicles for resource mobilization.
- Chamas offer products and services that are pro-women. For instance, to obtain credit services, there are no detailed application requirements such as pay slips or income revenue or collateral such as land title deed, which is not available to most women. In the FinAccess (2021) report, a higher proportion of respondents (30.4%) reported that Chamas were more convenient when it comes to access to resources compared with 13.3% who reported that SACCOs were more convenient.
- Loans are also approved and disbursed the same day, again pointing to the convenience identified in the FinAccess report. Further, the report also found that more people (14.8%) were likely to report going to a Chama for an emergency loan compared with a SACCO (6.5%). Comparing SACCO products and services has many requirements and stringent rules to follow, which is a disadvantage for women.
- Chamas are established within the village/community level; therefore, the trust among members is high. Due to occasional mismanagement of funds in the SACCO sector, Chamas end up with greater trust since members know each other due to locality proximity.
- Chamas foster coexistence and cohesion among women at the village or community level. This is depicted by the social functions and activities in which women in a Chama participate jointly and willingly, including in fundraising for common interest functions, e.g., weddings, bereavements, graduations, and social parties.

Not surprisingly, men are also members of Chamas. This is specifically the case from the low socio-economic status group and who, like women, are not able to secure loans without collateral.

PERCEIVED BENEFITS OF BEING IN A CHAMA COMPARED WITH A SACCO

There were generally more perceived benefits for women being members of Chamas compared with SACCOs. The benefits include:

- The interest rate on credit facilities received by Chama members is low, and the repayment mode is flexible compared with a SACCO credit plan.
- Apart from the economic benefits, Chamas provide more social support to members, especially in regard to family and child matters. Members know each other well; group membership include pastors, teachers, counselors, and women leaders, which yield rich benefits, cutting across various social needs and challenges.
- Women leaders in Chamas have opportunities to showcase their leadership skills at the group/community level. Equally, it has exposed them to opportunities as opinion leaders and networks to access government services, e.g., training and attending seminars, which they would otherwise not achieve as individuals.
- Chamas help women mobilize resources through daily or weekly savings from their small engagements such as at beauty shops, general kiosks, fruit vending, cleaning services, and domestic workers, which is accepted in Chamas. This has grown to enable women to support their husbands in family well-being such as school fees payment, buying family clothing, and foodstuffs.
- Chamas have contributed to improving the voices of women and building their confidence and courage, e.g., in public presentations, communication, and advocacy matters. This benefit is not well-aligned to the aspirations of most SACCOs.
- Families have improved their general well-being economically.

BARRIERS THAT WOMEN FACE WHEN JOINING CHAMAS OR SACCOS

Women face barriers when joining either Chamas or SACCOs. Nonetheless, there are more barriers that hinder women from joining SACCOs compared with Chamas, as summarized:

- Women have inadequate access to resources required during formation or joining Chamas or even SACCOs.
- Cultural beliefs and norms hinder women from joining Chamas. These issues have posed challenges for women desirous of joining Chamas or SACCOs.
- Inadequate education and knowledge on the importance of Chamas or SACCOs' contribution to the socio-economic agenda of individuals or communities has had a negative impact on women who wish to join or form Chamas. Most women have limited literacy and poor public communication skills.

CHARACTERISTICS OF THE SOCIAL BONDS AMONG MEMBERS IN CHAMAS AND SACCOS

Chamas and SACCOs exhibit different characteristics among their memberships. Chamas depict stronger social bonds amongst members compared with SACCOs:

- Chamas promote member participation in social functions and activities that are dear and close to individual members. This is observed as an ingredient for stronger social bonds among members in Chamas.
- The process of joining Chamas is characterized as less cumbersome compared with joining SACCOs, which has made more women join Chamas.
- Products and services that resonate well with the needs of Chama members such as emergency loans, which are quickly accessible and affordable to service, have improved social bonds among members in Chamas.
- Chamas have no special requirements for joining, e.g., gender, age, education, and faith, but does encourage achieving common goals and aspirations.

POLICY-MAKER PERCEPTIONS ON WHY MORE WOMEN JOIN CHAMAS COMPARED WITH SACCOS

Social protection development officers, county cooperative officers, administrators, and women leaders involved in the promotion of Chamas and SACCOs had similar views that more women join Chamas compared with SACCOs. Accordingly, more women join Chamas for the following reasons:

- Trust, goodwill, closeness, and shared social challenges and benefits are support bases for more women joining Chamas compared with SACCOs.
- Joining and/or formation of Chamas is easier and friendlier compared with SACCOs. At social development offices, potential group members will create a list with ground rules and objectives for the group they want to form and are introduced on how to govern Chamas. Registration is done at the grass-roots level. This opportunity is not granted to SACCO formation and joining policies.
- Chamas have products and service customized to the dynamic needs and challenges of the women at the household level.
- The government's guidelines, rules, and regulations are enforced by social development officers, who are trained and experienced in managing group dynamics. The guidelines are friendly to Chama members, especially where there are conflicts of interests and disharmony among members and leaders.
- Women join Chamas so as to utilize their leadership, resource mobilization, and other talents. Joining Chamas raises a personal profile and socio-economic mindset within a community and household.
- In Chamas, leaders have an opportunity to get trained, visit other places for benchmarking, and mostly obtain recognition via national and political leadership on opinion making of the community at large.

Conclusion

Chamas are important vehicles for mobilizing resources and are found at the grassroots level. There were more women in Chamas compared with those in SACCOs due to numerous benefits aligned to their gender-specific needs.

The social bonds among women in Chamas are stronger than in SACCOs. This is attributed to the gender-specific social characteristics of women in Chamas. SACCOs should develop innovative products and services that are attractive and which strengthen the social network bonds among women.

Overall, economics eventually play a role in pushing people into either Chamas or SACCOs. Nevertheless, what seems to push people into SACCOs or Chamas is (i) the regularity of monthly income, and (ii) the level or type of investment one wishes to make. When all these are taken into account, the push to join Chamas is greater for women than it is for men.

Recommendation

Collectives (including Chamas and SACCOs) provide critical social and economic support to members. Nonetheless, in terms of membership, there were more women than men in Chamas, an aspect driven more by greater trust, goodwill, and closeness among Chama members. Our study shows that Chamas and SACCOs provide for different needs, with Chamas focusing more on activities or investments that require fewer financial resources while SACCOs provide support to members who require larger financial resources to enable bigger investments.

While there is a place for different types of loans for different purposes, such as those offered by Chamas and by SACCOs, some of the characteristics and barriers identified in this study suggest that greater access to SACCO membership would be beneficial.

Study participants liked the fact that Chamas were more convenient and flexible when it comes to borrowing compared with SACCOs, which often require time-consuming procedures. In addition to Chamas' flexibility, Chama members also exhibited strong social bonds, which helped to build greater trust among members as opposed to those in SACCOs. These social bonds transcend gender differences, as women and men in Chamas generally reported stronger social networks. For impactful social and economic growth of members and communities, it is critical to access larger financial resources, something that only SACCOs or banks can provide.

In spite of the greater benefits, which accrue from SACCO membership, women faced social, cultural, economic, and structural barriers. In order to draw full benefits from belonging in a collective, SACCOs would provide greater financial support compared with those of Chamas. Thus, members belonging to a SACCO would have access to greater opportunities offered by these institutions. Indeed, some Chamas, with support from the department responsible for social welfare groups, have transitioned into SACCOs. Consequently, there is need for government to cater toward an enabling environment for women to overcome the social, cultural, economic, and structural barriers to joining SACCOs so as to draw from the greater benefits accorded by the SACCOs.