THE CO-OPERATIVE UNIVERSITY OF KENYA

Proceedings of The Eighth Co-operative University of Kenya (CUK) Annual Scientific Conference & The Third Co-operative Movement stakeholders' Conference,

"THE JOINT CO-OPERATIVE CONFERENCE 2025"

ON

Co-operatives Build a Better World: Re-energizing the Collective Power of Co-operatives in Africa

July 22nd-24th, 2025

Isaac K. Nyamongo - Editor

CO-OPERATIVE HEALTH INSURANCE IN TANZANIA: PERCEPTIONS AND DETERMINANTS

Cyril Kalembana Komba[*,1], Emmanuel Lulandala[2] & Godamen Naiman[3]
[1]Senior Lecturer, Moshi Co-operative University (MoCU), Tanzania; **ORCiD:** https://orcid.org/0009-0004-3395-6540
[2]Lecturer, Moshi Co-operative University (MoCU), Tanzania
[3]Co-operative Officer, Tanzania Co-operative Development Commission (TCDC)
[*]Corresponding Author: cyrill.komba@mocu.ac.tz OR cyrilkomba@gmail.com

ABSTRACT: Ushirika Afya scheme plays a vital role in improving and safeguarding the health of cooperative members in the agricultural sector. This study was conducted to assess the perceptions of cooperative members towards the Ushirika Afya scheme and to identify the key factors influencing their engagement in the scheme (UAS). The study was guided by the theory of planned behaviour (TPB) as the primary framework and the social capital theory. A cross-sectional research design was used. The target population and unit of analysis included all Agricultural and Marketing Co-operative (AMCOS) members participating in UAS within the study area, with a sample size of 300 respondents. Findings indicated that socio-demographic factors such as age, marital status, household income and size, education level, and economic activity significantly affect members' participation in Ushirika Afya. Thematic analysis showed that members' perceptions centered on health concerns, health protection, and support for elderly cooperative members. The scheme was also viewed as a government-established program for AMCOS members, specifically for the sick. Additionally, the study concludes that engagement among youth and women is limited. Many respondents perceive Ushirika Afya as mainly for the elderly, sick, and poor, supported by higher enrollment rates among elders compared to youth. To improve participation, there is a need for increased investment in awareness campaigns and capacity-building programs to promote the scheme, which could lead to higher membership levels.

Keywords: Ushirika Afya Scheme, Health Insurance, Co-operatives, Relative Importance Index

INTRODUCTION

Health insurance is gaining increasing attention in low- and middle-income countries as a way to improve healthcare utilization and protect households from impoverishment caused by out-of-pocket medical expenses. The World Health Organization and the World Bank have consistently advocated for reducing out-of-pocket payments and promoting universal health coverage. Universal health coverage means that all people have access to the full range of quality health services they need, when and where they need them, without financial hardship. (WHO,2019). In Africa, countries with national health insurance are gradually increasing (WHO,2019). However, the percentage of the population enrolled in health insurance remains

low. Many African countries have enrolment rates below 10%, with the notable exceptions of Rwanda, which reached enrolment rates of about 90% in 2015 (Cebul *et al*, 2011), while Ghana had an enrolment rate of 56% in 2014 (Amu et al., 2018). Hence, Ghana and Rwanda are among the very few countries in Africa where enrolments are mandatory for the entire population (McIntyre *et al*,2018). The history of health schemes in Tanzania dates to the post-independence era, when the government adopted a socialist approach under the Arusha Declaration of 1967, emphasizing free and accessible healthcare for all. Initially, health services were financed almost entirely by the state, with a strong focus on primary health care and rural outreach. However, economic challenges in the 1980s led to health sector reforms, including the introduction of cost-sharing measures in the 1990s. This shift gave rise to various health financing schemes, notably the Community Health Fund (CHF) and the National Health Insurance Fund (NHIF), which aimed to improve financial access to healthcare. In 1996, the Tanzanian government piloted a Community Health Fund (CHF), which was later scaled up nationwide after showing promising results. CHF is a voluntary prepayment scheme that primarily provides access to primary care services. In 1999, the government of Tanzania established the National Health Insurance (NHIF), which was initially aimed to cover all public servants, their spouses, and children or dependents (URT, 2018). In 2011, the Tanzanian government decided to reform the CHF and introduced an improved Community Health Fund (iCHF). The government target was for at least 70% of the population to be covered by the National Health Insurance Fund NHIF and the iCHF by 2020, which are the two main public insurance schemes. the total population of 24% is covered by CHF, and 9% under NHIF (Tungu *et al*., 2020). Since the inception of NHIF, the beneficiaries have increased from 691,773 in the year 2001/2002 to 4,403,581 in the year 2020, which is only 8 % of the entire Tanzanian population. (NHIF, 2020). Alongside these public schemes, private health insurance began to emerge in the late 1990s and early 2000s, driven by economic liberalization and the growth of the private sector. Companies like AAR and Jubilee Insurance started offering private medical insurance, mainly targeting urban, middle- and high-income earners (Frontiers in Health Services [FHS], 2023). These private schemes provided more comprehensive and higher-quality services than public options but remained unaffordable for much of the population. Today, both public and private health insurance schemes operate in parallel, and the Tanzanian government is working toward a unified and mandatory Universal Health Insurance (UHI) scheme to increase coverage, reduce fragmentation, and ensure equitable access for all citizens. Moreover, the government, through the National Health Insurance Fund (NHIF), created a unique voluntary health insurance scheme for co-operative members, namely "Ushirika Afya" in Kiswahili. The "Ushirika Afya" is a voluntary health insurance scheme designed to serve co-operative members who have no formal and conventional access to health insurance (Nzowa *et al*.2023). For other individuals employed in the formal sector, health insurance is mandatory for all workers. Premiums are remitted directly to insurance schemes or companies as employers deduct from their salaries (ILO,2021). The "Ushirika Afya" scheme was primarily

designed for workers in the agricultural sector to serve members of agricultural and marketing co-operative societies (AMCOS). However, members of other forms of co-operatives can also join the scheme. "Ushirika Afya" acts as a supplementary scheme for co-operative members employed in the formal sector and has a statutory health insurance cover. The National Health Insurance Fund (NHIF) created a unique voluntary health insurance scheme for co-operative members, namely "Ushirika Afya". The "Ushirika Afya" is a voluntary health insurance scheme designed to serve co-operative members who have no formal and conventional access to health insurance (Nzowa *et al.,* 2023). The "Ushirika Afya" scheme was primarily designed for workers in the agricultural sector to serve members of agricultural and marketing co-operative societies (AMCOS) that are involved directly in five strategic crops, which are Cotton, Coffee, Tea, Cashew, and pigeon peas (NHIF,2020). This service gives room to beneficiaries to offset their debts after selling their farm produce in the following harvest season. Ushirika Afya insurance scheme is working through a partnership between the Agriculture Marketing Cooperative Society, Banks such as Tanzania Postal Bank (TPB), National Microfinance Bank (NMB), and CRDB Bank, which signed the contract with the Cooperative Union all over the Country (NHIF,2020). According to TCDC (2022) that in that year, there were about 250 AMCOS in Tanzania that had joined the Ushirika Afya scheme. The adoption of Ushirika Afya through AMCOS is a welcome development that seeks to provide affordable health care to a larger segment of the population. With this system in place, members are able to access quality health care, regardless of their income level. Cooperative societies have adopted the Ushirika Afya scheme to help and provide affordable health care to their members. The idea behind health insurance is to create a risk-sharing system that spreads the cost of health care over many members, thereby making health care accessible to a larger number of people. By pooling resources together, members can contribute towards the health care needs of the group, and in turn, are able to benefit from the shared resources made available. The Ushirika Afya insurance facilitates and enables members to access any type of medical services, including major surgeries and full treatments for serious health conditions, including cancer and dialysis services for those facing kidney complications, at any health facility. In the process of ensuring universal health care through the introduction of the Ushirika Afya insurance scheme, one may wonder what is happening to the Cooperative members who join the Ushirika Afya scheme. Ushirika Afya scheme has become one of the best platforms for health insurance inclusion for individuals statutorily excluded from accessing health insurance. However, the Ushirika Afya scheme has been questionable. This is due to the process of members' enrolment, perception, Health insurance literacy, and Health care utilisation in terms of the range of services provided, reimbursement rate, as well as sustainability. These key issues form the direction of the study on assessing the Ushirika Afya scheme as a practice of cooperative health insurance with the view of finding out the Socio-economic characteristics of cooperative members participating in the Ushirika Afya scheme. Also, by comparing the Ushirika Afya scheme practice visa via successful cooperative health insurance practices in other countries, explore

the perception of cooperative members on the Ushirika Afya scheme and establish factors contributing to low Ushirika Afya scheme coverage in Babati, Manyara. The government of Tanzania has been keen on ensuring that NHIF improves its operations for the betterment of Tanzanians, especially farmers who are in a cooperative society. Through doing that, the National Health Insurance Fund (NHIF) introduced the 'Ushirika Afya' product in 2019 that sponsors health services to Agricultural Marketing Co-operative Societies (AMCOS) members. While the scheme plays an essential role in facilitating health care utilization, there have been limited empirical investigations showing the extent to which co-operative members and other individuals have utilised such a platform. Statistics show that only 32% of individuals accessed health insurance services in the country by 2019, whereby the NHIF covered 8%, while 23% by the Community Health Fund (CHF), and the remaining 1% by private insurers (Kigume *et al*, 2021). However, statistics in 2022 indicate that the total Tanzania population covered by health insurance declined to about 15%, of which CHF coverage decreased to about 5.4%, and NHIF remained at 8%. In contrast, private insurers increased coverage to about 2% (Nzowa *et al*. 2023). Despite the importance of the Ushirika Afya Scheme, studies have not focused on the dimensions such as perception of Co-operative members on the Ushirika Afya scheme, members' engagement, as well as members' satisfaction with health services they receive under Ushirika Afya. These studies include those carried out by (Nzowa *et al*., 2023; Sambuo, 2022; Asfaw and Braun, 2004). Previous studies have largely focused on the single model of community-based health insurance (CBHI) through National Health Insurance (NHIF), but the Ushirika Afya scheme offered by AMCOS is rare, and none have focused. This study, therefore, aimed to analyse co-operative members' perceptions of the Ushirika Afya scheme, taking Babati District in Manyara region as the case study. Specifically, the study analysed the socio-economic and demographic characteristics of co-operative members in the Ushirika Afya scheme, to examine the perception of Co-operative members towards the UAS and examine the socio-economic determinants of members' engagement in the UAS.

METHODOLOGY

Research Design and the Study Area: This study adopted a cross-sectional descriptive research design and a qualitative design. A cross-sectional design offers the benefit of easy access to data and the ability to observe the interplay of various actors and their downstream services. This design allows researchers to collect information from a diverse group at a single point in time, making it efficient for understanding current trends and relationships between variables. The study was conducted at Babati District in the Manyara Region of Tanzania. The study focused on two wards named Gallapo and Dareda. The study area was chosen because availability of 56 Agriculture and marketing Cooperatives (AMCOS) that are in the UAS.

Sample Size and Sampling Techniques: The target population of the study was Ushirika Afya scheme users and non-users in AMCOS within the study area, comprising a total of 3,200 cooperative members from 56 AMCOS, including those under and not under the

Ushirika Afya scheme. The sample size for the study was 300 members, determined using the Slovene formula, with the general principle that a larger sample is preferable, considering cost and human resource constraints (Leedy, 1984). The study adopted stratified purposive sampling, proportional sampling, and simple random sampling. Purposive sampling techniques were used because the sample of the cooperative society using Ushirika Afya consisted of members in the Ushirika Afya scheme. Proportional sampling was used to allocate respondents from each AMCOS in the Ushirika afya scheme. Simple random sampling was used to select participants for the study.

Data Collection and Analysis Techniques: The household survey technique, through a questionnaire, was the main data collection technique, which involved a list of questions (open and closed-ended) that were filled out by the respondents of the study (All were AMCOS members, but not all were UAS enrolled members). The questionnaire was monitored and administered by the researchers themselves. Two other methods were involved in the process of data collection, which are focus group discussions; a total of five FGDs were conducted in the study areas, and the interview method was used to interview five key informants. The thematic approach was applied in the analysis of qualitative data. The Statistical Package for Social Science was used to code quantitative data, which was responsible for determining the most and least determinant factors influencing the decision to enroll in the Ushirika Afya Scheme through the Relative Importance Index (RII) method in the transformation matrix proposed and developed by Chen *et al.* (2010), cited by Komba (2024). In this study, too, the RII value ranged between 0 and 1; however, the 0 value was not included as proposed by Chen *et al.* (2010). The importance levels determining joining the UAS are derived from the RII in Table 1.

Table 1: Importance Level from RII

SN	RII Level	RII Ranging Level	Model Assumptions
1	High (H)	0.8<RII<1.0	An extremely important determinant factor
2	High-Medium (H-M)	0.6<RII<0.8	A Very Important determinant factor
3	Medium (M)	0.4<RII<0.6	Moderately important determinant factor
4	Medium-Low (M-L)	0.2<RII<0.4	Low important determinant factor
5	Low (L)	0.0<RII<0.2	Not at all an important determinant factor

The RII assumption was that the higher the value of RII, the more important the determinant factors. The RII formula is as follows:

RII= Sum (W)/A*N…….……..…… (1)

Where: W-Weighting that is assigned to each variable by the respondent=300

A- Highest weight = 5

B- N- Total number of respondents = 300.

FINDINGS AND DISCUSSION

Socio-demographic characteristics of the respondents: In the process of examining the Ushirika Afya Scheme (UAS) among the co-operative members, it was first and foremost necessary to analyse the socio-demographic distribution and composition of the respondents involved in the study. This was important simply because, in understanding the determining

factors for the Ushirika Afya Scheme, the assumption was that they were also responsible for decision-making. In line with the 2015–2016 Tanzania Demographic and Health Survey (TDHS) and Malaria Indicator Survey, which indicated that the socio-demographic factors such as, age, marital status, level of education, urban versus rural residence, occupation, wealth index, frequency of health facility visits as well as media exposure like radio, TV, newspaper and internet are determinant predictors to predictors of health insurance enrollment. In this case, therefore, seven socio-demographic characteristics were thoroughly analysed through descriptive statistics. The socio-demographic data included in this analysis include sex (male or female) of the respondents, age of the respondents through six age groups, education level, household size, marital status, and the socio-economic activities performed (Table 2).

Table 2: Socio-demographic Characteristics of Respondents (n=300)

Characteristics	Attributes	Frequency	Percent (%9
Sex	Male	218	72.7
	Female	82	27.3
	Total	**300**	**100**
Age (Years)	18-25	20	6.7
	26-35	35	11.7
	36-45	51	17.0
	46-55	82	27.3
	56-65	90	30
	Above 66	22	7.3
	Total	**300**	**100.0**
Education Level	Primary	129	43.0
	Secondary	107	35.7
	Tertiary	39	13.0
	University	25	8.3
	Total	**300**	**100.0**
Household Size	1- 3	58	19.3
	4- 6	124	41.3
	7- 9	89	29.7
	10 and above	29	9.7
	Total	**300**	**100.0**
Marital status	Married	246	82.0
	Single	31	10.3
	Divorced	12	4.0
	Widow	6	2.0
	Widower	5	1.7
	Total	**300**	**100.0**
Socio-economic Activities	Small Businesses	37	12.3
	Driver	4	1.3
	Mechanical Workers	5	1.7
	Food Vendors	9	3
	Farmer and Herdsman	245	81.7
	Total	**300**	**100.0**

The findings in Table 2 indicate that many respondents, 72.2%, were male, which may reflect gender dynamics in cooperative membership and decision-making roles, particularly in rural Tanzania, where men often control household finances and are more likely to be cooperative leaders or representatives. Moreover, the low female representation suggests a gap in gender inclusiveness among the cooperative members in the study area. An analysis of age

distribution shows that the largest group of respondents was 56-65 years (30%), followed by those in the 46-55 years (27.3%), and 36-45 years (17.0%). The findings suggest that most respondents are middle-aged to older adults (46-65), which aligns with the age of active cooperative members. The results also indicate that the younger age groups (18-25) account for only 6.7%, highlighting the limited involvement of youths in cooperative membership and activities. This points to a need for youth-focused outreach or education about the benefits of insurance early in life. The education level of the respondents shows that 43% had primary education, 35.7% had secondary education, and 21.3% possessed tertiary or university-level education. This suggests that most respondents have relatively low education levels. Consequently, misconceptions about health insurance might be more common in the study area or among the respondents. The findings further show that 41.3% of households have between four and six members, while 29.7% have between seven and nine members. This indicates that cooperative schemes might consider family or group coverage options to boost participation and lower per-person costs. Based on the marital status of the respondents, the findings show that high rates of marriage suggest respondents are likely to have family responsibilities; hence, married individuals may be more motivated to seek financial protection for dependents as well as positively influence participation in schemes like Ushirika Afya.

Co-operative Members' Membership Status in the Ushirika Afya Scheme: The findings in Table 3 Show that 196 (89.9%) of the respondents were members of the Ushirika Afya Scheme (UAS), while the remaining have not joined the scheme. This can be due to different reasons. This indicates that many of the eligible cooperative members in the study area have been enrolled in the Ushirika Afya Scheme.

Table 3: Ushirika Afya Scheme Membership Status

Sex	**Members**	**Percent (%)**	**Non-members**	**Percent (%)**	**Total**
Male	157	72.0	61	27.9	218
Female	39	47.6	43	52.4	82
Total	196	-	104	-	**300**
Marital status	**Members**	**Percent (%)**	**Non-members**	**Percent (%)**	**Total**
Married	171	69.5	75	30.5	246
Single	13	41.9	18	58.1	31
Divorced	7	58.3	5	41.7	12
Widow	2	33.3	4	66.7	6
Widower	3	60.0	2	40.0	5
Total	**196**	**-**	**104**	**-**	**300**
Age (Years)	**Members**	**Percent (%)**	**Non-members**	**Percent (%)**	**Total**
18-25	9	45.0	11	55.0	20
26-35	15	42.9	20	57.1	35
36-45	24	47.1	27	52.9	51
46-55	57	69.5	25	30.5	82
56-65	78	86.7	12	13.3	90
Above 66	13	59.1	9	40.9	22
Total	**196**	-	**104**	**-**	**300**

The findings in Table 3, moreover, indicate that males represent a significantly higher proportion of Ushirika Afya members compared to females; 72% of male respondents are members, while less than half (47.6%) of female respondents are enrolled in the scheme. The findings further have shown that more than half of the female respondents (52.4%) are not members of the scheme. This could be due to multiple factors, like the limited control over finances in the households, especially in male-headed households, or also due to lower representation in cooperative leadership, and therefore, less access to scheme information or cultural norms that deprioritize women's access to decision-making. Since males dominate both cooperative membership (72.7%) and scheme enrolment (72%), health insurance decisions are likely to be male driven. However, men's dominant role does not automatically translate into family-wide coverage unless encouraged or incentivized. These findings indicate that male cooperative members are more likely to enroll in Ushirika Afya (72%), while female enrolment remains comparatively low (47.6%). While this may reflect men's greater access to cooperative resources and decision-making power, it raises concerns about equity and inclusion in access to health coverage in the study area. Addressing these gender disparities will be crucial for achieving universal health coverage and improving the effectiveness of the Ushirika Afya scheme. Moreover, the descriptive and thematic analysis indicates that the number of males enrolled in the Ushirika Afya scheme is higher compared to the number of females because of cultural beliefs about gender roles in decision making. It was revealed in one of the FGDs that:

> *"…. The majority of members in our cooperative are men because in our society, men are the ones making decisions in everything, and men are the ones who participate in Cooperative meetings, and the decision to join Ushirika Afya insurance is made by males as the members of AMCOS. Women, especially in our area, consider co-operative as a men institution" (FGD-Gallapo)*

The findings align with those of Mwinuka *et al.* (2022), who, in their study on the uptake of health insurance and its associated factors, noted that men were more likely than women to attend groups and village meetings, giving them better access to information. The study further attributed women's lower participation in the uptake of the UAS through AMCOS to cultural norms that required them to stay at home and care for their families, thereby limiting their access to information. Additionally, the study indicated that men were typically the ones with full registered membership in AMCOS and were primarily responsible for selling crops through these cooperatives. The findings also indicate that married individuals dominate membership status, as among all Ushirika Afya members, 171 out of 196 (75%) are married. Only 25% of married respondents are not members, showing a high enrolment rate among the married population. A significant 58.1% of singles are not enrolled in the scheme. The findings suggest that the high enrolment among married individuals was expected, as married people often have greater family responsibilities, especially regarding the health of children and spouses. They also may see more value in prepaying for health risks to reduce out-of-pocket expenses for the household. Although the divorced and widowed are few, their moderate enrolment rates may reflect mixed perceptions of the scheme, possibly influenced

by age, gender, or support systems. The findings have clearly shown that marital status is a strong predictor of membership in the Ushirika Afya scheme in the study area, whereas married individuals are the most likely to be enrolled, reflecting their heightened awareness of health needs and responsibilities. The single and widowed individuals, especially women, are underrepresented, pointing to potential financial, informational, or social access barriers. This calls the need for addressing these gaps through targeted communication, inclusive premium structures, and supportive community networks to expand coverage and improve equity in health insurance participation. The findings in Table 3, moreover, reveal that UAS membership increases with age. For example, the older age groups (46 years and above) show significantly higher enrolment rates, 56-65 (86.7%), 46-55 (69.5%), and above 66 years 59.1%. This trend implies that older individuals are more likely to value or seek health insurance, likely due to various reasons like increased health risks with age, greater healthcare needs and usage, as well as more life experience and understanding of medical cost burdens. However, the low enrolment rate among young adults may be due to the perception that they consider themselves healthier and less in need of health insurance.

> *"…….at my age and my economic situation, the Ushirika Afya scheme is my security, last year I travelled to Arusha to visit my son….. While I was there, I got sick on the way, but because I had my UAS Card with me, I just ran to the hospital and got treated. This Ushirika afya ID is my security guard in health issues." (FGD-Dareda).*

This statement proves that there is a clear positive correlation between age and the likelihood of enrolling in the Ushirika Afya Scheme. As age increases, so does the percentage of membership, peaking among individuals based on the age groups.

Co-operative Members' Perceptions on Health Insurance and the Ushirika Afya Scheme: The perceptions of co-operative members on health insurance and the Ushirika Afya scheme in the study area are described by exploring several key emerging themes through qualitative interviews. The key themes analysed and examined in this study include awareness and understanding, perceived benefits and cost, trust and confidence in the scheme, affordability and willingness to pay, health service quality and accessibility, perception of equity and inclusion, as well as administrative and operational challenges of the Ushirika Afya Scheme (Table 4). The findings presented in Table 4 show that a substantial proportion of respondents 72% and 65% agreed and strongly agreed, respectively, suggesting that many cooperative members are aware of and knowledgeable about the Ushirika Afya Scheme. However, a notable percentage 37% and 39% strongly disagreed and disagreed, indicating a significant portion of respondents lack adequate information. This highlights a critical information gap among both members and non-members. The findings suggest the need for enhanced communication and outreach efforts to ensure broader and more consistent dissemination of information regarding the Ushirika Afya Scheme. Addressing these gaps could lead to a better understanding and increased participation.

Table 4: Members' Perception of the Ushirika Afya Scheme

	Perceived satisfaction and understanding of the UAS (%) responses				
Attributes	**Fully disagree**	**Disagree**	**Neutral**	**Agree**	**Fully agree**

Co-operative members are aware of and know the UAS	37.0	39.0	61.0	72.0	65.0
Co-operative members view the scheme positively in terms of the provided services and benefits accrued	47.	52.0	82.0	63.0	59.0
Co-operative members have trust and confidence in the UAS	49.0	51.0	74.0	83.0	67.0
Members perceive that UAS services are affordable	58.0	69.0	52.0	52.0	41.0
Members perceive the healthcare services under UAS as substandard and delayed.	33.0	46.0	78.0	54.0	43.0
UAS is often viewed as a tool for social inclusion	39.0	47.0	58.0	79.0	69.0
Members perceive that UAS has administrative and operational challenges	55.0	53.0	49.0	54.0	63.0

The findings also reveal diverse perceptions among cooperative members about the benefits and services provided by the Ushirika Afya Scheme (UAS). Notably, 82% of respondents gave neutral responses (neither agreeing nor disagreeing), indicating significant uncertainty or a lack of clear understanding regarding the actual benefits received and the quality of services offered by the scheme. Meanwhile, 63% and 59% of respondents agreed and strongly agreed, respectively, showing that a notable number of members do perceive positive benefits from the UAS (Table 4). These findings have also been indicated in the 2015–2016 Tanzania Demographic and Health Survey (TDHS) and Malaria Indicator Survey, that people's perception and enrollment into health insurance are determined by various factors, including the service provider's attitude, reliability, tangibility, and responsiveness as well as the perceived benefits, misconceptions and mistrust of insurance schemes and poor knowledge about how the schemes' function. Interestingly, despite nearly half of the respondents expressing disagreement regarding trust and confidence in the scheme, a majority 83% and 67% agreed and strongly agreed, respectively, that their trust and confidence in the UAS had increased due to various other factors. However, the high percentage of neutral responses (74%) further emphasizes ongoing uncertainty or inconsistencies in members' experiences with the scheme (Table 4). These mixed perceptions suggest that while there is a growing base of trust and satisfaction with the Ushirika Afya Scheme, a significant proportion of members remain uncertain or unconvinced about its benefits and service quality. This highlights the need for the scheme to improve transparency, communication, and service delivery to build stronger, more uniform confidence among members. The findings on perceived service quality and accessibility are critical for understanding members' experiences with the Ushirika Afya Scheme (UAS). A substantial portion of respondents (78%) gave neutral responses, indicating limited direct experience or inconsistent knowledge regarding the quality and accessibility of UAS services. This neutrality may reflect a lack of engagement with the scheme or uncertainty about its effectiveness. In contrast, 54% of respondents agreed and 45% strongly agreed, that the services provided were substandard and often delayed. These responses raise concerns about the quality of service delivery and signal a potential red flag for UAS stakeholders. Contributing factors to these negative perceptions may be due to long waiting times, perceived attitudes of healthcare workers, and the geographical distance to accredited health

facilities, issues particularly pronounced in rural settings. These findings suggest an urgent need for UAS stakeholders to address service delivery challenges to improve user satisfaction and trust.

Determinants of Members' Engagement in the Ushirika Afya scheme: It was among the objectives of the study to analyse the important determinant factors in the members' decision to join the afya scheme. Based on the literature, there are several factors that may determine someone's decision or that can influence an individual's decision. In this study, a total of ten determinants (Table 5) were subjected to the Relative Importance Index (RII) to identify the most and the least important determinant factors.

Table 5: Determinants of Members' Engagement in the Ushirika Afya Scheme

Factors	Extremely important affecting (5)	Very Important Affecting (4)	Moderately important affecting (3)	Lowly important affecting (2)	Not at all important affecting (1)	The total weight (W)	Total Number (N)	A*N	RII	Rank
Age	158	143	171	207	201	880	300	1500	0.586	M
Level of Education	289	272	201	287	187	1236	300	1500	0.824	H
Sex	215	283	216	207	199	1120	300	1500	0.746	H-M
Marital Status	275	279	198	214	195	1161	300	1500	0.774	H-M
Household Size	186	109	178	135	159	767	300	1500	0.511	M
Economic activities	204	182	192	201	215	994	300	1500	0.662	H-M
Trust in the health system scheme	205	279	264	217	252	1217	300	1500	0.811	H
Awareness and Information Access	265	293	275	269	219	1321	300	1500	0.880	H
Influence of Co-operative Leadership	113	203	270	289	268	1143	300	1500	0.762	H-M
Perceived Benefits and Costs	201	178	193	297	189	1058	300	1500	0.705	H-M

KEY: High (**H**), High-Medium **(H-M),** Medium-**M**

The analysis of determinant factors influencing members' decisions to enroll in the Ushirika Afya Scheme (UAS) was conducted using the Relative Importance Index (RII). Based on the model assumptions, RII values were used to classify the importance of each factor. The findings in Table 4 show that three highly important determinant factors had a high index ($0.8<RII<1.0$). This range indicates that respondents view these factors as critical and significant in their decision to join UAS. Additionally, five determinants had a high-medium index ($0.6<RII<0.8$), which suggests they are very important factors according to the model. These are considered very important, though slightly less influential than the previously mentioned factors. Nevertheless, they remain significant motivators for scheme enrollment and should be actively addressed in implementation strategies. Two factors were ranked medium ($0.4<RII<0.6$), indicating that they are moderately determinant factors for

individuals to enroll in the UAS. However, based on the findings and the model assumption, there were neither low-important determinant factors nor not at all important. They are seen as moderately important, influencing some individuals but not decisive for the majority. However, when combined with other factors, they may still play a role in an individual's decision. The findings are supported by those of Msuya *et. al.* (2007) in the study on the impacts of Community Health Insurance Schemes on Health Care Provision in Rural Tanzania, which showed that community insurance scheme members were influenced by community development officers to join insurance, and that advocating community health insurance was an important means to reach the poorest of the poor. The RII analysis indicates that all ten identified factors have at least a moderate influence on members' decisions to enroll in the Ushirika Afya Scheme. The presence of three extremely important factors and five very important ones highlights the multifaceted nature of health insurance uptake. These findings imply that no single factor can drive membership alone; rather, a combination of affordability, trust, access, and awareness must be addressed collectively to increase engagement and sustainability of UAS.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions: The analysis demonstrates that age is a significant determinant of membership in the Ushirika Afya Scheme (UAS) in the study area. The likelihood of joining the scheme increases with age. Whereas the younger adults have shown significantly lower enrolment rates in the UAS in the study area. This pattern suggests that older individuals perceive greater health risks, have more frequent healthcare needs, and therefore value health insurance more highly. Conversely, younger people may feel less urgency to enroll, possibly due to perceived good health, limited income, or lack of awareness. Regarding the Perception of Co-operative members towards Ushirika Afya scheme, the study revealed that members in the Ushirika Afya scheme think the insurance is for elderly people, for sick people, and poor people; therefore, there is a need for awareness and mind-transforming training among cooperative members and promotion for youth engagement in the co-operative society activities to foster a stronger co-operative society among farmers. Shortly, the findings tell that age plays a critical role in shaping enrolment behaviour in UAS, and addressing age-specific needs and perceptions will be essential for expanding and sustaining scheme membership across all demographic groups.

Recommendations: The study recommends that AMCOS should:

- Develop age-specific education programs that emphasize the importance of early health insurance enrollment, even when one feels healthy.
- Use youth-friendly platforms (e.g., radio programs, social media, village youth groups) to raise awareness among them.
- Include real-life stories or testimonials from peers to illustrate the risks of being uninsured.

- Offer youth-discounted premiums or starter packages for younger individuals, possibly through cooperative youth programs.
- Provide family-based or bundled plans where younger family members can be included under a household policy.
- Engage influential community figures to advocate for health insurance across all ages, particularly to reach youth and low-literacy populations with trusted voices.

REFERENCES

Amu, H., Dickson, K.S., Kumi-Kyereme, A., and Darteh, E.K.M. (2018). Understanding variations in health insurance coverage in Ghana, Kenya, Nigeria, and Tanzania: Evidence from demographic and health surveys. *PLoS ONE*, 13(8): e0201833. https://doi.org/10.1371/journal.pone.0201833

Asfaw, A. and Braun, J. (2004). Is Consumption Insured against Illness? Evidence on Vulnerability of Households to Health Shocks in Rural Ethiopia. *Economic Development and Cultural Change*, Volume 53, Number 1. https://doi.org/10.1086/423255

Cebul R., Rebitzer, J., Taylor, L. and Votruba, M. (2011). Unhealthy Insurance Markets: Search Frictions and the Cost and Quality of Health Insurance. *American Economic Review*, 101(5):1842–1871

Chen, S., Zhang, Y.E. and Long, M. (2010). Supporting Online Material. *Science,* 330(6011): 1682-1685 [DOI: 10.1126/science.1196].

Frontiers in Health Services. (2023). Scaling Up Improved Community Health Fund in Tanzania: Progress, Challenges and Lessons Learned. Retrieved from: https://www.frontiersin.org/articles/10.3389/frhs.2023.1247301/full on 12/06/2025

ILO (2021). World Social Protection Report 2020–22: Social Protection at the Crossroads – in Pursuit of a Better Future. Geneva.

Leedy, P. D. (1989). Practical Research: Planning and Design. New York: Macmillan.

Komba, C. K. (2024). Factors Affecting People with Disabilities' Access to Micro-Finance Services in Kilimanjaro, Tanzania. *East African Journal of Management and Business Studies* 4(1), 73-79. DOI: https://doi.org/10.46606/eajmbs2024v04i01.0044.

Msuya, J., Jutting, J.P. & Asfaw, A. (2007). Impact of Community Health Funds on the Access to Health Care: Empirical Evidence from Rural Tanzania. *International Journal of Public Administration*, 30 (8-9): 813-833.

Mwinuka, B., Echoka, E. and Nyaberi, J.M. (2022). Uptake of Health Insurance and Its Associated Factors Among Informal Sector Workers in Dar Es Salaam, Tanzania. *Journal of Healthcare in Developing Countries*, 1(2): 20-25.

NHIF (2020) Fact sheet as at 30th June 2020.

Nzowa, P.G., Nandonde, F.A. & Seimu, S.M.L. (2023). Participation in health insurance and changes in the well-being status of co-operative members in Tanzania. *Decision*, 49 (5): 1-14. https://doi.org/10.1007/s40622-023-00362-z

Sambuo, D. (2022). The Sixth Principle of Cooperatives: Does Tanzania Succeed in Sectoral Cooperation Among Cooperatives during the Post-COVID-19 Era. In: 9th Technical

Committee of the Africa Ministerial Co-operative Conference (TCAMCCO). Sarova Whitesand: Mombasa, Kenya.

TCDC (2022). Establishment of National Cooperative Bank. [https://www.ushirika.go.tz/index.php/resources/view/benki-ya-taifa-ya-ushirika-kuanzishwa]. Retrieved on March 11, 2023,

Tungu, M., Amani, P. J., Hurtig, A. K., Dennis Kiwara, A., Mwangu, M., Lindholm, L., & San Sebastiån, M. (2020). Does health insurance contribute to improved utilization of health care services for the elderly in rural Tanzania? A cross-sectional study. *Global health action*, *13*(1), 1841962. https://doi.org/10.1080/16549716.2020.1841962

URT. (2018). *Social Security Laws and Regulations*. Dodoma: URT.

WHO (2019) Global Spending on Health: A World in Transition Global Report. Geneva.

The Co-operative University of Kenya
P.O. Box 24814-00502, KAREN, NAIROBI
TEL: +254 202430127/202679256
Mobile(office): +254 724311606
Conference link: https://conference.cuk.ac.ke/