# THE CHALLENGES TOWARDS ATTAINING UNIVERSAL HEALTH COVERAGE AMONG THE LOW INCOME POPULATION IN TANZANIA

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**The challenges towards attaining Universal Health Coverage among the low income population in Tanzania.**

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

By

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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.

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## 3. GLOSSARY OF KEY TERMS

**Progressive financing**; a mechanism whereby people with high income, contribute proportionally more than the poor/ people with low income. (Represented by positive Kakwani Index)

**Proportional financing**; a mechanism where both rich and poor contribute equally to the health care, irrespective of income (represented by a Kakwani index of zero).

**Regressive financing**; a mechanism whereby a group of low income/poor contribute proportionally more of their income to the health care than the group with high income (represented by a negative Kakwani Index).

**Pro-poor distribution of service benefits**; group of the poor benefits more from health care than the wealthier group (represented by a negative concentration index).

**Pro-rich distribution of service benefits;** richer group benefits more from the health services than the poor group (represented by a positive concentration index).

**Fee for Services**- is a form of prepayment method whereby provider reimburses for every service provided which as a result leads to over provision of health services and is more prone to cost escalation.

**Capitation -**is a form of prepayment method whereby an amount of money per person or per capita is paid prospectively, in order to provide health services when that person needs health care.

**Catastrophic expenditure-** is expenditure at a high cost that forces the household to reduce spending on other basic needs (e.g., food and water), at times it involves selling of assets or incurring high level of debt and eventually it increases risk of impoverishment (Mclyntyre,2007).

## 4. ACKNOWLEDGEMENT

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My heartfelt and special thanks go out to my thesis advisor and back stopper for their inputs all the way from the beginning until the final submission of this thesis.

Last but not the least, thanks to the Local Government Authority in Moshi District Council for the permission given to me to pursue further study, and to Dr. Anna Nswilla from the Ministry of Health and Social Welfare for the support, especially the important documents you sent to me which I had difficulty accessing electronically.

## 5. ABSTRACT

**Background:** Despite her vision of providing quality health care to all its citizens, Tanzania is struggling to provide quality health care to all. The poor are most affected as they have the lowest access to quality health care, and when seeking health care incur high cost, their poverty levels are increased.

**Objective:** The objective of this study is to review existing Tanzania health care financing based on the following three financing functions; revenue collections, pooling and purchasing of the services, identifying the gaps and propose recommendations to contribute the country progress towards Universal Health Coverage.

**Method:** Literature review

**Findings:** Tanzania is still far from raising sufficient and sustainable funds for Universal health coverage; the country is highly depending on external funds. In recent years it was noted that there was a decline in government health expenditure on health care and an increase in the out-of-pockets payments. The country is facing challenges in collecting the premiums and risk pooling from the informal sector. The pre-payment insurance schemes are highly fragmented, each with its own risk pooling mechanisms. The rich benefit more from the public subsidized services than the poor.

**Conclusions and recommendations:** Tanzania will be able to attain its goal of universal coverage only if will be able to raise sufficient and sustainable revenue through innovation. The size of risk pool should be expanded through increase in prepayment schemes and optimal use of resource in purchasing of services through good governance and stewardship.

**Keywords**: Universal Health Coverage, out-of-pockets, risk pooling, Tanzania

**Word counts:** 12,403

## 6. LIST OF ABBREVIATIONS

| | |
|---|---|
| ANC | Ante-Natal Care |
| ART | Anti Retro Viral Therapy |
| BP | Benefit Package |
| CHF | Community Health Fund |
| DFID | Department for International Development |
| DMO | District Medical Officer |
| FBO | Faith Based Organization |
| FFS | Fee- for- services |
| GDP | Gross Domestic Product |
| GNI | Gross National Income |
| GOT | Government of Tanzania |
| GTZ | German Technical Cooperation |
| ITNs | Insecticides Treated Nets |
| LGA | Local Government Authority |
| LIC | Low income countries |
| MOF | Ministry of Finance |
| MOHSW | Ministry of Health and Social Welfare |
| MOPH | Ministry Of Public Health |
| MSD | Medical Store Department |
| NBS | National Bureau of Statistics |
| NGOs | Non Governmental Organizations |
| NHA | National Health Account |
| NHIF | National Health Insurance Fund |

| | |
|---|---|
| OOPs | Out-of-pocket payments |
| PEPFAR | President`s Emergency Program for Aids Relief |
| PHSDP | Primary Health Services Development program |
| PIT | Personal Income Tax |
| PMI | President`s Malaria Initiative |
| PMO-RALG | Prime Minister's Office-Regional and Local Government |
| SDC | Swiss agency for Development and Cooperation |
| SHI | Social Health Insurance |
| SHIB | Social Health Insurance Benefits |
| SSA | Sub Saharan Africa |
| SSRA | Social Security Regulatory Authority |
| SWAp | Sector Wide Approach |
| TDHS | Tanzania Demographic health survey |
| THE | Total Health Expenditure |
| TIKA | Tiba Kwa Kadi |
| TIRA | Tanzania Insurance Regulatory Authority |
| UHC | Universal Health Coverage |
| URT | United Republic of Tanzania |
| VAT | Value Added Tax |
| WHO | World Health Organization |
| WHR | World Health Report |

## 7. INTRODUCTION

In the function of a District Medical Officer (DMO) since 2010 in Moshi District Council, Kilimanjaro Region Northern part of Tanzania, I have witnessed people fail to pay for health services, coming to my office with exemption letters from their local authorities. Despite this they were rejected by Faith Based Organization (FBO) hospitals who demand cash from these patients in order for them to get treatment. Some of these patients had to sell their property such as furniture, televisions, and sometimes cows or even pieces of land to pay hospital bills. Moreover, even among some insured low income groups, some people failed to get services; due to lack of money for co-payment by the health insurance schemes, they have been enrolled and/or required to pay before receiving any diagnostic services. Witnessing all these disparities in healthcare, I got inspired to think of ways that could reduce these inequalities.

Universal health coverage (UHC) is a paradigm to ensure that the population is protected from catastrophic health expenditure. In this regard, I decided to explore the challenges towards achieving Universal Health Coverage in order to highlight these challenges and from my position as a DMO, to propose recommendations to policy makers at all levels: Local Government Authority (LGA), Ministry Of Health and Social Welfare (MOHSW), Ministry of Finance (MOF), and other stakeholders working in the health sector.

Tanzania is among the countries making efforts towards achieving Universal health coverage, which makes it a right time to give my contribution on how to tackle the highlighted challenges so as to achieve the UHC. Currently every year about 682,000 people (1.52% of total population) are experiencing catastrophic health expenditures and approximately 166,000 people (0.37% of total population) are pushed below the poverty line as a direct result from paying for healthcare (Mills.*et al* 2012). Globally 150 million people experience catastrophic expenditure. Likewise, 100 million

people are impoverished from out of pockets payments while seeking health care (WHO, 2006). Globally, the study will contribute to the current debate on UHC after the WHO resolution (2005) to ensure the population has access to quality health services without experiencing financial hardship.

The presentation of this thesis is divided into five chapters. Chapter one describes the country background and health system information. Chapter two deals with problem statement, justification, objectives and methodology. The study findings will be presented in chapter three, discussed in chapter four while conclusions and recommendations will be explained in chapter five.

# CHAPTER 1: COUNTRY BACKGROUND

## 1.1. GEOGRAPHY;

The United Republic of Tanzania lies south of the equator with an area of 940,000 square kilometers of which 60,000 are covered by water bodies such as lakes and rivers. North of the border are Kenya and Uganda, the west borders with Rwanda, Burundi, the Democratic Republic of Congo and Zambia, and south of the border are Malawi and Mozambique. The country experiences two types of climatic conditions: the dry season runs from May to October and is followed by the wet season between November and April (TDHS, 2010).

Administratively, the country is divided into 23 regions 123 districts, 133 councils with about 10,342 villages (TDHS, 2010).

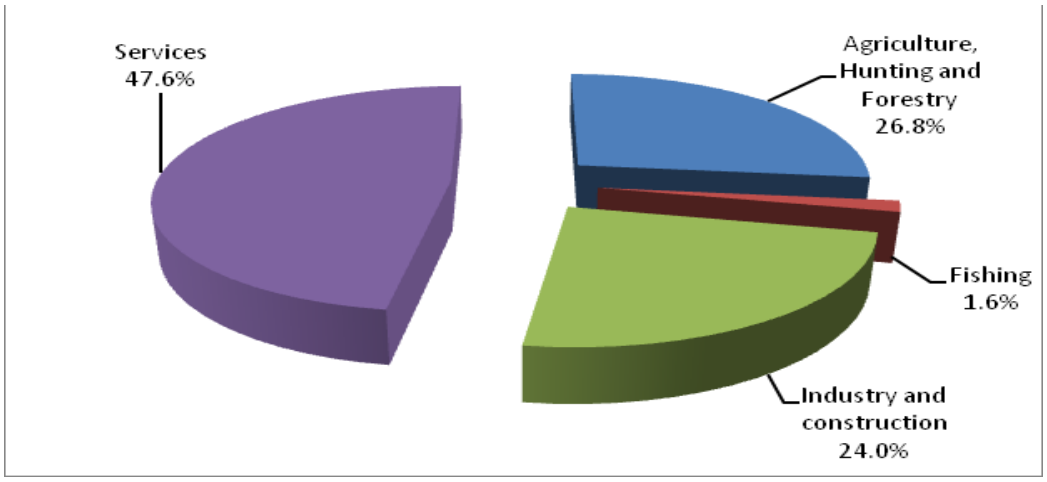
## 1.2. POPULATION

Between the years 2002 – 2012 the population of Tanzania has increased by 30%, from 34.4 to 44.9 million inhabitants. With an annual growth rate of 2.7% the population is expected to be doubled in the next 26 years (NBS, 2013). Majority of the population (about 76%) are residing in the rural areas leaving 24% in the urban areas (NBS, 2013). Life expectancy is about 58 years among men, compared to 61 years among women.

## 1.3. POLITICAL AND SOCIOECONOMIC SITUATION

Since acquiring independence in 1961 Tanzania has experienced Political stability under a single party system. From 1990, the country is operating under a multiparty system in an effort to gain more democracy. According to the National Bureau of Statistics (NBS, 2012), agriculture, hunting and forestry activities account for 26.8% of the Gross Domestic Product (GDP). While the industrial and construction sector contribute to 24% of GDP, fishing contributes only to 1.6%. This makes the service industry the largest contributor to the GDP, as is shown in figure 1.

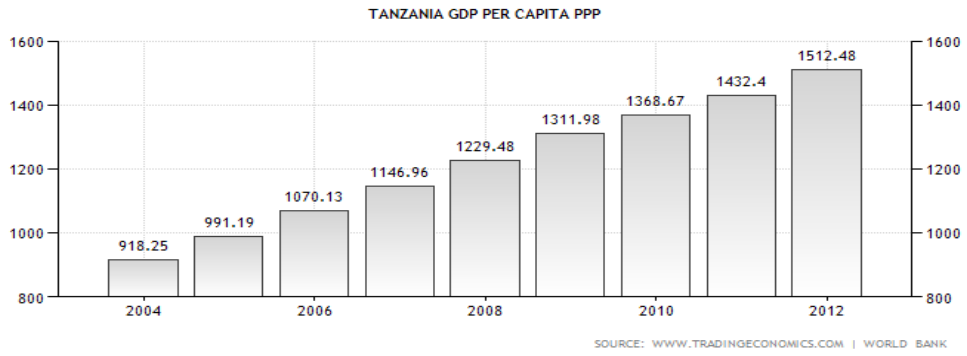
**Figure 1. %age share of GDP at current prices, 2012**




**Sources**; National Bureau of statistics

The GDP per capita as adjusted by purchasing power parity (PPP) has increased from $918.24 in 2004 to $1512.48 in 2011 (NBS, 2012). Despite the economic growth that occurred between 2004 and 2011 (figure 2); 34% of the population live on less than 1 US dollar per day (NBS, 2008). Tanzania is ranked 152nd out of 187 countries in the human development index (UNDP, 2013).

**Figure 2. Tanzania GDP per capita purchasing power parity**




**Source**:World Bank

(http://www.tradingeconomics.com/Tanzania/gdp-per-capitappp )

Between the year 2001 and 2011, the average unemployment rate was around 11-12% in Tanzania. Youth in the urban area are more affected (24.4%), as compared to youth in rural areas (3.2%).

The Bank of Tanzania reports that the country has more expenditure than its revenue, hence create the average budget deficit of 7.3% of the country`s Gross Domestic Product (MOF, 2011).

### 1.4. HEALTH SYSTEM in Tanzania

Health services delivery is categorized into three levels; Primary level with the dispensaries and health centers to cater for a population of about 10,000 to 50,000 respectively. Secondary level District hospital is the first referral system and serves about 250,000 people. Under the existing decentralization policy, The Local Government Authorities (LGAs) are charged responsible for provision of health services at the district hospitals, dispensaries and health centers. Currently 90% of the population is within a 5 km catchment area of the primary health facility (MOHSW, 2008a). Tertiary level consists of the regional hospitals which are second referral hospitals followed by the specialized hospitals (MOHSW, 2007).

**Figure 3: Organization of Health Services in Tanzania**


(**Source**: http://www.moh.go.tz, 2006)

## Health Workforce in Tanzania

The health sector is facing a critical shortage of personnel at all levels of service delivery. For example in the current situation, 0.1 physician serve a population of 10,000, which is less than neighboring regional countries, where 2.2 physicians serve a population of 10,000. Furthermore, 2.4 nurses serve a population of 10,000, which is again less than neighboring regional countries where 9 nurses serve a population of 10,000 (WHO, 2010). In Tanzania, like many other African countries, rural and remote areas are more affected by this shortage of personnel.

## Health care financing in Tanzania

The Government and implementing partners are the major funders of the health sector in Tanzania. The health system is financed through various sources of revenue such as taxes, National Health Insurance Fund (NHIF), Community Health Fund (CHF), Non-Governmental Organizations (NGOs), Donor/external sources, and Out of Pockets Payments (OOPs). Some sources like taxes and NHIF are progressive, as the people with high income contribute proportionally more to health care. On the other hand other forms of payment, like Community Health Fund (CHF) and Out of Pockets Payment (OOPs), are usually regressive as the people with low income pay more respectively.

In 2001, the Tanzanian government established the national health insurance and community health fund as the means of increasing income in order to improve health services**.**

# CHAPTER 2: STUDY RATIONALE AND METHODOLOGY

## 2.1. PROBLEM STATEMENT

Tanzania has taken a path to move towards Universal Health Coverage (UHC), to ensure that the population has access to quality health care without experiencing financial hardship. There are still some challenges on provision of quality health care, whereby the poor and vulnerable are most affected (Mills et al., 2012). UHC is not a new idea in Tanzania; it was initiated just after independence in 1961, when health services were provided by the government of Tanzania (GOT) free of charge. However, due to economic crisis, and to some extent the increased burden of HIV/AIDS and international Policy changes, the GOT had no option but to introduce the user fee policy in 1993.

The user fee policy had a negative impact on access and utilization of health services for the poor (Macha *et al*., 2012; Hussein and Mujina, 1997; Lagarde & Palmer, 2008). The National Health Account (NHA) data in Tanzania reveal that out-of- pocket payments (OOPs) expenditure has increased from 15% to 31% of the Total Health Expenditure (THE) between the years 2007 and 2011. Increase in OOPs has a negative impact especially on the poor as it increases the risk of household catastrophic healthcare expenditure (WHO, 2006; Mclntyre *et al*. 2008). Secondly, it cause delay in seeking healthcare services especially for the poor (WHR, 2010). Studies in Tanzania show that approximately 682,000 people (1.52% of the total population) incur catastrophic healthcare expenditure, and about 166,000 people (0.37% of the total population) are pushed below the poverty line[1] due to health expenditure (Mills *et al* .2012). The Government of Tanzania (GOT) opted to extend the coverage of health risk protection through extension of insurance schemes, in order to ensure the protection of the population (Haazen, 2012; McIntyre and Mills, 2012; Mtei and Borghi, 2010). The rationale for extending health benefits through insurance rather than general taxation is not clear. However, it is clear that general taxation will ensure promotion of equity in health services provision particularly in the present situation of fragmented insurance initiatives (Mtei et al., 2012).

[1] International poverty line; $1.25 per person per day 2005 in terms of purchasing power parity (Wegstaff et al., 2003).

The National Health Insurance scheme[2] covers only 7.3% of the total population (NHIF, 2012). About 76% of the population has informal employment and therefore cannot benefit from the NHIF scheme.

In 2001, The GOT introduced The Community Health Fund (CHF) and the `*TIBA KWA KADI*`[3] (TIKA) scheme, as a financing strategy to ensure access and utilization of health services to the unemployed and the informal sector, in the rural and urban areas respectively (Kamuzola *et al.,*2006*).* The aim of the CHF and TIKA was to establish the risk pooling mechanism at primary healthcare level, a coverage under which the CHF and TIKA showed that approximately 4% of the total population was enrolled in 2008 (World Bank, 2011: Borghi, 2011). Despite efforts made by the government to establish CHF/TIKA, its implementation faced many challenges that made the rollout stagnant. This concurred with the 2010 World health Report: 'It is impossible to achieve universal coverage through insurance schemes when enrolment is voluntary'. Although, exemptions for special groups such as pregnant women, children under the age of 5 and elderly people are practiced, exemptions for poor people are not very clear. This reduces their access to the health services due to inability to pay for the services (Mtei and Mulligan, 2007; Borghi *et al.,* 2011).

## 2.2. JUSTIFICATION

The National Health Accounts (NHA) data show that the Tanzanian government has made progress in relation to the Total Health Expenditure (THE) per capita at Purchasing Power Parity (PPP). The THE per capita has increased from $33 per capita in 2003 up to $107 per capita in 2011. However, general government expenditure on health as a percentage of THE has decreased from 66% in 2009 to about 40% in 2011 (NHA, 2012). The GOT's contribution, in relation to THE is not sufficient to provide a minimum basic health package of $60 per capita for all citizens, as per WHO recommendation. On the other hand, increase of OOPs raises the risk of poorest group incurring heavy cost burden or not seeking healthcare at all. Several studies have been reported on barriers that limit the poor to access healthcare. Some of these include: little or no knowledge about health problems, community cultural norms preferences, inability in making proper choices in seeking health care, long distances to the health facilities, poor quality of health care, lack of essential drugs and supplies, discrimination

[2] It Covers civil servants and their immediate dependents.
[3] Voluntary health insurance scheme for urban informal population with similar principles like CHF

against the poor by health workers, transportation costs, poor governance, and lack of accountability (Masuma&Bangser, 2004; Ensor & Cooper, 2004; Macha *et al*., 2012). However, few studies have been conducted in Tanzania in relation to removing financial barriers among the poor. For this reason, I am conducting a literature review on this topic. The findings of this thesis will contribute to the current debate on health care financing reforms towards UHC, heading towards the Tanzanian national vision that emphasizes ACCESS TO QUALITY HEALTH CARE FOR ALL by 2025.

## 2.3. OBJECTIVES

MAIN OBJECTIVE

To identify gaps in order to achieve universal health coverage in Tanzania, and provide recommendations to the Local Government Authority (LGA), Ministry of Health and Social Welfare (MOHSW), Ministry Of Finance (MOF),Ministry Of Labor (MOL), and other stakeholders working in the health sector.

SPECIFIC OBJECTIVES

1. To describe and critically discuss financial sources of the Tanzanian health system.
2. To review the existing pooling mechanisms in the different financing streams and their equity implications.
3. To review existing resource allocation, purchasing of health services, and provider payment mechanism in Tanzania.
4. To review best practices from selected countries on their way towards achieving Universal Health Coverage (UHC).
5. To provide recommendations to policy makers at all levels in making progress towards UHC in Tanzania.

## 2.4. METHODS-Literature Review

The purpose of the thesis is achieved through literature review of the journal reports from low and middle income countries, World Bank, WHO, Ministry Of Health and Social Welfare (MOHSW) publication reports on the topic.

### 2.4.1. Search strategy

Search engines used were Scopus, Pub Med, and Google scholar. WHO data base, MOHSW and MOF web sites were accessed for literature review. Demographic Health Survey (DHS) data were intensively used.

**Inclusion criteria** English language written journals published between the years 1993-2013, and studies from Tanzania and similar low and middle income countries.

**Exclusion criteria** was any study before the year 1993 (Cost sharing policy was not yet introduced and private for profit service providers were not allowed).

**Key words** used and possible combinations were; Tanzania, Universal Health Coverage, Health financing, out-of-pocket payments, catastrophic expenditure, National Health Insurance, Social Health Benefits, Equity, risk cross-subsidization, National Health Account, Low and middle income countries.

### 2.4.2. Conceptual Framework

Organizational Assessment for Improving and Strengthening (OASIS) health financing framework for assessing health financing systems performance were adopted. Literature search has shown that there are a number of conceptual frameworks used to assess country`s health care financing (WHR, 2O10; Kutzin, 2001; Mathauer and Carrin 2008). The analysis of challenges in health care financing to achieve universal coverage adopted the World Health Organization`s Institution and **O**rganization **As**sessment for **I**mproving and **S**trengthening health financing **(OASIS**) analytical conceptual framework designed by Mathauer and Carrin (2011) as shown in figure 4. The reason for adapting this framework is the fact that it will be able to capture objectives 1-3 as discussed earlier on. Also, it has been used to assess healthcare financing of low income countries similar to Tanzania.

The analytical framework to assess health financing is based on the three key health care functions to attain the following objectives: revenue collection (to ensure sufficient and sustainable resources

generation/availability), pooling of funds to ensure financial accessibility and purchasing of the services in order to ensure optimal use of the pooled fund in procurement of services in an efficient and equitable manner. Achievement of these three objectives ultimately leads to the contribution of attaining Universal Health Coverage (UHC), and finally achievement of the health system goal of providing improved and equitable health outcomes to the whole population. Mathauer and Carrin proposed interlinked indicators for the above three financing subfunctions as follows:

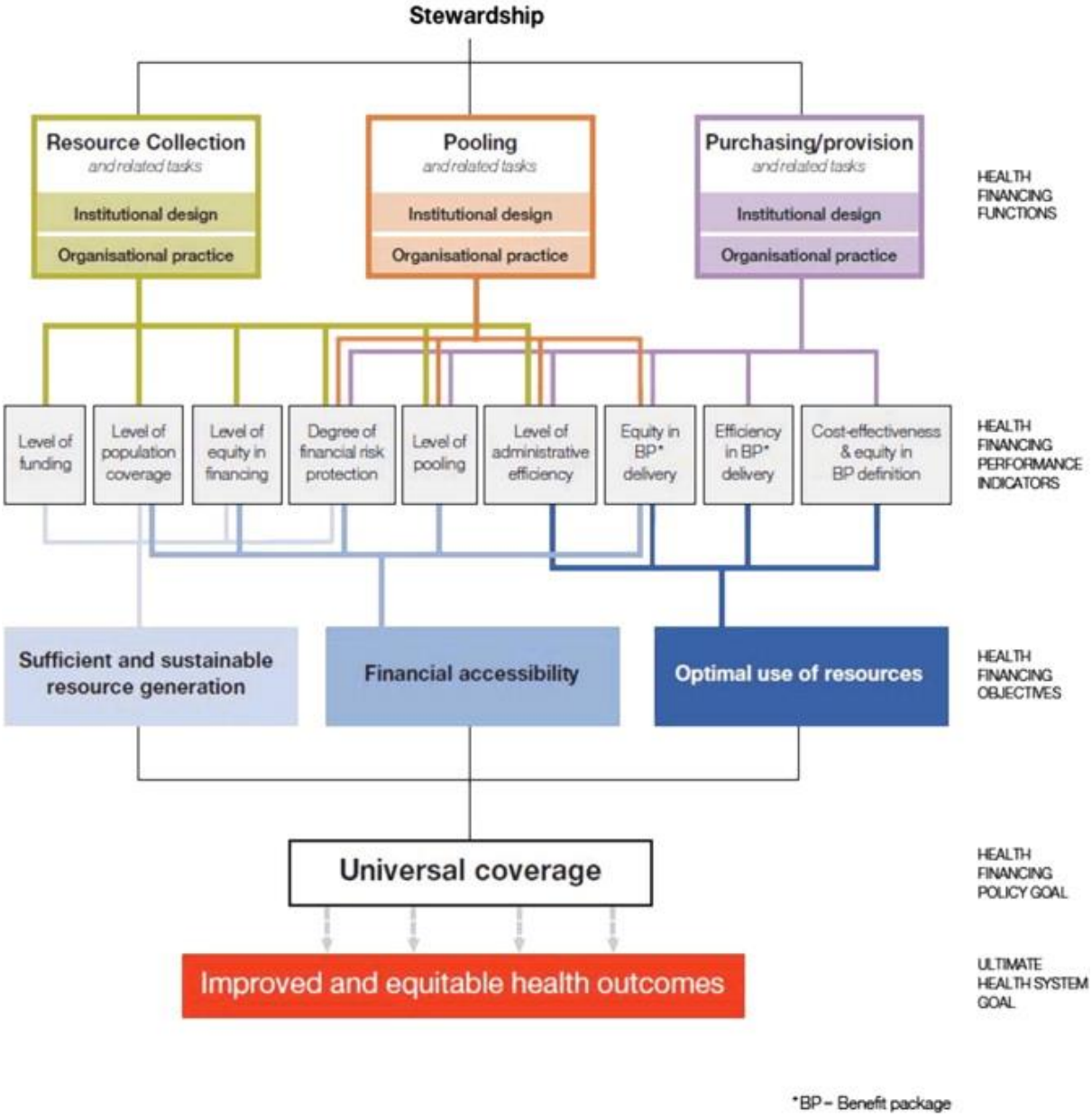
- Level of funding
- Level of population coverage
- Level of equity in financing
- Degree of financial risk protection
- Level of pooling
- Level of adminstrative efficiency
- Equity in Benefit package(BP) delivery
- Efficiency in BP delivery, and
- Cost effectiveness &equity in BP definition.

The framework helps in understanding the strength and weakness /bottlenecks in institution design and organizational practice, and proposes options on how to improve health care financing in the way the government will achieve UHC. Stewardship and Good governance is crucial in all the three (3) components of health care financing functions.

### 2.5. Limitation of the study:

The study is a literature review depending on secondary data which are limited due to the fact that very few studies about health financing are available. Studies that exist may present contradicting data due to the weak monitoring and information and tracking systems, as well as the methodological challenges involved in tracking financial flow in a developing country context that has a high dependency on external funds. Additional information from qualitative studies would have been of benefit in this study, especially in the form of discussion with the purchasers and providers.

**Figure 4. The OASIS conceptual framework**




**Source**: Mathauer and Carrin (2011)

## CHAPTER 3: STUDY RESULTS/FINDINGS

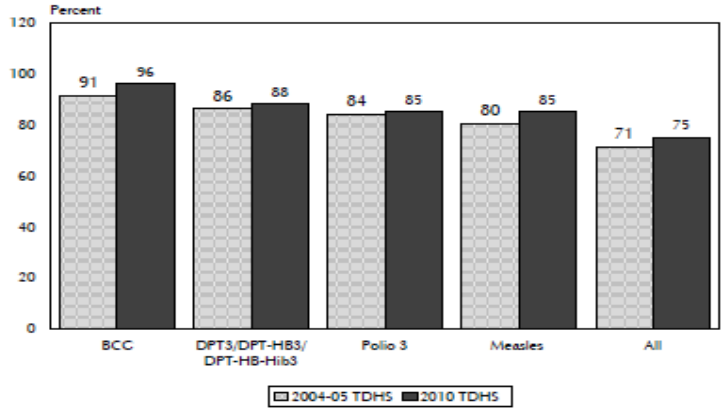
This chapter presents the study results starting with the trends in access and utilization of health services by the poor, based on Tanzania Demographic Health Survey (TDHS) data. Findings from each function of healthcare financing will be described separately as revenue collection, pooling and purchasing of services. Followed by review of Stewardship role and overview of national health policies of the GOT, a review of best practice of the selected countries on their way towards UHC is presented.

### 3.1. Trends in access and utilization of health services by the poor;

The ultimate goal of attaining UHC is to improve access and utilization of health services for the entire population without it being a financial burden on individual households. This is consistent with evidence from various studies concerning the impact of UHC on the access and utilization of services (Giedion et al., 2011). In order to have a clear cut picture on the access and utilization of health services in Tanzania for the years between 1995 to 2010/11, the focus will be on the the health services coverage in the following areas: Immunization coverage (DPT3,Measles OPVo), Assisted delivery of pregnant women by skilled personnel, Antenatal care coverage, TB detection, and treatment success rate under direct observation treatment (DOT). According to David et al. (2012) these are some of the indicators that can be used to monitor countries progress towards UHC.

**Immunization coverage**: According to data from the Tanzania Demographic Health Survey –TDHS (2010), it is shown that Tanzania has made effort in improving the immunization program. As shown in figure 5, there is an increase in vaccination coverage among children at 1 year in the cohort of children between ages 12-23 months, from 71% in 2004-05 to 75% in 2010. As I mentioned earlier on, DPT3 and Measles are used to reflect the utilization of services. In the years between 2004 to 2010 the coverage increased by 2% (86 to 88%) for DPT3, and increased by 5% for measles vaccination coverage (80 to 85%). However, there is big discrepancy between the Lowest and the highest wealth quintile (69 and 89% respectively). The lowest wealth quintile mothers with low education status were less likely to have their children fully vaccinated, compared with the highest wealth quintile with high education.

**Figure 5 Vaccination Coverage among children Age 12-23 Months, 2004-05 and 2010**

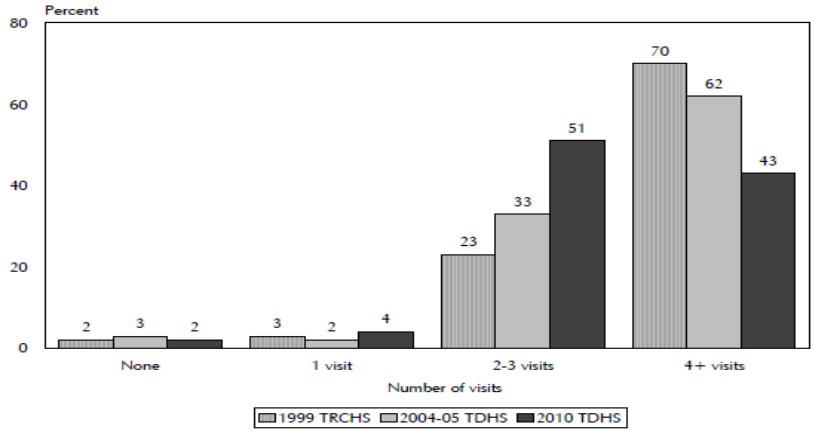



**Source:** Tanzania Demographic Health Survey (TDHS) 2010.

**Antenatal care (ANC) visits:** TDHS (2010) Shows a remarkable decline of ANC visits (4 + visits) by pregnant women from 70% to 43% between the years 1999 to 2010 as is shown in figure 6.

One of the major barriers affecting poor access to health services for women, was lack of money; whilst other constraints were long travel distances to the health facilities, not wanting to go alone, and getting permission from the husband/partners. Women in the lowest quintile living in the rural areas were more prone to poor access to health care, than women in the lowest quintile living in urban areas.

**Figure 6 Trends in Number of Antenatal Care Visits**




**Source:** Tanzania Demographic health survey (TDHS) 2010

**Assistance during delivery-**Percentage of pregnant women that delivered with the help of skilled providers has increased from 46 to 51% between the years 2004 to 2010 (TDHS, 2010). Women under 20 years old were more likely to be attended by skilled providers than women with an age between 35 and 49 years old. Urban women were twice as likely to be attended to by skilled providers than rural women. Only 33% of lowest wealth quintile pregnant women were attended to by skilled providers as compared to 90% from the highest wealth quintile. This means the probability of pregnant women from high wealth quintiles to be attended by skilled personell is 3 times higher than pregnant women from the lowest wealth quantile. Barros *et al*.(2012) shows similar findings in his survey conducted in 54 countries; the coverage of skilled birth attendant (SBA) for the poorest quintile was 32% compared to 82% for the richest quintile.

**Tuberculosis (TB) detection rate under Direct Observed Treatment(DOT)**

Tanzania has improved its estimate of TB case detection rate (CDR) from 69 to 81% btween the years 1995- 2011, as compared to a 66% average CDR in WHO-African region countries of 2010. Furthermore, the trends on the treatment success rate for the new smear positive cases increased from 73% in 1995 to 90% in 2010. This percentage is higher than 88% of WHO –African countries region (WHO,2012). However, still there are some barriers for the poor population living in the rural areas to seek health care in an early stage: unavailability of quality services in terms of laboratory tests, shortage of health workers, long distance from health facilities, poor road conditions, high transportation cost, lack of information about the signs, and symptoms of TB (Malisa and Bangser,2004)

### 3.2. Functions of healthcare financing

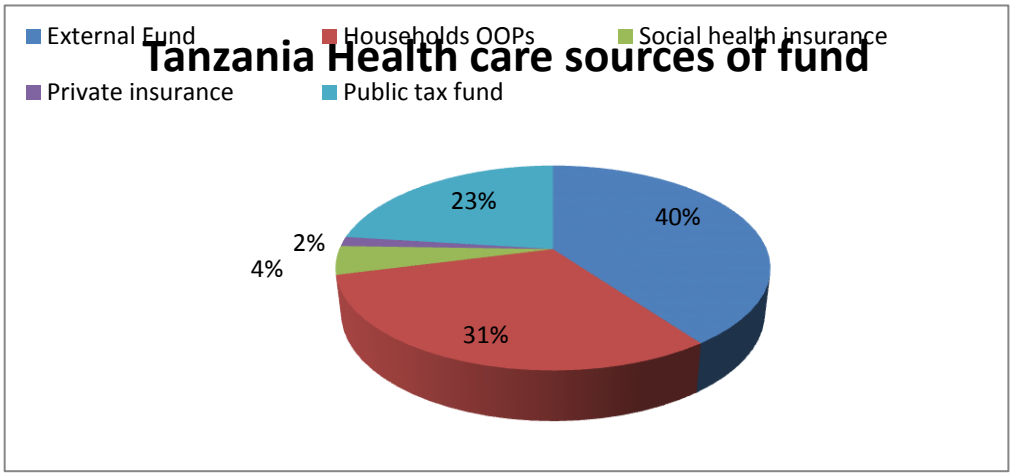
The WHO policy brief note (2005) urges the countries as they make progress towards Universal Health Coverage, to adapt reforms on the following health financing functions: revenue collection, pooling and purchasing or provision of health services, depending on the country context in either tax-based systems, social health insurance (SHI), or mixed forms of financing.

### 3.2.1 Revenue collection

Revenue collection is the first function of health care financing which focuses on various sources of health financing, their structure/forms and the way they are collected (McIntyre, 2007).

The sources of fund for health care in Tanzania for the year 2010 according to NHA as a percentage of THE, consists of domestic fund for about 60% (31 % from household out–of-pockets payments, 23% Public tax fund, 4.5% social security fund, and1.5% private insurance), and for 40% of external donor funds as is shown in figure 7 below.

**Figure.7 Tanzania Health care sources of fund**

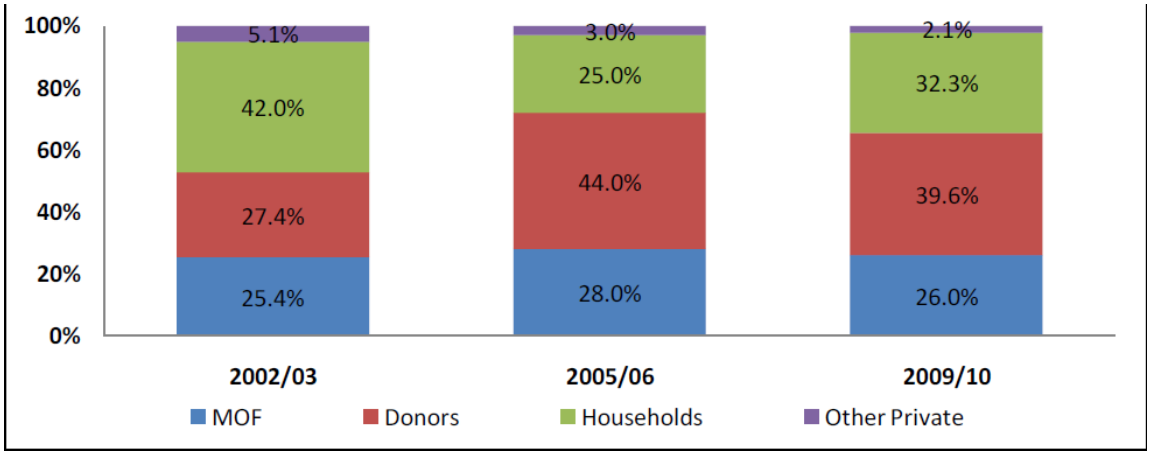



**Source:** National health account-2010/2011 & calculated by the author

Health sector expenditure review (2012) indicates that the trends of financing sources have shown an increase in the external fund from about 27% in 2002/2003 to about 40% in 2009/2010, a decline in the Public/Government expenditure from 28% in 2005/06 to 26% in 2009/2010, whilst the household out of pockets payments declined from 42% in

2002/2003 to 25% in 2005/2006, and then increased to about 32% in 2009/2010 as is shown in figure 8.

**Figure 8. Showing financing sources of THE**



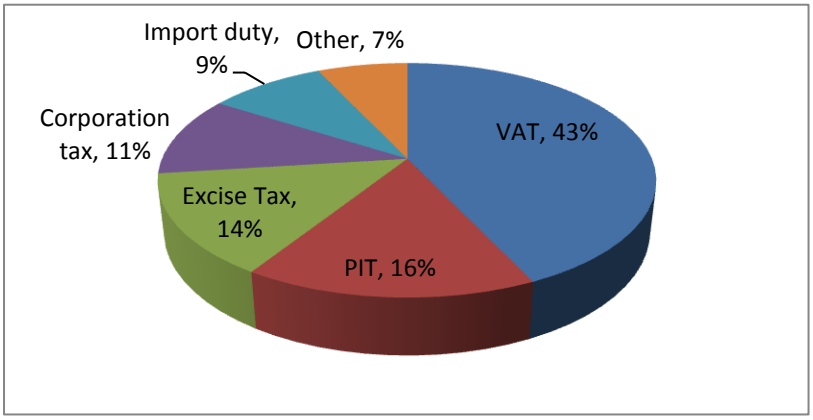

**Source:** Tanzania National Health Account Report 2009/2010

**Public fund** public fund is mainly collected as levies, from individuals and from corporate companies in the form of tax, which can be divided into the following categories: Consumption taxes such as Value added Tax (VAT), which is a larger proportion as shown in figure 9, followed by personal income tax (PIT), excise duty tax, corporate income tax, and import duty tax (MOF, 2008; AFDB, 2010).

In Tanzania VAT is rated as 20% of the price of goods/services paid by the consumers to the retailer; on behalf of the consumer, the retailer submits the VAT to the Tanzania revenue Authority (TRA) which is under the Ministry of finance. The GOT exercises special measures through the VAT act 2006 (URT 2006), to ensure that VAT is more equitable by exempting the unprocessed agricultural product used by the majority of the population, of which especially the poor.

*Excise duty (Tax*); is a kind of tax introduced to generate more revenue by raising extra tax over commodities which cause harm to the health of consumers or have detrimental environmental and social effects. According to the Tax act (2005), examples of these commodities are soft drinks, alcoholic beverages, tobacco products and petroleum products.

**Figure 9. Tanzania Tax revenue by source**

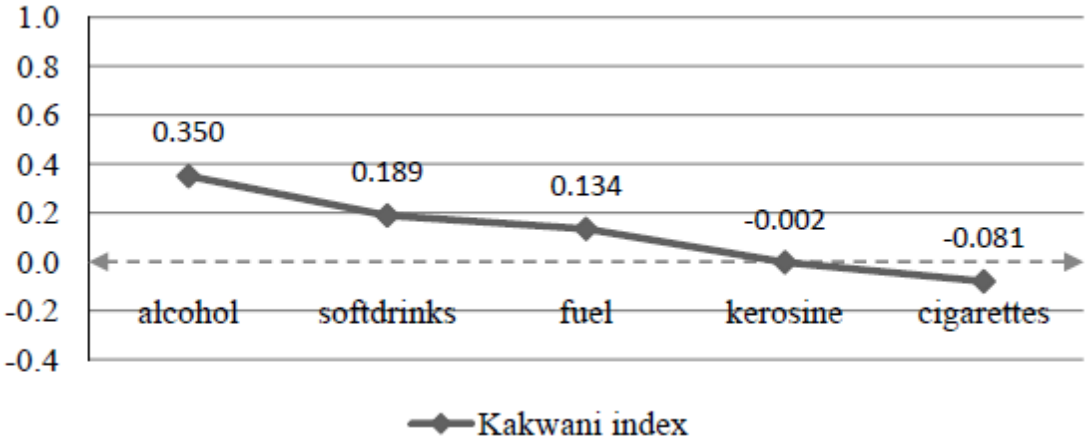



**Source**: Tanzania Revenue Authority –TRA. Accessed online; http://www.tra.go.tz/Info statistics.htm.

*Income tax***;** is a tax on gain from employees or profit from individual businesses and corporations. The income tax for individuals depends on the income; the higher the income the higher the tax. This is what is called pay as you earn. Corporate income tax is equivalent to 30% of the profit gain per year; the tax can be paid in installment to TRA. The GOT introduced the **Tax Act 2004** to ensure horizontal equity; income of different sources is taxed using the same formula. Additionally, vertical equity is ensured as the richer pay proportionally more than the poor (MOF Websites).

*Personal income tax (PIT);* As explained earlier on about equity, PIT follow the same pattern of progressivity, in which the rich pay a higher proportion of their income as income tax compared to the poor (Mtei and Borghi, 2010). Strategies for Health Insurance for Equity in Less Developed Countries (SHIELD) reports by Mtei *et al* (2010) show that overall excise tax is progressive. However, for some commodities like cigarettes consumed by the poor and kerosene, excise tax is regressive as shown in figure 10; the poor pay a higher proportion of their income as tax in purchasing these commodities, while alcohol, soft drinks and fuel are progressive tax. Morris et al.(2012) explained Kakwani`s progressivity index as a measure used to indicate the extent to which health care financing is deviated from proportionality (zero), progressive (positive indices) and regressive (negative indices).

**Figure 10. Kakwani indices of excise tax categories**




**Source**: SHEILD Report package 2 .pp 26(Mtei&Borghi, 2010).

**Out of Pocket Payments (OOPs)**

Out-of-pocket payment is another source of health financing where the patient pays directly to the provider of health care in the form of a user fee, or co-payment. OOPs contribute to about 50% of private total health expenditure in Tanzania (NHA, 2012). Similar to other countries OOPs in Tanzania were regressive (Mills *et al*., 2012; Mtei et al., 2012).

**External funding**

The Health basket fund (HBF) under the Sector Wide approach (SWAp), has been the main source of funding in the decentralized health system at the district and primary health care level.

In 1998, the Ministry of Health (MOH) managed to adopt SWAp by mobilizing the following funders: Denmark Development cooperation (DANIDA), Department for International Development (DFID), Swiss agency for Development and Cooperation (SDC), Ireland Aid, Norwegian Embassy, the Netherlands, and World Bank. Consecutively Kfw and German Technical Cooperation (GTZ) joined as well. HBF is flowing through government account exchequer and is aligned to the country`s financial rules and regulations. However, it has its separate accounting system under the HBF committee which consists of: donor, MOH, MOF and PMO-RALG representatives. Their responsibility is to approve and to review both financial and technical progress reports.

In the financial year 2004/05 to 2010/2011, non-HBF from development partners has tripled due to the moving of the off-budget Global fund grants incorporated into the budget. For example in 2006/07 from the U.S President`s Emergency Program for AIDs Relief (PEPFAR), there was an increase from 205.5 to 356.2 million US dollars for the financial year of 2008/09. Additionally, the Fund from the United State of America President`s Malaria Initiative (PMI) has increased from 35 million US dollars in 2009, to 52 million US dollars in 2010 (MOHSW, 2010). In 2010 the external financial resources on health was 39.2% of THE, while in 2011 it increased to 41.2% of THE (NHA, 2013).

### 3.2.2. Pooling

Revenue pooling is a function of health care financing, whereby resources from individuals or households are accumulated and managed in such a way that financial risks are shared or spread between the pool members (WHO, 2000). To ensure the financial risks are distributed among the members of the pool, Gottret and Schieber (2006) have highlighted the fact that rich cross subsidize the poor, high risk group cross subsidize from low risk, and productive age group cross subsidize for the group of young children and elderly. According to Goudge et al (2012) Tanzania had a lower percentage of people willing to contribute to healthcare of the poor than Ghana and South Africa.

In order to protect its people from financial risks Tanzania is using taxed based financing and health insurance schemes. In context of tax based financing, the MOF is responsible not only in the revenue collection, but also in the pooling of public revenues from both tax and external funding. Through budgetary processes some funds are allocated to the MOHSW and to the LGA through PMO-RALG (MOHSW, 2012). Funds are used to pay salaries, and buy medicines, medical supplies, and equipment through Medical Stores Department (MSD), all for public health facilities and faith based organization designated district hospitals. In this respect public and external funds subsidize the health care cost at the public health facilities (Borghi *et al.,* 2012*).* According to Mills et al (2012) benefits for the population from the pooled fund were marginally pro rich as the rich had more access to the services than the poor.

The exemption mechanism for vulnerable groups (pregnant women, children under 5, and elderly people) has been well implemented. However,

implementation of the exemption policy for the poor is still a challenge (Mclyntyre et *al*, 2012; Mtei *et al.,* 2007). The above explained taxed based health financing covers the entire population. However, about 15% of the population has extra protection from financial risks from the insurance schemes as described in table 1.

**National Health Insurance Fund (NHIF) -** is a compulsory health insurance scheme established in 2001 that followed the Parliamentary act no. 8 of 1999. The main objective of the NHIF was to increase access to health services for its principal members and their dependents (1principal 4 dependents). NHIF is a single risk pool mechanism which is very progressive as the higher income group contributes more to the pool than the lower income group (Mtei *et al*., 2012; Mtei and Borghi, 2010; Mills *et al*., 2012).

In 2001 the scheme began with only civil servants. However, currently more sectors have been included, for example: councilors, members of the police forces, prison guards, immigration officers, and fire and rescue officers. Moreover, retired members who paid premium for at least 10 years are entitled to the benefits of NHIF for the rest of their lives. The enrollment of councilors and the retirees into the scheme has not been smooth as is shown in the NHIF report. Out of 13,194 potential retiree members only 484 were enrolled. As for the councilors: out of 3543 only 878 councilors were registered (NHIF, 2012). According to the current NHIF report data it is shown that 7.3% of the total population is covered by NHIF. The beneficiaries have access to both inpatient and outpatient services in the accredited health facilities. 72% of all the facilities are now able to offer services for NHIF beneficiaries. For the health facilities to be able to offer services to NHIF beneficiaries they have to comply with the minimum standards that have been set by the MOHSW. However, this set of standards applies mainly to private and FBO health facilities. Public health facilities are automatically accredited even if they do not meet the minimum set standards (Haazen, 2012).

In an effort to pool funds from the informal sector, which is the majority, the NHIF has been tasked by the MOHSW and PMO-RALG to manage the CHF, through managerial and technical support assistance to the decentralized LGA health facilities (ihi, 2012; Haazen, 2012; Stoemer et al., 2011; Gilson et al., 2012).

**Table 1. Current situation of insurance market in Tanzania**

| Dimension | NHIF | CHF/TIKA | NSSF-SHIB | PHI |
|---|---|---|---|---|
| **Coverage%** | 7.30% | 8.40% | 0.12% | 1.02% |
| **Members** | Civil servant and 5 dependants | Rural/Urban population informal sector | NSSF members upon signing registration form | Private and high income h/holds |
| **Enrollment** | Mandatory | Voluntary | Voluntary | Voluntary |
| **Collection method** | Payroll deduction | Remit to Health facilities | Payroll deduction | Remit to Private health insurance schemes |
| **Premium** | 6% of gross salary split between employer and employee | $4.2-12(5000-15,000Tshs)Per annum +matching fund 100% paid by the government | NSSF contribution 20% of gross salary split between employer and employee | Varies between $200-600 per annum |
| **No. Risk pool** | 1 | Funds pooled at the district level | 1 | Each scheme own risk pool |
| **Benefit package** | Medium range | Primary health care some hospitals | Broad range | Full range |
| **Provider payment method** | Fee for Service | Capitation | Capitation | Fee for Service |
| **Regulator** | SSRA | SSRA | SSRA | TIRA |
| **Ministry responsible** | MOHSW | PMO-RALG | MOL | MOF |

**Community Health Fund (CHF) /`Tiba kwa Kadi` (TIKA):** As shown in table 1 CHF/TIKA is a voluntary prepayment scheme for the rural/urban informal sector respectively. The estimated population coverage has been increased from 4% in 2008 to 8.4% in 2011 (NHIF, 2012). CHF/TIKA covers children under 18 and couples. Premium Costing is between US $4.2 and US $12.7 per household per year with a 100% subsidy (matching fund) paid by the government. The flat rate premium is designed by the LGA, based on the population economic status in general, and not on the individual household's ability to pay. This in turn has made CHF/TIKA to be regressive as the wealthier pay the same amount as the poorer (Macha *et al*, 2012). The funds are collected at the health facilities and then pooled at the district level, then re-disbursed to the facilities in the form of supplies, medicines and equipment. Benefit package is mainly provided at the primary health care and limited at the referral care in some district hospitals (Borghi et al, 2012).

**Social Health Insurance Benefits (SHIB)-** was established in July 2006, as a fulfillment of the legal requirement of NSSF Act 28 of 1997 with the purpose of increasing access to health services for its members (NSSF website). Private sector workers enrolled in NSSF are eligible for SHIB upon completion of the registration forms. Contribution is 20% of the gross salary (10% from employer and 10% from the employee) used to cater for healthcare in the form of SHIB. The scheme is voluntary with a single risk pool, covering about 0.12% of the population. The scheme includes outpatient and inpatient services (World Bank, 2011; Haazen, 2011).

**Community based health insurance micro schemes (CBHIs) -** is a form of prepayment which is being run by informal groups, religious groups and social associations. UMASITA (Tanzania Informal Sector Community Health Fund) and VIBINDO (The umbrella organization of informal sector) are examples of micro-insurance groups that operate in the mainland of Tanzania. Micro insurance is still at a beginner's stage as it covers less than 1% of the total population. The schemes are not doing well due to lack of knowledge on how to operate using the fundamental insurance principals. The members remit between 20USD to 25USD per annum, and there is no risk pooling across the micro insurance schemes. Members benefit from private out patient care and transport for referral and a maximum of Tshs 10000 (7 US dollars) to cover referral costs.

**Private Health Insurance (PHI)** private insurance flourished after the health sector reforms in the 1990s, with about 15 private insurance companies, of which 5 offered health insurance. Approximately 120,000 people are insured by private health insurance companies. The coverage is less than 1% of the total population. Each scheme has its own risk pooling mechanism. Contribution of the members depends on the benefits (World Bank, 2011). According to the NHA (2011) private health insurance contributes 1.5% to the private total health expenditure. PHI activities are regulated and supervised by Tanzania Insurance Regulatory Authority (TIRA) under the MOF.

**Fragmentation of risk pooling;** the above prepayment schemes are highly fragmented due to the fact that each scheme is under different ministries with its own risk pooling mechanism, for example: NHIF under MOHSW, CHF under PMO-RALG, NSSF-SHIB under the Ministry of Labor(MOL), and PHI under the MOF(Annex 2). Fragmentation of these insurance schemes reduces the ability of risk cross subsidization and equalization mechanisms, both from the rich to the poor and from the healthier to the sick (Goudge et al., 2012).

### 3.2.3. Resource allocation, Purchasing & Provider Payment Mechanisms (PPM):

The manner in which funds are used through resource allocation, purchasing, and PPM is selected according to a specific system for each financial financing mechanism, depending on the source, which is explained underneath:

**Public Tax funding-** To ensure equity between the poor and wealthy districts, and allocation of Tax fund, GOT adopted a needs-based resource allocation formula (70/10/10/10); allocation of the resource depends on the population (70%), burden of disease using under 5 years of age mortality as indicator (10%), poverty level of the community (10%), and finally estimated adjusted cost of services provision in Rural districts with a scattered/sparsely population (10%) (MOHSW, 2008; Mclntyre, 2007). However, unfair resources allocation remains between the regions and districts, due to the fact that the needs-based formula is not adhered to, especially in the case of allocation of other charges (OC) and Personnel emolument fund (Boex, 2007; PMO-RALG, 2008). Further, the formula does not reflect on the current situation, as it is based on the old statistical data

(2001). This might lead to under- or over- allocation of the resource, as the population size is growing and the economic status of the community is changing with time.

Public facilities get supplies of medicines and medical supplies by central procurement through MSD, whereas the allocation of these commodities before the year 2007, were push system. Kits were sent to the health facilities independent of local need. This system was ineffective because it failed to meet the need of the public, where some facilities were supplied with huge amounts of medicines and supplies compared to the capacity of the facility use, especially in areas of low prevalence. For example ALU[4], which proved to be effective in the treatment of malaria, was supplied in large amounts and then expired. However, most of the time essential drugs were missing at different consignments (Baumgarten, et al., 2011). These discrepancies led the Government to adopt the Indent Kit system, which since 2010 was an integrated logistics System, whereby the facility reports and orders according to the local needs. The allocation of medicines and supplies follow the same formula as discussed above, yet with some modifications; Population size (70%), under 5 mortality (15%), and poverty level (15%) (MOHSW, 2010).

**External Funds-** Presently, there are two main ways in which donor funds are used; the first is in the form of HBF, which is allocated to the MOHSW and LGA through SWAP, according to the needs based allocation formula that was explained earlier on in section 3.2.1. Secondly, there is the non HBF which is specifically for vertical programs in the three priority areas, which are HIV/AIDS, Malaria and Reproductive Health care. According to the Tanzania NHA (2012) data donor funds accounted to over 70% of the HIV vertical program in 2009/2010, whilst public funds declined from 27% in 2002/2003 to 12% in 2009/2010, and private sector contribution declined from 42% to 18% in the same period. Similar trends were noticed in the malaria and reproductive health programs, where 80% of the donor funds are managed by NGOs in providing preventive and curative health services offered for free in public health facilities.

[4] Artemether Lumefantrine

**Household out-of-pocket payments**- are made directly to the provider by the individuals. Payments can be in the form of co-payment, user fees, under the table payments, administrative cost etc., as explained earlier on in section 3.2.1.

**Insurance Schemes**- Several methods are applied in purchasing services from providers by using pooled funds. NHIF mainly uses Fee-for–service (FFS) method, NSSF-SHIB uses capitation and FFS, private health insurance uses FFS, and micro schemes use capitation (Borghi *et al*., 2012) .However, there is a big discrepancy between the rural and urban areas; urban areas are more likely to raise and pool more revenue than the rural areas, because the majority of the NHIF members are residing in the urban areas. Also, people in the urban or rich districts are able to contribute/join CHF and get more matching fund than the rural and poor districts (Mclntyre, 2007).

**Purchasing of services**- Tanzania practices both ways: passive and active strategic purchasing of health services. Passive purchasing is a traditional way of purchasing services on behalf of the population whereby Public fund is transferred to the providers. On the other hand, active purchasing implies that the purchaser is on a continuous search for the best intervention; looking where best to purchase and from whom and finding the best payment mechanism to ensure the population health needs are met in an effective manner (WHR, 2000).

**Provider payment mechanisms:** In purchasing of services, provider`s payment method is crucial to both consumers and providers. In this regard, Tanzania relies mainly on the supply side financing system in which services are procured by inputs (Salaries and medicines, supplies and equipment) in the form of budget line, as was discussed earlier on. As reported by WHR (2010) and cited in Mushi et al (2003), Demand side financing is done by providing subsidized vouchers for pregnant women and children less than 5 years of age, in order to secure Insecticides Treated Nets (ITNs).

In terms of benefits the inverse care law applies, as the rich benefit more than the poor (Makawia *et al*., 2010). For instance, Primary care in the dispensary is pro-poor while District hospitals and Referral hospitals are pro-rich (Mtei &Borghi, 2010). This is due to the fact that the majority of the low income group from the informal sector is in rural areas and has more access to primary health care level. District hospitals are mostly located in the

suburbs. First referral from lower health facilities causes difficulties in accessing these due to various reasons, including transportation and other reasons in relation to access to medical services.

### 3.3. Health financing performance indicators

The following health financing indicators were used to assess the performance of the third component of health financing function:

**Level of funding**: Tanzania is among the 29 low income countries that spend less than 44 US dollars per capita, which is the average cost required by the country to provide a minimum package of essential health services for the whole population. Likewise, the THE per capita in Purchasing Power Parity(PPP) int. US is 107 US dollars, which is less than that of the average African region of 147 US. There was a significant increase in THE as a share of Gross Domestic product (GDP) from 3.7% in 2003 to 7.3% in 2011. This is higher than most low and middle income countries (4.6% and 4.8% respectively). The General Government Expenditure on Health (GGHE) as a percentage of THE, declined from 65% in 2009 to about 40% in 2011 (NHA, 2013). Furthermore, Tanzania reached the Abuja commitment (2001) of putting aside 15% of the national annual budget to health care in 3 years consecutively from 2006 to 2009. However, since 2010 the country failed to maintain its commitment where the allocation for health was only 8.7% of the 2011/2012 budget (MOF, 2012; MOHSW, 2012).

**Level of population coverage:** based on the current situation, tax and donor funds cover the services provided free of charge for the entire population, such as: Vaccination, ANC, TB, Anti Retro Viral Therapy-ART (Borghi *et al*, 2012). In addition to that, approximately 18% of the Tanzanian population is covered by Health insurance or other prepayment schemes. Of this 18%, approximately 7.3% are population from the formal sector covered by NHIF&SHIB, 8.4% are from the informal sector covered by CHF/TIKA in Rural and Urban areas respectively (NHIF, 2012).

**Level of equity in financing sources:** In general, overall tax & NHIF were progressive as the rich pay a higher proportion over the poor. However, out-of-pocket payment and CHF/TIKA were regressive as the poor contribute proportionally more in comparison with their income, than the rich (Mtei and Borghi, 2010; Mills et al., 2012).

**Degree of financial risk protection:** Currently, most Tanzanians are protected by Tax and external funds through subsidized services at the public health facilities, whereas the remaining population members are protected through various prepayment insurance schemes (NHIF, CHF/TIKA, and SHIB). Prepayment ratio (GGHE/THE in percentage) is approximately 39%, which is very small compared to the recommended 70% or above. In 2011, OOPs account for about 31% of Total health expenditures in Tanzania (NHA, 2013). This shows there is an increase in the possibility that households incur catastrophic healthcare expenditure and impoverishment in seeking health care. This is due to the fact that the OOPs is higher than 15 to 20%, which is the minimum percentage to determine the occurrence of household catastrophic healthcare expenditure (WHR, 2010).

**Level of pooling across the health care financing system** Currently, tax funds are pooled by MOF after which they're allocated to the MOHSW and LGA. Other existing mechanism includes pooling of funds from the formal sector under NHIF. Contributions to the NHIF are being deducted from the payroll centrally, by gathering 6% (3% from the employer and the remaining 3% from the employee's monthly gross salary). CHF is mostly practiced at primary care level. The CHF operates at the district level by using a single pooling mechanism to which all health facilities contribute. By so doing it allows for cross subsidization to occur between the health facilities. Currently, most of the health facilities have their own individual accounts and no longer send money to a single district account. This results in an increase of the risk pool fragmentation, yet it eventually reduces the level of pooling in the district (Borghi *et al*., 2013).

**Level of Equity in Benefit package (BP) delivery-** each scheme has a benefit package, which differs pending on the scheme. For example, the NHIF has wider benefit packages for its members unlike the voluntary schemes like CHF/TIKA, that have a benefit package which is limited to primary health facilities. Private insurance is mostly for the wealthy and healthier people in contrast to the CHF/TIKA, which is used by the low income groups that are mostly not healthy and are in need of access to health care. Other uninsured population solely depends on the OOPs when seeking health care from the tax subsidized health services in the public health facilities. However, due to poor quality of health services at the public facilities, including irregularities of medicines and supplies, long waiting time, absence of laboratory services, and attitude of health workers, the

people including the poor seek healthcare in the private sector. Even though doing so increases the likely hood of incurring catastrophic health care expenditures (Macha et al., 2012; Masuma&Bangser, 2004). Primary health facilities as gatekeepers in health system are passed on by most people that go directly to the higher level (district and regional hospitals) due to the reasons explained above. Similar reasons are found in the healthcare systems of other Sub Saharan African countries that have been unable to efficiently deliver health care. As a result, almost 50% of health care, often obtained in the private sector, is paid by patients out-of-pocket. This causes many to fall into a poverty trap (WHR, 2010).

**Cost-effectiveness and Equity considerations in BP definition-**The NHIF benefit package covers both inpatient and outpatient services. Other services include laboratory investigations and so (image) diagnostic tests (Ultra sound, Echocardiography, CTscan and MRI), physiotherapy, optical services and orthopedics appliances (NHIF, 2012). Most of these services are in urban areas and big cities, which is making it difficult for the low income groups living in rural areas to access these health services. Moreover, not all the cost is covered by the insurance; extra cost has to be paid by the members, which also makes it even more difficult for low income groups enrolled in the schemes, to access some of these services. Cost effective interventions, such as immunization and other mother & child health services and chronic diseases such as Tuberculosis (TB), leprosy and HIV/AIDS are provided for free; cost of these services are covered by external and tax fund. However, opportunistic infections resulted from these disease are included in the benefit package. Other services exempted include provision of eye glasses, cosmetic surgery, complications from illegal abortions, treatment of alcoholism, suicide attempts, and self-mutilation (NHIF, 2012).

**Level of administrative efficiency**: According to the health sector expenditure report by MOHSW (2012), it is revealed that NHIF spends approximately 12% of its revenue on administrative purposes, a figure which is higher than most low and middle income countries where less than 8% is spent on administration (WHO, 2010). As discussed earlier regarding fragmentation of existing prepayment, insurance schemes can lead into duplication of effort and increase in administration, which makes the schemes inefficient.

The prepayment schemes, like CHF, are being managed by the Council health services board (CHSB), under the technical advisor District Medical Officer (DMO). The dual role of this board as a purchaser and as the providers of the services is a problematic one; it makes it difficult to protect the interests of both CHF members and health service providers (Stoermer, 2011). Since 2009, GOT has tasked NHIF to administer CHF/TIKA in an effort to extend prepayment insurance to informal sectors. This caused more administrative expenses as a result of introducing a new administration level at the regional/zonal and finally at the district level which will require additional administrative cost (Borghi *et al*., 2013).

### 3.4. STEWARDSHIP & HEALTH POLICIES OF GOT.

**Stewardship;** According to WHO the responsibility of overseeing the health sector is supposed to be under Ministry of health. However, in the health insurance market in Tanzania there are 4 ministries responsible: Ministry of labor (MOL) responsible for NSSF-SHIB, MOHSW for NHIF, PMO-RALG for CHF and MOF for private health insurance scheme (PHIs). Further, two government agencies are responsible for regulatory oversight- the Social Security Regulatory Authority (SSRA) and Tanzania Insurance Regulatory Authority (TIRA). The MOHSW and LGA have a dual conflicting role; as owners of the public health facilities (Providers), and as employer of health staffs and overseer of NHIF and CHF respectively; they are making no split between purchasing and service provision.

**Overview of National Health Policy** -The first National health policy was developed in 1990. Before then MOH relied on the general country policy, based on Arusha declaration of 1967, of which the main focus was self-reliance and equitable distribution of social services. The policy was reviewed in 2003. Among the objectives of this policy on health financing related to the poor are exemptions and waiver mechanisms, which are not well implemented despite the fact that they are clearly stated. The policy highlights the importance of solidarity, cross-subsidization, and risk equalization mechanisms. The role of the MOHSW as both the owner of public health facilities and as the Inspector of quality assurance causes a potential conflict of interest.

The current policy does not address the issue of fragmentation in the health insurance market, but it only points out developing guidelines for different types of insurance schemes. Further, related to development partners the

policy is just encouraging the partners to channel the fund through SWAP or to align with GOT budgetary system, which gives the option to the development partner on whether to align or not. Lastly, this policy spells out the country's vision of 2025 to improve the health and wellbeing of all Tanzanian especially those most at risk. After the world assembly meeting and WHO 2005 resolution, Tanzania committed to move towards UHC; by ensuring all the citizens have access to the quality health services without experiencing financial hardship.

The GOT developed strategies that will help the country to move towards UHC. Some of these strategies were health sector reform and strategic plans, National strategy for growth and poverty reduction, and Primary health services development program.

*Health sector reforms (HSR)*; The first reform in health financing occurred in the early 1990`s, where user fees were introduced as the source of revenue in order to improve the quality of health care in the Public service. At that moment the public health facilities had a number of challenges including constant irregular availability of medicines and supplies (Georgen et al.,2007). In 2001, the GOT established NHIF and CHF as discussed in chapter 1 and chapter 3. Another area in the health sector reforms was that of decentralization policy, whereby the districts were given power and authority to plan and implement health interventions. However, still most financial transactions are centrally controlled in terms of procurement of medicines and supply for the LGA health facilities (MOHSW, 2012).

*Health sector strategic plan (HSSP)* is the 5 year plan acting as a road map in implementation of the National health policy of delivering quality health services to the population, and help to mitigate all the challenges that occurred in the course. The first HSSP-I was meant for the years 1999-2002 (`Power of work`), and focused on making the foundation of the health system, where it was also developing structure and systems for efficient and effective delivery of health services (MOHSW, 2003). The second HSSP II based on provision of quality health services to all Tanzanian especially the poor. However, still some challenges exist in providing quality services among the poor in the crucial interventions such as immunization, TB, etc., as discussed in chapter-3.1.

*Health Sector Strategic Plan III (2009-2015)*; Focused on deliverly of health services through partnership in order to accelerate the movement towards attaining the Millenium Development Goals (MDGs) by the year 2015.

The GOT made a decision to develop a health financing strategy in order to realize/fulfil her dream of providing health services to all (Vision). It is now in progress to prepare the health financing strategy, which will have the road map for the country to move towards UHC. However, a number of activities have been going on, for example–option of the country to attain UHC through extending prepayment insurance schemes as explained in chapter 2, Plan of merging formal scheme NHIF with informal pre-payment scheme CHF. According to Borghi et al.(2013) the scheme benefited from the supervision and other technical support, but proved no evidence on the efficiency.

*National Strategy for Growth and Reduction of Poverty II (NGRP II);* as presented in the poverty reduction strategy paper (PRSP) it does not explain anything related to the user fees in health, but does so in the education sector, for example about abolition of fees in primary education. Also in its report there is no discussion on financial barriers for the poor in accessing health services. Further, it does not mention any waiver or exemption mechanisms to protect the poor from financial risks.

*Primary Health services development program (PHSDP 2007-2017) and Human resources development program (2008-2015).* These are two programs that resulted from the update of the health policy in 2007 with the purpose of increasing physical access and quality of health services for all Tanzanians.

## 3.5 BEST PRACTICE OF OTHER COUNTRIES ON THE WAY TO UHC.

In this section the focus will be on the best practices of the Low and middle income countries on their way to UHC; countries selected are Ghana & Rwanda at their intermediate stage towards UHC. Description will start with comparison of the two countries in selected ratio indicators for expenditures on health as reported by NHA 2011 report.

**Table 2.Country`s selected ratio indicators for National Expenditure Health 2011.**

| SELECTED RATIO INDICATORS FOR NATIONAL EXPENDITURE ON HEALTH | GHANA | RWANDA | TANZANIA |
|---|---|---|---|
| Total expenditure on health (THE) as % of GDP | 5 | 11 | 7.3 |
| External resources on health as % of THE | 14 | 46 | 41.2 |
| General government expenditure on health (GGHE) as % of THE | 56 | 57 | 39.5 |
| Private expenditure on health (PvtHE) as % of THE | 44 | 43 | 60.5 |
| Social security funds as % of GGHE | 26 | 11 | 0 |
| private insurance as % of PvtHE | 6 | 0 | 1.5 |
| Out of pocket expenditure as % PvtHE | 66 | 49 | 52.4 |
| out of pocket expenditure as % THE | 29 | 21 | 32 |
| Total expenditure on health/capita at purchasing power parity NCU per $ dollar | 90 | 135 | 107 |

**Source**: Global Health Expenditure Database

http://apps.who.int/nha/database/standardReport.aspx?

**Ghana** is among the Sub Saharan African (SSA) countries that have made progress towards UHC. This is demonstrated by increased population coverage of Social Health Insurance (SHI) from 27% in 2005 to about 67%

in 2009. The country used the "poor first approach" to enroll the poor and most disadvantaged groups (Durairaj *et al*., 2010).

Ghana introduced consumption value added tax of 2.5% that earmarked the revenue for National Health Insurance Schemes (NHIS), which accounts for about 61% of the scheme budget. Other sources are from formal sector deduction and from household's contribution. Presently, Ghana's single pool targets the entire population with a comprehensive benefit package which is offered in private and public health facilities (Lagomarsino et al., 2012). In 2011, SHI funding contributed to about 14% of THE. However, OOPs is still about 30% of THE and THE per capita in PPP is about 90 Int. $ which is less than that of Tanzania of about 107 Int.$ as shown in table 2. This proves that Ghana is not further than Tanzania on the road to UHC, although it seems that they have been doing much better in advocacy.

**Rwanda**- is among the countries which demonstrated government commitment and the Political will to move towards UHC. However, according to Makaka (2012) the country faced many challenges including: insufficient funds at district and national level, weak risk pooling mechanisms, inadequate staff with limited managerial capabilities and a large number of the population with little or no ability to pay premiums. Therefore, the country made Community Based Health Insurance (CBHI) reforms which was done in 2011 in order to be able to address and mitigate the challenges that faced the country`s progress towards UHC. The reforms started with the changes in the policy using evidence based results obtained from the costing study done by MOF, and with the development of a nationwide database which enrolls people according to their social economic status. Since the reforms, 90% of the population especially in the informal sector and among the poor are covered (Haazen, 2012; Makaka et al., 2012). However, only 6% of THE flows through SHI, meaning that the Benefit package BP is small. In 2011 the country`s OOPs was about 21% of THE which is approximate close what the WHO has recommended (15-20%), and the THE per capita in PPP was 135 Int$ which is higher than Tanzania (107 Int.$) as shown in table 2 .

## CHAPTER 4: DISCUSSION

This chapter discusses the findings/results of the study, starting with the discussion on the trends in access and utilization of health services, in particular by the poor. This will be followed by a general discussion on the functions of health financing, focusing on the health financing indicators and the challenges in organizational and institutional arrangements that influence the performance of financing indicators, including a link to the best practices in various selected countries on their way to achieving UHC.

**4.1. Trends in access and utilization of services for the poor**- Looking at the coverage of the interventions that are needed by the whole population, all of the following health services are provided for free by the GOT in all Government health facilities: immunization, TB, and Maternal services: ANC and delivery of pregnant women by skilled birth attendants. However, a comparison between DHS data of the year 2004 -2005 and 2010 shows that the coverage among the poor is lower in the lowest wealth quintile compared to the coverage among the rich, which is in the highest wealth quintile in all respect. This suggests that removing the user fee does not guarantee increased access and utilization of health services by the poor. It implies that other factors do contribute to the poor access to health care among the lowest wealth quintile, which includes the following:

*Availability* of health services; women in the lowest quintile living in the rural areas have poorer access to health care than women in the same category living in urban areas, which shows there is unequal distribution of health facilities between rural and urban areas. This is despite the fact that of the country having made progress and that 90% of the population are living within 5 kilometers or less from the health facilities, as was discussed in chapter 1 (MOHSW, 2008). According to Macha et al. (2012), people from the rural areas who do not have health facilities have to travel long distances and incur extra transport cost. In case of admission, there is an extra cost to the caregiver for food and accommodation, while he's looking after the sick. All these factors have a negative impact on the poor as it increases the risk of impoverishment, since most have to sell their assets or borrow the money to meet the cost. This was proven by studies conducted in 15 African countries on coping mechanisms from OOPs (Leive and Xu, 2008).

*Quality of health services*- Even though health facilities are available in some rural areas, there are challenges in providing quality health services due to

shortage of skilled personnel as most opt to stay in the urban areas. Also, irregular availability of supplies and equipment contribute to low quality of care (Kwesigabo et al., 2012).

*Acceptability*- Services need to be accepted by the people in order for them to be utilized; culture, tradition and beliefs of the community need to be considered in catering for these services. Between 2005 and 2010 ANC visits by pregnant women has declined despite the fact that these services are provided free of charge. This suggests that there is a need to look at other factors beyond financing that affect access to health care.

**4.2. Health care financing functions** – This section will focus on the discussion of the challenges in the three sub functions of health care financing; revenue collection, pooling, and purchasing of health services.

**4.2.1. Revenue collection** -The first step towards universal health care coverage is to find ways and means on how to raise sufficient and sustainable funds for health care (WHR, 2010). Tanzania mainly depends on external funding for health care delivery. There is a high level of donor dependency, which will compromise sustainability of provision of health service due to the risk of pulling out by unreliable donors. Another reasons includes the economic crisis, which made most high income countries fail to fulfill their commitment on Official Development Assistance-(ODA), of putting aside 0.7 of their Gross National Income (GNI) for external funding LIC. In this respect, there is a call to raise more domestic revenue for health care in Tanzania, by making the health sector a priority and therefore adhering to the commitment that was made during the Abuja declaration in 2001 This declaration says that 15% of the Government budget is to be allocated to health care (AU, 2001). Another way of raising more domestic revenue in a sufficient and sustainable way is through innovation of various taxes; solidarity levies in mobile phone calls, and increasing tax of harmful substances like alcohol and tobacco, which has a dual role; first it will decrease consumption of these harmful substances and maintain health of the population, and secondly, it will raise more funds for health care. Currently, harmful substances are highly taxed but the fund is not allocated directly for health care. Collecting tax revenue/premium from informal sectors that are a majority is a challenge, not only for Tanzania but also for other countries on their way towards UHC. Notwithstanding this fact, Tanzania has opted to expand coverage of prepayment insurance schemes.

Studies show that without subsidies from the government for the majority in the informal sector that are poor, it is impossible to attain UHC.

According to the WHO report 2007, Tanzania was among the four countries to accomplish the agreement signed at the Abuja declaration in 2001, which states that 15% of government budget should be allocated for healthcare. This did not happen though, during the financial year of 2011/2012, as the government budget for health was 8.9% (MOF, 2013). Powell-Jackson et al. (2012) emphasized that fiscal space can also be increased by economic growth, which can be noticed in the country`s GDP growth.

Prepayment ratio is smaller than the recommended 70% which reflects an increase in the OOPs in recent years. This shows that most people, including the poor and the majority from the informal sector, are not enrolled into prepayment insurance schemes available in the country. As a result, OOPs have been increased, in turn counteracting on the concept of risk pooling. Subsequently, the burden of health care remains in individual households (Mclntyre, 2007). Other reasons for recent increase in OOPs could be due to poor quality of health care at public health facilities, as discussed earlier in section 3.3, which causes people, including the poor, to seek health care in the private sector. Irregularities of medicines in the public facilities could cause people to buy medicines at private pharmacies at higher prices and therefore incur more cost. The insufficient gate keeper role in the health system could be caused by- passing of primary levels into hospital level, which causes more costs including transport cost as most hospitals are located in the suburbs. Furthermore, poor implementation of exemption policy could be the reason contributing to the increase in OOPs. Borghi et al. (2011) in their survey reported that 44% of the poor entitled for exemption paid user fees for outpatient services and about 70% paid user fees for inpatient services.

The decline of public funding from 65% in 2009 to about 40% in 2011 could be due to the following reason: increase of the external funds supporting vertical programs (HIV/AIDS, Malaria & Reproductive health) as discussed in section 3.2.3 led to decrease in the public funds to those particular interventions. Similar findings were reported by Ku et al.(2010); in every 1$ increase of external funds there is a decrease of about $0.43 public health expenditure to support health interventions. In recent years more priority has been given to other sectors which are considered to be related to

economic growth such as education. This is evident, as in the financial year 2012/2013, about 23%, of the annual government budget was allocated for education sector, and only 10% for the health sector (MOF, 2012). According to WHO 2010, lack of bargaining power by the MOH to convince the MOF for more allocation could be another reason in the decline of the public funding.

Tanzania can take lessons learnt from other insurance schemes and best practices in other low income countries like Rwanda and Ghana. In Rwanda they have been able to establish a mechanism where people pay according to the ability to pay whilst poor are subsidized by the government due to the following: government commitment and political will with good usage of external aid and CHBIs reforms, which was accompanied by development of data base of its population based on the social economic status. This lead to increase the coverage of prepayment schemes to the informal sector, which is a challenge to the GOT. Ghana through its political will of his legacy Kuofor has been able to increase the population covered in the insurance schemes to over 67% of the total population. This has been successful due to innovation of earmarked VAT tax of 2.5%.

**4.2.2. Pooling**-The present tax based financing and health insurance schemes have the role of protecting the population from health-related financial risks, based on the principle of risk pooling. The advantage for the insured population is an effective cost-sharing mechanism based on the basic principle of solidarity. The recent introduction of insurance initiatives is aimed to expand the prepayment mechanisms. MOHSW needs to ensure that additional funding through SHI is not off-set by diminished share of tax funding. The Country`s progress towards UHC is determined by solidarity and the willingness of citizens to cross subsidize the risks (Mclntyre & Mills, 2012). For Tanzania, having a low percentage of people willing to contribute towards the poor is an indication that the level of knowledge and awareness about risk cross subsidization and solidarity is low. Therefore, as the country is heading towards UHC, it is important for the population to be aware of and be ready to accept the principle of solidarity. Tanzania could benefit in reducing existing fragmentation risk pooling mechanism by learning from the example of Ghana where there is a single risk pooling mechanism at NHIS.

**4.2.3.Purchasing**-Traditional passive purchasing of services through budget item line, which is done prospectively, has made provision of most public health facilities ineffective as a method; there is no incentive for performance because health workers know that they will get their salary at the end of the month. This in turn leads into under provision of services or unnecessary referral of patients. Splitting the dual role of the MOHSW as the purchaser and the provider of the service, by creating a separate purchaser as was done in Ghana would have the potential of increasing competition between the private and public health facilities, which lead to improvement of the quality of health services.

Provider payment system- is very complicated as it is a matter of trial and error and continuous monitoring based on cost controlling, facilitation of prevention and health promotion, effect on the quality of care and the burden of financial risk. NHIF used FFS payment method. Fee for Services is easily developed and implemented. However, it encourages providers to work longer hours and provide more services due to information asymmetry between provider and patient, which is called "providers induced demand". The quality of health care could be compromised due to reduction of time used to attend to patients in order to be able to attend to more patients. This will eventually affect preventive and counseling services for health promotion. SHIB uses Capitation which has the advantage of improving efficiency and continuity of care, cost containment, as the financial risks lie to the providers, and potential of improving health promotion and preventive services. However, capitation method could lead to under provision of services and selection of healthier enrollees, which is a condition called "cream skimming".

There is renewed attention to target the poor in purchasing of health services. Therefore, as the country is heading towards UHC there is a need to opt for a financing system which will benefit the poor, based on the local context. Jehan et al (2012) shows how the demand side financing of cash transfer and voucher schemes executed/practiced in countries like Bangladesh, Nepal, Pakistan and India, target the poor and improve access to maternity services

### 4.3. Stewardship

In the Tanzanian health insurance market there is no unified or harmonized system of regulation; each scheme operates under different ministries while conforming to a different act. For example National Social Security fund (NSSF)-SHIB –reports to the MOL while conforming to the NSSF act, and NHIF reports to the MOHSW and is regulated by the NHIF act, and SSRA in non technical matters. However, NHIF and SHIF are all under oversight of the SSRA which reports to the MOL. This kind of organizational structure and institutional arrangement reduces the regulatory authority of the SSRA. Further, the dual role of the MOHSW as both a regulatory in quality assurance and as the owner of the facilities, creates conflict of interest.

# CHAPTER 5: CONCLUSION & RECOMMENDATION

## 5.1. CONCLUSION

Tanzania is among the SSA countries struggling to reach the UHC. A lot has already been done to ensure achievement by 2015. A targeted 45% of the population is to be enrolled in prepayment schemes. Some of the efforts include scaling up of health care services in every village as planned during PHSDP/MMAM. To date, 90% of the population is living within 5 kilometers from the health facilities. However, there are challenges that need to be resolved through improving the health care financing from the higher levels to the community level. Extra efforts and commitments by the government are needed to ensure availability and access to quality health care services for Tanzanian citizens. UHC of the poor can only be realized if the country is able to raise sufficient and sustainable funds by improving an efficient Tax collection and earmarked Tax, especially for harmful substances which will be directed towards the health care.

Secondly, enhancing the level of pooling by increasing population enrollment in prepayment schemes will make it compulsory for the government to subsidize the poor by using tax money. Solidarity in risk pooling will be realized by raising the awareness of the population on the importance of risk pooling and cross subsidization. The existing fragmentation of a risk pool could be minimized by merging informal CHF and NHIF and later on SHIB of NSSF into a single pool. To ensure equity in resource allocation GOT should adhere to the resource allocation formula and should be updated.

Thirdly, UHC can be realized only if the resources are utilized in an efficient and effective manner, which can be done by strategic purchasing of the services and changing the existing passive/ traditional way of purchasing. This should be accompanied by the separation of the roles of MOHSW, LGA from purchaser and provision of services. UHC can be achieved by increasing decentralized autonomous Service providers (Health facilities) to be run by skilled Managers, in collaboration with the existing Health facilities governing committees and Council health services board. This will make the health facilities to be more accountable to the population and provide quality health services as the fund will follow the patients. LGA is to ensure that the poor in their respective councils are identified and are enrolled in prepayment schemes. This will be done by using tax subsidized funds. The minimum benefit package should be prepared to harmonize the existing discrepancy between the NHIF members and the CHF, when the coverage is universal then the benefit package could be increased.

Having said all of the above, it is clear that Political will, the Government commitment, good governance and stewardship are needed if The United Republic of Tanzania is to achieve Universal Health Coverage.

## 5.2. RECOMMENDATIONS

The following recommendations will ensure access to quality and equal health care services and, financial risk protection among the poor/vulnerable in Tanzania.

### AT MINISTERIAL LEVEL

- The Ministry Of Health and Social Welfare should ensure improvement of quality of care through compliance of minimum standards in terms of: availability of human resources, strengthening the existing logistic supply chain by ensuring constant availability of medicines, supplies and equipment in health facilities.
- The Ministry of Health and Social Welfare is to develop a policy to ensure availability of social health insurance that will focus on subsidizing the poor, following the identification criteria under the Ministry of Social Welfare. Currently, there is a need to strengthen the exemption and waiver policy for the poor, which is not very well implemented, by raising awareness to the public about the policy.
- The Government of Tanzania (GOT) and the Ministry of Finance (MOF) are to put focus on reliable and sustainable means of funding through innovation of earmarked tax that should be directed for health care. Taking example from Ghana with earmarked VAT tax of 2.5%, as well as to adhere to the Abuja declaration commitment of setting aside 15% of government budget to health care.
- Government of Tanzania to ensure the existing fragmentation of prepayment health insurance by merging NHIF, SHIB, and CBHIs and by providing Minimum basic Package (MBP), as this will enable the expansion of risk cross subsidization and equalization.
- Government of Tanzania to split the dual role of Ministry Of Health and Social Welfare (MOHSW)/ Local Government Authority (LGA) as the purchaser and providers of the services, making NHIF the purchaser, and in order to increase the autonomy of health facilities; make changes on how the facilities are financed from input purchasing (Budget line for salaries and medical supplies) to output purchasing (services delivered to the patient).

- Government of Tanzania following health financing reforms should institute a good monitoring and evaluation system, particularly looking at access to health care for the poor and at possible perverse incentives that may lead to moral hazard and cost explosion.

**LOCAL GOVERNMENT LEVEL**

- The local government authority together with the department of social welfare to improve the mechanism of identifying the poor population in the community and link them with CHF (which will be subsidized by GOT), to ensure access to health services.
- To strengthen the existing structure of health facilities, governing committees and Council health services Board, in order to ensure good governance, accountability and transparency.
- To raise awareness on the importance of risk pooling and cross-subsidization and prepayment insurance schemes in general.

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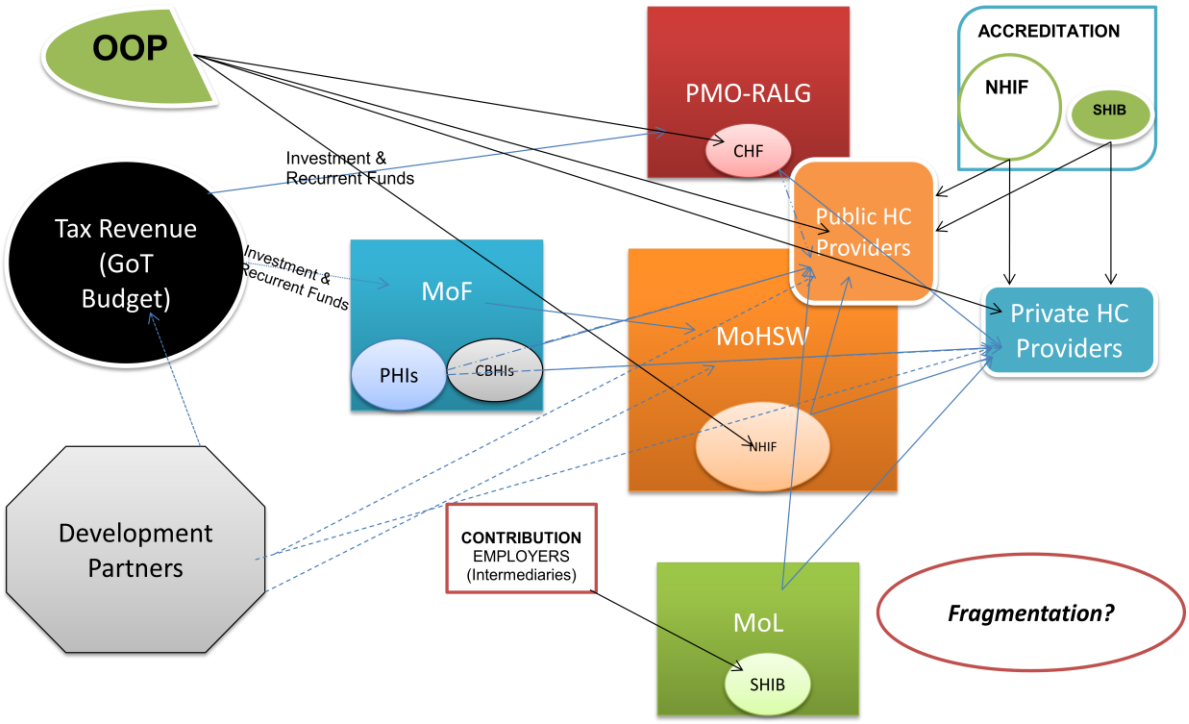
## ANNEXES

### Annex 1. Map of Tanzania


Map source: HDS 2010.

## Annex 2 .Current Health Financing Structure




Source: mohsw,2013