

# An Assessment of the Implementation of the Re-structured Community Health Fund in Gairo District in Tanzania

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## Research

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# Abstract

While the government of Tanzania has been implementing community health fund (CHF) for more than two decades, the uptake of the scheme has been persistently low due to management and performance problems. As a response, from 2011 a new initiative was adopted that changed the overall structure, management and benefit packages of the CHF. This paper assesses the implementation of the newly re-structured CHF in Gairo District in Morogoro Region. This study employed a descriptive qualitative case study design using three types of data collection techniques, namely individual interviews (n=14), focus group discussions (n=4) and document review. A thematic approach was used to analyse the data. Findings show that the re-structured CHF has improved the pooling and provider payment mechanism compared to the old CHF. Benefit packages have been expanded to include referral services up to regional level. However, stakeholders, including community members, had negative perceptions of the restructured CHF owing to high annual premium rates, low incentive to enrolment officers, weak registration network and poor quality of health care services. In order to improve CHF performance and achieve universal health coverage, the central Government needs to invest more in the improvement of the quality of health care services, particularly availability of drugs and medical supplies. Additionally, the government should make CHF scheme compulsory to all members of the community who do not have alternative health insurance.

## Introduction

Globally, there is an increasing interest in advocating Universal Health Coverage (UHC) which calls for all nations to provide health care services to all citizens without facing financial difficulties.<sup>1-3</sup> In order to meet this objective, low and middle-income countries (LMICs) devoted themselves to health financing mechanisms known as community based health insurance schemes (CBHIS). This is a pre-paid non-profit insurance health scheme with risk pooling and sharing that is characterized by voluntary membership in a given community group.<sup>1</sup> CBHIs exist in many forms that cover a wide variety of health insurance arrangements with varying degree of ownership, membership, management, service packages and financial coverage in a distinctive setting within a defined population group.<sup>2</sup> The system is recognized to be a powerful health financing method for citizens without facing financial difficulties.<sup>3-7</sup>

In the Tanzanian context, CBHIS was introduced for the first time in 1996 through a pilot study conducted in Igunga District in Tabora Region.<sup>4</sup> The scheme operated under the name of Community Health Fund (CHF). In 2001, the Government of Tanzania enacted the CHF Act to make the CHF a voluntary prepayment health scheme that operated countrywide and managed by the district governments<sup>5</sup>. The main objective of the CHF scheme was to enable all community members to have reliable access to health care services by mobilizing financial resources from the community. This was also intended to improve the quality and affordability of health care services through sustainable financial mechanisms along with improving the management of services by empowering communities in decision making on matters affecting their health<sup>5</sup>.

After almost one decade of its operation, CHF continued to face structural, design and implementation problems resulting to low uptake, poor provision of health care services, members' dropouts and poor management<sup>11</sup>. In an attempt to solve the CHF problems, a new initiative was initiated that changed the overall structure, management and benefit packages of the CHF. The new initiative was named '*CHF Iliyobreshwa*', literally meaning the re-structured Community Health Fund.<sup>11-10</sup> The initiative came after a pilot study conducted in Dodoma and Shinyanga and Morogoro regions from 2011 and 2015 respectively.<sup>10-13</sup> Furthermore, from 2018 the CHF started to be rolled out countrywide<sup>14</sup>. These initiatives aimed at increasing CHF uptakes through electronic registration, improving benefits package that expanded the range of services to regional level and beyond, re-designing the structure of CHF management and improving the quality of the provided health care services.<sup>13,15</sup> Table 1 compares the structure of the old and new CHF schemes.

Table 1  
Old CHF vs New CHF

Component	Old CHF	New CHF
Enrolment mechanisms	Enrolment was done at the nearby primary health care facility by health care workers who were not paid for the task	Enrolment is done in the community by selected enrolment officers who are paid 10% of the collection
Premium amount	Amount was determined by districts and thus varied from one district to another. It ranged from TZS 5,000 to 30,000	Annual premium is TZS 30,000 across the country. The amount is determined centrally
Premium collection mechanisms	Funds were collected at each health facility and deposited into the District CHF account	Funds are pooled at the Regional level and managed by the Regional Administrative Secretary (RAS)
Purchasing arrangements	No separation between the provider of services and the purchaser. Provider payment is largely input-based rather than output-based and there's potential for conflicting incentives in the multitude of payment systems used.	Health facilities are reimbursed for services provided to the CHF members (fee per service).
Benefit packages and portability of the services	CHF members were allowed to access health services at the primary health care facilities within their areas without further co-payment. Referral services to the district level were at the discretion of the districts.	CHF members are entitled to primary health care services and referral services up to the regional referral hospitals without further co-payment.

Given the increased interests scaling up the CHF, it is important to understand how the scheme is actually being implemented and perceptions of stakeholders about the scheme. This paper assesses the implementation of the re-structured CHF in Gairo District in Morogoro Region.

## Methods

### Study settings

The study was conducted in Gairo District where restructured CHF has been implemented since 2015. Gairo District was purposefully selected because of its participation in the pilot study of the restructured CHF during the second phase from 2015; after Dodoma Region which started implementation of the restructured CHF from 2011.

## **Study design**

This study employed descriptive qualitative case study design.<sup>21–22</sup> This design was adopted because of its relevance in investigating a phenomenon in real life setting, which was the case for this study.

## **Sampling procedure**

Morogoro Region and Gairo District in particular was purposefully selected because of its participation in the pilot implementation of the restructured CHF from 2015 following the earlier pilot conducted in Dodoma Region from 2011. In Gairo District, two wards were purposefully selected; including Gairo, which was selected due to its proximity to a health centre which was also used as referral from other wards. Similarly, Rubeho Ward was included because it was the farthest from the health centre. From these two wards, two villages were selected at random. The villages were Mamuli in Gairo Ward and Rubeho in Rubeho Ward.

## **Data collection techniques**

This study employed three types of data collection techniques. These were in-depth interviews with key informants, focus group discussions and documentary review. Data were collected by the first author (RA) and supervised by the second author (SM). Interviews were conducted with district officials managing the CHF, former and current District CHF Co-ordinators and the Zonal CHF Supervisor. Other key informants included the District Health Secretary and the District Medical Officer. At the ward level, interviews were conducted with ward executive officers while at village level, interviews involved village executive officers and CHF enrolment officers. Interviews were also conducted with heads of health centres and dispensaries. Interview guide was developed and tailored to specific respondents. Interviews lasted between 20 and 30 minutes; and were conducted until the saturation point was reached; meaning that no new information was coming from the successive interviews. Focus group discussions were conducted in both villages. The discussions were conducted separately in order to get the views from residents who resided nearly the health facility and those who were distantly located. Each group had 7–10 participants who were recruited by the CHF enrolment officer of the respective village. In total, four (4) FGDs were conducted and each lasted for approximately 45 minutes. Furthermore, documentary review was done by the first author and particularly covered CHF registers in the village. Documents were mainly used to crosscheck what was reported during interviews and FGDs. Table 2 summarizes the categories of respondents and distribution across the ward.

Table 2  
The Categories of Respondents Involved in the Interviews and FGDs

No	Category of Respondents	Number of Interviews	
		Gairo Ward	Rubeho Ward
1	District CHF officials	4	
2	Ward executive officers	1	1
3	Village executive officers	1	1
4	District health officials	2	
5	Heads of health facilities	1	1
6	CHF enrolment persons	1	1
	<b>Total Respondents</b>	<b>10</b>	<b>4</b>
7	FGDs	2	2

## Data analysis

A thematic data analysis approach<sup>23</sup> was used to guide data analysis. This involved a number of stages. First, interviews and FGDs were transcribed by the principal investigator (RA) and reviewed by the second author (SM). Second, both authors familiarized with the data by reading and re-reading the transcripts and also listening to recorded interviews. Third, RA generated initial codes that were relevant to the research questions. The code manual was reviewed by SM, a senior qualitative researcher. Fourth, both authors coded the first five interviews separately for comparison and thereafter the first author (RA) coded the remaining interviews and FGDs. Other themes which emerged during coding were added simultaneously. Fifth, responses were then compared across different types of respondents and across the studied villages. Sixth, both authors reviewed the themes in relation to the coded extracts. Seventh, findings were synthesized and summarized keeping the key phrases and expression of the respondents to support the findings. Lastly, findings from interviews were triangulated with those from FGDs.

## Results

This section presents the key findings of the study. The first section presents the strengths of the new CHF with a focus on expansion and portability of health care services, strengthened management of the scheme and provider-purchaser separation. The second section highlights the challenges facing the iCHF scheme including low community sensitization and engagement, high premium rates, low incentive to enrolment officers and poor quality of health care services. The analysis of documents and interviews with various categories of respondents revealed that the re-structured CHF had significant improvements compared to the old CHF.

# Portability of health care services

Respondents acknowledged that the iCHF has expanded the range of health care services compared to the old CHF. Interviews conformed that health care services were portable across the region. However, in case referral services were needed, patients had to follow referral procedures from the primary health care facility to the regional referral hospital.

*.....Few days ago I had pain in my back bone. I had to go to the health centre. The doctor told me that I needed further diagnostic examination. The Doctor referred me to Morogoro Regional Hospital. However, I was supposed to pay TZS 80,000 (eighty thousand shillings) as co-payment, which was complemented by the CHF card. I think without this card I could pay more... (IDI with a female respondent, Gairo Health Centre)*

## Strengthened management of CHF scheme

Review of documents revealed that the management of the iCHF had improved significantly. This was further confirmed during interviews with various actors across all levels. According to our respondents, at the Regional and District levels, there are CHF coordinators responsible for coordinating the implementation of the scheme. Although the old CHF also had District coordinators, they were working on part-time bases and thus they were not solely responsible for the implementation of the scheme, as exemplified by one respondent.

*".... In the new CHF scheme, the officials who are appointed as CHF coordinators are full time employees solely responsible for coordinating the implementation of the scheme. They mostly perform CHF activities as their primary duties. In the old CHF, the coordinator was working for few hours in a week as they were not permanent employees" (IDI with CHF coordinator).*

It was evident from the interviews and analysis of documents that the new CHF has improved the data management system. Members are registered using smart phones and their membership information is stored digitally. This means that information about members could easily be updated and retrieved when needed. CHF coordinators and health care workers reported that the new system had made it easier to detect expired CHF cards and thus beneficiaries could be reminded to renew their membership on time; as illustrated by one respondent.

*".....The new CHF has improved the storage of the members' information despite the problems of the internet that we encounter. This makes it easier to track members' information and check the validity of their membership. Many members come without knowing if their membership has expired. Once we recognize that, we ask them to renew the membership. The old CHF had no such a mechanism" (IDI with health care worker).*

Another respondent added:

*“.....This scheme is better in terms of management data for the members. We have a programme known as Insurance Management System (IMIS), which manages data such as payment and members’ registration...We don’t necessarily need papers to register members or to track them. Everything is computerised.” (IDI with CHF coordinator).*

The improvement in registration and collection of annual premium has also improved the management of funds and reduced loss of funds which was reportedly a common challenge in the old CHF. The online registration and payment has facilitated the tracking of the annual premium from the village enrolment officers as illustrated by one respondent.

*“.....The new CHF is different in terms of management of funds. We normally collect the premium paid by members from our village enrolment officers....The funds are managed well through our IMIS before depositing in the CHF account, which is managed at the regional level” (IDI with CHF coordinator).*

## **Purchasing arrangements**

Review of documents and analysis of interviews revealed that the new CHF had clearly separated the purchasers of health care services and providers. According to our respondents, this has improved the efficiency of the scheme management and reimbursement of health care providers. In the new CHF, service providers are reimbursed based on the services provided, as elaborated by one respondent.

*“.....In the old CHF, enrolment was done at the facility and there was no separation between service providers and purchasers of the services. The new CHF is now managed by the Office of the District Executive Director (DED) instead of the District Medical Officer (DMO)” (IDI with health care worker).*

Despite notable achievements reported by respondents, it was evident that the re-structured CHF faced a number of challenges which contributed to low uptake of the scheme.

## **Low awareness of the community**

The analysis of the interviews and FGDs indicated that community members were not aware of the way the CHF system works and its benefit packages. All village leaders within the district had a duty to sensitize the community through regular meetings and make CHF agenda one of its priorities during the meetings. Contrary to this, it was seen that some village leaders reported lack of enough budget for community sensitization. In their views, they suggested to have a separate budget for community sensitization that focuses on CHF only and not as part of other businesses in the meetings. In an interview, one village leader had this to say;

*...We don’t have money for meetings and sensitization. We don’t have enough budget. We need a separate agenda for CHF, right now we mainstream CHF on top of other agendas; and that is why it has low priority. There must be a separate time table for CHF agenda. For example, we had a meeting for maternal and child nutrition here; I tell you it was done for almost one week. But if they could empower us, we could also do the same CHF (Interview with a village leader).*

The above claim was supported by some of FGD members; who were of the view that the village governments do not do enough in sensitizing people about CHF. Moreover, some people were not aware of the manner in which the CHF operates, the benefit packages, and even the enrolment procedures. It was thus found that majority of the non-CHF members were not willing to enrol due to poor awareness about the general performance of the CHF facility. One of non-CHF members claimed that:

*... We don't know about CHF... We have never heard about it....but those who have registered know about it... We hear those who are members saying they get health care services for free from health centres...May be you can explain to us about CHF..."* (FGD member - Rubeho Village).

It is not surprising that some members of the community had misconceptions about the CHF scheme. When asked why they did not join the scheme, some community members said that the CHF scheme is meant for the sick people; and if someone does not fall sick, there is no reason for them to join the scheme. Other members said that the scheme was designed for frequently sick persons and not for those with good health. An active CHF member commented that;

*I joined CHF last year, 2018 but I did not use the card because I was not sick at all. This was like wasting my money. This year, I am not interested to renew the membership"* (FGD member- Mamuli Village).

## **Low community engagement and high premium rates**

Low community engagement in the CHF implementation process was frequently mentioned in both interviews and focused group discussions. Participants revealed that they were not engaged during the early process of designing and implementing the CHF. Instead, village leaders were simply informed about the implementation of CHF and were asked to attend seminars about the new programme. After the seminar, village leaders in collaboration with stakeholders from Health Promotion and System Strengthening (HPSS) project and district officials organized village meetings and sensitization campaigns about the new system. The HPSS project provided the district with financial and technical support such as training and registration devices that included computers and mobile phones. One health care provider commented thus,

*When they came to introduce CHF in this district, we were not informed in advance. We were called for meetings by partners who collaborated with district officials and given seminars and later we were told to sensitize people in wards and villages about the introduction of the new system* (Interview with a health care provider).

During this period, CHF members paid 10,000/- Tanzanian shillings (equivalent to 5 USD) as premium per year. This amount enabled the members to get health services from dispensaries and other health facilities such as health centre and district hospital through referrals. They also managed to get treatment in other regions such as Dodoma and Shinyanga, which were also part of the pilot study programme. However, the transition period lasted for only two years; when the government assumed full control of the scheme in 2018. Subsequently, the premium rate was raised up to 30,000/- Tanzanian shillings (equivalent to 15 USD per year). The change of the annual premium rates invoked complaints

from the stakeholders, particularly community members. This situation contributed to high drop out after expiry of their membership. The situation also discouraged enrolment of new members as exemplified by some respondents that;

*The system started with 10,000/- as premium rates per year and operated only for two years... until last July 2018. We had active members of 20% of the total households in this district. But now in 2019, when the premium is 30,000/- per household, and active members have dropped to 4.5%. Many have dropped out due to high annual premium rates” (Interview with CHF district official).*

Similar observation was made during FGDs as narrated by some participants:

*The main problem that we are facing here is the high amount of premium rate. When they introduced this CHF, we used to pay only 10,000/- per year but now it is 30,000/-. Do you think we can afford this amount?” (FGD Mamuli Village)*

Moreover, as indicated in Table 3, documentary review confirmed that the overall enrolment trends in Gairo District had declined drastically to almost 4.5% by 2019. The decline is associated with the increase of premium from 10,000/- to 30,000/ in 2018. In addition, review of documents from the CHF office at Gairo District showed that in the year 2017/2018, the enrolment trend was higher. In this particular year, some households received social safety net from the Tanzania Social Action Fund (TASAF). During this period, TASAF was actively involved in providing financial relief to some of the poorest households in Gairo District.

*“TASAF programme has been providing social safety net to the poor households. Some households use the cash received from TASAF to purchase CHF cards. But when TASAF programme ended, households were unable to renew their premium” (District health manager, Gairo).*

Table 3  
Enrolment Trends in Gairo District

S/N	Year	No. of Enrolled Households	%
1	2015/2016	2,391	8.7
2	2016/2017	5,169	13.9
3	2017/2018	7,156	20
4	2018/2019	1,237	4.5
<b>Source:</b> CHF Report 2019 <sup>24</sup>			

## Low incentives for enrolment officers

Each village had one CHF enrolment officer. Most of them were selected based on their experience in working in the community as community health workers. The CHF district management in collaboration with HPSS trained them on how to use electronic devices particularly mobile phones to register members.

The duty of enrolment officers was to enrol new members, sensitize the community about CHF and replace expired membership cards. Registration of members was done in many places including village offices, homes, dispensaries, health centres and any other place provided they had mobile digital registration devices. The officials responsible for enrolment were paid 10% of the annual premium (Tshs. 30, 000) for each registered member, which is about TZS 3,000/ (equivalent to 1.5 USD). This amount had to be used for transport and buying internet bundles to enable the processing of membership information through the Insurance Management Information System (IMIS) during registration. Enrolment officers complained that the amount paid as commission for enrolment was very minimal and could not defray the costs of the whole activity. This situation discouraged them as narrated by one respondent:

*The work is difficult compared to the commission that I get. I do not have means of transport as I visit households which are far from here to encourage them to join CHF...Moreover, our system of registration uses the internet... we don't have money to buy internet bundles (Interview, enrolment officer).*

While enrollment officials felt that the commission was low compared to the nature of the work, CHF district managers had different opinions. They argued that the 10% commission was reasonable as illustrated by one respondent:

*Enrolment officers normally get 10% of the amount CHF members pay. The more members they enroll, the more payment is given. This amount is meant to motivate them to work hard and encourage more members. If they are lazy, they get little and they end up complaining (Interview, CHF district official).*

## **Weak network for registration**

Enrolment officers and heads of health facilities raised concerns about the electronic enrolment systems. The problems were mainly about availability of the internet to enable uploading of the data. The electronic mobile device is supposed to take information and a photo of the CHF member and upload the information into the IMIS. This information is then electronically displayed in the health facilities. Due to network problems, registration took long time and sometimes some members' information got lost. Consequently, some members who had registered could not get health services because their data could not be found in the health facilities, although they had registered and paid annual premium.

*The IMIS system which we are using holds members' information but most of the time the system is slow or not active. This sometimes creates problems in uploading members' information into the system. When members go for treatment, they find that their information is not available. For example, last year (2018), we entered information for almost 600 households but it was all lost. Sometimes, even the health facility fails to retrieve members' information; and even their claims are not sent timely due to poor performance of the system" (Interview with district CHF official).*

This finding was supported by the heads of the health facilities as illustrated by one respondent:

*“The system that we use to retrieve members’ information is slow. It is time consuming and difficult to allow the client to get treatment because we are not sure whether the member is active or not. Sometimes we face internet problems and even when it is not offline, it does not work always”* (Interview with head of health facility).

However, some local government leaders depicted different picture as they praised the system saying it is good and very quick because it enables members to get their CHF identity card instantly and, therefore, they can proceed with health services, if they fall sick.

*...So far the IMIS system is good. Enrolment persons go with their mobile phones, take photos and other information from members and register them instantly. It does not take time at all. They get their CHF identity card on the spot...* (Interview with a village leader)

## **Poor availability of health care services**

Interviews with respondents and FGD participants frequently reported that the quality of health services provided particularly drugs availability was very poor. When CHF members visit health facilities, they do not always find the required drugs. Similarly, in most cases, laboratory services were missing. As a result, some CHF members were told to buy drugs from private vendors; and other members were given referrals to the nearby health facility. This situation discourages members and thus they sometimes decide not to seek health care services. Due to this problem, some members planned not to renew their CHF cards upon expiry. This is attested in an interview with a health official thus;

*Lack of drugs and equipment in the dispensary and health centre is a big problem for now. When CHF members go for health care services and told to buy drugs, they develop a negative attitude about the scheme and some even regret why they joined the scheme. These people also spread this news to their fellows and convince them not to join* (Interview with district health official).

Similar observation was revealed by FGD participants as they frequently confirmed lack of drugs especially in dispensaries.

*We have paid 30,000/- for nothing. We better had not paid the premium and used our cash to get health services. Most of the time, when we go for treatment in the health facility, we don’t get drugs; instead, they tell us to buy from pharmacies* (FGD Rubeho Village).

On the other hand, interviews with heads of health facilities depicted a relatively different view; they argued that some of their facilities are designed to offer certain services only depending on the standard level and capacity of the facility set by the government. For example, dispensaries are different from health centres and hospitals in terms of coverage of health services. They further argued that dispensaries normally offer primary health care services while services and drugs of higher standards are provided by health centres and hospitals. They said that not every drug or service is available at the dispensary level claiming that some drugs and services are supposed to be found in health care centres and hospitals. It was revealed that when CHF members miss the prescribed services, they are given

referral to seek treatment from a nearby health centre or hospital. However, the heads of facilities claimed that they normally have drug stocks for CHF members, and very rarely did CHF members miss prescribed drugs. Thus,

*We don't have any problem with drugs availability. When CHF members come, we make sure that most of the time they get drugs. In case a CHF member misses the prescribed drugs, it might not be our fault because we give drugs and services that are available at the dispensary level and these are set according to the government standards. If there is any problem, we give referral to the nearby health centre... Sometimes we reserve the stock of drugs for CHF members... may be sensitization is more needed to CHF members about the nature and health services found at the dispensary level (Interview with Head of Health facility).*

## Discussion

This study aimed to assess the implementation of the restructured CHF in Gairo District. The findings showed that the restructured CHF has improved risk pooling and provider payment mechanism compared to the old CHF. Providers are paid through their bank accounts based on the services provided compared to the old CHF where funds were deposited into district CHF account. Benefit packages have been expanded to include referral services up to the regional referral hospital without further co-payment. The efforts of the government to centralize funds and management of the new CHF to the regional level are a commendable step. This arrangement has made it possible to increase resource pooling and expand benefit packages to the level of the region. This is a good initiative towards universal health coverage. Evidence elsewhere has indicated that pooling risks across members enrolled in the health insurance lessens the financial burden on the members thereby making them more financially resilient during illness since costs are borne by the entire pool.<sup>25</sup> The provider-purchaser separation means that the local governments now focus their engagement on investment in and supervision of health providers as the owners of public district and primary facilities, population-based and community-oriented public health, supervision and monitoring of health policy implementation, and advocacy on behalf of citizens. On the other hand, the regional level focuses on the management of the funds and reimbursing health care providers. This new arrangements is likely to improve the accountability and performance of the health care providers.

Despite the notable achievements, the previous literature confirms CHF implementation problems that relate to low community engagement and high premium rates that, in turn, lead to low enrolment in the scheme in Tanzania. It has been frequently reported that households are unable to join the scheme due to poor community engagement and high premium rates.<sup>6, 8-11, 13</sup> Engagement of the community through communication and awareness about CHF reforms was not done well at the community level between the community members and CHF implementing partners. Specifically, community engagement assumed a top down approach, whereby community members were mainly involved during the implementation process. In addition, high premium rates discouraged community members from joining the scheme. Earlier studies on CHF implementation in Tanzania frequently reported low community engagement and

high premium rates as key factors contributing to low enrolment and high drop-out from the CHF scheme.<sup>6-8, 13, 22</sup>

While low community engagement, high premium rates and low sensitization were attributed to low enrolment, majority of people in the study area thought that poor health services are the main reasons for low enrolment in and uptakes of the CHF scheme. Many community members do not see the importance of joining CHF due to poor health care services. Most of the time when members visited health care facilities, they could not get the required services, particularly drugs and diagnostic services. In some cases, CHF members had to purchase these services from private vendors. Again, this finding has been frequently reported in previous studies.<sup>8-7, 6</sup> The government should seriously improve health care services in terms of equipment, drug availability and increasing the number of health facilities. For instance, currently the Gairo District has only one health centre that is also used as a referral facility from its 22 dispensaries.

These findings suggest that restructuring of the CHF scheme has not managed to solve the problems which were identified in the previous version of the CHF scheme, including low enrolment in the scheme. As part of the solution, therefore, the government should consider making health insurance compulsory to all Tanzanians, since the current voluntary nature of the CHF scheme does not seem to help the country to achieve universal health coverage. Globally, there is an increasing call to change the voluntary nature of the community-based health insurance schemes in terms of participation of the community in the management of the scheme and payment of premiums.<sup>26-28</sup> In deed, there seems to be no any country which has effectively achieved universal health coverage through voluntary health insurance.<sup>26-27</sup> Tanzania could learn from other African countries such as Rwanda and Ghana, which have effectively implemented community-based health insurance schemes by making the scheme compulsory and centralizing the management of the schemes.<sup>26, 29</sup> The government should also improve the management of the CHF scheme to make it more professional. The National Health Insurance Funds (NHIF), which manages the formal health insurance scheme in Tanzania, should be given the mandate to professionally manage community-based health insurance schemes. The NHIF has one nation-wide pool into which all premium revenue collected together with returns from investments are deposited. The relatively large pool gives it financial viability. There is no doubt that centralizing the management of the CHF funds may improve resource pooling and reimbursement to health service providers. Furthermore, the government should increase the allocation of funds to the health sector in order to improve the quality of health care services.

## Conclusion

The study concludes that the community-based health insurance scheme is still facing structural and implementation problems which have been frequently reported in earlier studies. This implies that the restructuring of the CHF scheme has not managed to solve the problems which were dominant in the previous version of the CHF scheme. In order to achieve universal health coverage, the central

Government needs to invest more in the improvement of the quality of health care services, particularly the availability of drugs and medical supplies. Additionally, the government should make CHF scheme compulsory to all members of the community who do not have alternative health insurances. Furthermore, the government should professionally manage the CHF scheme through fully transferring the management to a professional organization such as the National Health Insurance Fund.

## **Declarations**

### **Ethical consideration**

The study was part of the first author's PhD research at the Institute of Development Studies (IDS), University of Dar es Salaam. The research received permit from the University of Dar es Salaam and subsequently submitted the same to the Morogoro Regional Administrative Secretary (RAS). In turn, the RAS office issued a permit to conduct the study in Gairo District whereby the Gairo District Executive Officer (DED) issued permit to visit the selected wards and villages. Furthermore, before actual data collection, verbal informed consent was obtained from the potential respondents.

### **Consent for publication**

Not applicable

### **Availability of data**

The datasets are not publicly available because respondents did not give consent for the public sharing of their information. However, summaries of the information are available from the corresponding author upon request. Similarly, the data collection tools and meeting reports are also available upon request.

### **Competing interests**

The authors declare that they have no conflict of interest.

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### **Authors' contribution**

RA conceptualised the study, developed data collection tools and collected, coded and analysed data. RA & SM drafted the manuscript. Both authors approved the final manuscript.

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