

**COMMUNITY HEALTH FUND SCHEME IN  
TANZANIA: EXPLORATION OF ITS  
CHALLENGES AND OPPORTUNITIES IN  
CONTRIBUTION TOWARDS UNIVERSAL  
HEALTH COVERAGE**

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TANZANIA**

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OPPORTUNITIES IN CONTRIBUTION TOWARDS  
UNIVERSAL HEALTH COVERAGE**

A thesis submitted in partial fulfilment of the requirement for the degree of Master of Public Health

By

Stephen C. Winani

Declaration:

Where other people's work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.

The thesis Community Health Fund (CHF) scheme in Tanzania: An exploration of its challenges and opportunities in contribution towards universal health coverage is my own work

Signature:  .....

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## ABSTRACT

**Background:** Tanzania's health Tax financing has not been possible due to the low collection of taxes, because a low tax base due to a large proportion of the informal sector in Tanzania economy and a poor tax collection system. The government decided to engage the community in both social and community health insurance.

**Objective:** The general objective is to review relevance and experience of the Community Health Fund within the broader perspective of the Universal Health Coverage.

**Methods:** The methodology of this thesis is literature review on published literatures on CHF in Tanzania, CBHI in other similar countries and policy and guidelines documents from WHO, UNDP or World Bank reports.

**Findings:** There are a lot of challenges in the implementation of CHF in Tanzania, many can't afford premiums, most people live distant from health facilities, there is no a mechanism to collect premiums during harvest, and health care is of low quality. In addition, there is no trust in management and schemes; there is no mix of contributions from other sources including government and even local government. There is no a mechanism to enhance pooling. Services of poor quality are purchased from government facilities. Payment is done regardless of the quality; there is no referral mechanism in place.

**Conclusion:** Generally, in the implementation of the Community Health Fund there are a lot of challenges that hinder the success of the schemes in reaching intended objectives. In addition, the schemes do have a negligible amount of contribution towards health financing and universal health coverage.

**Recommendation:** I recommend that, the government of Tanzania re-design the CHF scheme and learn from Ghana on how to strengthen CHF and merge the schemes; from Rwanda on how members can pay the contribution according to their ability to pay, and also on how to improve the management and quality of care in public facilities. Finally, improve the geographical distribution of the health facility in remote areas.

**Key words:** Community health fund, Health financing, Universal health coverage, Tanzania

**Word count: 14830-1755=13,075**

## **LIST OF ABBREVIATIONS**

CBHF	Community Based Health Financing
CBHI	Community Based Health Insurance
CCHP	Comprehensive Council Health Planning
CHF	Community Health Fund
CHMT	Council Health Management Team
DHMT	District Health Management Team
DMHO	District Mutual Health Organization
FBOs	Faith Based Organizations
GDP	Gross Domestic Product
GGHE	General Government Health Expenditure
GNI	Gross National Income
GOT	Government of Tanzania
GTUC	Ghana Trade Union Congress
GTZ	German Technical Cooperation Agency
HBF	Health Basket Fund
HFC	Health Facility Committee
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
HSSP	Health Sector Support Program
IHI	Ifakara Health Institute
KIT	Royal Tropical Institute- Amsterdam
LGA	Local Government Authority
MDGs	Millennium Development Goals
MHO	Mutual Health Organization

MOHSW	Ministry of Health and social welfare
NGOs	Non Governmental Organizations
NHIS	National Health Insurance Scheme
NSSF	National Social Security Fund
OOP	Out of Pocket Payment
PE	Personal Enrolment
PMO-RALG	Prime Ministers' Office- Regional Administration and Local Government
SHIB	Social Health Insurance Benefit
STD	Sexual Transmitted Diseases
TB	Tuberculosis
THE	Total Health Expenditure
TZS	Tanzania Shilling
UHC	Universal Health Coverage
UNDP	United Nations Development Program
VAT	Value Added Tax
VU	Vrije Universiteit (Free University) - Amsterdam
WEO	Ward Executive Officer
WHC	Ward Health Committee
WHO	World Health Organization

## **INTRODUCTION**

I am an assistant lecturer in population and health planning at the Institute of Rural Development Planning, Dodoma United Republic of Tanzania. I have been working as a District health officer at Ileje District council for more than 16 years before joining the training institution.

During that period of working at the local government authority, I have observed and experienced people suffering, because of the lack of financial resources to access health services. Also there were lack of financial resources from the local government own sources to finance the district health plan.

I was involved in the establishment of the Community health Fund (CHF) in Ileje district, when the scheme was started in many parts of the country. CHF was thought to be one of the potential financial resources that could help the health department at district council to finance health activities/ plans.

In my new job as lecturer in population and health planning I became interested in studying about the contribution of CHF in health care financing and how it protect people against financial catastrophes and see if there is any way to improve and make it useful. We teach students who become District planners that are involved in preparation of Comprehensive Council Health Plan (CCHP) in collaboration with the council health Management teams (CHMT) previously known as District Health Management Team (DHMT).

My wish is to contribute to the improvement of the health system financing in Tanzania to enable the government to meet its stewardship goals in providing health services. I also wish to see people get services according to what they need not according to their ability to pay. Findings from this study will enable me to contribute to the success of the health service delivery in the country. The populations that live in rural areas who are marginalized and disadvantaged will benefit too.

# CHAPTER 1

## 1.0 BACKGROUND INFORMATION OF TANZANIA

### 1.1 Geographical location

The United Republic of Tanzania is located in Eastern Africa along the coast of the Indian Ocean. The United Republic of Tanzania is a union of Tanganyika (Tanzania Mainland) and Zanzibar, which was formed in April 1964. It is the largest country in East Africa, in terms of land it occupies an area of 945,087 sq. km, and it is bordering with eight countries. It borders with Kenya and Uganda to the north; Rwanda, Burundi, and the Democratic Republic of the Congo to the west; Zambia, Malawi, and Mozambique to the south; and the Indian Ocean to the east (National Bureau of Statistics 2014).

**Figure 1: Map of United Republic of Tanzania**



**Source:** (National Bureau of Statistics 2014)

## **1.2 Population and demographic data**

The population of Tanzania is 47.4 million in 2014 (projection). The annual Average Annual Growth Rate 2.7 percent. About 33% of the population lives in urban areas 74 % live in rural areas. The population structure show that 16.2% are children between 0-4 years, 43.9% are below 15 years of age; 36.0% are between 15-64 years old, and 3.9% of the population is aged 65 years and above (National Bureau of Statistics 2014).

## **1.3 Social Cultural & Economics situation**

Tanzania is a low income country as indicated by the United Nations, with a Gross Domestic Product GDP per capita of US\$ 667 in 2013. The average Gross National Income (GNI) per person was US\$1760 PPP dollars in 2013. Tanzania's unemployment rate is approximately 10.30 percent. It is estimated that one third of Tanzanians live below the basic needs poverty line, and well below the international poverty line, even though the proportion of people living below those lines has become less. About 34 % of Tanzanians live in poverty, the incidence of poverty in rural areas was 39 %; in Dar es Salaam it was 18 percent (Ministry of Finance 2015).

Agriculture contributes to 26 percent of GDP and employs 75 % of women contributing to 75 of the labour force (Ministry of Health and Social Welfare 2009). The agricultural sector comprises 75-78% of the total export earnings, it meets only one third of Tanzania's import requirements. Import constraints have an adverse effect on the delivery of health services, since the inputs in health have got a very high import context, in a sense that most of the medical supplies are imported from foreign countries ( United Republic of Tanzania, 2003).

## **1.4 The National Health Policy**

The vision of the Tanzania health policy is to improve the health and well being of all Tanzanians, with a focus on those at risk, and to encourage the health system to be more responsive to the needs of the people. In order to achieve this vision, the health sector is required to facilitate the provision of equitable, quality and affordable basic health services. which are gender sensitive and sustainable, delivered for the achievement of improved health status (United Republic of Tanzania, 2003).

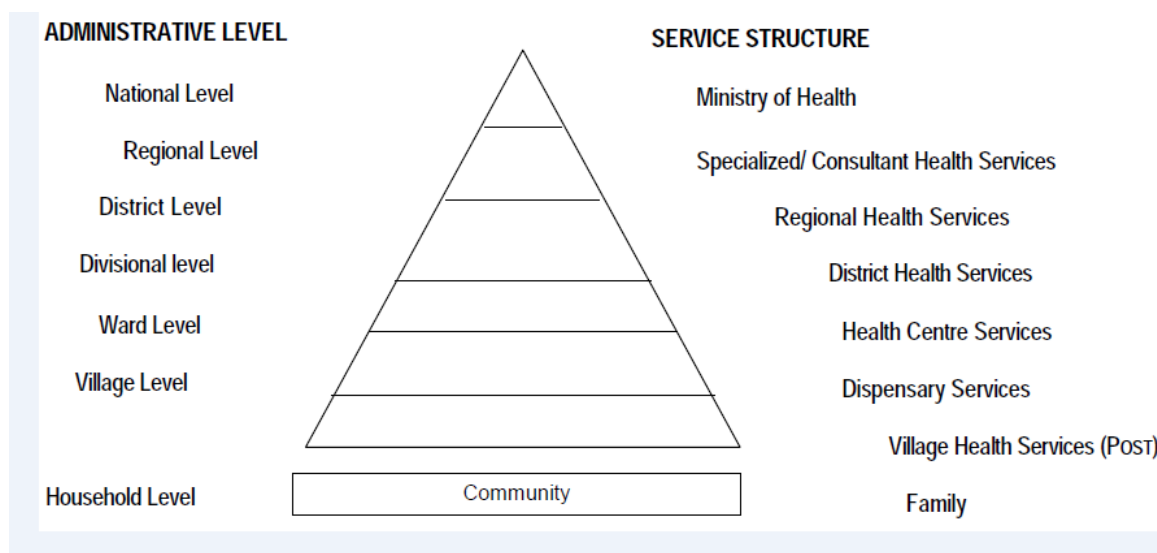
## **1.5 Health care system**

The Tanzania Health System is organized as a referral pyramid, starting from the village level at the base, where there are village health posts; at ward level, there are community dispensaries; at divisional level, there are rural health centres; at district level, there are district or district designated hospitals; at the regional level, there are regional hospitals; at zone level, there are referral/consultant hospitals and at

national level there are national and specialized hospitals (Musau et al, 2011).

At the National level, the hospitals are supervised by the Ministry of Health and Social Welfare. Referral or consultant hospitals at zones are also managed by the ministry of health and social welfare. Hospitals at the regional level are supervised by the Regional Administrative Secretary with technical guidance of a Regional Medical Officer. Local Government Authorities (LGAs) are responsible for health services at District level, management and administration of health services has been devolved into districts through their health management teams.

**Figure 2: Structure of the health system in Tanzania**



**Source:** (Kwesigabo et al. 2012)

## 1.6 Health financing system

### 1.6.1 Sources of funding for Tanzania Health system

WHO stresses that governments are responsible for the largest share in Total health expenditure rather than individual, otherwise the poor will be denied health services and pushed into poverty due to the health expenditure (World Health Organization 2000).

Tanzania's health financing system is dominated by funding through taxes and donor funding with very little proportion from social, community, or private health insurance which includes Community Health Fund (CHF), National Health Insurance Fund (NHIF), Social Health Insurance Benefits (SHIB) under National Social Security Fund (NSSF), and other private insurance, and micro-insurance schemes (West-slevin & Dutta 2015).

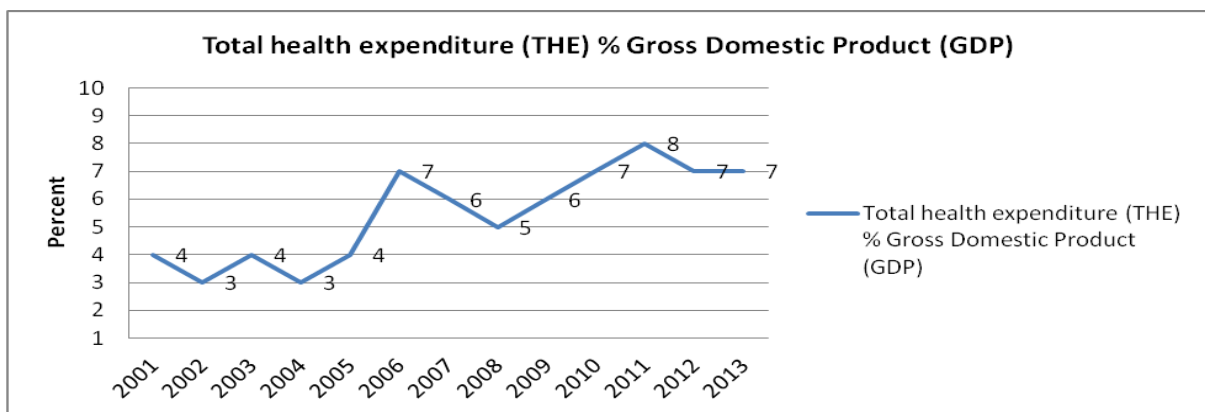
Most of the government spending is on recurrent costs; in the period between 2010 and 2014, 60-68 percent of health spending went to recurrent items. It shows that the government is spending less on capital and development projects (West-slevin & Dutta 2015).

### 1.6.2 Analysis of Tanzania National Health Account (NHA) statistics

#### 1.6.2.1 Total Health Expenditure (THE) as percent of gross domestic product (GDP)

THE as a percent of GDP show the increasing trend (Figure 3)

**Figure 3: Total health expenditure as a % of Gross Domestic Product (GDP)**



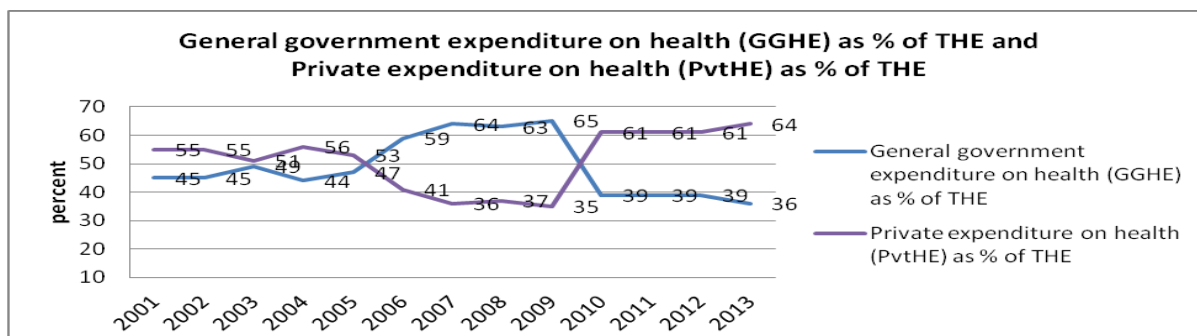
Source: Author, 2015

#### 1.6.2.2 General Government expenditure on health (GGHE) as percentage of THE and Private Expenditure on Health as percent of THE

GGHE as percentage of THE also showed fluctuating trend an average of 46 % ( 2001-2005), 62% (2006-2009), and decreased to 39% (2010-2013) according to WHO the ideal benchmark for GGHE as percentage of (THE) is above 80%. Private expenditure has increased from 55 (2001) to 64% (2013) (see figure 4)



**Figure 4: GGHE as percent of THE compared to Private expenditure on health (PvtHE) as % of THE**

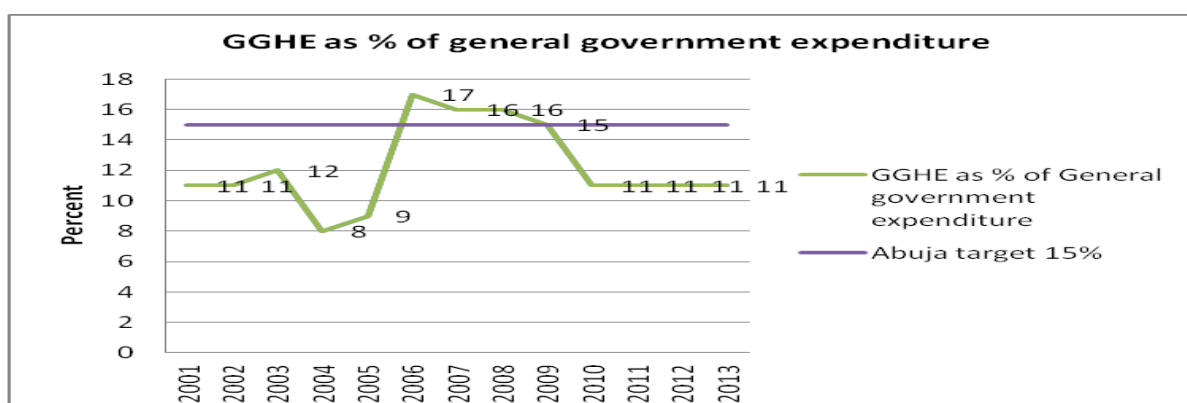


**Source: Author, 2015**

### 1.6.2.3 General Government expenditure on health as % of General government expenditure

The Tanzania government signed the Abuja declaration in 2001 which commits countries to spend at least 15% of their total budget on health. Data from NHA showed a decrease in health spending from 17 % of total budget in 2007 to only 11% in 2013 (see Figure 5).

**Figure 5: GGHE as percent of THE compared to Private expenditure on health (PvtHE) as % of THE**



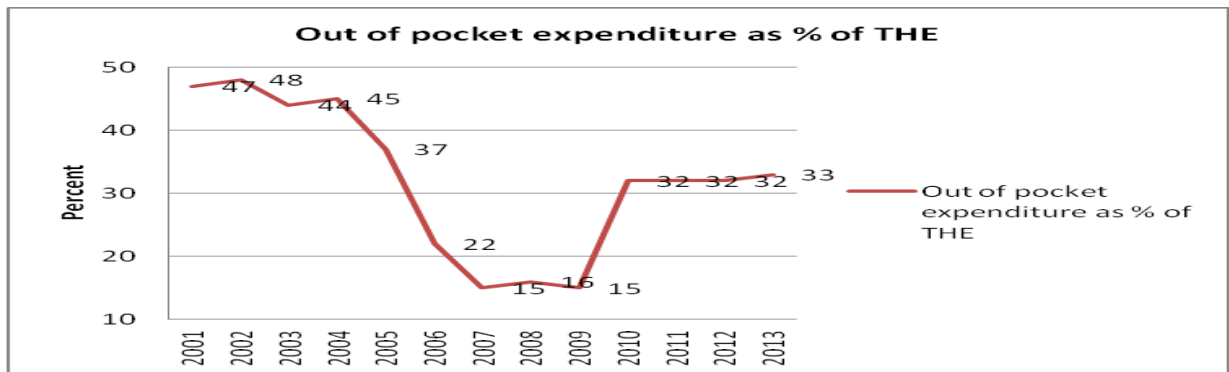
**Source: Author, 2015**

### 1.6.2.5 Out-of- pocket expenditure as a percent of private health expenditure

Out of pocket expenditure as a percent of private health expenditure was 48% it decreased to 15% in 2008 but now it is doubled to 32% (see figure 7). Out of pocket payments are a serious equity issue because

they reduce the utilization of health services and limit access to care for the poorest population sub-groups (Lagarde & Palmer 2008).

**Figure 6: Out-of-pocket expenditure as % of PvhHE**

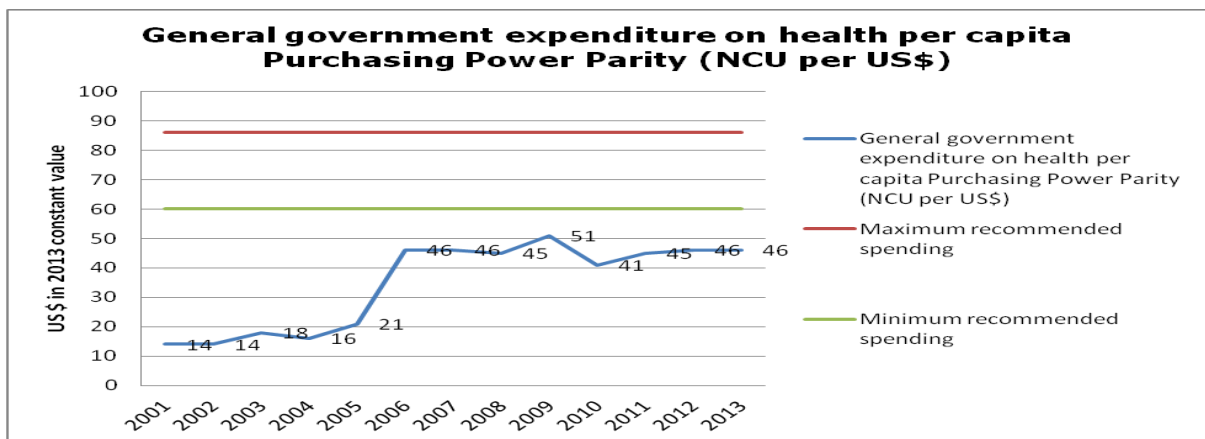


Source: Author, 2015

**1.6.2.6 General government expenditure on health per capita purchasing power parity**

Although the trend in government spending per person is increasing (Figure 8) the government of Tanzania is has spent US \$ 46 per person in 2013 which is far below the WHO recommended minimum amount of US \$ 60 and the maximum of US \$ 86.

**Figure 7: General government expenditure on health per capita purchasing power parity**



Source: Author, 2015

## CHAPTER 2

### 2.0 PROBLEM STATEMENT, JUSTIFICATION AND STUDY OBJECTIVES

#### 2.1 Problem Statement

In order to improve UHC, the WHO (2015) suggests that countries need to prioritize on the poorest, increase reliance on public funding, reduce or if possible eliminate OOP spending and also develop a strong health system. To fulfil this condition the government of Tanzania made a commitment to move towards UHC by improving Community Health Insurance (CHI). In its Health Sector Support Program (HSSP) III the government has set a target of enrolling 45 percent of the population in prepayment schemes by 2015 (World Bank 2011). This is the best option because revenues collected through tax financing and social health Insurance (SHI) schemes are insufficient to finance the health system due to a low tax base. Low tax base is caused by a poor economy and the large proportion of people in rural area who are employed in the informal sector (Ministry of Health and Social Welfare 2009).

The CHF started in 1996 with a pilot project in the Igunga district which was later expanded to other councils with the expectation of covering the whole country. The schemes were established in a response to user fees as an alternative of payments (Mtei & Mulligan 2007). The objectives of the CHF are: (i) to mobilize financial resources from the community for provision of health care services to its members; (ii) to provide quality and affordable health care services through sustainable financial mechanism; and (iii) to improve health care services management in the communities through decentralization by empowering the communities in making decisions and by contributing on matters affecting their health (United Republic of Tanzania 2001). In general, the CHF scheme aims to enable members to have access to reliable and effective health care by creating a sustainable financial mechanism.

CHF is not performing well since its establishment in 1996; the coverage has remained very low over time with enrolment far below the HSSP III target. Studies showed that the enrolment trend is not only declining, but also some members withdrew from the scheme. Some of the reasons for low enrolment include poor quality of care, drugs stock outs in public health facilities, weak design and management of the schemes, poor understanding of the concept of risk pooling and unattractive benefits packages (Msuya, Johannes & Abay 2004; Mtei & Mulligan, 2007; Marwa et al., 2013).

With all other sources of health financing in Tanzania and the weak performance of CHF, should Tanzania continue to put more effort in CHF? Therefore, the purpose of this thesis is to understand the relevance and experience of CHF within the broader perspective of HCF and the UHC in general. The broader perspective is based on the 3 sub-functions that influence health financing: mobilization, pooling and purchasing. These functions will be analysed for the CHF scheme as well as compared with other sources of health care financing. This will allow an assessment of the contribution of CHF to the health care financing system and UHC.

## **2.2 Justification**

This study is important because there are high expectations that if CHF is successful, Tanzania will be able to raise funds from insurance schemes and inject them into health financing systems. The Tanzania health system will deliver health care which is responsive to people's needs. It will enable sustainable health financing structures and to some extent achieve UHC. Achieving UHC is an important element in fulfilling article 25.1 of the Universal Declaration Of Human Rights which states that "everyone has the right to a standard of living adequate for the health and wellbeing for himself and of his family" (World Health Organization 2011)

Globally, there is increasing encouragement for the need to have CBHI and countries consider CBHI as a potential source of sustainable health care financing (Bennett 2004). West-slevin & Dutta (2015) found that, health insurance coverage across all schemes in Tanzania has stagnated at about 5-16 percent for a long time. In addition, the Tanzania health budget depends on donor community by 40 percent which is not recommended by WHO (United States Agency for International Development 2013)

The findings of this thesis will also have policy lessons, practice and research implications for Tanzania and other low income countries. It will bring evidence on how CHF can be improved. Policy makers will be able to come up with appropriate public policies that will guide the strategies to implement the ideal ways to organize the set up and management of CHF for sustainable health care financing.

## **2.3 Study Objectives**

### **2.3.1 General Objective**

To review relevance and experience of Community Health Fund within the broader perspective of the Health Financing and Universal Health Coverage in Tanzania.

### **2.3.2 Study objectives**

Describe the community health fund design, intended objectives, organization, and management, collection of money and use of money

Discuss the success and challenges on the implementation of the community health fund in relation to its intended objectives.

Discuss the contribution and prospect of the community health fund in overall Tanzania health Financing and towards the road to Universal health coverage

Review the experience with the Community Based Health Insurance in similar countries and applicability to Tanzania's context.

To use the findings to make recommendations for improvement of the community health fund scheme in Tanzania.

## **2.4 Methods**

### **2.4.1 Methodology**

The methodology for this thesis was literature review. A review was done on published literatures to describe CHF, its design, success, challenges, and a review of experiences from other countries and examination of the contribution of CHF in health financing and UHC in Tanzania. Type of literatures included; reports, guidelines and policies on CHF/ CBHI from the MOHSW, Ministry of Finance & Economic Planning, Tanzania and other organizations like WHO, UNDP or World Bank reports. International literature will also be used.

### **2.4.2 Search methods**

In order to identify relevant articles to provide required information, search strategy was done in four stages see Table 1. The search involved both libraries and international journals like Pub Med; internet based. Pub med, Google, Science Direct, Cochrane, WHO, library, World Bank, IMF, World Bank reports, KIT & VU libraries were accessed to search for literature. The electronic searches were done between March and July 2015.

**Table 1: Search strategy**

Search	Search Category	Selection criteria		Number of Papers used
		Inclusion	Exclusion	
1	Health financing in Tanzania  Guidelines, policies, Acts, etc from MOHSW, WHO, WB, IMF etc	Subject related to CBHI,CHF,UHC and Health care financing, Tanzania NHA	Subject related to specific country other than Tanzania	21
2	Conceptual framework	Materials related to health financing sub functions (Revenue collection, pooling and purchasing)	Does not show the inter relationship between sub functions (Revenue collection, pooling and purchasing)	5
3	CHF in Tanzania	No time limit  Studies about CHF in Tanzania with clear purpose	If the purpose is not clearly indicated	14
4	CBHI in sub Saharan Africa	Studies about CBHI in any From Sub-Saharan Africa  No time limit  Countries that have successful CHI schemes i.e. Ghana, Rwanda	Reports that do not explain the reasons for failure or success of CBHI	12

**Source: Author, 2015**

### **2.4.2.1 Key Words**

The key terms used to retrieve articles included "Community health Insurance", "Community-based health insurance", "Mutual health insurance", "Mandatory health insurance", "Social health insurance", "National health insurance", "Universal coverage", "Health financing and Innovative health financing".

### **2.4.2.2 Types of literatures**

The following types of literature/ studies were included in the study: peer reviewed journal articles, grey literature from unpublished and published reports, documents of international organizations, and academic institutions.

### **2.4.2.3 Quality assessment, analysis and synthesis**

The literatures were checked if they include relevant information for this study. In order to analyse and synthesize, a thorough reading was done and notes were taken using an excel sheet, and then the synthesis was done by using the concept mapping technique. With this technique the relations between concepts and ideas are illustrated to show connections between ideas. The technique basically allows one to organize and structure thoughts to further understand information and discover new relationships.

## **2.5 Conceptual framework**

In order to analyze factors that influence the performance of three health financing sub-function, the model on factors influencing performance of health financing sub-functions (see Figure 9) developed by WHO in 2003 was adapted. This model is chosen because with this model, I will be able to analyze performance of CHF in terms of 3 sub functions and assess how these functions influence financial protection, equity in utilization of health services, and sustainability of CHF (World Health Organization 2003).

### **2.5.1 Revenue collection**

To better understand factors that influence revenue collection for CHF in Tanzania, the following factors were analyzed; affordability of contributions, unit of membership, Distance from health facility to household, timing of collection, quality of care, trust, and alternative contributions from households, central government, local government and donors.

Affordability of premiums or contributions is a determinant of membership to CHF (Schneider & Diop 2001). The cost of contributions, which exceeds 5-10% of the annual household budget could be an obstacle to membership (Cutler D & Zeckhauser R 2000).

When the unit of enrolment is household membership, the rate will be easy and it is easier to achieve higher enrolment rates (Atim 1998). The distance from the health facility where health services are insured also affects the decision to enroll (Schneider & Diop 2001).

Timing for collection of annual contribution may influence the membership. The best time to collect the premiums is during the harvest seasons in rural areas (Mladovsky & Mossialos 2008).

Quality of care offered by health facilities participating to insurance schemes also influences decisions to enrol to CHF. Community trust towards insurance schemes influences people's participation in CHI. This can be easy when the community already has trust in existing other schemes in place, like micro credit schemes (Mladovsky & Mossialos 2008).

### **2.5.2 Pooling**

Alternative mixes of contributions by households, central, local governments and from donors do enhance revenue collections and strengthen the insurance schemes which attract new participants. To understand factors that influence financial risk pooling, trust mechanisms will be analyzed. In the community where there is a pre-existing saving and credit schemes, women economic groups and other forms of self help groups the idea of community health becomes very easy to introduce (World Health Organization 2003).

### **2.5.3 Purchasing**

In order to understand whether strategic purchasing has any contribution to the performance of CHF, the elements of strategic purchasing will be analyzed. Contracting providers, payment mechanisms, and referrals and waiting time.

### **2.5.4 Impact on health system goals**

The impact of CHF on health system goals will be analysed based on the degree of financial protection, equity in utilization of health services and sustainability.

#### **2.5.4.1 Financial protection**

To assess financial protection, we look the reduction in use of out-of-pocket expenditure by using any form of pre-payment mechanism will be assessed. We look the proportion of population covered by the CHF schemes, waiver and exemption system.

#### **2.5.4.2 Equity in utilization of health services**

It is assumed that equity in utilization of health services will be achieved by either being a member of CHF or if unable to enrol one gets benefit

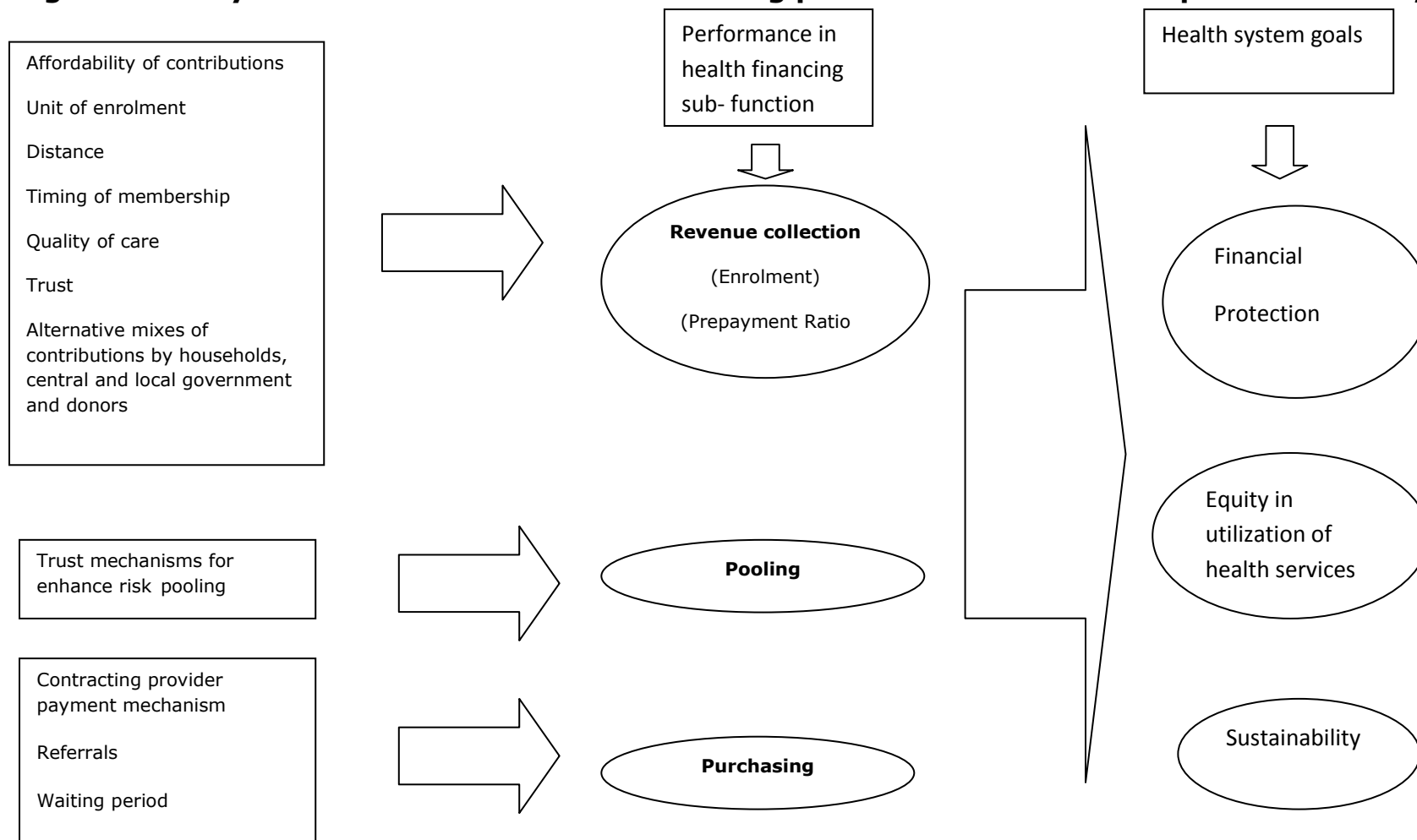


of waiver or exemption (World Health Organization 2003). To assess the equitable utilization of health services as a result of CHF, we look at the extent to which the rich and the poor join the scheme, as well as the sick and the healthier.

#### **2.5.4.3 Sustainability**

Sustainability of the CHF schemes is influenced by good financial and administrative and managerial capacity, financial viability, affordable contribution, determination of the benefit package, marketing and communication, contracting with good providers, use of management information system and accounting (World Health Organization 2003).

**Figure 8: Analytical framework Factors influencing performance of CBHI adapted from WHO, 2003**



## **CHAPTER 3: RESULTS AND FINDINGS**

### **3.0 DESIGN, HISTORY AND CHARACTERISTICS OF COMMUNITY HEALTH FUND IN TANZANIA**

#### **3.1 Meaning of CHF**

According to the CHF Act of 2001, "the Community Health Fund is defined as a Community based health financing scheme whereby households pay contributions to finance part of their basic health services to complement the Government health care financing efforts"(United Republic of Tanzania 2001). On the other hand Jakab & Krishnan (2015) define CHF as the mechanism whereby the community members finance or co-finance costs associated with health services, offering them a greater involvement in the management of the community financing scheme and organization of health service. Munishi (2001) defines CHF as the form of prepayment scheme designed specifically for people in rural areas from the informal sector.

#### **3.2 Goals for CHF**

CHF was started following health sector reforms that took place between 1994 and 1996; the scheme was a part of the programs in health reforms that target the involvement of the community in health financing. The challenge was how to engage the informal sector which form a large population in rural areas, and engage them in financing health care that was faced by lack of tax financing (Macha et al. 2014). According Mtei & Mulligan (2007) Community Based Health Financing (CBHF) can be used to achieve UHC. CHF is seen as an option to achieve or increase UHC.

#### **3.3 Objective of CHF**

The objectives of the CHF are: (i) to mobilize financial resources from the community for provision of health care services to its members; (ii) to provide quality and affordable health care services through sustainable financial mechanisms; and (iii) to improve health care services management in the communities through decentralization by empowering the communities in making decisions and by contributing to matters affecting their health (United Republic of Tanzania 2001)

#### **3.4 Operation of the CHF**

##### **3.4.1 Membership**

Membership to the CHF is voluntary each household is required to contribute the same amount of premium as membership fee. The membership entitles the household to a basic package of primary

level curative health services throughout the year. The CHF act of 2001 provides for member registration whereby “all contributing members shall be registered with the fund and shall be issued with a membership card” (United Republic of Tanzania 2001). Membership benefit covers husband and wife together with children and dependants aged below eighteen years. Households that do not participate in CHF have to pay user fees on an individual basis at health facilities during the use of the service. The unit of enrolment in CHF is household (Msuya, Johannes & Abay 2004).

### **3.4.2 Management and Administration of CHF**

The management and administration of the CHF is vested at district level. At the district, to the council, through a Council Health Service Board, at the ward level, to the ward development committee, through the Ward Health Committee at village level, village council, through the village service committee. District authorities have to pass CHF by-law by provision of the CHF act prior to establishment of CHF, sensitization and orientation should be done (Mtei & Mulligan 2007). Before initiation of CHF, district council has to have in place a Council Health Service Board (CHSB), Health Facility Committees (HFC), and Ward Health Committee (WHC) (Mtei & Mulligan 2007). The District health management Team (DHMT), nowadays known as Council Health Management Team (CHMT) is required to supervise the operations of CHF at the District level. At the ward level, clinical officer who is the in charge of health facility is responsible for management of the CHF program.

### **3.4.3 Collection of CHF revenue**

Every local government is given mandate under the CHF act to determine the amount of contribution to be paid by each household at that district; this is done after consultation with the members of the community(United Republic of Tanzania 2001)

#### **3.4.3.1 Exemptions**

In order to ensure equity, the CHF act 2001 provides for the powers to issue exemptions to pay Community health fund annual contribution to any person who is vested to Ward Health Committee after receiving recommendations from the village Council and the council shall authorize that person to obtain a community health fund card. The exempting authority is required to look for an alternative compensating fund (United Republic of Tanzania 2001).

### **3.5 Pooling of CHF fund**

Financial pooling is meant to ensure money is accumulated and managed to guarantee risk of having to pay for health care is taken care by all members and not by the individual contributor (Carrin et

al. 2001). To fulfil this, the CHF Act ( 2001) provides that “with CHF fund all money received in respect of contributions paid by members; user fees payable for using a government health centre or dispensary; government contributions; grants from councils; organizations or any other donor or any other money lawfully acquired from any other sources shall be pooled together” (United Republic of Tanzania 2001)

### 3.6 Purchasing (The use of fund)

The CHF fund act 2001 provides that the councils are required to spend the money in accordance with their own plans and budget, maintain a careful procure in transparent and open manner and according to government standard operating procedures; keep accurate records of the expenditure of the resources of the fund and hold regular meetings of the established committees. In addition, all expenses must be approved by the Board.

CHF membership provides members with access to outpatient services in respective districts at all participating health facilities, government facilities are included automatically (see Table 3).

**Table 2: CHF Benefit Package (Health services to members)**

Health Package	Dispensary level	First referral (Hospital level)
Reproductive health and Child Care	Ante-natal care, delivery care, post-natal care, immunization and family planning services, micronutrient supplements	Obstetrics and Gynaecological care including caesarean section Paediatric care
Control of communicable diseases	Diagnosis and treatment of common illnesses including malaria, STD, diarrhoea, TB and referral of severe conditions	Outpatient and Inpatient care for severe disease conditions
Non-communicable diseases and Trauma	Diagnosis, treatment and/or referral of non-communicable diseases including Diabetes, anaemia, mental disorder trauma	Outpatient and Inpatient care for severe conditions General Surgery
Clinical Support Services	Essential drug supply Basic laboratory services	Drug supply laboratory services, X-ray services, Quality services

**Source:** (Msuya, Johannes & Abay 2004)

## CHAPTER 4

### 4.0 FACTORS INFLUENCING PERFORMANCE OF HEALTH FINANCING SUB-FUNCTIONS IN COMMUNITY BASED HEALTH INSURANCE

#### 4.1 Factors Influencing Revenue Collection (Enrolment)

##### 4.1.1 Affordability of contribution

Affordability of contributions is a main determinant of membership to CHF. Cost of contributions above the range 5-10% of the annual household budget could be an obstacle to membership (World Health Organization 2003).

The government of Tanzania emphasises that membership fee should be determined by the council after consultation with the community so that people will be able to join CHF scheme (Chee & Smith 2002). Most of the CHF schemes contribution rates ranges between TZS 5,000 to 20,000 an equivalent to USD 5-10 per year per household, other studies (Haazen 2012) show the range to be between TZS 5,000 to 15,000 and the membership is valid only for one year.

Although the premiums are determined by people themselves, the premium seems to be unaffordable to some people. Mushi (2007) found that many people consider the premiums to be too high for them, 61.8 percent said that lack of money and the premium being too expensive was their first reason for not to joining the CHF. This findings is similar to the findings of the study done by Kamuzora & Gilson (2007) on factors influencing the implementation of CHF in Tanzania. One of the key informants said that "*When it comes to health care, the majority of household members declared that they were unable to cope with costs*" However, study in Liwale district showed that people found that premiums are affordable (Marwa et al. 2013)

Households that depend on small scale farming, also known as subsistence agriculture, are disadvantaged; they also find it difficult to pay CHF premiums. Kamuzora & Gilson (2007) revealed that 38.7% of rural households and 27% of urban households declared that they were not able to pay CHF premiums because of an unstable income. However, some schemes provides opportunity for the farmers to pay on instalments taking into account reasonability of their income, but the findings show that the majority of the current members 97% did pay in full (Msuya, Johannes & Abay 2004). A study by Macha et al. (2014) found that a middle income quintile is more likely to join the

CHF scheme. Similarly, a study done in Igunga district found that of those who join CHF 60% were of richer households compared to 33% of the poorest households (Mtei & Mulligan 2007)

Households that are too poor to afford the premiums are granted exemption. The exemption is granted by the village council and approved by the district council; this is done very careful to avoid cheating. However, there is a weakness in the implementation of the waiver system in identifying the real poor in need (Mtei et al. 2012). The District council is supposed to fully subsidize the amount of CHF fees exempted, but in reality this is not done (Msuya, Johannes & Abay 2004).

#### **4.1.2 Unit of membership**

The unit of Membership in CHF is a household (United Republic of Tanzania 2001). WHO suggests that membership rates are likely to be easier if the unit of membership is a household rather than an individual person. When the household is used as a basis for membership it helps to achieve higher rates of enrolment (World Health Organization 2003).

Msuya, Johannes & Abay (2004) found that a household with many family members were more likely to join the scheme than the small family size. Similarly, Macha et al. (2014) disclose that a large family size of more than 7 people was the reason for enrolment, other reasons included a male headed household, having completed secondary education and being married. Another study by Msuya, Johannes & Abay (2004) suggests that households with more than 5 family members have a great chance to enrol in CHF schemes compared to small size considering that premiums are flat rate, and average contribution becomes less in large families.

CHF accept membership of only one wife, the second wife will be considered another household and they have to pay membership premium. This is becoming a big burden to poor families (Macha et al. 2014).

#### **4.1.3 Distance**

The distance of the household's home to the health facility where insured health services are offered, affects the decision to enrol in insurance schemes due to the cost of travelling to the health facility at a distant place (Mtei et al. 2012).

One respondent in a study done by Macha et al. (2014) said that..

*"Yes we have been told, we can go to the district hospital but the transport cost discourages members to go there" (FGD, Mbulu DC, CHF members)*

#### **4.1.4 Timing of membership**

A study done in Hanang district found that membership fees were collected throughout the year by a person who is based at the health facility collecting CHF funds, also collecting user fees for the health facility each (Chee & Smith 2002). People in Liwale District suggested that fee should be collected after the harvest because most of them are subsistence farmers (Marwa et al. 2013).

#### **4.1.5 Quality of care**

Quality of care influences enrolment to any Community Health insurance scheme (Mushi 2007). Macha et al. (2014) studied determinants of CHF membership in Tanzania's two districts Mbulu and Kigoma and found that the supply side factors affect CHF enrolment. The aspects of quality reported by respondents were, shortage of staff, shortage of drugs, lack of diagnostic equipment, long waiting time, when drugs are out of stock CHF members have to buy at private pharmacies using their out of pocket money, unavailability of medical supplies, limited working hours at the dispensary, they only benefit from services offered by health facility in their locality, they are restricted to HF where they sign up for the CHF membership. The following are the responses from the Focus Group Discussion (FDG):

*"Now, what made me drop out of this scheme it's the shortage of drugs at the health facility. And at the drug shop you can pay more than half of the fees that you paid to become a member of the scheme. This is double payment, it is better that I don't join anymore" (FGD, Mbulu District Council, uninsured).*

*"When you go to the facility to be told to go and buy drugs at the private pharmacy, there is no difference between those who are insured and those un-insured" (FGD, Kigoma DC, CHF members)*

*"...there is no guarantee of the service provided. Today you get a complete service tomorrow half of the service, this is what discourages us" (FGD, Mbulu DC, CHF members)*

*"Often one can spend almost the whole day waiting at the facility, with only two staff to take care of everyone, it is not easy. CHF member can't opt to go elsewhere as they restricted to one facility [where they first sign up to the scheme]" (FGD, Kigoma DC, Uninsured)*



Factors for poor quality includes are fuelled by inefficiencies and poor management (Marwa et al. 2013). However, some studies show improvement in quality of care CHF money used to purchase microscope, drugs and other equipment and supplies (Mtei & Mulligan 2007).

#### **4.1.6 Trust**

People may have a sense of trust when their community already have trust in existing schemes like micro savings, social organizations and credit schemes. Communities with higher levels of trust are more open to and ready to accept changes and something new like CBHI and its management team (Chen et al. 2012; Tundui & Macha 2014).

Kamuzora & Gilson (2007) found in a study about factors influencing the CHF in Tanzania that the degree of trust among community members varied, the poor households perceived CHF officials as trustworthy contrary to the wealthy groups that did not trust the officials at all. In another district studied by the same author, lack of trust was towards ward leaders accused for corruption and lack of transparency. This was due to lack of supervision from a higher level, lack of information, transparency and failure of the district managers to respond to requests from communities and committees.

#### **4.1.7 Alternative mixes of contributions**

Macha et al. (2014) found that CHF the scheme didn't receive a matching grant from the central government, and when received the money, it was not used to improve the health care in respective health facilities. The following are the responses from FGD:

*"There is no improvement in the service, even if the government also contributes to the fund" (FGD, Kigoma DC, HFGC members). (Macha et al. 2014)*

*"We were told if we contribute, the government would match our contribution by the same amount" (FGD, Mbulu DC, HFGC members)*

### **4.2. Factors Influencing Pooling**

#### **4.2.1 Trust mechanisms for enhance risk pooling**

The degree of risk sharing in health financing organizations matters a lot in both organization goals and health system attainment (Carrin et al. 2001). Theory of moral hazards suggests that individuals may have exceeded the demand for health care and want it from more specialized hospitals (Carrin & James 2004)

In some districts each health, facility participating in CHF, opened a bank account which risks further fragmentation of the CHF (Borghetti et

al. 2013). The concept of insurance is poorly understood by both the management and potential members (Mtei & Mulligan 2007)

### **4.3 Factors Influencing Purchasing**

The CHI may also receive a mandate to determine the list of health care providers, from which CHF members can feel free to choose from, to establish a list of insured health service package; to set quality standards of care, to propose the provider payment mechanisms (Carrin, Waelkens & Criel 2005).

#### **4.3.1 Contracting provider**

All government health facilities are automatically contracted. The money is collected at the Government facilities and money is pooled at the district (Carrin & James 2004). In some districts money is not pooled in the district account (Borghi et al. 2013).

Some CHF schemes provide referral in a list of benefits including fare. For example CHF in Hanang district in Manyara region (Mtei & Mulligan 2007). Most of the CHF schemes do not provide referral benefits and benefit package covers only services that are offered at single health facility (Carrin & James 2004).

Findings from a FGD by Macha et al. (2014) respondents said that:

*"The scheme only covers services at one facility, when you travel to other villages you will have to pay, and wait a long time to get attended to and that is discouraging" (FGD, Kigoma DC, uninsured)*

*"Hospital care is included in the CHF and the CHMT is working hard to ensure there are enough drugs for members, however you won't always get the drugs, to be honest there are still some challenges" (FGD, Mbulu DC, HFGC members)*

#### **4.3.2 Provider payment mechanism**

Most of the CHF schemes are not reimbursed by CHF based on the number of CHF members they served but they can use the CHF revenues to purchase drugs, equipment, and furniture, renovate the buildings and pay allowances. In some district there is a central CHF account where the fund from all health facilities are deposited, in others facilities have their own bank accounts and deposit money directly (Borghi, Makawia & Kuwawenaruwa 2014)

#### **4.3.3 Referrals**

In a study done by (Macha et al. 2014) in Kigoma district it was found that, referral services are not covered by the CHF and thus are more expensive than primary care services covered by the scheme. In

contrast to that, referral services are included in benefit package in Mbulu district that motivates people to join the scheme.

#### **4.3.4 Waiting period**

The WHO suggests that, in order to avoid the effects of adverse selection to any CHI schemes, waiting or qualifying period must be established (World Health Organization 2003). There is no any evidence in the literature found that show that waiting period is insisted in the CHF in Tanzania.

## CHAPTER 5

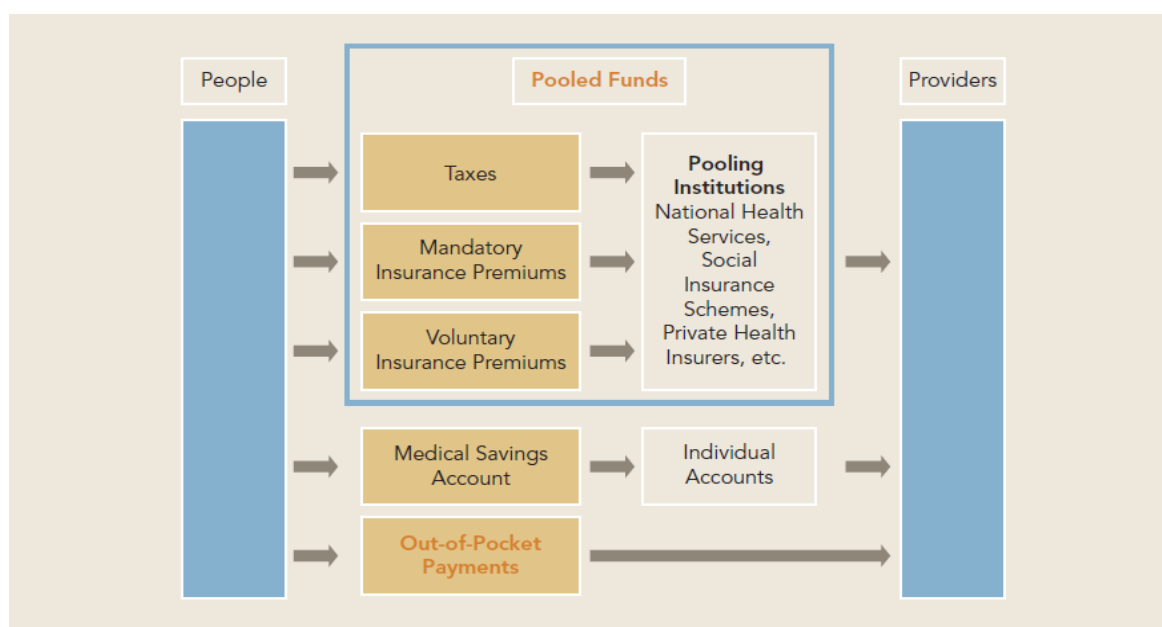
### 5.0 IMPACT OF CHF ON HEALTH SYSTEM GOALS IN RELATION TO HEALTH FINANCING AND UNIVERSAL HEALTH COVERAGE

This section provides an assessment of the Tanzania health system financing and movement towards the goal of Universal Health Coverage (UHC), with a particular focus on highlighting the position of the CHF towards contribution to achieve UHC.

In order to assess the impact of the CHF on health system goals and contribution towards health system financing and the UHC, the three health system goals were analysed. These goals include financial protection, equity in utilization of health services and sustainability. These were analysed in relation to the three elements of CBHI health care financing functions; revenue collection, pooling and purchasing (see Figure 9)

To look at it the whole picture of health financing in Tanzania, the sources of health care financing as shown in Figure10 were briefly assessed.

**Figure 9: Sources of health care financing**



**Source:** (Savedoff et al. 2012)

#### 5.1 Degree of financial protection

Financial protection is very important in achieving health system goals; it depends directly on equity in health care financing (Carrin & James 2004). The WHO emphasises that health care financing should

be according to the ability to pay, shared equitably across different socio-economic groups(World Health organization 2015). In addition, to move towards UHC, it requires systems to raise bulk of fund through forms of prepayment ( Taxes and/or insurances) then pool the fund to spread to financial risk of illness across the population (Carrin et al. 2008)

Health care financing in Tanzania is characterized by both progressive (All pay equal amount) and regressive (The rich pay more) financing mechanisms, but it is marginally progressive (Mtei et al. 2012).

**Table 3: The nature of sources of health care financing in Tanzania (progressive or regressive)**

<b>Progressive</b>	<b>Regressive</b>	<b>Remarks</b>
Tax (Indirect Tax)		Indirect Tax covers on 40% of Public expenditure on health  Some Taxes are regressive (on Cigarettes and kerosene)
NHIF		The problem is low share of THE
	CHF	It covers informal sector in rural area  Very low population coverage  Benefit packages covers only primary level care, and hospital but not referral
	OOP	High burden to the poor May lead to catastrophic expenditure

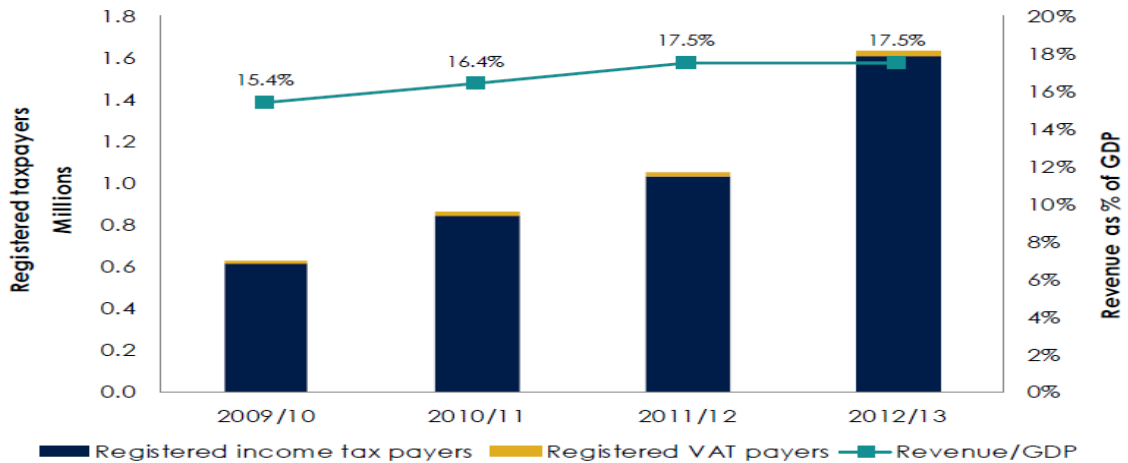
**Source: (Mtei et al. 2012)**

### 5.1.3 Trends in Sources of revenues in Tanzania

#### 5.1.3.1 General tax revenue

In Tanzania the general tax revenue is growing (see Figure 4) (Dutta 2015).

**Figure 10: Government tax revenues growth 2009-2013**

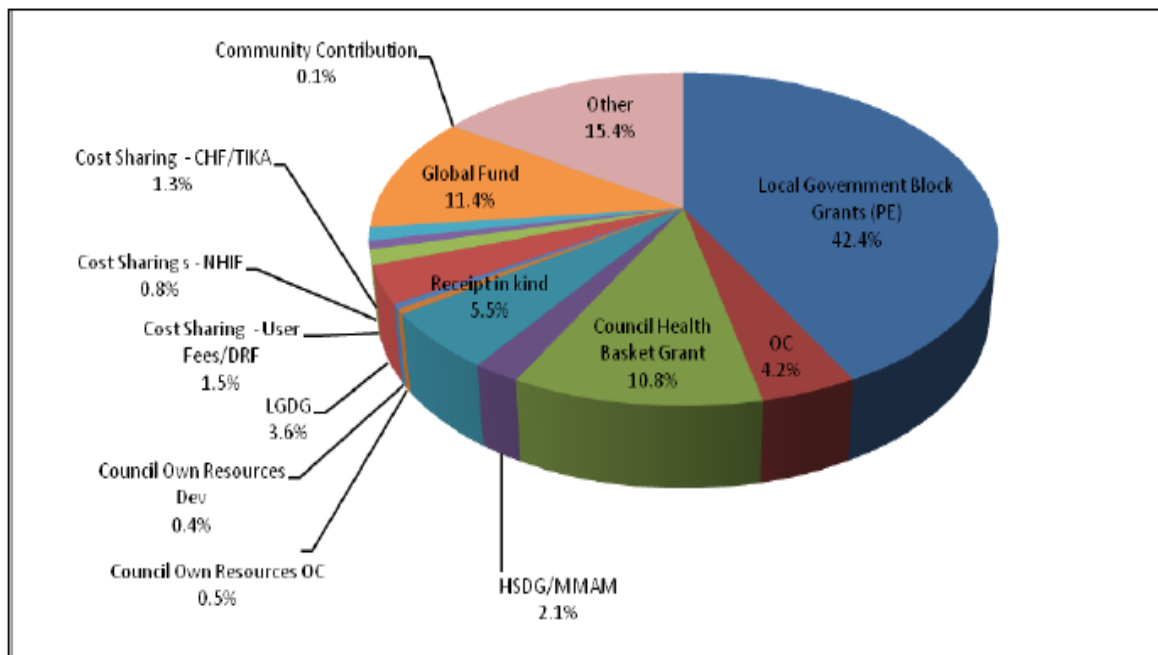


**Source: (Dutta 2015)**

#### 5.1.3.2 Health Insurance Schemes

In Tanzania apart from NHIF and CHF there are also a number of small scale CBHI schemes and private insurance schemes (Mtei et al. 2012) Most of the CHF schemes in Tanzania have a very low coverage of the target population. On average the coverage of CHF ranges from 7-10 percent. Figure 13 shows that contribution of CHF to LGAs health funding was only 1.3% combined with cost sharing (Ministry of Health and Social Welfare 2013).

**Figure 11: Sources of health funding council level for 2013**



**Source: (Ministry of Health and Social Welfare 2013)**

## 5.2 Equity in utilization of health services

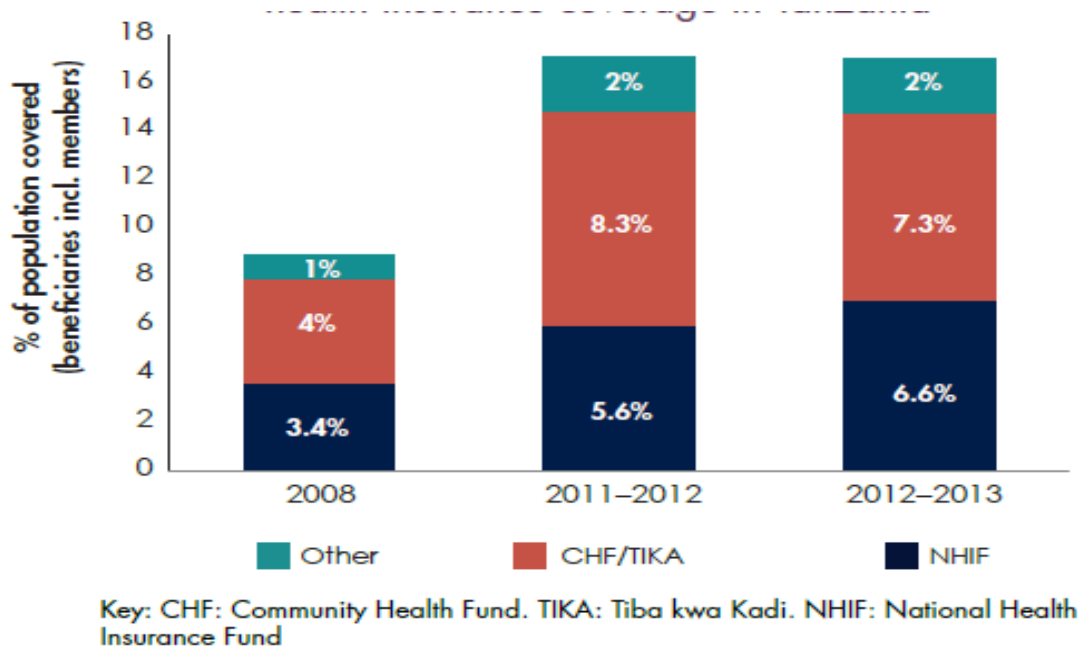
According to (Frenz & Vega 2010) equity is an ethical issue which is value-based concept which is about when people are denied health care unfairly.

### 5.1.1 Population coverage by health insurance schemes

CHF schemes cover only 3.9% of the total population, the target is to cover 85% of employees of the uninformal sector in rural areas (Kamuzora & Gilson 2007). Enrolment varied from 4 to 20% of the various CHF schemes. However this does not reflect the effective coverage of the Health services (Atim & Hong 2012). CHF covers only marginal proportion of the population (Msuya, Johannes & Abay 2004).

A literature review of CHF in Tanzania by (Mtei & Mulligan 2007) provides evidence that CHF can provide protection to their members by reducing the level of out of pocket payment, however the issue of low enrolment rates still persist. According to Dutta (2015) In the year 2012/2013 CHF covered only 7.3% (see Figure 3).

**Figure 12: Recent trend in population level health insurance coverage**



**Source: (Dutta 2015)**

### **5.1.2 Level of fragmentation of health insurance schemes in Tanzania**

The health insurance system in Tanzania is highly fragmented with a number of small pools that target small segments of the population (Dutta 2015). According to the World Health Organization (2010) equity is affected by small insurance schemes. Table 4 provides a summary of all insurance schemes in Tanzania. High fragmentation of insurance schemes results in that the poor segment of population having less financial protection against health expenditures than others (Haazen 2012). Despite of this number, less than 5% of pooled finance was through health insurance of Tanzania Network of Community Health Funds in 2010 (Musau et al. 2011). However, some studies showed improvement of health care and increased utilization of health care (Mtei & Mulligan 2007) the members use health care more than non-members (Musau 2004)



**Figure 13: Health Insurance schemes in operation in Tanzania 2014**

Topic	National Health Insurance Fund (NHIF)	Community Health Fund (CHF)/ Tiba Kwa Kadi (TIKA)	National Social Security Fund—Social Health Insurance Benefit (NSSF-SHIB)	Private Health Insurance (PHI)	Community-Based Health Insurance (CBHI)
Coverage*	6.6%	7.3%	0.12%*	1.02%*	1%*
Beneficiaries	Civil servants (+ private)	Informal sector, low-income	Formal sector, semi-formal sector	Private market	Informal sector, low-income
Enrolment	Mandatory	Voluntary	Voluntary	Voluntary	Voluntary
Collection	Payroll	Remit at facility	Payroll	Remit to PHI	Remit to CBHI
Premium	6% of salary, shared equally by employer and employee	TZS 5,000—20,000 per year, matched by GOT	Part of 20% of salary contributed per month	TZS 300,000 to 950,000 per year	TZS 30,000 to 40,000 per year
Benefits	Inpatient + outpatient at accredited health facility	Primary health and limited hospital care	Similar to NHIF	Full range	Primary health and limited hospital care
Provider payment	Fee for service	Capitation	Capitation	Fee for service	Capitation
Regulator	Social Security Regulatory Authority (SSRA)	SSRA	SSRA	Tanzania Insurance Regulatory Authority (TIRA)	Unregulated

**Source: (Dutta 2015)**

### 5.1.3 Exemption and waiver system

Mtei & Mulligan (2007) found that the poorest often do not access the exemption or waiver because there are a lot of challenges in the process of identifying the needy, which include each district having own criteria and lack information of the poor, the length of the process, misuse and abuse of the process. In addition the process is left to the community which is not knowledgeable about the process. Similarly, a study by (Macha et al. 2014) in a FGD revealed that there are some problems in the exemption and waiver system.

*"Sometimes it is better to join, as for instance old people are supposed to get free services, but when they visit the facility they often pay, they provide only free childhood vaccinations and clinic services" (FGD, Mbulu DC, Uninsured).*

However, Muheza and Mwanga districts, have strong exemption and waiver systems, they have identified the poor and maintain a list of poor in all the health facilities has released funds to subsidize the poor (Mtei & Mulligan 2007).

## **5.3 Sustainability of the insurance schemes**

### **5.3.1 Management of the schemes**

Most of the management duties are performed by medical staff who lack financial management skills and are also overworked with multiple tasks, (Borghi et al. 2013). They also lack financial and management skills as well as social mobilization skills (Mtei & Mulligan 2007)

Running the CHF is more expensive than user fees in Iringa and Kilosa districts (Mushi 2007). Findings from the study done by (Borghi, Makawia & Kuwawenaruwa 2014) shows that the cost was very high at district and facility level, the cost were in advertising , revenue collection and stewardship despite the fact that the schemes are build in existing government structures.

Management operations have been harmonized since 2009 between NHIF and CHF, by incorporating CHF management in the NHIF structure to improve efficiency and supervision, increase awareness, and increase coverage in line with universal coverage. However, the management duties are in the hands of district officials who have other full time duties (Ifakara Health Institute 2012).

### **5.3.2 Providers Payment mechanism and use of funds**

In CHF providers payment mechanism is capitation, providers of health providers services under the scheme receive an advance grant to allow for sufficient equipment of the facility and pre stock drugs, the advance is according to the number of CHF member pre-selected the facility (Msuya, Johannes & Abay 2004).

Purchasing is from public health facilities located in own districts regardless of the quality of service provided. A contract requires providers to agree and accept prescribed reimbursement rates for different services. However, some districts have never used the money as indicated in the CHF act, money is used for other activities outlined in CCHP (Mtei & Mulligan 2007)

### **5.3.3 Benefit package**

A limited benefit package that covers primary care and hospital in the district and no referral to specialized care and transportation cost (Borghi et al. 2013) CHF is designed to cover only a basic package of curative and preventive services at dispensary and health centre level, which means that whenever a CHF member needs a referral service the option is an Out-of- pocket payment (Mtei & Mulligan 2007).

CHF members are allowed to choose the service provider at the beginning of the year, they need, but are not allowed to change /switch, in most of the rural area there is no option only government facilities are available (Mtei & Mulligan 2007)

In most districts accessing private for profit and faith based facilities is not possible with the CHF cards because of the scheme providers payment mechanism is not clear (Mtei & Mulligan 2007)

#### **5.3.4 Enrolment/dropouts/members contribution**

Enrolment has remained low, due to weak management and poor understanding of the concept of risk pooling (Mtei & Mulligan 2007). In another study findings show that enrolment decreases and dropout rates increases even in CHF schemes, which started earlier like Igunga and Singida. The downward trend in enrolment affects the revenue contribution (Mtei & Mulligan 2007)

## CHAPTER 6

### 6.0 EXPERIENCE OF SUCCESSFUL COMMUNITY BASED HEALTH INSURANCE SCHEMES IN OTHER SIMILAR COUNTRIES

#### 6.1 Revenue collection

Rwanda has managed to raise the enrolment to CBHI schemes to 90-95%. The success was due to political will and the decision to make community health insurance compulsory for the informal sector, the system was built in just 10 years. To improve quality of care so as to attract enrolment in CBHI schemes in Rwanda, the government decided to add-on the CBHI plan Performance based Financing programme (Schneider & Diop 2001)

Rwanda has an innovative approach to collect premiums; the population is stratified and organized in social economic categories in order to allow different premiums according to the ability to pay. This was also facilitated by the introduction of weekly reporting in order to monitor income and expenses by using the CBHI financial modelling tool (Government of Rwanda 2012). Similarly with Ghana members pay different premiums depending on social economic status (Durairaj, Almeida & Kirigia 2010).

On the other hand Ghana has a very different approach in revenue collection; National Health Insurance Scheme (NHIS) was formed by the National Health Insurance Act which provides for the merging of district mutual health organizations (DMHOs) with NHIS. The DMHOs are being subsidized by the National government through 2.5 percent of social security contributions from employees and employers. The premium for the DMHOs membership is between US\$ 5 and US\$ 33 per person in the informal sector per year, In 2008 95 percent came from tax related income (Alfers 2012). The enrolment to the scheme is maintained because of the perceived good quality of the health care (Jehu-Appiah et al. 2012).

#### 6.2 Pooling

Trust is a very necessary condition for success of pooling of community health funds. Studies show that in communities, where there is a pre-exist community based association, like self help groups or women groups it becomes easy for them to trust CHF. In Cameroon they used the pre-existing solidarity association for sensitization of CHF schemes (Noubiap et al. 2013)

Ghanaian government introduced the National Health Insurance Scheme (NHIS) in 2003 in collaboration with the Ghana Trade Union Congress (GTUC) that represents both formal and informal workers.

Together they formed a very unique fusion of Social Health Insurance and Community Based Health Insurance. The structure of the unification is a "hub-spokes system". The National Health Insurance Fund (NHIF) is mandated to administer the fusion, the hub is based on what is called the SHI model of pooled public tax resources (Alfers 2012). Hubs are funded from many sources but mainly from extra 2.5 VAT levy 2.5 percent from purchases of all goods sold in Ghana. The spokes are made of Mutual Health insurances from all over the country which are ministered, subsidized and re-insured by the hub (Alfers 2012). Although Ghanaians contributes to the National Health Insurance through VAT, they can only access health services once they have paid registration fees and an annual premium. Durairaj, Almeida & Kirigia (2010) consider Ghana's system as a three tier health insurance system where the District Mutual Health Insurance (DMHI) is subsidized by the government from tax and NHIF, membership in DMHI provides beneficiaries with access to health services in different districts.

### **6.3 Purchasing**

We could not find information on purchasing from the literature used in my study. This may be a result of the search terms used.

## **CHAPTER 7**

### **DISCUSSION, CONCLUSION AND RECOMMENDATION**

#### **7.1 Discussion**

##### **Factors influencing revenue collection/enrolment**

It is assumed that affordability of premiums or contributions is a main determinant of membership to any CBHI. The results indicate that people who are richer are more likely to join CHF schemes because they can afford pre-determined premiums. These people who are richer in rural areas are those who engage in multiple occupations like small business/trade owners of small shops, keeping animals as well as farming. Findings from a study by Mushi, (2007), Kamuzora and Gibson (2007) show that people who consider premiums unaffordable are those who do not have a stable income and depend on the seasonal harvests. In contrary, findings from a study done by Marwa et al. (2013) in Liwale district show that most of the respondents said that premiums are affordable. Probably those who said the premiums are affordable are of higher economic class.

The WHO suggests that if the unit of membership in CBHI is a household the membership rate is likely to be easy. Findings show that unit of membership in Tanzania's CHF is a household. A study by Msuya, Johannes & Abay (2004), Macha et al. (2014) showed that membership is not only influenced by the household as a unit of membership but also the size of the household size matters. Households with a family size of above 7 people were the reason for enrolment. Some of the challenges were when the household consisted of a polygamy marriage and there were no clear guides how to register them. Some CHF schemes consider them as separate households. There was no clear guideline on how to consider extended families and the number of beneficiaries in a household. Households with too many dependants found it difficult to pay for extra people.

The distance to the health facility that registers CHF members also determines the decision to enrol. Findings showed that what discourage people to enrol is when the facility is too far and the cost of transport and food.

Timing of membership is also a factor for enrolment; most of the people in rural areas are farmers that depend on seasonal agriculture and therefore depend on seasonal incomes. Findings show mechanism in place to collect contribution from the households is having one person in the health facility that collect user fees and CHF contributions thus people have to come by themselves to contribute.

Due to the voluntary nature of the scheme this is not workable. Findings from a study in Liwale district suggest that contributions should be done by the community themselves after harvest.

Findings show that the aspects of quality of care reported, included shortage of staff, shortage of drugs, lack of diagnostic equipment, long waiting time, unavailability of medical supplies, and limited working hours at the dispensary. Findings from a study done in Mbulu and Kigoma district showed that members of CHF have to pay money to buy drugs at very high prices when drugs are stock-out, some are required to bring gloves when they are out of stock in health facilities. Sometimes when the facility has everything, but lacks staff, one can spend the whole day waiting for health care. All of these factors discourage membership.

Findings also showed that trust in the CHF varies through the households. Households classified as poor perceived CHF schemes and officials trustworthy, contrary to their counterpart the rich households. Lack of trust was due to accusation of corruption, misuse of public funds, and lack of transparency and failure of district managers to respond to requests from communities and committees.

Alternative contributions to CHF schemes from other sources such as households/ communities, local government, central government and donors is believed to enhance the revenue collection and strengthen the insurance scheme. Findings showed that CHF lacks contributions from other sources, even local government authorities do not contribute to the schemes. However there are some local government authorities that contribute to their CHF schemes but not continuously. Matching fund from the central government are not reliable and if received not used in CHF schemes.

### **Factors influencing pooling**

Findings show that the degree of risk pooling is affecting the CHF schemes. The concept of risk pooling is not actually practised because people lack information about the importance of health insurance. In one study a respondent said that he doesn't see the reason why he should continue with the scheme because he contributed previous year, nobody in his family got sick so contribution was not utilized. There is a high fragmentation of CHF schemes within some districts; in some districts every health facility opened a bank account. Some districts have one bank account for all health facilities.

## **Factors influencing purchasing**

Strategic purchasing in CHF cannot be practiced in most of the rural districts in Tanzania. Findings showed that, in most of the districts there are only public dispensaries available in villages. Authorities cannot search for the best health services or best providers to purchase from. Again, the nature of some CHF schemes, where a facility signed their membership, affects the purchasing, because beneficiaries can only access health in those facilities.

In Tanzania all government facilities in every district are automatically contracted for CHF schemes. There is no way to negotiate price, quality of service or withdrawal from a contract. However there are some districts that have signed contracts with faith based organizations in their areas.

Most of the districts do not provide referral to all level including consultant hospitals at zone level benefits to CHF members, in our literature review we only found Hanang district that offers CHF benefits to its CHF members. Hanang district managed to do this because their membership contribution is higher. Most of people in Hanang are from pastoralist communities. Health care at the referral level is more expensive compared to primary level health care. So people would have been happy if insurance covers referral services. Some districts provide referral benefits to only district hospital while others don't provide at all.

Provider's payment mechanism in CHF is neither capitation nor fee for service. Providers are paid based on their requests based on the annual plans. Usually they request fund for drug procurement, equipment, furniture, renovation and payment of allowances. This is applied to government facilities. Information on how FBOs are paid was not found. This payment mechanism for public health facilities does not encourage hard working and innovations.

## **Evaluation of CHF contribution to the three functions of health system goals and universal health coverage**

### **Financial protection (Revenue collection)**

Tanzania decided to establish the CHF in order to protect people employed in informal sector who live in rural areas from financial catastrophes and poverty. Findings show that coverage of the CHF to targeted population is still very low ( 7.3% in 2013) to the extent that it cannot generate good pooling of revenues to cover cost of health care. To provide universal health coverage CHF has to cover all population groups.



There are several insurance schemes in Tanzania which are fragmented. CHF is also highly fragmented, every district has its own CHF schemes, and other districts have different CHF schemes in different villages and in the dispensary which are not integrated. This kind of set up does not provide financial protection to its members.

Although findings show that general tax revenue in Tanzania is growing from 15.4 % (2009/10) to 17.5 % (2012/13) of GDP but Tanzania health financing still depend on donor community. Donor funding is not reliable due to delays and change in commitment. Out-of-pocket payment as percentage of Total Health Expenditure is 52 percent. The tolerable percentage of out-of-pocket expenditure as a percent of Total Health Expenditure is less than 25%.

### **Equity in Utilization of health services (Pooling)**

As explained earlier CHF schemes in Tanzania are highly fragmented and not connected to each other. Therefore pooling through CHF is limited. This situation is affecting the issue of equity in utilization of health services.

Findings also showed that, the issue of the referral service, which is not covered by most of the Insurance schemes in most districts, also affects equity in health care utilization. Even if in some districts it is included in benefit package but the cost of transport affect CHF beneficiaries who cannot afford the cost of travelling to access referral services.

The policy of exemption and waivers, which meant to ensure the most poor households and individuals have access to health care, has so many challenges. It is not understood by those who are supposed to identify poor households, the criteria are not clear and communities themselves are not aware of the policy.

### **Sustainability (Purchasing)**

Findings show that most of the management duties are performed by medical staff that lack management, financial and mobilization skills. Most of these managers perform clinical duties as outlined in their job description, therefore CHF duties are consider as extra duties. This affected the performance of many CHF schemes in the country. Findings also show that the duties of the CHF management have been harmonized with the management operations of the National Health Insurance Fund (Social Insurance Scheme for the employee in formal sector) to improve efficiency and supervision, to increase awareness and coverage. However, the anticipated changes are not yet realised

yet due to failure to change CHF act of 2001 where the management duties are still under district officials who have other full time duties.

The payment mechanism which is prepay in CHF, is passive, it purchases the services, regardless of the quality, and mostly purchases from only government health providers located within their districts. Some district have never used CHF money as intended .

The benefit package that covers primary care services and some hospitals within the district, affects the sustainability of the CHF schemes; people don't see the reason to be covered for only primary care services but are not covered for referral services that are expensive. In some districts, CHF members can only access services from the health facility if they sign up CHF membership.

Although there are some increases in enrolment to the scheme but generally the enrolment is very low. There are several factors reasons that explain the reason for poor people's participation in CHF schemes, as explained in various sections in our study. Some of the reasons are the poor management, and the poor quality of services to mention a few.

## **Lessons learnt from other countries on revenue collection, pooling and purchasing**

### **Revenue collection**

Rwanda managed to raise enrolment to their CBHI schemes with coverage of 95%, contrary to Tanzania's coverage, which is only 7.2%, the strategies used by the Rwandan Government were to make CHBI membership mandatory, there was a serious political will; when the system was built in 10 years. Tanzania established CHF since 1996 but still struggles for more than 19 years now ending up in only 7.2% coverage of the targeted population.

Other experiences from Rwanda showed that to improve the quality of the health care, they decided to introduce performance based financing to all health faculties. Contrary to Tanzania, where performance based financing is only in pilot study. In addition the purchasing of health care is conducted regardless of the quality of service offered.

The Rwandans collect premiums in a different way, households are stratified in different economic status, premiums are determined according to ability to pay. In Tanzania membership contribution is the same for all, regardless of their economical status. In Ghana there is a merging of all district mutual health organizations with the national health insurance scheme. All mutual health organizations are subsidized by the national government. In Tanzania the government

is supposed to provide a marching fund, but findings show that this rarely happens if it happens the money is used for different purposes.

### **Pooling**

In order to facilitate pooling and solidarity Cameroon used the pre-exist community based associations to build on their CBHI schemes. Contrary to Tanzania where the CHF schemes where established as newly independent schemes.

The Ghanaian on their side decided to make a fusion of all Mutual Health Insurance from all over the country which are ministered, subsidized and re-insured by the National health Insurance Fund this unification is called the hub which is based on SHI model of pooled public tax resources. The hubs are funded from 2.5 VAT from the purchase of all goods sold in Ghana. In order to benefit from the insurance scheme, a Ghanaian has to pay registration fees and annual premiums in the first place. In Tanzania all CHF schemes are independent and operate in autonomy. They only depend on members' contributions and matching grants from the central government.

### **Purchasing**

We could not find any experience from similar sub-Saharan countries on the issue of purchasing or provider payment mechanisms

## **7.2 Conclusion**

The general objectives of the study was to review relevance and experience of CHF within the broader perspective of the Health Financing and UHC in Tanzania

CHF in Tanzania has several successes and challenges in reaching intended objectives. Some of the success includes; members of CHF do access health care more often, some health facilities improved health care using CHF funds. Some of the challenges are poor households cannot afford annual premiums, distance from health facility affect membership, timing for revenue collection is not planned, quality of care affect enrolment, lack of trust to the scheme and management affect enrolment and alternative contributions from other sources not collected. Other challenges are the concept of risk pooling is not understood by scheme managers, district leaders and the community in general. The strategic purchasing is affected by the fact that most of the health facilities, available in rural areas, are public facilities that are characterised by a shortage of staff, shortage of drugs, lack of diagnostic equipment, and medical supplies. The benefit package does not include referral services, if included it is only for the hospital located in the district.

The contribution and prospect of the CHF in overall health financing and towards UHC is questionable. CHF members are not protected from financial catastrophe and poverty. This is because the population covered is too small, the out-of-pocket expenditure is still very high and CHF does not cover most of the services offered at district and specialized hospitals. The CHF funding pool is too weak due to the lack of alternative contributions from other sources and the lack of subsidized funds for exempted and waived poor members. In addition, CHF funding pools in some districts are highly fragmented where every dispensary forms its own pool. Other reasons that jeopardize the future of CHF are the fact that most of the management duties are performed by medical staffs that lack skills in financial management and social mobilization skills and its contribution to the health care financing is very low. However, in some districts CHF have shown some positive contributions in improving the quality of care and provided CHF members with access to health care.

Experience with CBHI in similar countries show that Rwanda managed to perform well in revenue collection from CBHI by classifying households into social economic strata so premiums differ depending on household's income (progressive in nature). In addition, Rwanda implemented the Performance Based Financing in all health facilities that improved quality of care. All of these in addition to political commitment and compulsory insurance schemes Rwanda managed to maintain CBHI population coverage for more than 95%. On the other hand, Ghana formed unification of all Mutual health Organization and formed a hub funded by 2.5% of VAT of all purchased commodity in Ghana. Beneficiaries can access health care anywhere in Ghana. The condition for one to access benefits is to pay registration fees and annual contribution.

CHF in Tanzania is still relevant but need some efforts to make it successful. It is relevant because large proportion of population lives in rural areas and employed in un-informal sector

### **7.3 Recommendation**

We consider CHF as a potential mechanism Tanzania can use to provide financial protection to people in the informal sector in rural areas. If improved and merged with NHF, CHF can improve health care financing and universal health coverage.

To improve the performance of the implementation of CHF we recommend the following:

In Revenue collection:

- Households have to be categorized by authorities into strata of different income levels and geographical locations premiums determined according to their ability to pay
- Timing for revenue collection to be designed in such a way to suit the situation of different members for example during harvest, by two equal instalments, or through peer members
- Revenue from alternative sources must be seriously collected from Central or local government

In influencing pooling we recommend:

- Social mobilization to be done by specialised people and a relevant department for example the community development to sensitize people on importance health insurance and risk pooling
- Improve management of CHF schemes to enhance transparency and accountability
- Community involvement in all stages of CHF implementation to build a sense of ownership and work together with existing community based solidarity groups
- Integrate all CHF schemes in one pool that will enable the pools to have more funds

In influencing purchasing we recommend:

- Improve the quality of care provided by public health facilities in rural areas. This can be done by introducing performance based financing.
- Include referral care to the level of consultancy hospitals and fare to the poorest households located in a distant areas
- Include all facilities in the district in a list of health facilities to be utilized by the CHF beneficiaries

To ensure that CHF contributes to the overall health care financing and universal health coverage we recommend:

In addition to the above recommendation that will improve performance of CHF, authorities must be sure that CHF covers a total of the population of more than 80%, most of the health care services are included in the benefit package, and finally large proportion of the population are not required to make out-of-pocket payment when consuming health care.

## **Limitations of study**

The limitation of this study includes lack of studies that show the element of CHF reforms and the impact of CHF on health system goals in Tanzania. There was inadequate information from other countries on the factors that influence purchasing.

## **Suggestion for further study**

I suggest that more studies be done about providers' payment mechanisms in Ghana and Rwanda.

## **Reference**

Alfers, L 2012, 'The Ghana National Health Insurance Scheme: Assessing Access by Informal Workers', *Policy Brief , social protection No.2, Women in Informal Employment Globalization and Organizing*.

Atim, C 1998, 'Contribution of Mutual Health Organizations to Financing, Delivery, and Access to Health Care: Synthesis of Research in Nine West and Central African Countries (Technical Report No. 18)', *Partnerships for Health Reform*, no. Technical report No. 18, p. 102.

Atim, C & Hong, W 2012, 'How should we track progress toward universal health coverage in low-income countries?', *African Journal of Health Economics*, vol. AJHE-2012-, pp. 1-8.

Bennett, S 2004, 'The role of community-based health insurance within the health care financing system: A framework for analysis', *Health Policy and Planning*, vol. 19, no. 3, pp. 147-158.

Borghi, J, Makawia, S & Kuwawenaruwa, A 2014, 'The administrative costs of community-based health insurance: a case study of the community health fund in Tanzania.', *Health policy and planning*, no. December 2013, pp. 19-27.

Borghi, J, Maluka, S, Kuwawenaruwa, a, Makawia, S, Tantau, J, Mtei, G, Ally, M & Macha, J 2013, 'Promoting universal financial protection: a case study of new management of community health insurance in Tanzania', *Health Research Policy and Systems, Health Research Policy and Systems*, vol. 11, no. 1, p. 21.

Carrin, G & James, C 2004, 'Reaching universal coverage via social health insurance: key design features in the transition period'. World Health Organization, Discussion Paper Geneva.'

Carrin, G, Mathauer, I, Xu, K & Evans, DB 2008, 'Universal coverage of health services: Tailoring its implementation', *Bulletin of the World Health Organization*, vol. 86, no. 11, pp. 857–863.

Carrin, G, Waelkens, MP & Criel, B 2005, 'Community-based health insurance in developing countries: a study of its contribution to the performance of health financing systems.', *Tropical medicine & international health : TM & IH*, vol. 10, no. 8, pp. 799–811.

Carrin, G, Zeramdini, R, Musgrove, P, Poullier, JP, Nicole Valentine & Ke Xu 2001, 'The impact of the degree of risk-sharing in health financing on health system attainment', *Department of Health Financing and Stewardship of World Health Organization, Background paper on non formal sector financing, group 3, Geneva*, pp. 1–105.

Chee, G & Smith, K 2002, 'Assessment of the Community Health Fund in Hanang District , Tanzania', *Abt Associates Inc.*, pp. 1–105.

Chen, K, Daukste, R, Przybyl, A & Fechter, N 2012, 'Trust , Community-Based Health Insurance and Enrollment Rates Health Financing Practicum 2012', pp. 1–32.

Cutler D & Zeckhauser R 2000, 'The Anatomy of Health Insurance, in Handbook of economics', C A.J & N J.P (eds), Vol.1 edn, Elsevier Scienec B.V, Amsterdam, North Holland, pp. 564–637.

Durairaj, V, Almeida, SD & Kirigia, J 2010, 'Ghana ' s approach to social health protection', *World Health Report (2010) Background Paper, No. 2 World Health Organization, W.*

Dutta, A 2015, 'Prospects for Suatainable Health Financing in Tanzania: Baseline Report', *Health Policy project, Future Group , Washington DC.*, no. February.

Frenz, P & Vega, J 2010, 'Universal health coverage with equity : what we know, don't know and need to know', *Proceedings of first global symposium on health systems research 16-19 November Montreux, Switzerland.*

Government of Rwanda 2012, 'Government of Rwanda Ministry of Health Annual Report: Community Based Health Insurance 2012', *Rwandan Ministry of Health*, no. October.

Haazen, D 2012, *Making Health Financing Work for Poor People in Tanzania*, The World Bank, Washington, D.C.

Ifakara Health Institute 2012, 'Lessons from Community Health Fund reforms: A review of the past three years', *Spotlight, Ifakara Health Institute , Dar es Salaam*, no. 15.

Jakab, M & Krishnan, C 2015, 'Community Involvement in Health Care Financing: Impact, Strengths and Weaknesses', *Public health policy*, vol. 2, pp. 1–81.

Jehu-Appiah, C, Aryeetey, G, Agyepong, I, Spaan, E & Baltussen, R 2012, 'Household perceptions and their implications for enrolment in the National Health Insurance Scheme in Ghana', *Health Policy and Planning*, vol. 27, no. 3, pp. 222–233.

Kamuzora, P & Gilson, L 2007, 'Factors influencing implementation of the Community Health Fund in Tanzania', *Health Policy and Planning*, vol. 22, no. February, pp. 95–102.

Kwesigabo, G, Mwangi, MA, Kakoko, DC, Warriner, I, Mkony, CA, Killewo, J, Macfarlane, SB, Kaaya, EE & Freeman, P 2012, 'Tanzania's health system and workforce crisis.', Nature Publishing Group, *Journal of public health policy*, vol. 33 Suppl 1, no. S1, pp. S35–44.

Lagarde, M & Palmer, N 2008, 'The impact of user fees on health service utilization in low- And middle-income countries: How strong is the evidence?', *Bulletin of the World Health Organization*, vol. 86, no. 11, pp. 839–848.

Macha, J, Kuwawenaruwa, A, Makawia, S, Mtei, G & Borghi, J 2014, 'Determinants of community health fund membership in Tanzania: a mixed methods analysis', *BMC Health Services Research*, vol. 14, no. 1, pp. 1–11.

Marwa, B, Njau, B, Kessy, J & Mushi, D 2013, 'Feasibility of introducing compulsory community health fund in low resource countries: views from the communities in Liwale district of Tanzania.', BMC Health Services Research, *BMC health services research*, vol. 13, no. 1, p. 298.

Ministry of Finance 2015, 'Country Report on the Millennium Development Goals 2014 Entering 2015 with better MDG scores Poverty Eradication through Empowerment Health care for social well-being Partnership.', *Ministry of Finance of United Republic of Tanzania, Dar es salaam*.

Ministry of Health and Social Welfare 2009, 'Health Sector Strategic Plan III July 2009 – June 2015 " Partnership for Delivering the MDGs "', *Ministry of Health and Social Welfare, Dar es Salaam*.



Ministry of Health and Social Welfare 2013, 'Summary and Analysis of the comprehensive council health plans 2013/2014', no. September 2013.

Mladovsky, P & Mossialos, E 2008, 'A Conceptual Framework for Community-Based Health Insurance in Low-Income Countries: Social Capital and Economic Development', *World Development*, vol. 36, no. 4, pp. 590–607.

Msuya, JM, Johannes, JP & Abay, A 2004, 'Impacts of Community Health Insurance Schemes on Health Care Provision in Rural Tanzania', *Centre for Development Research, Discussion Papers on Development, Bonn*.

Mtei, G, Makawia, S, Ally, M, Kuwawenaruwa, A, Meheus, F & Borghi, J 2012, 'Who pays and who benefits from health care? An assessment of equity in health care financing and benefit distribution in Tanzania', *Health Policy and Planning*, vol. 27, no. SUPPL.1.

Mtei, G & Mulligan, J 2007, 'Community health funds in Tanzania: A literature review', *Ifakara Health Research and Development Centre/ Consortium for Research on Equitable Health Systems (CREHS), London*.

Munishi, G 2001, 'Constraints to Scaling Up Health Interventions: Country Case Study : Tanzania', *Commission on Macroeconomics and Health ,CMH Working paper Series, Paper No. WG5: 16*, no. June.

Musau, S 2004, 'The Community Health Fund: Assessing Implementation of New Management Procedures in Hanang District, Tanzania', pp. 18–35.

Musau, S, Chee, G, Patsika, R, Malangalila, E, Chitama, D, Praag, E V & Schettler, G 2011, 'Tanzania: Health system assessment', *Bethesda, MD: Health Systems 20/20 project, Abt Associates Inc. 2*, no. July.

Mushi, DP 2007, 'Financing public health care: insurance, user fees, or taxes? : welfare comparisons in Tanzania', *REPOA research report* .

National Bureau of Statistics 2014, 'Basic Demographic and Socio-Economic Profile : 2012 Population and Housing Census', vol. IIID.

Noubiap, JJ, Joko, WY, Obama, JM & Bigna, JJ 2013, 'Community-based health insurance knowledge, concern, preferences, and financial planning for health care among informal sector workers in a

health district of Douala, Cameroon', *Pan African Medical Journal*, vol. 16, pp. 1–9.

Savedoff, WD, Bitrán, R, Ferranti, D De, Fan, VY, Holly, A, Moreno-serra, R, Saksena, P, Smith, AL, Smith, PC & Xu, K 2012, 'Transitions in Health Financing and Policies for Universal Health Coverage : Final Report of the Transitions in Health Financing Project', *Final report of the transitions in health financing, Results for Development Institute, Washington Dc.*

Schneider, P & Diop, F 2001, 'Impact of Prepayment Pilot on Health care Utilization and Financing in Rwanda: Findings from Final Household Survey', *Bethesda, MD: The Partners for Health Reforms plus project, Abt Associates Inc, USAID/Kigali.*

Tundui, C & Macha, R 2014, 'Social Capital and Willingness to Pay for Community Based Health Insurance: Empirical Evidence from Rural Tanzania', *Journal of Finance and Economics*, vol. 2, no. 4, pp. 50–67.

United Republic of Tanzania 2001, *The Community Health Fund act, 2001, Clecky of the National Asembly, Government Printer, Dar es Salaam.*

United Republic of Tanzania 2003, 'National Health Policy', *Ministry of Health and Social Welfare, Dar es Salaam, Tanzania.*

United States Agency for International Developemnt 2013, *USAID/Tanzania Health Systems Strengthening strategy 2013-2018, United States Agency for International Developemnt.*

West-slevin, K & Dutta, A 2015, 'Prospects for sustainable health financing in Tanzania', *Health policy project by Futures Group, US Agency for International Development , Washington, DC.*

World Bank 2011, 'Making Health Financing Work for Poor People in Tanzania : A Health Financing Policy Note', pp. 40–60.

World Health Organization 2000, 'The World health Report, 2000 Health Systems: Iproving Performance', *World Health*, vol. 78, no. 1, pp. 1–215.

World Health Organization 2003, 'Community based Health Insurance Schemes in Developing Countries: facts, problems, and perspectives', *Discussion paper number 1-2003, Department of Health System Financing, Expenditure and Resource Allocation, (FER) Cluster ' Evidence and Information for Policy' (EIP), Geneva.*

World Health Organization 2010, 'The World Health Report: Health System Financing, The path to universal coverage', *The world health report*, WHO Library Cataloguing-in-Publication Data, Geneva.

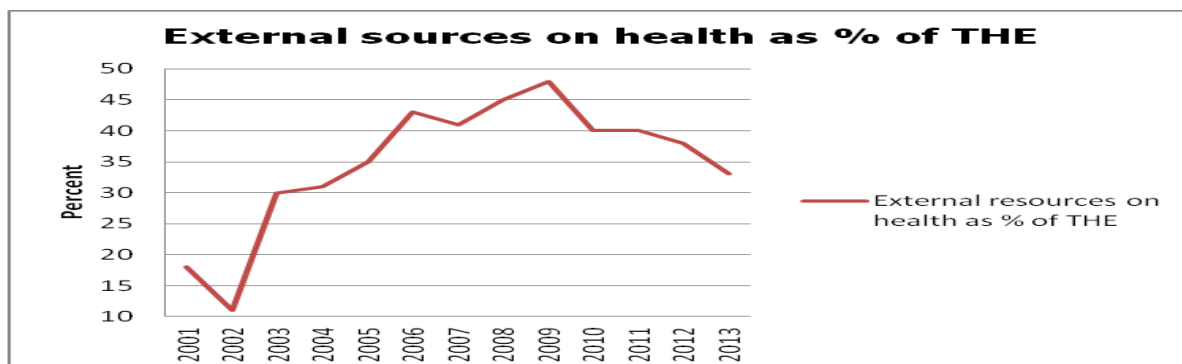
World Health Organization 2011, 'Sustainable health financing structures and universal coverage', *The world health report 2010. Health systems financing: the path to universal coverage*, Geneva.

World Health organization 2015, *Tracking universal health coverage: first global monitoring report*, WHO Library Cataloguing-in-Publication Data, Geneva.

## Annex 1: Summary Of The Tanzania National Health Account 2001-2013 (source:WHO,2015)

Indicators	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Total health expenditure (THE) % Gross Domestic Product (GDP)</b>	4	3	4	3	4	7	6	5	6	7	8	7	7
<b>General government expenditure on health (GGHE) as % of THE</b>	45	45	49	44	47	59	64	63	65	39	39	39	36
<b>Private expenditure on health (PvtHE) as % of THE</b>	55	55	51	56	53	41	36	37	35	61	61	61	64
<b>GGHE as % of General government expenditure</b>	11	11	12	8	9	17	16	16	15	11	11	11	11
<b>External resources on health as % of THE</b>	18	11	30	31	35	43	41	45	48	40	40	38	33
<b>Social security funds as % of GGHE</b>	6	4	2	2	5	3	3	3	3	4	4	4	4
<b>Out of pocket expenditure as % of PvtHE</b>	86	88	87	82	70	54	42	42	42	52	52	52	52
<b>Private insurance as % of PvtHE</b>	4	4	4	5	7	8	10	10	10	2	2	2	2
<b>Total expenditure on health / capita at exchange rate</b>	11	10	12	12	15	23	26	23	28	37	39	42	49
<b>Total expenditure on health / capita at Purchasing Power Parity (NCU per US\$)</b>	30	31	36	35	45	78	72	79	106	117	117	117	126
<b>General government expenditure on health / cap x-rate</b>	5	5	6	5	7	14	15	16	18	14	15	16	18
<b>General government expenditure on health / cap Purchasing Power Parity (NCU per US\$)</b>	14	14	18	16	21	46	46	45	51	41	45	46	46
<b>Out of pocket expenditure as % of THE</b>	47	48	44	45	37	22	15	16	15	32	32	32	33
<b>Gross Domestic Product (Million NCU)</b>	9,10	10,4	12,1	13,9	15,9	17,9	16,8	20,9	28,2	32,2	37,5	44,7	53,1
	0,27	44,5	07,0	71,5	65,2	41,2	26	48,4	12,6	93,4	32,9	07,8	74,6
	0	10	60	90	90	70		00	50	80	60	40	78

## Annex 2: External resources on health as % of THE



Source: Author, 2015