Cooperative Resilience Longitudinal Study in Kenya

Research Brief

Introduction and Background

Global Communities through the USAID (United States Agency for International Development) Cooperative Development Program (CDP) known as Cooperative Leadership Engagement Advocacy and Research (CLEAR) project, partnered with the United States International University-Africa (USIU-A) to conduct a 5 -year longitudinal research study on the dynamics of social capital within the context of agricultural cooperatives in Kenya. Cooperatives are a dynamic force for self-determination, and they contribute to creating communities where all people — including women, youth and the most vulnerable — have an opportunity to improve their livelihoods. Cooperatives go where for-profit businesses will not — they provide economic opportunities and services in places that others find unprofitable or too risky. For many poor and isolated people, joining a cooperative is the best option to help them escape poverty.

The research was aimed at ascertaining the role that cooperatives play in the resiliency of cooperative members, as organizations, and communities against external shocks. While development interventions in Kenya show real progress over time, unfortunate external shocks could limit growth and sustainable human development in affected communities.

The 5-year longitudinal research unraveled the role of cooperatives in strengthening communities and building resilience against various external shocks such as drought, election-driven violence, floods, insecurity, cattle rustling, human and animal diseases, among others.

Study Highlights

- During 2020, cooperative members faced greater difficulty in paying for health-related expenses as compared to 2019. Greater proportions of members could not afford bills or had to rely on borrowing to fund doctor visits, dental appointments, and hospitalizations.
- More active cooperative members were with his or her cooperative, the more statistically they were likely to afford medicine, doctor and dental visits, hospital stays, home repairs, and children's school fees during 2020.
- Between 2019 and 2020, members in better performing cooperatives were statistically better able to fund medication, doctor visits, home repairs, and their children's education and were statistically more likely to have money set aside for emergencies.
- Cooperative member optimism pre-pandemic compared to during the pandemic waned as cooperative members faced more concerns about their future, particularly in getting enough food to eat and their own health.

Trust remained a prominent theme throughout the study, thus the researchers explored its role in guiding the activities, performance, and resilience of cooperative members amidst various external shocks. The study also aimed to pinpoint the types of external shocks with the most severe impact on cooperative member resiliency in Kenya.

Study Overview

Community resiliency begins with resiliency among individual members of the community. Simply put, resiliency, at the individual level, refers to one's capacity to mitigate, adapt to, and recover from shocks and stresses. Throughout the five years, the CLEAR study centered on rigorous data collection and analysis, yielding valuable insights into the socio-economic landscapes navigated by cooperative members. This research brief reflects on the key findings and recommendations on the significant role that active cooperative membership plays in building psychological and economic resilience of cooperative members, and the resilience of communities.

Africa's economic boom has not reached most of its citizens, especially those on the lower income end of the economic pyramid. Therefore, cooperatives present a powerful and effective method of improving equitable community and rural income distribution. Specific to Kenya, economic gains have proven widely unequal, particularly in rural areas[1]. Therefore, since agriculture provides over 80% of the labor work in Kenya[2], agricultural cooperatives can successfully develop rural growth more equitably, with better management practices. This is because cooperatives have a way of touching the lives of the very vulnerable rural households who are otherwise left out.

In addition to fostering income equality, it is necessary to establish whether cooperatives also improve the ability of rural residents to resiliently withstand and prosper during and after external shocks. External shocks including political violence, government reprioritizing development spending, ecological disasters such as invasive pests (from white flies to locusts, etc.), drought, cattle rustling, among numerous others can destroy families and communities.

Some of the indicators of resilience that the research study focused on included the preparedness of the cooperative members in the face of external shocks, their ability to survive without their main source of livelihoods, their creditworthiness, their existing support systems, and their general outlook on life.

The research was targeted to answer the following questions:

1. Which types of external shocks have the greatest impact on cooperative member resiliency in Kenya?
2. In what ways does cooperative membership build resiliency following external shocks in agricultural cooperatives in Kenya?
3. How effective is trust at regulating cooperative member activities, cooperative performance, and cooperative member resilience?

1 Lay, J., Mahmoud, T., & M'Mukaria, G. (2008). Few Opportunities, Much Desperation: The Dichotomy of Non-Agricultural Activities and Inequality in Western Kenya, World Development, 36(12), 2713-2732.
2 Gichimu, B. & Njeru, L. (2014). Influence of Access to Land and Finances on Kenyan Youth Participation in Agriculture; a Review, University of Nairobi Proceedings.

Study Design

The research study employed a quantitative method to tackle the questions posed. By this approach, we hoped to dissect the complexities of cooperative *membership*, *trust*, and *resiliency* in the context of external shocks among agricultural cooperatives in Kenya. Data was collected for four years while the final year was focused on data analysis and validation of the findings. The following table provides the number of research participants, cooperatives, and counties throughout the four data collection years of the study.

Demographics

The table below represents the demographics of the study.

Year	# Participants	% Youth (18-35)	% Women	# Cooperatives	# Counties
1	437	22%	33%	20	9
2	411	22%	45%	18	9
3	490	23%	41%	19	9
4	554	26%	46%	19	9

Nine counties in Kenya that were notably susceptible to adverse external shocks were identified and included in the study, namely; Nyeri, Narok, Samburu, Isiolo, Kisumu, Homa Bay, Kwale, Baringo and West Pokot. The selection of these counties was a collaborative process involving the research team and the State Department for Cooperatives, a department under the Ministry of Cooperatives and Micro and Small Enterprises (MSME). Within these counties, county cooperative officers selected specific cooperatives from different communities to take part in the research based on their susceptibility to external shocks and natural disasters. The sample included a selection of agriculture cooperatives in different sectors that include; dairy, coffee, tomato, Potato, marketing, fishing and rice, and different communities, aiming to capture diverse experiences and responses to external shocks.

Types of Resilience

CLEAR focused on four specific types of resilience and utilized the following definitions for purposes of this study:

Social Resilience	Capability of communities to manage external stressors and disruptions caused by social, political, security, health, and environmental changes.
Development Resilience	Ability of a cooperative member or member's household to avoid poverty in the face of external stressors and in the event of multiple shocks over a period of time.
Community Resilience	Adaptive capacities of a community to return to positive trajectories of interlinked functioning following external stressors.
Psychological Resilience	Cooperative members' capability to adapt to adversity and stress.

Findings

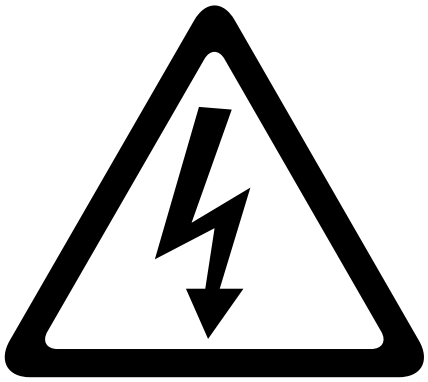
In this section, we answer the evaluation questions (EQ) 1) The types of external shocks that have the greatest impact on cooperative member resiliency in Kenya; 2) The ways in which cooperative membership build resiliency following external shocks in agricultural cooperatives in Kenya; and 3) The effectiveness of trust at regulating cooperative member activities, cooperative performance, and cooperative member resilience; and offer a summary of findings.

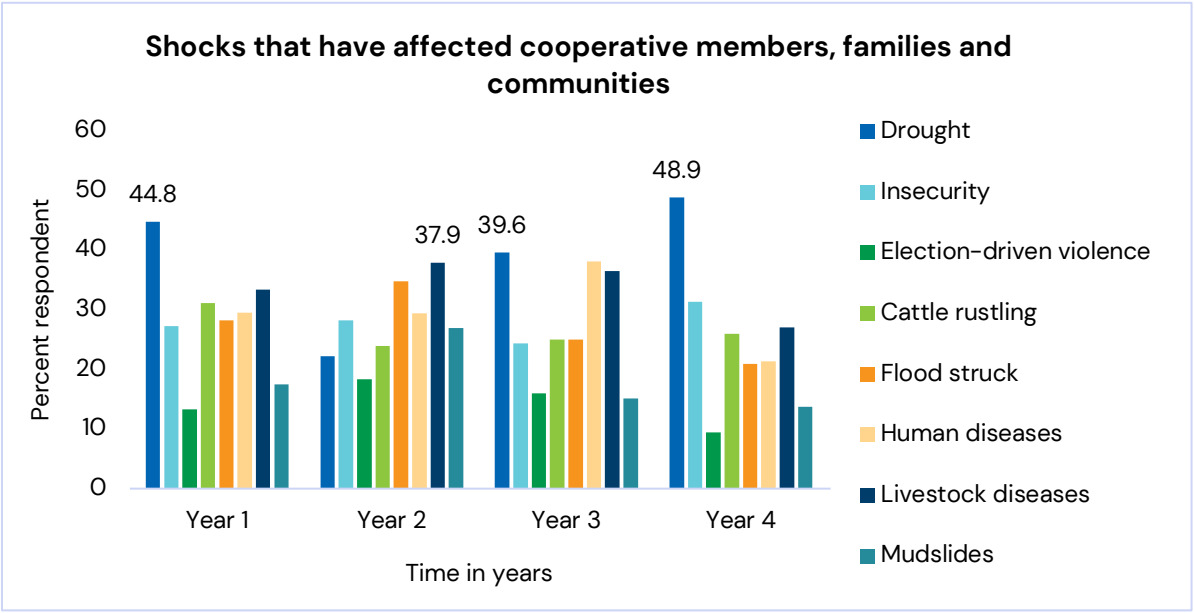
The study takes a detailed look at various aspects including the types and effects of external shocks faced by cooperatives, the relationship between active cooperative membership and personal resilience, the psychological and financial benefits of cooperative membership, and the effectiveness of trust in regulating cooperative activities and resilience. Our investigation offers crucial insights into the significant role cooperatives play in providing stability and resilience to their members in the face of adversities. Overall, the findings underscore the pivotal role of cooperatives in fostering community resilience. Cooperatives were critical in supporting members during some shocks, especially drought, livestock illnesses, and pests. In comparing active and non-active cooperative members, **active cooperative members showed higher probability of being resilient with high confidence in their abilities and preparedness to overcome a shock in the face of one.**

EQ 1: The types of external shocks that have the greatest impact on cooperative member resiliency in Kenya.

The research investigated the types of shocks that have the greatest impact on cooperative member resiliency in Kenya. Utilizing feedback from cooperative development experts, the State Department for Cooperatives, and cooperatives themselves, this study determined to measure the following types of external shocks that were likely to occur, over the five-year period:

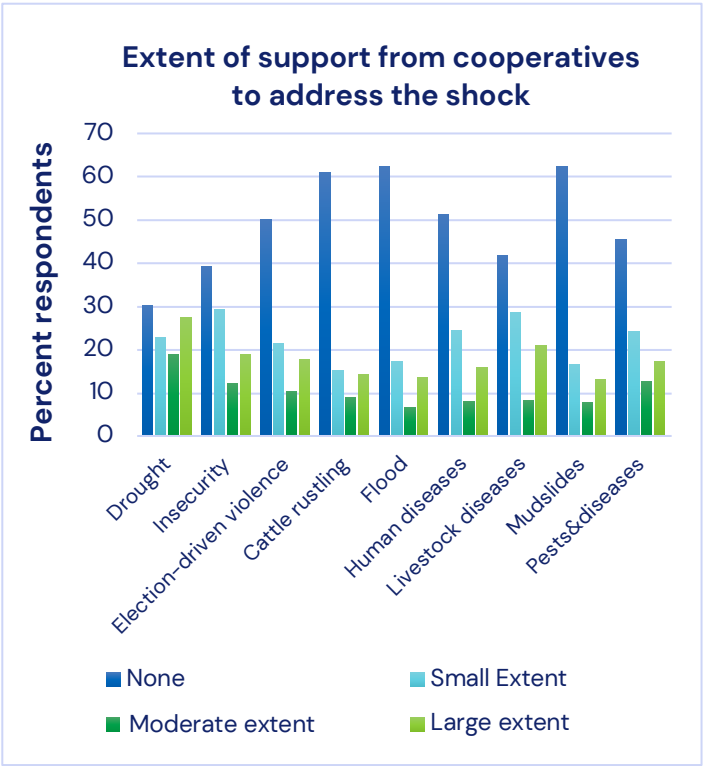
- Drought
- Insecurity
- Mudslides
- Election-related violence
- Cattle rustling
- Floods
- Human diseases
- Animal diseases
- Others





Main shocks that affected cooperative members: Over the period of study, drought stood out as the most experienced shock, taking lead in year 1 and 4. Other key identified shocks included livestock diseases, floods, and human diseases. The Covid-19 global pandemic presented a major unexpected external shock with substantial affect, undoubtedly testing the social cohesive fabric among Kenyan communities. As the unexpected coronavirus spread across Kenya's counties with alarming spikes, the study sought to investigate how cooperatives supported their members throughout and after the pandemic.

Although the study recorded an increase in human diseases in year 3 at the height of the COVID-19 pandemic, these communities are constantly affected by many external shocks that the global pandemic did not result in a major increase of this shock, as might have been expected. This may show that human disease always was and has continued to be a concern outside of the COVID-19 pandemic. However, putting all shocks together on the trend graph, it is observable that the effects of the shocks combined were higher in years 2 and 3, a reflection of the impacts of Covid-19 pandemic within these communities.

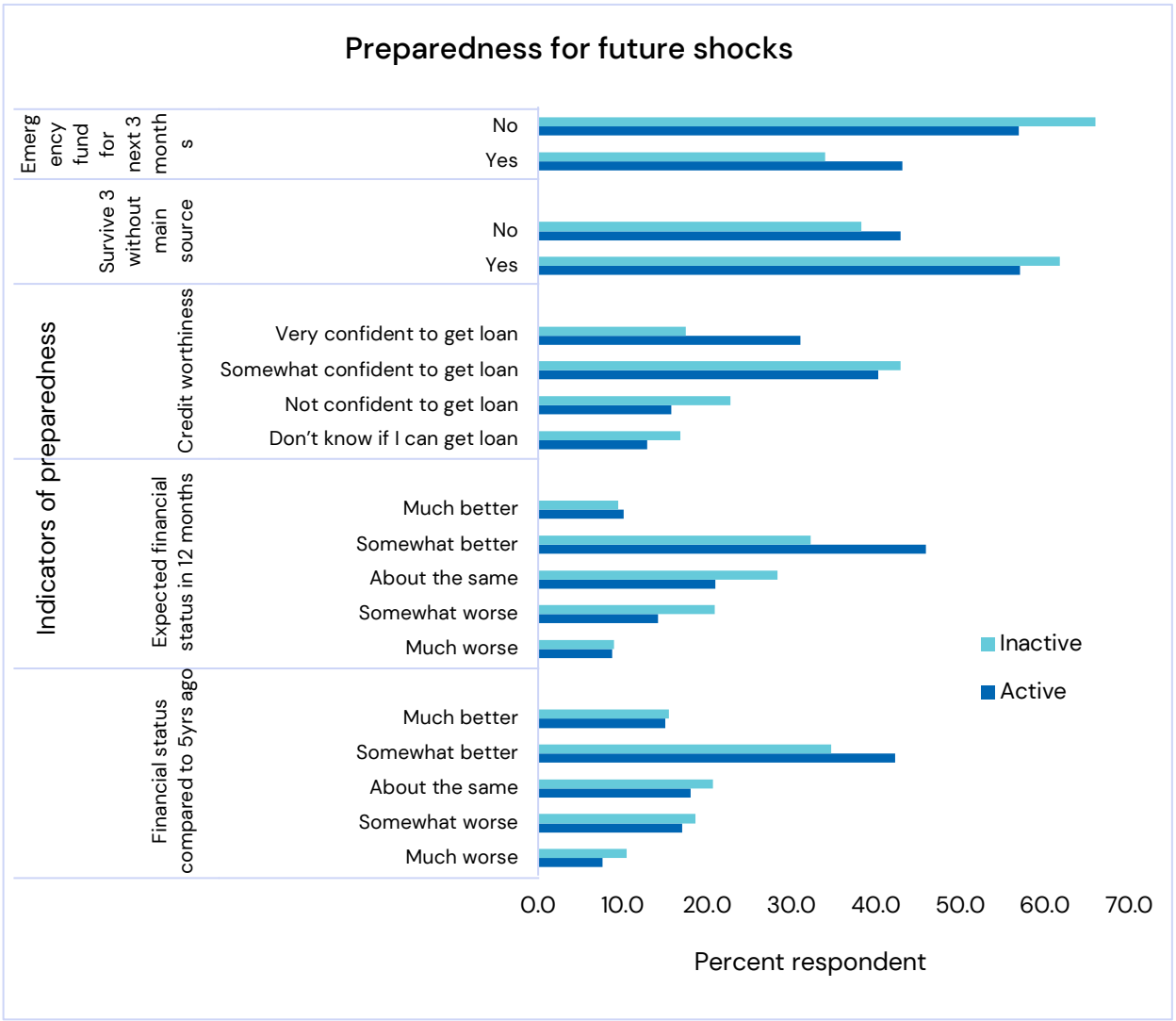


EQ 2: The ways in which cooperative membership build resiliency following external shocks in agricultural cooperatives in Kenya.

The research study assessed the resilience of cooperative members and their response in the face of external shocks. In addition to the powerful protective social cap ital and networking built through cooperative

membership, the study found that, **members more active in their cooperatives are more likely to hold stronger positive expectations for their life, more hopeful for the future, much higher cohesion within their own families, higher self-efficacy, and satisfaction in their lives, and much more self-esteem.** In terms of direct assistance, cooperative members who were less active in their membership were less likely to receive support from their cooperative following an interruption in their lives. From a social exchange theory perspective, this finding is not surprising.

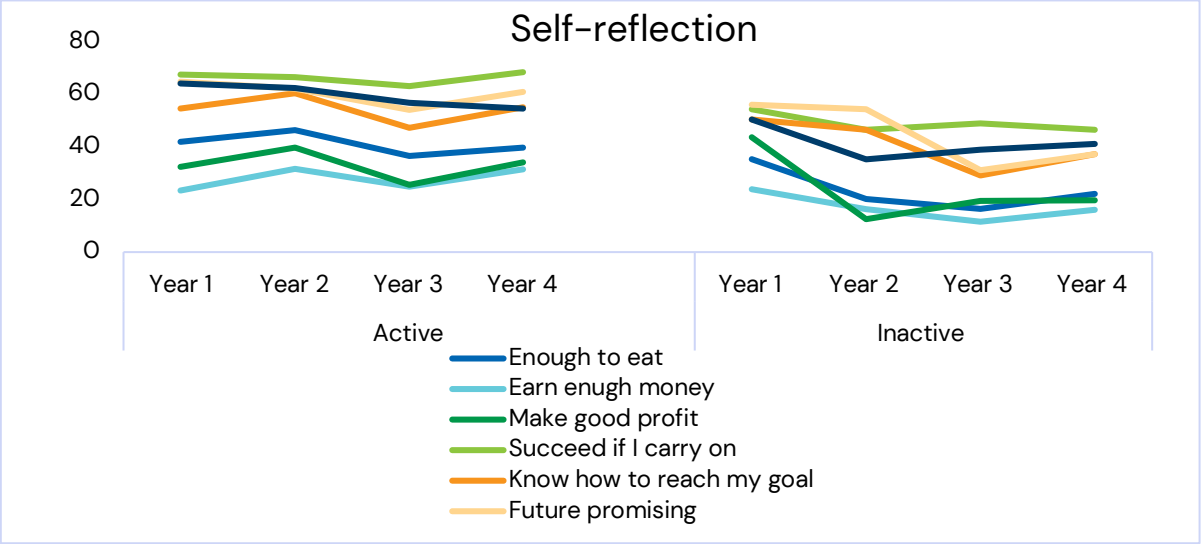
Extent of support from cooperatives to address the shock: The study investigated cooperatives' responses to these shocks and levels of resiliency among members and in their communities. **Also, the study** utilized the same sample cooperatives to follow how they lived up to their members' expectations during COVID-19 pandemic to support them and strengthen their resilience and increase their ability to mitigate, adapt, and overcome the commensurate stress. The Covid-19 global pandemic presented a major unexpected external shock with substantial affect, undoubtedly testing the social cohesive fabric among Kenyan communities. As the unexpected coronavirus spread across Kenya's counties with alarming spikes, the study sought to investigate how cooperatives supported their members throughout and after the pandemic.



About 82% of cooperative members expressed certainty that if they faced a crisis, their cooperative would swiftly come to their aid. It is however evident that cooperatives' support to address shocks is inadequate, with active members receiving comparatively higher support. Generally, members received highest support to address effects of drought, followed by livestock diseases and then pests and diseases across the four years. Given that the study focused on agricultural cooperatives that rely on the produce from members, it is not surprising that the highest support went to supporting response to drought, livestock disease and pests' control. Drought, being the highest external shock experienced among members, must have significantly affected the productivity of the cooperatives, making it a priority shock to address and therefore providing support to members on how to mitigate against it.

Preparedness for future shocks: Psychological benefits of cooperative membership were sweeping. Respondents are overall quite optimistic, more than 50% say they are better off now than 5 years ago and 60% expect to be even better off a year from now.

Comparatively, optimism is higher among active members than inactive members. Less than half of the respondents had set aside some emergency fund. However, the proportion was comparatively lower among inactive members (34%) than active members (43.1%). Additionally, active members are more confident of getting a loan if they applied, with 31.1% of them being very confident compared to only 17.5% of the inactive members. These psychological benefits are building blocks of adaptive and resilient rebound aftershocks, with far reach positive consequences for communities.



Self-reflection and confidence: Comparatively, active members of the cooperatives are more positive about themselves and their potential. They believe that they will succeed in life if they do not give up. They also believe that their future plans are possible to achieve and that they know how to reach their goals. However, there is an observable falling trend into the 2nd and 3rd years, then a bit of rising into the 4th year. This fall in self-confidence and optimism is highly attributed to the far-reaching implications of COVID-19 which affected operations, member engagement and potentials of cooperatives especially in the years 2020 and 2021.

Outlook on Life: Comparatively, active members were more optimistic and believed in their stronger likelihood to thrive than inactive members. They also indicated that cooperatives are more useful to the community. As shown on the table below, it was evident that active members were better placed to adapt and deal with shocks and unforeseen circumstances as they were more resourceful, able to adapt to changes and are more credit worthy than inactive members.

Variable	Percentage of respondents			p-value
		Active (%)	Inactive (%)	
Respondent characterization				
Will have enough to eat	Disagree	24.3	31.3	0.004
	Neutral	8.0	16.0	
	Agree	67.7	52.7	
Know how to reach their goal	Disagree	8.3	15.4	0.000
	Neutral	8.9	20.0	
	Agree	82.9	64.6	
Their future is promising	Disagree	8.6	21.4	0.000
	Neutral	9.7	13.0	
	Agree	81.7	65.6	
Ability to adapt and deal with shocks and unforeseen circumstances				
Resourceful to deal with unforeseen circumstances	Disagree	18.6	19.1	0.000
	Neutral	8.6	23.7	
	Agree	72.9	57.3	
Able to adapt to changes	Disagree	14.3	23.7	0.000
	Neutral	4.9	12.2	
	Agree	80.9	64.1	
Credit worthiness	Not confident	25.7	40.5	0.000
	Somewhat confident	44.6	45.0	
	Very confident	29.7	14.5	
Engagement in cooperatives				
Attend AGMs	Disagree	3.7	32.8	0.000
	Neutral	1.4	17.6	
	Agree	94.9	49.6	
Attend trainings	Disagree	6.6	24.4	0.000
	Neutral	3.7	7.6	
	Agree	89.7	67.9	
Perform tasks	Disagree	4.3	32.1	0.000
	Neutral	2.0	9.2	
	Agree	93.7	58.8	
Benefiting from cooperatives				
Cooperatives are useful to community	Disagree	12.6	36.6	0.000
	Neutral	5.7	13.7	
	Agree	81.7	49.6	
Cooperative people are trusted	Disagree	24.3	45.8	0.000
	Neutral	8.0	9.2	
	Agree	67.7	45.0	
Future of cooperatives promising	Disagree	9.4	40.5	0.000
	Neutral	3.4	6.1	
	Agree	87.2	53.4	
Cooperatives help during emergency	Disagree	10.6	32.8	0.000
	Neutral	5.4	9.9	
	Agree	84.0	57.3	

EQ 3: The effectiveness of trust at regulating cooperative member activities, cooperative performance, and cooperative member resilience

Cooperatives form a basis for psychological and actual safety nets for their members. It is therefore not merely the act of coming together to form a democratic shared entity that boosts resiliency among members. In a low trust national culture context, cooperative membership provided immense trust-building opportunity. A cooperative's performance also matters in building trust of the members in their cooperative. Evidently, active members are much better at taking part in cooperative activities as reflected by their significantly higher attendance of annual general meetings (AGMs), participation in trainings and performance of their various roles and duties as members. The Active members indicated that cooperative people are trusted members of society. However, on the flipside, people less involved in cooperative affairs trust the cooperative less and seem to think that cooperative people cannot be trusted. Active cooperative members indicated that cooperatives' future is promising as cooperatives are helpful in emergencies, terming them useful to the community. The table below offers more details on the value trust plays in resilience of cooperatives.

Variable	Percentage of respondents			p-value
		Active (%)	Inactive (%)	
Engagement in cooperatives				
Attend AGMs	Disagree	3.7	32.8	0.000
	Neutral	1.4	17.6	
	Agree	94.9	49.6	
Attend trainings	Disagree	6.6	24.4	0.000
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Future of cooperatives promising	Disagree	9.4	40.5	0.000
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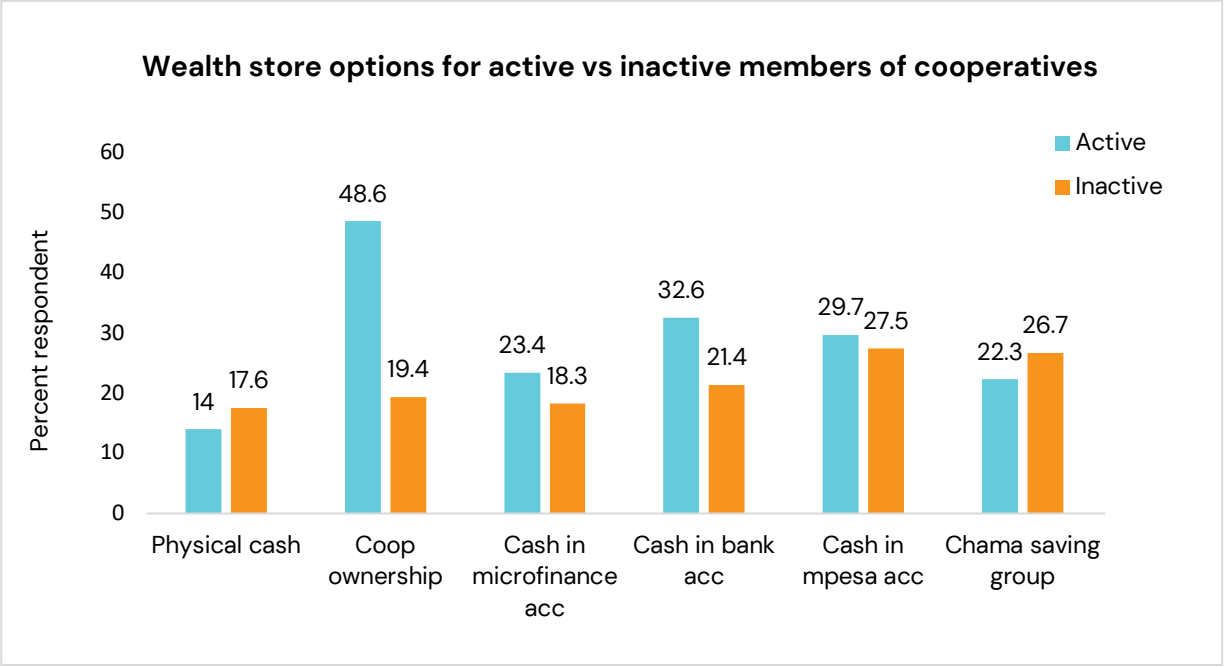

Wealth store options for cooperative members: 54% of cooperative members relied heavily on their cooperative ownership as a store of wealth. The cooperative as a store of wealth even exceeded banks and other traditional investment types as alternative places to store cooperative members' wealth. In general, most cooperative members keep their wealth in cooperatives, bank accounts and Mpesa accounts. Chama groups (small informal savings and investment groups) also came out as an important wealth store especially among inactive members. Comparatively, more active members (48.6%) keep their wealth in the cooperatives than inactive members (19.4%), as well as in the bank and microfinance accounts. Less active members tend to keep most of their wealth in the Chama groups and hold physical cash.

Conclusion

Following the economic challenges induced by the Covid-19 pandemic and various other shocks experienced from 2019-2023, agricultural cooperatives in Kenya demonstrated their pivotal role in fostering economic and psychological resilience among their members. As Kenya experiences an economic drop, these cooperatives remain instrumental in enabling members to afford key medical and business services, even though affordability had not fully reached pre-pandemic levels. Cooperatives also were critical in supporting their members who were impacted with drought, a growing challenge in many regions in Kenya. The resilience of cooperatives was further exemplified by their consistent support to members amidst various external shocks, whether security-related or natural.

Active membership in cooperatives significantly correlated with psychological resilience, underlining the crucial role cooperatives play in building community resilience. It also correlates significantly with psychological resilience presenting a compelling case for promoting active cooperative participation. Cooperatives, development aid partners, NGOs, and policymakers must recognize and leverage this correlation for enhanced community empowerment and resilience.

As the five-year study concludes, the findings underscore the pivotal role of cooperatives in fostering community resilience. The role of cooperatives in socio-economic recovery and resilience building is evident in the trends. Their part in navigating external shocks and supporting

their members suggests an essential direction for future policy and interventions, emphasizing the need for continued economic support, flexibility in responding to changing shocks, incorporation of climate resilience strategies, capacity building, and the promotion of active cooperative participation. This study provides a robust foundation for future research and the development of stronger, more resilient agricultural cooperative ecosystems in Kenya. It also offers important insights for the government, the development partners, NGOs, cooperatives, and citizens in rural communities, helping them align their efforts more effectively with the needs and potential of cooperative members. Additionally, the findings provide an evidence-base for the existing gaps where members need more help to build more robust, resilient, and empowered agricultural cooperative ecosystems in Kenya.

Recommendations

The Government

1. **Bolster active participation:** Design and implement strongly coordinated strategies to encourage citizens to form, join and actively participate in cooperatives. Tax breaks, continuous and focused sensitization, training, and other innovative initiatives could play a leading role in promoting membership, growth, and sustainable cooperatives in Kenya.

2. **Enhance transparency and accountability:** Establish robust measures to ensure transparency and accountability within cooperatives, enhancing trust among members through rules requiring the publishing of financial accounts given to each member, whereby each member signs that they received the information.

3. **Adapt Establish dynamic and flexible infrastructure and support systems:** The changing nature of external shocks suggests the need for flexibility in the government's approach that will not only promote resilient agriculture cooperatives to major shocks but also promote economic recovery among members, households, and communities.

Development Partners - Donors, NGOs, and CBOs

1. **Provide strategic and focused economic support:** Acknowledge the ongoing economic strain on cooperatives and communities. Even though signs of recovery are visible, more targeted, and tailored support is needed, for instance in form of recovery grants and loans, for cooperatives to support their members rebuild and recover faster and better in the context of changing external shocks that have far reaching implications on agriculture-based cooperatives performance and stability.

2. **Capacity building for External Shocks: The** data reveals the evolving nature of shocks with an increased incidence of mudslides. Tailor sensitization and capacity building to realize more responsive interventions to diverse and dynamic patterns shocks among cooperatives and communities.

3. **Support integration of climate resilience interventions: Facilitate** mainstreaming of climate action within the cooperative initiatives as a key driver of resilience of agricultural cooperatives, including learning and knowledge exchange. This will help them enhance their preparedness for future climate driven shocks such as drought, which are increasingly becoming important drivers.

Cooperative Leaders and Members

1. **Promote and incentivize active membership:** Cultivate an environment that encourages active participation, highlighting its critical role in building resilience. Putting members at the center through effective and tailored benefits and dynamic interventions for the agriculture sector will attract more members and encourage active engagement

2. **Facilitate basic life skill training programs:** These will enhance the abilities of the members to adapt and cultivate positive behavior that enables them to deal effectively with the demands and challenges of life. Additionally, enhanced financial literacy and health education programs, emphasizing the importance of savings and preparation for health-related emergencies will alleviate the financial burdens faced by cooperative members during crises.

3. **Facilitate trust-building:** Endeavor to build trust among cooperative members, recognizing its role in cooperative performance.

Researchers

1. **Consider cultural context:** Unpack the role of culture and gender diversities in cooperative function and member behavior, particularly regarding trust and expectations. This will better inform culture and gender-responsive interventions.

2. **Continued research on economic recovery:** There is a need to continue studying the economic recovery trajectory of cooperatives in the post-pandemic context. For example, some unanswered questions include: How long does it take to fully return to pre-pandemic levels? What factors accelerate this recovery within agricultural cooperatives in Kenya?

3. **Evolution of external shocks:** Investigate the changing patterns of external shocks and their impacts on cooperatives and communities over a longer period than the CLEAR grant performance period. There is a need to understand why some types of shocks are becoming more prevalent and how they can be effectively managed.

4. **Link between active membership and resilience:** The study in the final year provides even more compelling evidence for the link between active membership in cooperatives and psychological resilience. Further research is needed to explore this relationship and determine how it can be leveraged to strengthen the resilience across ecological resilience of cooperatives and communities.

This brief is authored by Pamela Kaburu; Monitoring and Evaluation Specialist with contributions from Ashley Holst, Chief of Party from Global Communities and Erick Omollo, Researcher, University of Nairobi. The analysis and content of this brief are drawn from "CLEAR Research Final Report" authored by Dr. Scott Bellows; the Lead Researcher from USIU-A for the 5-year longitudinal study. This report is informed by the full analytical report.

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