Reproductive Health and Family Planning Financing in Kenya

A mapping of the resource flows

NIDI   Netherlands Interdisciplinary Demographic Institute

APHRC   African Population and Health Research Center

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Foreword

Reproductive Health and Family planning related policy making, budgeting and planning by governments and other stakeholders at country level would benefit tremendously if quality periodic reports that compare the health sector funding needs with the allocation of resources (domestic and external), actual expenditure and distribution of resources as well as projected availability of resources (domestic and external) are made available on regular basis.

'*RH/FP Financing in Kenya – A mapping of the resource flows'* is an evaluation report aiming to give an overview of what is currently happening at the country level in tracking resources for Reproductive Health and Family planning. Besides being a comprehensive inventory of who is doing what in the field of RH/FP financing in Kenya, the report highlights the challenges facing RHA estimation process in Kenya and how they can be overcome. The discussion is limited to two rounds of NHA even though Kenya has undertaken four rounds of NHA (1994/05, 2001/02, 2005/06 and 2009/10). The two periods, 2005/06 and 2009/10 are important since during these periods, RH sub-accounts were estimated as part of the general health accounts.

The report recognizes that data related to the resources going to RH at the country level in Kenya are available but the quality is fair. The RHA process suffers from a lack of data on expenditure by service element. The available data are also not sufficient enough to estimate the Out of Pocket Spending on SRH. Furthermore, information on spending on RH by beneficiaries is missing rendering impossible to generate a benefit incidence analysis that shows who benefit from RH spending.

It is our sincere hope to capitalize on the partnership with UNFPA and NIDI and their corresponding expertise and database to produce future reports with a more complete picture of the RH resource flows and funding gap in Kenya. We also hope that the recommendations for improving construction of RHA provided in this report serve as a basis to support the Kenyan Government in its efforts to collect and process data.

List of Acronyms

AIDS	Acquired Immune Deficiency Syndrome
AMREF	African Medical Research and Education Foundation
ANC	Antenatal Care
CBOs	Community Based Organizations
CHWs	Community Health Workers
CPR	Contraceptive Prevalence Rate
DHS	District Health System
EmONC	emergency obstetric and neonatal care
FGI	Futures Group International
FHI	Family Health International
FP	Family Planning
GDP	Gross Domestic Product
GERH	Government Expenditure on Reproductive Health
HC	Health Care
HCR	Health Care Related
HH	Households
HIV	Human Immunodeficiency Virus
HMOs	Health Management Organizations
HMSF	Health Management Services Fund
HSSF	Health Sector Services Fund
ICD	International Classification of Diseases
ICHA	International Classification of Health Accounts
ICPD	International Conference on Population and Development
IEC	Information, Education, and Communication
IIHMR	Indian Institute for Health Management Research
IP	Inpatient
IPT	Intermittent Preventive Treatment
IUD	Intra Uterine Device
KAIS	Kenya AIDS Indicator Survey
KASPA	Kenya Service Provision Survey Assessment
KDHS	Kenya Demographic Health Survey
KFW	German Development Bank
KIHBS	Kenya Integrated Household Budget Survey
KSAM	Kenya Service Assessment Mapping
Las	Local Authorities
LLITNs	long-lasting impregnated bed nets
MDGs	Millennium Development Goals
MNCH	Maternal, Neonatal and Child Health
MoD	Ministry of Defense
MoF	Ministry of Finance
MoH-ERH	Ministry of Health Expenditures on Reproductive Health
NACC	National AIDs Control Council
NASCOP	National AIDS and STI Programme
NGOs	Non Governmental Organizations

NHA	National Health Accounts
NHIF	National Hospital Insurance Fund
NHSSP-II	National Health Sector Strategic Plan II
NIDI	Nederlands Interdisciplinair Demografisch Instituut
OBA	Output Based Approach
OECD	Organization for Economic Co-operation and Development
OOP	Out-of-pocket
OP	Out Patient
Oxfam	Oxford Committee for Famine Relief
PBF	Performance-based financing
PERH	Private outlays on reproductive health
PHIE	Private Health Insurance Expenditure
PMTCT	Prevention of Mother to Child Transmission
RF	Resource Flow
RH	Reproductive health
RHA	Reproductive Health Account
SHA	System of Health Accounts
SIDALAC, PHRplus	Regional AIDS Initiative for Latin America and the Caribbean,
SRH	Sexual and Reproductive Health
SSA	Sub Saharan Africa
SSERH	Social Schemes Expenditure on Reproductive Health
STI	Sexually transmitted Diseases
SWAP	Sector Wide Approach
TFR	Total Fertility Rate
THE	Total Health Expenditure
THERH	Total Health Expenditure on Reproductive Health
UNAIDS	United Nations Programme on HIV/AIDS
UNFPA	United Nation Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WB	World Bank
WFS	World Fertility Survey

Executive Summary

The general objective of the mapping of RH study is to strengthen the institutionalization of country-owned systems to produce periodic reports that compare the need for SRH funding at country level with the allocation of resources (domestic and external); actual expenditure and distribution of resources; as well as projected availability of resources (domestic and external) in the years ahead

The review attempts, using the NHA framework and RH sub-Accounts, to map what is currently happening in Kenya in terms of tracking resources for the health system especially SRH and supporting the strengthening of country processes, put together what is available in terms of RH/FP resources and the resource tracking processes of generating this information and also develop a framework suggesting possible approaches for implementing RHA estimation in Kenya.

The approach adopted involved reviewing reports that provide estimates of health accounts and if possible disaggregating the health expenditure estimates into expenditure elements that are related to reproductive health and family planning. Since the NHA reports for 2005/06 and 2009/10 were some of the useful sources of this study, the process here involved reviewing the RH-sub accounts to see whether they are disaggregated into detailed RH and family planning components that are useful for this analysis. The analysis follows the Kenya National Health Account framework that is informed by the WHO producer guide on NHA and the OECD SHA framework. These two frameworks describe the resource flow in the health system from the sources through financing agents, providers and beneficiaries.

Actors in the RH system

In Kenya, critical actors in the reproductive health system interact to undertake transactions that lead to the production of RH services. Actors involved in RH financing mobilize, allocate and utilize RH funds. Actors that mobilize RH resources are referred to as financing sources while those that allocate RH resources are referred to as financing agents. Entities or actors that receive funds from financing agents, providers, generate RH related services for consumption by beneficiaries. The actors involved financing and production of RH services are categorised by ownership that is by either public or private and the type RH services produced. In the process of interaction actors exchange resources and produce RH good and services within the RH system.

For construction of RHAs, it is the transactions between the actors in carrying out their designated activities that are critical. The classification of actors, activities and transactions into important categories that share common characteristics are therefore important in constructing the RHA. The aim of the RHA is to generate an illustrative representation of the sources of RH funds, the allocation of RH funds and also capturing of the transactions that occur in the RH system. Data for estimation of RHA comes from both secondary and primary sources.

Trend in general health and RH budget in Kenya

Over the years, Reproductive health has received little attention in terms of financing. Several studies attribute this to the shift in focus by the international community both politically and programmatically towards HIV/AIDS program. Limited integration of HIV/AIDS and RH/ FP

programs has also been cited as possible contributor to the limited funding going to RH. The end result has been inadequate access to RH services, poor service delivery and high maternal and child mortality rates.

The health sector budget has been increasing overtime, however, in terms of health budget as a percentage of total government budgets, the budget has decreased from 6.4% of the total government budget reported in 2007/08 to 5.48% of total government budget in 2011/2012. In terms of health

The budget allocation for Maternal, Neonatal and Child Health (MNCH) related activities is channeled through the Ministry of Public Health and Sanitation (MPH&S) under Preventive and Promotive sub-vote and under item 328 (Family Planning, maternal and child health) and would ideally include items like family planning, maternal and child health. Reproductive health receives little attention within the government budgets. According to the a *Health Budget Analysis – the case of RH/FP report of 2010*, only Kshs 51.6 million was dedicated to reproductive health out of a total health budget of Kshs 30 billion in 2005 indicating that the total health expenditures were 581 higher than reproductive health expenditures. In 2010, the estimates increased to about Kshs 1.2 billion that was committed to reproductive health out of a health budget of Kshs 47 billion.

The low priority accorded to reproductive health is also reflected in two key indicators that include per capital spending on RH which was about Kshs 30.5 in 2009/10, compared to Kshs 1.5 in 2005/06. The reproductive health portion of the state health budget was 2.58% in 2009/10 compared to 0.17% in 2005/06

A major challenge that was encountered in an attempt to disaggregate the MNCH budget and projections was the fact that the data could not be broken down by service element that i.e. by FP, Maternal and Infant care, management of sexually transmitted infections, management of other SRH problem).

Trends in overall spending on general health and reproductive on RH/FP in Kenya

The total expenditure on health increased from Kshs. 70.8 billion (964.3 US$ million) to Kshs. 123 billion (1,620 US$ million). Total spending on reproductive health amounted to Kshs. 17 billion (US $ 225 million) compared to Kshs. 13 billion (US $170 million) reported by NHA of 2005/06. Total spending on RH represents 13.8% of total health expenditure and 0.8% of GDP in 2009/10 as opposed to 12.7% of total health expenditure and 0.6% of GDP in 2005/06. In 2005/06, family planning accounted for 24% of RH spending while in 2009/10, FP accounted for 22% of RH expenditures.

Burden of RH financing on Households

Given the importance of household out of pocket spending on RH, it is very important to analyze where households spend their money. According to the 2005/06 NHA, Households spend close to Kshs. 5 billion (30%) of the total resources for RH mobilized in 2009/10. During the same period, majority of the out of pocket resources for RH were spent at health facilities. Public hospitals accounted for 36.4% of the total household spending on reproductive health. Among the private health facilities, private clinics and private hospitals received 15% and 22.9% of

household resources in 2005/06. In terms of what was purchased by households, 57.8% of household resources were used for maternal and antenatal services and 41.8% was used to buy family planning services.

Spending by Health Insurance

Coverage of health insurance in Kenya is limited both in terms of the numbers covered and the resources controlled by the insurance sector – National Hospital Insurance Fund (NHIF) and Private health Insurance. In 2005/06, private health insurance controlled 9.3% of the total expenditures on RH compared to 12.5% in 2009/10. NHIF controlled 6.2% of total RH resources in 2005/06 as opposed to 8.8%. In total, health insurance accounted for 21.3% of resources mobilized for RH up from 15.5% of RH resources mobilized for RH in 2005/06.

Challenges facing construction of RHA

One major concern with government sources has been the fact that government information is not disaggregated to the level (e.g. may not have line items on RH-specific services) desired in the sub-analysis tables. This made it difficult to estimate NHA matrices by providers and by functions.

Information collected from most of the providers that include NGOs could also not easily be broken by the respective functional classification as proposed by the producer guide. With regard to data from private insurance, firms and employers, the NHA process in Kenya especially the RHA suffered from lack of data from this sources that have functional details the health accounts required. The private insurance firms also excluded patient or client payments in terms of co-payments and deductibles.

The available data for estimating the role of HHs were not sufficient enough to estimate the Out of Pocket Spending on SRH. The team ended up using distributive variables like utilization statistics and unit costs to derive some estimates of the OOPE on SRH which was either highly underestimated or over estimated. A special Household Health Expenditure and Utilization Survey targeting RH services will therefore be required in future to estimate a robust OOPE on SRH.

Analysis beyond NHA framework - breakdown of RH spending by beneficiary using Benefit Incidence Analysis (BIA)

The breakdown of RH spending by beneficiary shows the RH expenditure in the health system distributed among the population group. It answers the question, *"Who benefits from RH spending?"*. The population groups are defined on the basis of sex, age, social economic status, health status and geographical place of residence.

Breakdown of RH spending by beneficiaries groups is one of the most challenging health accounts activity (WHO, 2003). It requires reliable health status data and population that can be linked to reproductive health expenditures. In period, 2005/06 and 2009/10, these tables were not produced in Kenya due to lack of reliable data on utilization of RH services data. To generate the RH spending by beneficiary, the utilization statistics on RH services need to be generated alongside the NHA-RHA estimations and then information is combined to generate

estimates of spending on RH by beneficiary. Benefit Incidence Analysis can facilitate the breakdown of RH spending by beneficiaries

Additional data required to improve construction of RHA

To develop a more complete picture of RHA accounts in Kenya, a number of steps or activities need to be undertaken. The following are therefore some of the additional data required to improve the construction of improved RHA in Kenya:

- A costing of RH services study at the provider level is important. The costing should aim at generating unit costs of producing RH services by functional categories
- Facility based surveys as another avenue for collecting data on providers (this was not undertaken in 2005/06 and 2009/10) to collect information on specific RH expenditures. If resources allow, the facility surveys can also be a mechanisms for conducting a patient record review of services administered and consumed to RH clients. The facility based surveys also supplement data from the government budgetary documents. It should however be noted that facility surveys are difficult to implement since many of this facilities use accounting systems that do not necessarily correspond with NHA categories. For instance facilities may tend to record financial spending in terms of inputs such as salaries, personnel, maintenance etc.
- A special Household Health Expenditure and Utilization Survey targeting RH services will therefore be required in future to estimate a robust OOPE on SRH.
- Future estimations of RHA it will be important to undertake a targeted household survey specific to SRH i.e., a survey population that use RH services and /or acquire RH commodities.
- A BIA that combines spending on RH with household utilization of RH services to generate data on who benefits RH spending. This will help in constructing the RH spending by beneficiary table.

Strategies for institutionalization of RHA

The following are some of the key steps that were identified by the review for the institutionalization RHA in Kenya:

- Expand the NHA team to include the representation of key NGOs and development partners. This will ideally ensure these key players understand and appreciate why the RHA accounts are required and the kind of information required.
- Development of a standardized data collection tool that targets the donors and NGOs. This can later be computerized so that expenditure information on RH is made available on regular basis from the NGOs. This should be followed by an intensive advocacy targeting this two sources of RHA data to ensure that the tool is populated on regular basis and then send to the NHA team
- Institutionalization also requires an ongoing technical team to work on RHA and respond promptly to request from policy makers and other stakeholders. The number of the qualified NHA team is reducing and more targeted training is required to create a critical mass of RHA practitioners. The entry point could be the University of Nairobi where RHA can be trained to economists who can later join the government. Support will also be required to help the universities revised their economics curriculum to include NHA/RHA

resource tracking module. This will help in term of introducing NHA/RHA resource tracking at an early stage to potential government economists. Supporting the development of capacity on RHA accounts will substantially reduce the costs involved in generating routine estimates of resource flows of RH.

Recommendations

The study recommends generation of RHAs on regular basis and for this to be achieved; the government of Kenya will require both technical and financial support from development partners as to institutionalize the RHA process. Support will also be required to generate additional data for undertake a comprehensive RHA as specified in the earlier section of the excusive summary. This could be piloted in a number of countries that are already producing RHA estimates using the NHA framework. This may include countries like Kenya, Tanzania, Rwanda etc.

In Kenya, Households through out of pocket are contributing 30% of the overall financing of RH. A key policy goal should therefore be to reduce the burden of total financing borne directly by households. This implies a strong commitment to increase resources from both the public and the donors and also strengthen public sector delivery of reproductive health services.

Chapter 1: Introduction

1.1. Background for the study

Understanding the flow of resources to the health sector is essential for an efficient organization and management of the health system. In developing countries, information on resource flows is often generated as a precursor to the implementation of health sector reforms. National Health Accounts (NHA) is one tool that is used to generate the resources flows. NHA is an internationally accepted tool that describes the various sources of health resources from where the funds come from, how they flow through the various financing agents and how different providers and socio-economic groups use these funds. Through comprehensively tracking the flow of funds through a country's health system, NHA describes a in a broad way the account of how much the country spends on health in a period of time from both public and private sources, the distribution of the health spending by major financing sources, key stakeholders who manage health spending, the providers of health services, and the type of services that were consumed. As such, NHA usually involves intensive collection of expenditure data from international and domestic actors, including country governments, donors, insurance providers and households for measuring out-of-pocket (OOP) expenditure. The methodology has been standardized to facilitate comparison between countries and over time (WHO, 2009).

With the support from the World Health Organization (WHO) and other major international organizations, NHA has been conducted in more than a 100 countries over the last 20 years. In addition to national account of all health related expenditures, subaccount analyses can be conducted for a number of specific health areas, such as Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS), Reproductive Health (RH), tuberculosis, malaria, and child health. These subaccounts provide detailed assessments of the flow of funding for priority health areas. RH subaccounts estimate total spending on FP, maternal health, and treatment of reproductive's ailments, including Sexually Transmitted Infections (STI). RH health expenditures are defined as expenditures on activities for which the primary purpose of the expenditure is to restore, improve, and maintain RH for the nation and for individuals. RH is defined according to the 1994 International Conference on Population and Development (ICPD).
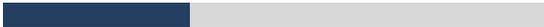
This analysis is part of the United Nation Population Fund (UNFPA) endeavour to strengthen the institutionalization of country-owned systems to produce periodic reports that compare the need for Sexual and Reproductive Health (SRH) funding at country level with the allocation of resources (domestic and external); actual expenditure and distribution of resources; as well as projected availability of resources (domestic and external) in the years ahead. The assumption is that Sexual Reproductive Health and Family planning related policy making, budgeting and planning by governments and other stakeholders at country level would benefit tremendously if quality periodic reports that compare the health sector funding needs with the allocation of resources (domestic and external), actual expenditure and distribution of resources as well as projected availability of resources (domestic and external) are made available on regular basis. These reports would respond to critical questions relating to the match between SRH policy priorities and actual expenditures, the predictability of funding for different SRH components, the availability of funds across the different levels of the health system, the equitably and efficiency of health financing, etc.).

The analysis therefore attempts, using the NHA framework and National Health Account-Reproductive Health (NHA-RH) Sub-Accounts, to map what is currently happening in Kenya in terms of tracking resources for the health system especially SRH and supporting the strengthening of country processes.

An attempt is also made in classifying various actors in the domain of RH into four broad groups namely financing sources, financing agents, health care providers and health care beneficiaries. A detailed description of their role is also undertaken as a useful basis for evolving RHA. Description of the actors is made following the System of Health Accounts/Organization for Economic Co-operation and Development/World Health Organization (SHA/OECD/WHO) classification norm. It is worthwhile to mention that while classifying actors and activities, some deviation is made from the International System of Classification (ICHA) to suit to the Kenyan health system context. An attempt is also made to build a flow of funds model for the Kenyan system for the construction of Reproductive Health Accounts (RHA). While constructing the funds flow model every effort is made to confine it to RH care within the broad context of Kenyan health sector situation although some mention and analysis of NHA in Kenya is also made.

1.2. International context of RH subaccount

Since early 1990's there have been continuous efforts to increase access to RH services globally through several international initiatives. Key among them is the International Conference on Population and Development (ICPD) held in Cairo in 1995 that identified RH activities and costed them for the less developed countries. This led to the recommendation for tracking of the "Costed Population Package" which is included in the ICPD Programme of Action (paragraph 13.14).

In September 2000, the countries of the world adopted the Millennium Declaration, a collective commitment to accelerate progress on human development, setting out eight Millennium Development Goals (MDGs), which they pledged to achieve by 2015. It has been widely acknowledged that these goals can only be reached if there are significant improvements in reproductive health (RH), especially in the poorest developing countries. Most families in this part of the world still have more children than they want. Women especially suffer from the lack of means to control their fertility, and many die young from causes related to maternal health.

Half way to 2015, a number of countries have been identified as not being on track to meet the Millennium MDGs. National and international organizations are examining how efforts to achieve the MDGs and related targets can be made more effective. One way is to improve understanding and management of competing financial resources for health. Decision-makers need to know whether their country has adequate resources to achieve its health goals. If there is a funding gap, can external resources fill it? And where are the resources going? In particular, what resources are earmarked for RH? Often, governments do not have the technical instruments they need to plan budgets that would allow them to achieve their RH goals. Civil society also lacks information about where money is going, and is thus unable to lobby successfully for national and international funds to fill the gaps. The challenge is, therefore, to obtain information that will lead to more effective use of the resources available. Considerable value would be added if resource monitoring were done in a comprehensive and consistent way, with standard definitions that allow for international comparable time trends.

1.3 Need for Reproductive Health Subaccounts in achieving MDGs

During the special session of the United Nations General Assembly that took place five years after the International Conference on Population and Development in Cairo (ICPD+5), health systems stakeholders set a target of universal access to quality RH services by 2015. And while improving RH is not a specific Millennium Development Goal, there has been significant acknowledgement that the attainment of RH is fundamental for meeting other MDG goals such as fighting poverty. Improvements in RH services require significant resource commitments as well as efficient and effective use of those resources. But in order to properly address these issues, country leaders will first need to understand how much is currently being spent on RH and what that money is being spent on.

Policymakers will require, on a regular basis, comprehensive data on the flows of RH funds in order to adjust policy to reflect the needs of the country and the current distribution of funding.

1.4. Linkage between NHA and RHA

The National Health Accounts (NHA) methodology is an internationally recognized and accepted tool for tracking flows of funding through country health systems – from their financing sources, to their principal managers, and end users.

Generally conducted in tandem with the NHA, the RH subaccounts are an additional, more detailed report of spending levels and patterns specific to RH. The RH subaccount is a comprehensive and consistent way to evaluate RH expenditure data to help guide the allocation of limited resources among various needs. RH subaccount results can be used in various ways to inform RH policy and programming. Because the subaccount methodology uses the internationally recognized NHA framework, its findings can be compared across countries. If a country prepares estimations for a number of years, the results can be used to track trends in expenditure, to monitor patterns of resource use over time, and to evaluate how resource use relates to the achievement of RH programme goals.

Reproductive health definition takes into account the reproductive processes, functions and system at all stages of life of the individual. Included in this definition are the following critical dimensions at the individual level - Sexual behaviour, Fertility choices, Motherhood and

childbirth. Activities related to these aspects of reproductive health may therefore include promotive, preventive, curative (including diagnostics and nursing) or administrative in nature. In addition, these activities may take place either in the public or private sphere of the reproductive health system. In the Kenya context, reproductive and child health care are generally combined, particularly in the motherhood context. However, for the development of the RHA, the focus is reproductive health exclusively. In this report therefore, an attempt to separate the RH-related components entrenched in the general health sector interventions by both public and private entities is made.

1.5. **Objectives of the study**

The general objective of the study is to strengthen the institutionalization of country-owned systems to produce periodic reports that compare the need for SRH funding at country level with the allocation of resources (domestic and external); actual expenditure and distribution of resources; as well as projected availability of resources (domestic and external) in the years ahead. The specific objectives are to:

- Map what is currently happening in Kenya in the tracking resources for health and supporting the strengthening of country processes;

- Put together what is available in terms of RH/FP resources and the resource tracking processes of generating this information;

- Review in detail methodological approaches and processes for NHA, generally and RHA, in particular; and

- Develop a framework suggesting possible approaches for implementing RHA estimation in Kenya.

1.6. Organization of the report- outline of the report and what each chapter entails

This report is organized in five chapters. The introduction chapter provides background information of the study and build context of RH subaccount. Chapter 2 discusses RH state and financing in Kenya. It includes the status of key RH indicators, highlights of RH challenges,

progress in MDGs-particularly MDG-5, trend in health and reproductive health spending, RH policies and systems and recent health reforms that target RH. Chapter 3 discusses data and methods for generating RHA. The discussion starts by providing an overview of RH system in terms of the actors (financing sources, financing agents, providers and beneficiaries) in the RH system and their classification. The chapter also discusses the RHA, list of potential RH activities included under RHA, and the classification scheme to categorise RH expenditures, data sources, collection and data analysis – an attempt to explain what data are required and why, how the data is collected, estimated and analyzed in terms of the 4 NHA matrices and RH indicators measured. Chapter 4 provides a description of the RH financing in Kenya in terms of the description of process, methodology and sample results from the RHA financial flows using the NHA-RH framework and the four matrixes. Chapter 5 discusses some key innovative schemes implemented in Kenya, that are specifically relevant in context of reproductive health financing while chapter 6 concludes the analysis by generating conclusions and potential recommendation for future country report.

Chapter 2: Reproductive health state and financing in Kenya

2.1. Data sources of Indicators of reproductive health

Reproductive health data is available from a number of sources in Kenya including the Kenya AIDS Indicator Survey, Kenya Demographic Health Survey, Kenya Service Provision Survey Assessment (KASPA) and the surveillance reports from the National AIDS and STI Programme (NASCOP). The Kenya KDHS and the KASPA are some of the most reliable resources of reproductive health data in Kenya. They present RH indicators information up to the provincial level and can therefore generate some inter-provincial analysis with respect to RH indicators. This section therefore presents the situational analysis of RH in Kenya in the context of RH indicators as presented by several KDHS results.

2.2. Status of RH indicators in Kenya

Fertility levels and trends

Kenya was one of the first countries in Sub Saharan Africa (SSA) to develop a national population policy in 1968. This policy was however not implemented until the World Fertility Survey (WFS) of 1977 that demonstrated that Kenya had one of the highest TFR[1] in the world. The WFS reported a total fertility rate (TFR) of 8 children per woman for Kenya. The TFR as reported by the WFS led to an increased policy and public attention on the need to focus on population interventions to address the fertility issues. As a result, a national family planning programme was put in place. Indeed, the decline in fertility between 1977 and 1998, from 8.1 to 4.7 births per woman, was one of the most rapid declines that were as a result of the investments put in place to address the high fertility rate reported by the WFS. Fertility has since then been declining, however, it still remains high among the poorest and shows marked differentials across the provinces.

Total fertility rate (TFR) has since stalled with a TFR of 4.6 reported in 2008/09, a slight decrease from 4.9% reported in 2003. The Contraceptive Prevalence Rate (CPR – percentage of married women using contraception) improved from 17% to 32% between 1989 and 1998.

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[1] Average number of children per women

However, CPR also stayed constant between 1998 and 2003 at 39% but increased to 46% in 2008/09.

Figure 1: Trend in Total Fertility Rate (TFR)
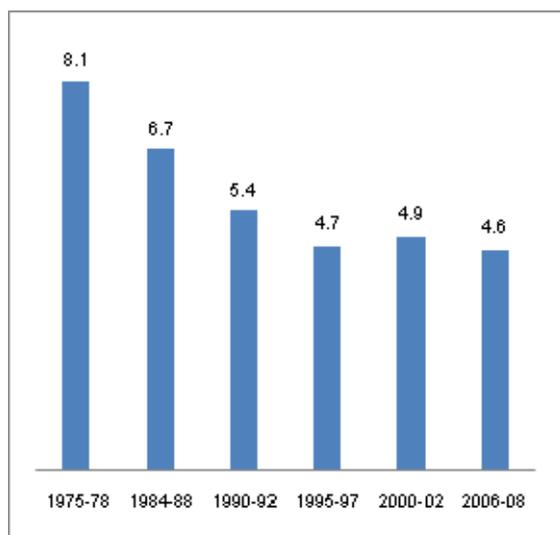
Sources: KFS 1978, KDHS 1989 - 2008

Figure 2: Trends in CPR for Kenya from 1978 to 2008
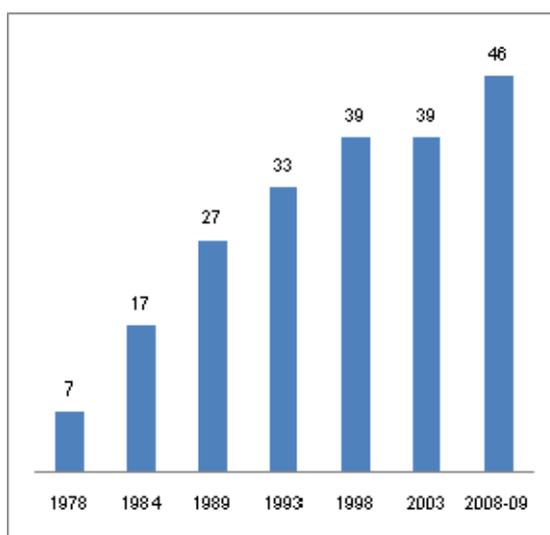
Source: KFS 1978, KDHS 1989 - 2008

Data from the first five sources omit several northern districts, while the 2003 and 2008/09 KDHS surveys represent the entire country

Fertility remains very high among the poorest at 7.0 in contrast to 2.9 among the richest (figure 3). Several KDHS reports also show differentials in fertility for urban and rural areas and provinces in Kenya. In 2008/09, the TFR in rural areas (5.2 births) was significantly higher than the TFR in urban areas (2.9 births). The regions also shows significant differentials with three provinces - Nyanza, North Eastern and Eastern – reporting TFR of over 5 births per woman. In North Eastern for instance, the TFR was reported at 5.9 births per woman, Western TFR was 5.6 births per woman and Nyanza 5.4 births per woman in 2008/09. Nairobi and Central province reported the lowest TFR at 2.8 births per woman and 3.4 births per woman respectively (figure 4).

Figure 3: Total Fertility Rate by wealth index, KDHS 2008/2009
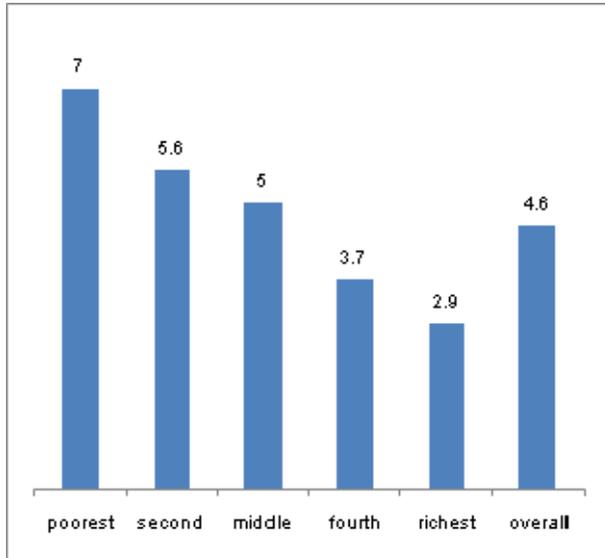
Figure 4: Total Fertility Rate by province, KDHS 2008/2009
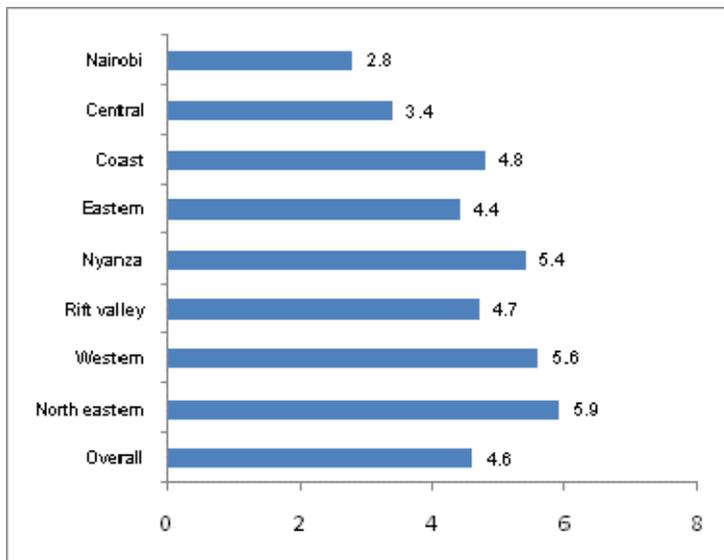
Age at first marriage

The number of children that a woman will have in her lifetime is influenced by the age at which she marries. Almost a one-third of women (32%) are married by age of 18 years. The median

age at first marriage is 20 years for women aged 25-49 compared with men who marry later, at a median of 25.3 for men aged 30-49. Age at marriage is influenced by education with women with secondary school and higher education likely to get married almost five years later than those with no education.

Age at first birth

Since the reproductive period for women is biologically limited – 15-49 years – the onset of childbearing has an effect on fertility. An early start on child bearing lengthens reproductive process and consequently increases the fertility which may pose risks for social-economic disadvantages later in life. On average young women are waiting longer than their mothers to start child bearing. 26% of women aged 20-24 had given birth by the age of 18 years while 36% of women aged 45-49 had given birth by age 18.

Birth Interval

A birth interval is defined as the length of time between two successive live births. It also indicates the pace of child bearing. Short birth intervals adversely affect a mother's health and her children's chances of survival. Children born too close to a previous birth are at increased risk of dying especially if the interval is less than 24 months. In Kenya, the median open birth interval has remained more or less the same, reducing marginally from 32.9 months in 1998 to 32.6 months in the 2003 KDHS and later increasing marginally to 33.1 months.

Knowledge and Use of Family Planning Methods

Information about knowledge and use of contraceptive methods is collected from female respondents on the use of any method to delay or avoid a pregnancy. Contraceptives methods are grouped into two types - modern and traditional methods. Modern methods are commonly used (38 percent) than traditional methods (6 percent). The Injectables are the most widely used methods among the modern methods with abstinence the most popular among the traditional methods. A higher percent of contraceptive use by the Urban (53%) as compared to 43% of the rural areas was reported by the KDHS of 2008/09. Contraceptive use increases with the level of education with 60% of married women with secondary education using contraceptives methods compared to 40% of women with primary education. Contraceptive use also varies across regions of the country (figure 5).

Figure 5: Trends in modern contraceptive use among married women, by province, Kenya
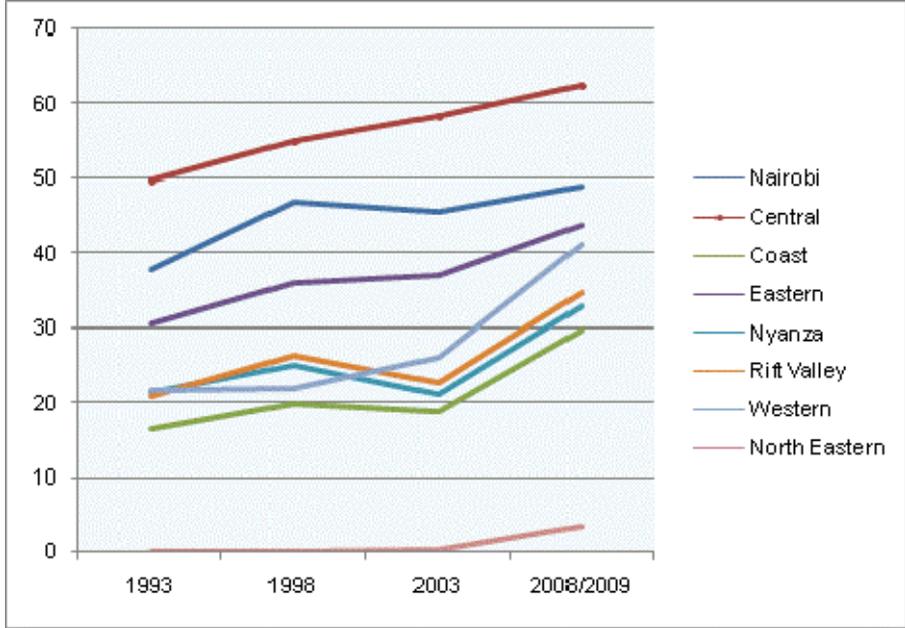
Source: KDHS survey reports

Antenatal and delivery care

Attendance of antenatal care services has consistently being high since the early nineties and continues to be high with 9 out of 10 women attending at least one visit. A decrease from 64% in 1993 to 52% in 2003 was reported in the proportion of women who make at least four visits. The proportion of women who made their first visit before 6 months of pregnancy also declined from 56% to 49% during 1993-2003 periods. The proportion of pregnant women who received one or two doses of tetanus toxoid was very close to antenatal care coverage and was 85% in 2003 and 72% in 2008/09.

A major thrust of the Kenya RH programme is to encourage deliveries under proper hygienic conditions and under the supervision of trained health professionals. The KDHS of 2008/09 reports that 43% of births were delivered in health facilities in Kenya. At the national level there was no progress in coverage by skilled birth attendants during 1989-2006 when a low of 39% was reported. In the KDHS of 2008/09, coverage by skilled birth attendance increased to 44%.
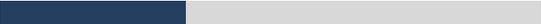
A physician is the skilled attendant in one-fourth of the deliveries with the remainder skilled assisted births being accounted by nurses and nurse-midwives.

The place of delivery is highly correlated with the skilled birth attendance as very few deliveries at home are attended by doctors or nurses. There are marked differences between the provinces and there has been little change over time in the gaps between the provinces. Central Province and Nairobi maintained institutional delivery rates that are twice as high as in all other provinces. The 2008 KDHS documents progress in five of the eight provinces: Nairobi, Central, Eastern, Coast and Nyanza provinces. A decline was observed in Rift Valley, Western and North Eastern Province. Overall, the gap between the provinces has not changed much in the last 15 years. For instance, the urban and rural institutional delivery rates were 78% and 39% respectively in 1993 and were 75% and 35% respectively in 2008. Figure 6 below shows the trends in ANC Coverage[2] and skilled birth attendance, Kenya, surveys 1989-2008.

Figure 6: Trends in ANC Coverage and skilled birth attendance, Kenya
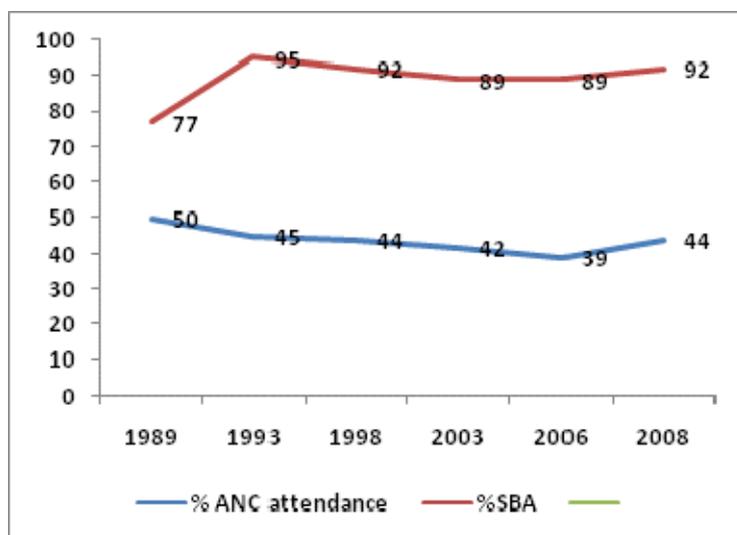
Source: KDHS survey reports

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[2] At each one visit

Box 1: Key highlights of RH challenges in Kenya

High fertility rate

- Fertility has been declining over time but remains high among the poorest (at 7.0 in contrast to 2.9 among the wealthiest)
- Total fertility rate (TFR) dropped significantly from 8.1 births per woman in 1977/78 to 4.7 in 1998 (in all age groups) but has since stalled with a TFR of 4.6 in 2008/09.

Adolescent fertility rate is high

- Adolescent fertility is still high with 103 reported births per 1,000 women aged 15–19 years

Early childbearing is more prevalent among the poor

- The rich-poor gap in prevalence of early childbearing has increased across cohorts
- While 64 percent of the poorest 20–24 years old women have had a child before reaching 18, only 21 percent of their richer counterparts did

Use of modern contraception is less than 50 per cent

- Current use of contraception among married women was 46 percent in 2008–2009
- More married women use modern contraceptive methods than traditional methods (39 percent and 6 percent)
- Use of long-term methods such as intrauterine device and implants are negligible
- Health concerns or fear of side effects (thirty-one percent) and opposition to use (23 percent) are the predominant reasons women do not intend to use modern contraceptives in future

The unmet need for contraception is high at 26 percent

- This indicates that women may not be achieving their desired family size
- Abortion is illegal in Kenya except to save a woman's life. A legal abortion must be conducted in a hospital and requires the approval of three medical providers, leading many women with unwanted pregnancies to seek abortion elsewhere
- It is estimated that 21,000 admissions to public hospitals in Kenya are due to complications of incomplete abortions

ANC coverage is high but skilled attendance during delivery is low

- While majority of pregnant women use antenatal care, institutional deliveries are less common
- Over nine-tenths of pregnant women receive antenatal care from skilled medical personnel (doctor, nurse, or midwife)
- 44 percent deliver with the assistance of skilled medical personnel predominantly in the public sector

Human resources for maternal health are limited

- With only 0.14 physicians per 1,000 population. Nurses and midwives are slightly more common, at 1.18 per 1,000 population
- The high maternal mortality ratio at 530 maternal deaths per 100,000 live births indicates that access to and quality of emergency obstetric and neonatal care (EmONC) remains a challenge

HIV prevalence is falling in Kenya

- But the prevalence among females is almost twice that among males (8.0 percent and 4.3 percent, respectively)

2.3. Progress towards achievement of MDG 5 – RH related MDGs

Progress towards achievement of MDG 5A

The target for MDG 5A was set at reducing Maternal Mortality ratio (MMR) by three-quarter, between 1990 and 2015. Maternal mortality estimates in Kenya have varied widely by source. However, estimates from the KDHS indicate that some slight improvement was reported in the early 1990s with the number of women dying as a result of complications during pregnancy and childbirth decreasing from 670/100,000 in 1990 to 560/100,000 in 1998 and further to 414/100,000 in 2003. The slight decline could however not be sustained as the MMR further dropped to 488/100,000 in 2008/09 (see figure 7 below).

Figure 7: Trends in Maternal mortality Ratio
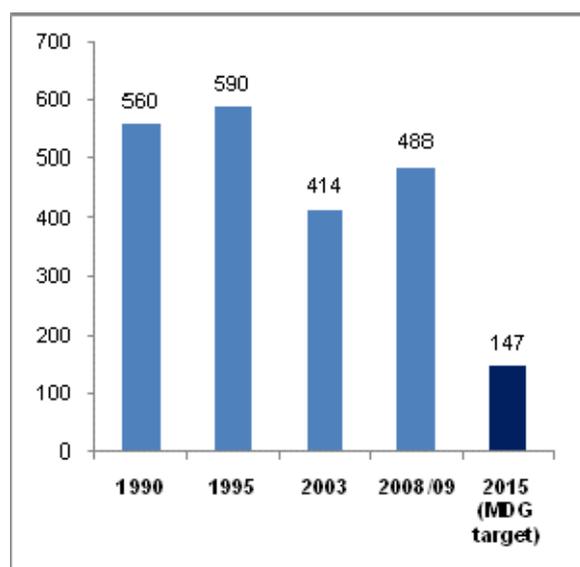
Source: Respective Demographic and Health surveys

Progress towards achievement of MDG 5B

The target for MDG 5B was set at achieving universal access to reproductive health by 2015. Indicators used to measure progress in achieving MDG 5B include Contraceptive Prevalence Rate and adolescent fertility rate (Adolescent fertility rate (births per 1,000 women ages 15–19). Although adolescent fertility rate has shown a declining trend, it is still high at 103/1,000

reported births. Births to women aged 15-19 years old have the highest risk of infant and child mortality as well as high risk of morbidity and mortality for the young mother

2.4. Trend in Kenya spending on health and reproductive health

Over the years, Reproductive health has received little attention in terms of financing. Several studies attribute this to the shift in focus by the international community both politically and programmatically towards HIV/AIDS program. Limited integration of HIV/AIDS and RH/ FP programs has also been cited as possible contributor to the limited funding going to RH. The end result has been inadequate access to RH services, poor service delivery and high maternal and child mortality rates. Table 1 below shows the health sector budget for 2007/08 to 2011/2012. The table shows that the health budget has increased from Kshs. 34.3 billion in 2007/08 to Kshs. 49 billion. However, in terms of health budget as a percentage of total government budgets, the MoH budget has decreased from 6.4% of the total government budget reported in 2007/08 to 5.48% of total government budget in 2011/2012. In terms of health budget as a percentage of GDP, this has remained relatively constant at below 2% of GDP.

Table 1: Health Budget – Ministry of Medical Services and Ministry of Public Health and Sanitation

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/2010	2010/2011	2011/2012[3]
Recurrent									
Revised budget estimates	15.94	17.46	20.45	22.26	23.67	25.55	30.456	33.33	34.43
Actual expenditures	15.38	17.37	19.74	21.48	23.69	27.69	29.92	32.57	-
Execution rates	96.51	99.44	96.5	96.53	100.07	108.38	98.2	97.7	
Development									
Revised budget estimates	1.5	2.42	5.44	6.87	7.74	9.29	13.78	12.40	15.29
Actual expenditures	0.49	1.49	2.74	3.36	3.39	6.95	5.99	7.69	
Execution rates	45.13	61.5	50.27	48.9	43.79	74.81	43.47	62.02	

Source: HENNET budget analysis for 2011/2012

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[3] 2011/12 only presents the revised budget

The budget for Maternal, Neonatal and Child Health (MNCH)

The budget allocation for Maternal, Neonatal and Child Health (MNCH) related activities is channeled through the Ministry of Public Health and Sanitation (MPH&S) under Preventive and Promotive sub-vote and under item 328 (Family Planning, maternal and child health) would ideally include items like family planning, maternal and child health. Over the years, the MNCH component has received little attention as far as budget allocation is concern despite its contribution to the MDGs. All the key program interventions under preventive and promotive health received 13% and 16% of the total budget for 2009/10 and 2010/11 respectively as shown while the MNCH component accounted for 2.69% and 2.56% of the total health budget in 2009/10 and 20010/11 respectively. The development budget and projections include resources external resources that go through the Kenya budget system (on-budget).

Table 2: Budget Vs projection for MNCH (budget and projections)

	Budget	Budget	Budget	Projections	
	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Recurrent	105,493,057	107,029,760	122,373,037	124,880,551	141,458,570
Development	1,107,841,937	1,115,095,000	2,234,515,740	1,148,550,000	1,148,550,000
Total	1,213,334,994	1,222,124,760	2,356,888,777	1,273,430,551	1,290,008,570
Total health budget	47,721,023,650	51,273, 627,351	49,715,126,230	54,123,112,000	57,134,244,000
MNCH as % of total health budget	2.69	2.56	4.74	2.35	2.26

A major challenge that was encountered was the fact that the MNCH budget and projections could not be broken down by service element that is by FP, Maternal and Infant care, management of sexually transmitted infections, management of other SRH problem).

For future SRH expenditure analysis and to ensure a possible breakdown of SRH expenditure is undertaken into key items that constitute SRH component – Family planning, Maternal and infant care, management of sexually transmitted infections, management of other SRH problems - this study proposes use of distributive elements that are derived from possible costing studies at the provider level. The study therefore recommends a costing study of SRH at the provider level as part of the RHA accounts. In this way, resources spend on RH from the

financing agents will be broken down into the RH constituents using proportions generated from the costing study.

Another way of attempting to break down the SRH at the national level is to take advantage of key informants (expert opinion) managing the SRH resources at the national level – department of reproductive health in the Kenyan case – to generate proportions for instance; out of the total budget for MCNH, what proportion or percent can be attributed to either Family planning, maternal and infant care, management of sexually transmitted infections etc. These proportions will then be used to disaggregate the MCNH/SRH budget or expenditure by the constituents – family planning, maternal and infant care, management of sexually transmitted infections and management of other SRH problems.

The study therefore proposes the above techniques to be used in future RHA analysis.

2.5. Reproductive health context: policy and system

This section discusses the policy framework relating to RH in Kenya – health system, health policies on RH. In the Kenya health policy framework 1994 population development was identified as a priority strategy for achieving balanced socio economic development, including family planning, adolescent health and well-being of the entire family. The goals include a reduced fertility rate, increased proportion of health facilities providing integrated reproductive health services (FP, MCH and STI) and better access and use of family planning services. There were no specifics on how to address maternal health issues.

A national reproductive health strategy was published in 1997 with two maternal health objectives: reduce maternal mortality to 170 by 2010 and increase professionally attended deliveries to 90%. The main elements of the strategy include improving facility capacity at all levels to manage pregnancy related complications, unsafe abortion and newborn care and establishing a functioning referral system.

The NHSSP-II 2005-2010 specified the Kenya essential health package (KEPH) for pregnant women and newborn children that aimed to address a range of health threats including maternal infections, anaemia, malaria, complicated and unsupervised delivery, nutritional deficiencies, hypertension, and postpartum hemorrhage. In response to these threats, KEPH included the

following preventive and promotive activities: the use of long-lasting impregnated bed nets (LLITNs), essential antenatal (TT2 and IPT) and postnatal care, family planning and child spacing, the use of skilled birth attendants, and general health education. At community level, deliveries conducted by skilled birth attendants and the use of LLITNs by pregnant women are the most important activities that need to be monitored. At health facility level (including district/primary hospitals), indicators relate mainly to reproductive health and safe motherhood interventions. Table 3 below summarizes the national policies and strategies that have influenced reproductive health in Kenya.

Table 3: National Policies and Strategies that have influenced Reproductive Health

1980s: Policy Guidelines for service providers in family planning

1997: Reproductive Health / Family Planning and Standards for Service Providers

1999: National Reproductive Health Implementation Plan for the years 1999-2003

1999: National Plan Of Action For The Elimination of Female Genital Mutilation in Kenya, 1999-2019

2000: The National Population Policy for Sustainable Development, which was approved by Parliament as a Sessional Paper No. 1 of 2000

2003: Adolescent Reproductive health development policy to respond to the concern raised about mainstreaming adolescent health and development issues

2006: Sexual Offences Act No. 3 (Rev. 2007)

2007: First National Reproductive Health Policy to enhance the reproductive health status of all Kenyans

Health reforms targeting RH

Over the last decade an increasing number of countries have begun implementing health sector reform programmes including Kenya. Kenya for instance, has been implementing health sector reforms mostly targeting the process such as financing, decentralization, Human resources and service delivery since 1980s.

In Kenya, reforms targeting financing health financing system have largely focused on increasing health resources as well as improving the efficiency and effectiveness of the public expenditures. Three main financing mechanisms have been the major focus in Kenya's health reforms. These include improved mechanisms for public funding systems, user fees and health insurance. Of these, user fees mechanisms have been devotedly embraced by Kenya and other African countries albeit with a lot of sceptism by donors. Studies in Kenya, Tanzania and Papua New Guinea reported decline in the use of maternal health services, particularly of the poorest (Family Care International 1999, Ambrose 2000). However, some authors have however argued that the negative impact in user fees are as a result of poor design, planning and implementation that result in inadequate attention to ensure quality improvements and the design of exemption mechanisms, and insufficient involvement of those who will implement the systems (Bennett 2000).

Many reproductive health priorities, such as improving service quality and client satisfaction, educating consumers, and providing more choices, are consistent with health sector reforms in Kenya. However, in terms of increasing resources for reproductive, not much has been achieved.

Chapter 3: Data and methods

The study is primarily based on desk review that involved a thorough review of the available information from a variety of sources that included the National Health Account reports of Kenya, Budget estimates, Annual Operational Plans (AOPs), Ministerial Public Expenditure Reviews (MPERs) among others. These sources provided information that was useful in constructing the reproductive health account in the format prescribed by the NHA methodology based on the WHO NHA producer guide. The NHA reports for Kenya were particularly useful as they also provided the RH-sub account analysis (KNHA 2005/06 and KNHA 2009/10).

The study is informed by the availability of health accounts estimates in Kenya and specifically RHA accounts that were undertaken as part of the NHA accounts. The health accounts are also standardized according to international standards.

The approach adopted involved reviewing reports that provide estimates of health accounts and if possible disaggregating the health expenditure estimates into expenditure elements that are related to reproductive health and family planning. Since the NHA reports for 2005/06 and 2009/10 were some of the useful sources of this study, the process here involved reviewing the RH-sub accounts to see whether they are disaggregated into detailed RH and family planning components that are useful for this analysis. The analysis follows the Kenya National Health Account framework that is informed by the WHO producer guide on NHA and the OECD SHA framework. These two frameworks describe the resource flow in the health system from the sources through financing agents, providers and beneficiaries.

The next section therefore starts by describing the Reproductive Health System in terms of *actors (stakeholders)*, their *activities* in the reproductive health system and the *transactions* between the actors in carrying out their designated activities. The classification of actors, activities and transactions into important categories that share common characteristics is therefore critical to the generation of health accounts.

3.1. Description of Reproductive Health system

The actors in the health care system that are involved in health care financing and specifically reproductive health in Kenya, *mobilize, allocate* and *utilize RH* funds. Actors or entities that mobilize health resources are commonly referred to as **financing sources**, while those that allocate or channel the resources to pay/purchase the RH related activities in the reproductive health system are referred to as **financing agents**. Actors or entities that receive money to enable them produce the health activities are called **providers** or **uses**.

In the health system analysis, three types of actors are identified by the WHO producer guide (WHO, 2003). They include: the consumers of health care (patient), the providers of health care (the physicians and other health personnel and health institutions) and the financier of health care (e.g. donors). In addition, the government plays a significant role in the context of financing and managing/controlling resources. Figure 10 below shows the actors in health system and how they relate to one another in transactional activities. The actors associated with reproductive health activities are classified according to the WHO (2003) classification scheme and are categorized as: (a) Financing sources; (b) Financing agents; (c) Health care providers; and (d) Health care beneficiaries. Each of these categories is further categorized as public, private and the rest of the world - donors.

According to figure 8, financing agents' pools resources from financing sources or use self generated resources to pay directly for health/reproductive health services(service function) produced by health providers to be consumed by beneficiary population who can be grouped by sex and age group, social economic groups, health status or geographical divisions. Households and private firms are examples of financing agents that use own generated resources to pay for health care. Households purchase health services using out-of-pocket payments while private firms purchase health services for their employees. Providers are paid for their goods and services directly by consumers of health care or financing agents.

Figure 8: Relationship between actors
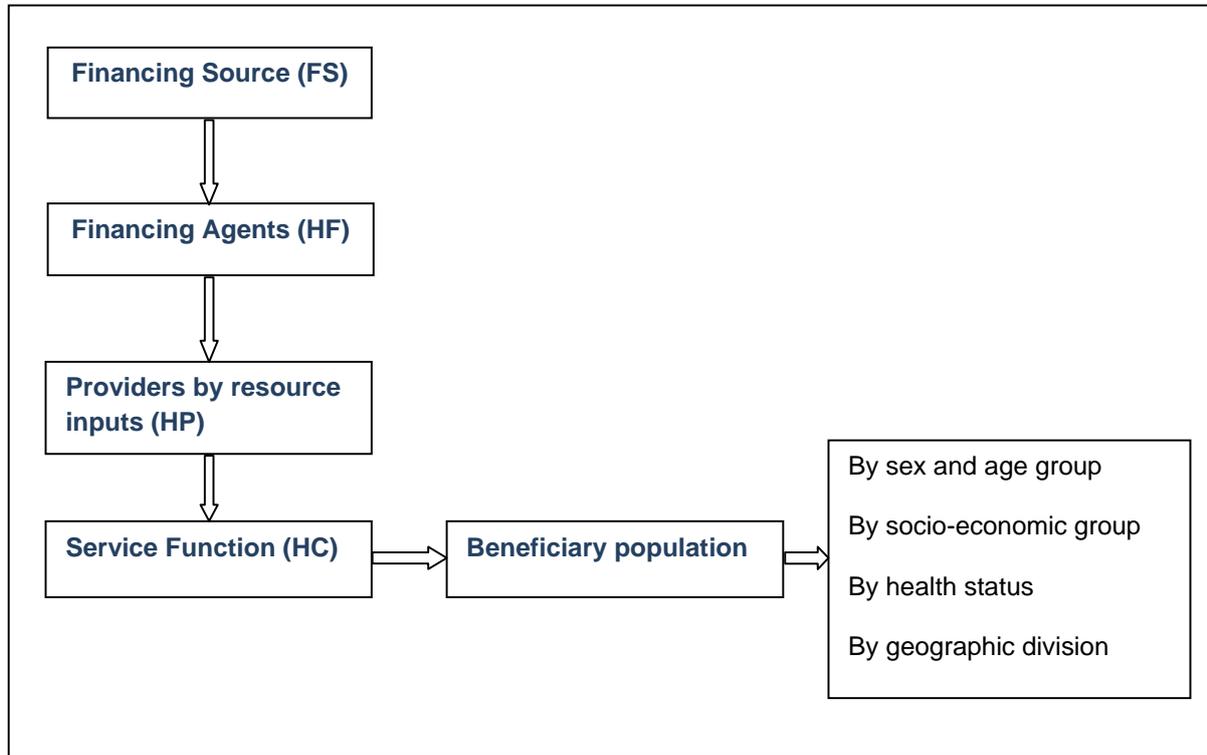
Systems for paying health providers

There are several systems that available for paying health providers. This include **transactional system** where providers are paid directly by consumers of goods and services they provide with the market determining what price the consumers will pay for these goods and services. **Insurance system** is another transactional system that involves an insurance firm acting as a third party between the beneficiary and the provider of health care. **National system** involves financing health care either entirely or partly through tax revenues. In this model of payment mechanism, membership of the national system is compulsory and contributions are based on income. **Capitation fee system** is another payment system that involves reimbursement to providers using a fixed rate per period of time for each person served or member of the scheme.

Box 2: Definitions of actors

- **FS** are institutions or entities that provide resources used in the health system by financing agent. They include the central government, households, firms and donor agencies (domestic and foreign).

- **FA** are institutions/entities that channel the resources provided by financing sources and use this funds to pay for, purchase, the activities within the health system boundary. They include the Ministry of Health (and equivalents at lower levels of government); other Ministries and Agencies which have significant health expenditure; Health Insurance Companies; out-of pocket expenditure of households; Non-governmental organizations; Health units of firms**.**

- **HP** are entities that receive money from financing agent in exchange for or anticipation of producing the activities inside the reproductive health accountant boundary. They include public and private health facilities, chemists/pharmacies, traditional care providers, health research/training institutions; and administration/management of health care.

- **Beneficiaries** are those receiving or affected by the goods and services consumed within the reproductive health system.

3.2. Description of the main actors in the RH system

3.2.1. Financing sources (FS)

The WHO user guide, 2003 provides guidance on how financing sources should be classified. (See annexes for the WHO classification scheme for financing sources). Three broad categories of classifying financing sources (FS) are identified. These three broad categories mirror the health system structures in many developing countries. These broad categories include: the public sector, the private sector and the rest of the world – donors and multinationals. Each of these broad categories is given a code with **FS 1.2** referring to resources mobilized by the public sector and include central government, Parastatals, public trust funds or other public assets while **FS 2.4** refers to funds generated by the private sector. The **FS 3** refers to funds mobilized outside the country and includes resources from bilateral or multilateral donors and funds contributed by institutions and individuals outside the country (e.g. remittances).

In Kenya, external sources accounts for 35% of the total spending on health while the private including households out of pocket accounts for 37% of the total health spending in 2009/10 in Kenya (Kenya NHA, 2009/10).

The UNFPA/UNAIDS/NIDI distinguishes three types of donors namely: (1) *primary donors* that include developed countries and private foundations, (2) *intermediate donors*, that include multinational organizations and agencies (mostly UN organizations), international NGOs and research institutes/universities that channel most of the primary donor's funds for in country population and HIV/AIDS activities, and (3) *development banks*. The UNFPA/UNAIDS/NIDI further distinguishes two types of domestic sources: *central governments*; and (2) *national NGOs* that work entirely in one country (Den Haag, 2005). Table 4 shows what Kenya has adopted in terms of classification of financing sources. The classification has been largely borrowed from the ICHA classification but with some modification to suit the Kenya's health system setting.

Table 4: Classification of financing sources used in Kenya

Code	Description
FS.1.1.1	Central government revenue (Ministry of Finance (MoF)
FS.1.1.2	Municipal governments (Regional/ Municipal Government Revenue)
FS.2.1	Other Public Funds
FS.2.1.1	Government Employer (Parastatals employer funds)
FS.2.1.2	Other Employers (private employer funds)
FS.2.2	Households (HH)
FS.2.3	Non-profit Institutions Serving Households (local foundations)
FS.2.4	Other private funds
FS.3	Rest of the world funds (Donors)
FS.nsk	Financing sources not specified by any kind

3.2.2. Financing agents (HF)

Financing agents, denoted by **HF**, are entities that pay/purchase health care services produced by health providers. They include entities that pool health resources from financing sources as well as entities (such as households and firms) that pay directly for health care from their own resources and therefore playing dual roles – both financing source and financing agents (WHO, 2003). The WHO manual adopts the ICHA (OECD) classification of financing agents (see annexes). The ICHA classification of financing agents is similar to that of financing sources as it also divides HF into three broad categories that include public, private and international sector. ICHA classification also provides some explanation on how Parastatals that exhibit both public and private characteristics should be classified. As a rule, entities providing social security - provide compulsory insurance and are controlled by the government – should be classified as private financing agent while Parastatals that include Government owned railway or power companies that provide health care through own clinics or insurance schemes should be classified under private firms category. Households are accorded a separate code as they are considered a very important purchaser of health care (HF.2.3). As discussed under financing source section, household can act as financing source as well as financing agent. They act as financing source if they buy health care through agents for instant through paying premiums for health insurance and also by paying directly to health providers for health care through out of pocket. In this case, they are playing dual roles, financing source as well as financing agent.

According to the WHO classification, various insurance arrangements do exist for pooling and paying for health care. The Producer Guide lists three categories that **include Social security schemes, private insurance schemes and other private insurance schemes**. Social security schemes, denoted as **HF.1.2** are insurance arrangements that are created through law or regulation and are classified under the public sector. Although the social security schemes are controlled by the government, they operate separately and also own assets and liabilities. Private social insurance schemes, **HF.2.1**, are classified as private entities because they have power to restrict membership and are not controlled by the government. Other private Insurance **(HF.2.2)** referred to as voluntary medical insurance schemes and may include prepayment schemes by households and pooling schemes.

Gribble *et al* (2004) presents some interesting scenarios where health expenditures may be covered by two or more entities. For instance health care costs may be partly covered by the government or insurance and partly by out-of pocket payments for example deductibles/co-payments under health insurance schemes. Health goods and services supplied through a social marketing program is another case in point where health care costs are shared by the beneficiary and a governmental or non-governmental organization. Sharing of costs therefore presents an alternative for ensuring acceptable levels of reproductive health activities are achieved in situation of declining public resources as long as market differentiation is used to determine the individuals in need of subsidized services.

Table 5 highlights what Kenya adopted as the classification of the financing agents and was informed by the ICHA classification and the NHA producer guide but with some modifications.

Table 5: Classification of financing agents used in Kenya

Code	Description
HF.1.1.1.1	Ministry of Health
HF.1.1.1.2	Other Ministries[1]
HF.1.1.2	State/provincial government (local authorities)
HF.1.2	Social security funds (NHIF)
HF.2.2	Private Insurance Enterprises (other than social insurance; individual insurance excluding social health insurance)
HF.2.3	Household out of pocket
HF.2.4	Non-profit institutions serving individuals (NGOs)
HF.2.5.1	Parastatals companies
HF.2.5.2	Private non-Parastatals firms and corporations (other than health insurance)
HF.3	Rest of the World
HF.nsk	Financing agent not specified by any kind

[1] Ministry of Defense (MoD), Office of the President (incl. NACC), Ministry of Education, Ministry for Local Government

3.2.3. Health care providers (HP)

Health providers are the end- users of resources mobilized by financing agents. They receive resources from financing agents and in return produce health care. They answer the question - **Where does the money go**? Health providers include hospitals, clinics, primary health centres, traditional health care institutions, pharmacies and researchers (Berman, 1997). They also include independent physicians, nurses and other health personnel. Providers may also include organizations that provide IEC services aimed at health promotion and preventing illnesses. Health care providers include in Kenya include international nongovernmental organizations (NGOs) such as the Red Cross, Provider International, AMREF, Oxfam, Save the Children, Action AID, Family Health International (FHI) and many others, public, private for profit and faith based health facilities that are distributed across the country are basically organized by level of care. They also include for-profit organizations such as private clinics, traditional healers, pharmacies, doctors, and diagnostic centers; and non-profit and community based organizations such as religious organizations, trade unions, and other NGOs. In many third world countries health providers can further be broken down in three categories based on ownership: public, private for profit and private not for profit (faith based).

Kenya borrowed heavily from the NHA producer guide to generate a classification of providers of health care in Kenya but modified the classification to also include key health providers in Kenya and also to reflect the ownership and distribution by level of care as shown by table 6.

3.2.4. Beneficiaries

Beneficiaries are individuals or group of individuals that benefit from particular health services. They are patients or individuals in the population. The classification of individuals can be made on the basis of a range of characteristics. Demographic characteristics may include age, sex, ethnicity or place of residence. The socio-economic status and health status of beneficiaries are of particular importance in the analysis of RH expenditures. The vulnerability status is an important concept as far RHA is concerned. Vulnerable groups include women or couples with unmet need, i.e. persons who want to limit or space childbearing but have no access to the means to do so. They are not served by family planning (FP) and reproductive health services providers.

Table 6: Classification of providers of health care used in Kenya

Code	Description
HP.1	Hospitals
HP.1.1	General Hospitals
HP.1.1.1	Government Hospitals
HP.1.1.2	Private hospitals
HP.1.1.2.1	Private FOR profit
HP.1.1.2.2	Private hospitals NOT-FOR- profit
HP.1.2	Mental Health and Substance Abuse Hospitals
HP. 1.3	Specialty Hospitals (other than mental health and substance abuse)
HP.1.3.1	Government speciality hospitals (e.g. Pumwani Maternity Hospital)
HP.1.3.2	Private speciality hospitals (e.g. Nairobi Women's Hospital)
HP.2.	Nursing and residential care facilities
HP.3.	Providers of ambulatory health care
HP3.1-3.3	Offices of Physicians, dentists, nurses and clinical officers
HP.3.3.1	CHWs
HP.3.3.2	Traditional healers
HP.3.4	Outpatient care centers
HP.3.4.1	Family Planning Centers
HP.3.4.3	Free-standing ambulatory surgery centers
HP.3.4.5	All Other outpatient multi specialty and cooperative service centers
HP.3.4.5.1	Government Health Centers and dispensaries
HP.3.4.5.2	Private not-for-profit health centers and dispensaries
HP.3.5	Medical and Diagnostic Laboratories
HP.3.6	Home based Palliative care
HP.3.9	All other ambulatory health care
HP.3.9.1	Ambulance services
HP.3.9.2	Blood banks
HP.4	Retail Sale and other providers of medical goods
HP. 4.1	Dispensing Chemists
HP 5.	Provision and administration of public health programs
HP 6.	General health administration and insurance
HP 7	All other industries (rest of the economy)
HP.7.1	Establishments as providers of occupational health care services
HP.7.1.1	Schools
HP.7.1.2	Safety and security
HP.7.1.3	Others
HP 8	Institutions providing health related services
HP.8.2	Education and training institutions
HP.8.3	Other institutions providing health related services
HP 9.	Rest of the World
HP. nsk	Provider expenditure not specified by kind
HP.AD	Institutions providing non health services (shelters, orphanages, non-health research institutions, CBOs)

Vulnerable groups also include people with low ability to pay for commodities and health services. The health status and vulnerability status are not constant but vary in time. Of particular relevance is the variation over the life course. People in different stages of life have different needs and early life experiences may have consequence lasting a lifetime. The ICPD Programme of Action stressed the changing reproductive health needs over the life cycle and the Madrid International Plan of Action on Ageing 2002 called for ensuring that "gender-specific primary prevention and screening programmes are available and affordable to older persons" and "provision of adequate information, training and care giving skills, treatment, medical care and social support to older persons living with HIV/AIDS and their caregivers" (Madrid Plan of Action, 2002).

The classification of beneficiaries facilitates the appraisal of who benefits most from reproductive health care expenditures. *Benefit incidence analysis* is a tool that investigates the extent to which the financial benefits of public spending on social services accrue to different population groups (e.g. the poor, adolescents, older women and men) (Van de Walle, 1995; Demery, 2000). Benefit- incidence analysis has long been used in the public finance field, to determine who benefits from public spending on specific programmes (Van de Walle, 1995).

The Resource Flow (RF) Project does not use the concept of beneficiary. Instead RF project uses the *final recipient* instead. Final recipients include (1) developing countries and countries in transition that are the final beneficiaries of the programmes being funded, and (2) national NGOs that receive funds for programmes that they themselves execute (UNFPA, 2002). The concept is therefore different from that of beneficiary.

The WHO manual suggests that spending on health care can be disaggregated among disease categories using the International Classification of Diseases (ICD). Linking expenditures to specific ICD categories can be a useful approach to tracking resource allocation and a step in the direction of a powerful monitoring and evaluation methodology (WHO, 2003). No international standards exist to guide the health accountant. Data on reproductive health expenditures by socio-economic status and other characteristics of beneficiaries are often lacking. When expenditure data are lacking, they may be estimated using costing methods that combine information on the use of family planning commodities and reproductive health services and information on unit costs. Use of RH services data are generally made available by

health surveys such as the Demographic and Health Surveys (DHS).

3.2.5. The activities (HF)

The RHA includes all goods and services produced by health providers in the health system. The goods and services are what are referred to as *Activities/Functions*. Activities (HF) answer the question ***"What types of goods and services were actually produced?"*** The International Classification for Health Accounts (ICHA-HC), which is adopted by WHO (2003), provides a method of grouping activities and transactions in health accounts by referring to the functions of health expenditures. The functional approach includes all expenditures on all health care activities regardless of who provided health care or who paid for the services. Many classifications of reproductive health activities have been applied for instance by Odumosu *et al.* (2002), Rannan-Eliya *et al.* (2000), and Sharma *et al.* (2002). The Programme of Action of the ICPD (Paragraph 13.14) distinguishes four categories in the costed-population package:

    I.   Family planning services;
    II.   Basic reproductive health services;
    III.   Prevention and treatment of STDs and HIV/AIDS;
    IV.   Research, data, policy analysis.

The Resource Flows project (RF) monitors expenditures for population and AIDS activities by the above ICPD costed population categories. Globally, the RF report of 2009 indicated that close to US$ 10,830 million was mobilized with 68% of the resources going to the prevention and treatment of STD/HIV/AIDS, 23% to basic reproductive health services, 7% to family planning services and 2% to research, data and policy analysis. In SSA alone, 86% of the resources mobilized for population activities were consumed by STD/HIV/AIDS.

(RF) project adjusts the list of health activities covered by the above categories to meet data requirements of UNFPA and UNAIDS. De *et al.,* 2004 attempted to map the list of health activities to the NHA classification scheme. The classification of RH activities proposed draws on the various classifications. In general, it takes into account the following considerations:

- The categories of the classification must be exhaustive and mutually exclusive; i.e. all RH-related activities should be covered by the classification, and they should be attributed to one category only;

- The classification should only include activities whose primary purpose is to promote, restore or maintain RH. Other activities that may be associated with RH, but whose primary aim is different —e.g. infant and child health activities— should be excluded;

- Given the importance of distinguishing health expenditure and activities for men and women, the classification should be gender specific. Expenditures by function and resulting RHA matrices should, therefore, be disaggregated by sex.

- The classification should be based on OECD's ICHA-HC. This has two major reasons: it facilitates the integration of RHA into the larger framework of NHA; and it allows cross-country comparability. The ICHA-HC provides a functional classification of activities at the two- and three-digit level. It distinguishes personal and collective health care services (respectively, codes HC.1-HC.5 and HC.6-HC.7).

Personal health care services are further broken down by *mode of production* - inpatient, day care, out-patient, home care and by the *basic functions of care* (curative, rehabilitative and long-term nursing). The classification of RH activities provides a detailed and elaborate adaptation of the ICHA-HC by OECD. Besides including the health-related functions that include infrastructure development, health personnel training and research, it also includes the Addendum or non-health related functions, e.g. legal support to people living with AIDS or reproductive health policy advocacy. So as to ensure flexibility it is recommended that these levels of details are maintained even though information can be presented at a more aggregated level. However, collection of data for all these categories may not be possible and in practice these may be limited categories that are relevant and feasible.

Countries that implement an RHA can expand or use the functional classification that suits their specific needs, possibilities and circumstances. Viewing activities in relation to the objectives they serve provides a good basis for the monitoring and evaluation of the activities, and the formulation of a set of indicators to measure the performance of the activities. Monitoring and

evaluation view reproductive health programmes as composed of a set of **activities** that use (invest) **inputs** or resources (financial, manpower, technology) and that produce results (**output**) at the programme level intended to lead to changes at the population level (**outcome**) (Bertrand and Tsui,1995).

Kenya adopted the ICHA classification of functions/activities but some modification were undertaken to reflect the unique characteristic of our health care system as shown by table 7 below.

Table 7: Activities/functions of RH services used in Kenya

Code	Description
HC.1	Services of curative care
HC.1.1	Inpatient curative care
HC.1.1.1	Deliveries
HC.1.1.2	Family planning services (incl. sterilizations, deliveries) (IP)
HC.1.1.3	Other RH services (IP)
HC.1.3	Outpatient curative care
HC.1.3.1	Maternal health services (OP)
HC.1.3.1.1	Antenatal
HC.1.3.1.2	Postnatal
HC.1.3.2	Family planning services (OP)
HC.1.3.2.1	Family planning counseling
HC.1.3.2.2	Infertility treatment
HC.1.3.3	Reproductive health services (OP, Other)
HC.2	Services of rehabilitative care
HC.3	Services of long-term nursing care
HC.3.1	IP long term nursing care (Palliative care)
HC.3.3	Long term nursing care: home care
HC.4	Ancillary services to medical care (incl. for prenatal and antenatal care)
HC.4.1	Clinical laboratory
HC.4.2	Diagnostic Imaging
HC.4.3	Transport for emergency obstetric care (that is officially reimbursed or paid for)
HC.5	Medical goods dispensed to outpatients
HC.5.1	Pharmaceuticals and other medical nondurables
HC.5.1.1-2	Pharmaceuticals- prescribed and non-prescribed (incl. oral contraceptives, prenatal vitamins etc.)
HC.5.1.3	Other medical nondurables (female condoms)
HC.5.2	Therapeutic Appliances and other medical durables
HC.6	Prevention and public health services
HC.6.1	MCH; FP and counseling (incl. IEC, public awareness campaigns etc)
HC.6.1.1	Maternal health preventive programs
HC.6.6	Monitoring and evaluation (e.g. DHS)
HC.6.6.1	Sentinel surveillance
HC.6.6.2	Other monitoring
HC.7	Health administration and health insurance (for public RH programs)
HC.nsk	HC expenditure not specified by any kind
HCR.1	Capital formation for health care provider institutions
HCR.2	Education and training of health personnel

HCR.3	Research and development in health
HCR.4	Food, hygiene and drinking water control
HCR.5	Environmental Health
HCR.nsk	HCR expenditure not specified by any kind
RH Addendum:	
AD.1	Female and male circumcision
AD.2	Programs designed to eradicate gender based violence
AD.3.	Programs designed to address sexual trafficking and exploitation of minors
AD.4.	Programs targeted at addressing harmful sexual practices
AD.5.	Other Non-health RH activities

3.3. Activities produced by RH providers in Kenya

In Kenya, the package of reproductive health services includes the following components:

- **Family planning services:** All programs, goods and services intended to assist women control their fertility, and all counseling, health education and information in support of the same.

- **Maternal health services:** This includes all programs that are intended to provide antenatal and postnatal care to mothers, including provision of dietary supplements for malnourished pregnant and lactating mothers, such as iron and vitamins.

- **Childbirth services:** Services to provide medical care for women delivering and giving birth.

- **Infant care:** All services intended to promote and improve the health and development of infants (defined as children aged less than 1 year), including baby health care, growth monitoring and growth promotion, and provision of dietary supplements such as micronutrients.

- **Child Health Services:** All services for children, including immunization.

- **Other personal reproductive health services for women:** All other clinical services for women, which intend to enable women to safely exercise their reproductive health functions, to be operationalized as the equivalent of all obstetric and gynecological services.

Boundaries

As discussed in NHA framework, boundary demarcates limits for what is supposed to be included in the RH accounts. The core of the RHA is in keeping with the NHA approach. In this case RHA will only include all expenditures for activities whose primary purpose is to restore, improve or maintain reproductive health for individuals during a specified period of time. The "primary purpose" is inferred from the type of good or service purchased, or determined from the stated intention of the purchaser. This definition applies regardless of the institution or entity providing or paying for the health activity

It will also include expenditure on health care by citizens and residents who are temporarily abroad and excludes spending on health care by foreign nationals within the country. Regarding time boundary, RHA accounts will include expenditures recorded for the time period in which the activity took place as opposed to when the actual payment is made. For example, if a hospital stay occurs during the final month of fiscal year 2010 but payment is made in fiscal year 2011, the expenditure is recorded for fiscal year 2010. The Kenyan NHA approach follows the prescribed boundary definition by the NHA producer guide of 2003.

Overlap

The reproductive health services comprise of two broad components, namely maternal and child health (MCH) and family planning (FP). This classification was reported in most of the health accounts especially at the service provision level (provider level) and at source and financing agent level. Therefore, the RHA proposed in this analysis will include maternal and child health services since it is not possible to disaggregate these broad components in the Kenya NHA reports.

3.4. Data sources and analysis

3.4.1. Data sources

The key sources of RH expenditure data consulted during the desk review include the Kenya National Health Accounts reports of 2005/06 and 2009/10, the Kenya budget estimates, the MDG Need Assessment and Costing, Kenya Health Care Financing draft strategy, Ministerial Public Expenditure Reviews (MPERs). Other key documents consulted include a budget

analysis that focused on reproductive health undertaken to inform the civil society, health budget analysis reports by the Health NGOs Network (HENNET).

As for the disaggregation of reproductive health expenditures into the relevant categories - maternal health and family planning - the RH sub-account analysis for 2005/06 and 2009/10 were relied on. The Kenya NHA reports of 2005/06 and 2009/10 did not segregate maternal and child health but the broad estimate was broken down into curative (inpatient and outpatient), preventive (prenatal and post natal, family planning service delivery) and rehabilitative elements as prescribed by the producer guide. However, no data is provided under rehabilitative services.

The Kenyan NHA reports (2005/06 and 2009/10) also provide information for the family planning commodities under HC.5.1. (Medical goods dispensed to outpatients). It was challenging to isolate family planning commodities as a separate expenditure item as some commodities may have also consumed through inpatient.

3.4.2. Data analysis

The analysis stage of the subaccount generation involved a thorough review of the data as presented in the sources of information and assembly of the same as per the NHA framework to provide a clear picture of RH funding flows. The two main objectives of the data analysis stage are to:

- Populate at least the four basic NHA matrices with RH expenditures for the year under review:
    1. FSxHF table
    2. HFxHP table
    3. HPxHC table
    4. HFxHC table
- Generate critical policy indicators for the RHA.

The RHA accounts and matrices presented in this report have been extracted from the Kenya NHA RH sub accounts for 2005/06 and 2009/10 with some modification. An attempt was also made to measure the following indicators related to RH:

1. **Total Health Expenditure on Reproductive Health (THERH)** which aggregates reproductive health expenditure from public sources i.e. government expenditure on reproductive health (GERH) and private outlays on reproductive health;

2. **Public/Government Expenditure on RH (GERH)** is made up of tax-funded reproductive health expenditure and Parastatal expenditures on reproductive health;

3. **Donors expenditures on reproductive health** aggregates reproductive health expenditures from the rest of the world or external sources;

4. **Social Security Expenditure on RH (SSERH)** is the proportion of total premium paid by employees and employers for compulsory schemes of health (medical) care and medical goods channeled to reproductive health care for a sizeable group of population. This is the expenditure on reproductive health by National Hospital Insurance Fund (NHIF);

5. **MoH-ERH (Ministry of Health Expenditures on Reproductive Health) is expenditure on** reproductive health development channeled through the Ministry of Health or other public agencies. Grants in-kind refer to capital equipment, pharmaceutical supplies and vaccines, and technical assistance such as experts;

6. **Private Health Insurance Expenditure (PHIE)** are the total premiums collected from employers, households or sometimes other agents to prepay reproductive related medical and paramedical benefits, including the operating costs of these schemes;

7. **Out-of-Pocket Expenditure (OOP)** is direct outlays of households including gratuities and payments in-kind made to reproductive health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the enhancement of the reproductive health status of individuals or population groups.

Estimation of missing data

- In the process of constructing the matrice, information on spending on RH by beneficiaries was missing. This meant that constructing this table was not possible. Future estimates should be undertaken alongside data collection on utilization of RH services so that utilization of RH services can be combined with spending on RH services to generate a benefit incidence analysis that shows what benefit from RH spending by age and sex;

- The role of pharmaceuticals and chemists in provision of Family planning commodities was also a challenge and this made it difficult to produce estimates of RH commodities managed by pharmaceuticals and chemists;
- The rehabilitative aspect of RH was not include in the RH accounts and this posed some challenges in terms of determining what portion of RH spending is attributed to RH services of rehabilitative nature.

Chapter 4: Reproductive health financing in Kenya

Reproductive health has received little attention in terms of financing. This is mainly because of the shift in focus by the international community both politically and programmatically towards HIV/AIDS program. In Kenya, Reproductive health if financed by the public sector government and the private sector mainly the out of pocket. The government finances 40% of the total RH spending in Kenya while the private sector mainly through out of pocket finances 38% (KNHA, 2009/10).

This chapter discusses the financing of RH in Kenya focusing on the total amount of resources going to RH by different sources with a focus on out of pocket spending on RH, public spending on RH and development partners spending on RH. The chapter also critically reviews the expenditures on RH by providers, expenditures by RH activities and spending on RH by beneficiaries. An attempt is also made to present the expenditures analysis for the two periods, 2005/06 and 2009/10.

4.1. Trend in total heath expenditure on RH and FP

Figure 9 shows that the total expenditure on health increased from Kshs. 70.8 billion (964.3 US$ million) to Kshs. 123 billion (1,620 US$ million). Total spending on reproductive health amounted to Kshs. 17 billion (US $ 225 million) compared to Kshs. 13 billion (US $170 million) reported by NHA of 2005/06. Total spending on RH represents 13.8% of total health expenditure and 0.8% of GDP in 2009/10 as opposed to 12.7% of total health expenditure and 0.6% of GDP in 2005/06. In 2005/06, family planning accounted for 24% of RH spending while in 2009/10, FP accounted for 22% of RH expenditures.

4.2. Sources of RH and FP funds

Figure 10 shows the sources of financing of RH in Kenya for 2005/06 and 2009/10 respectively. From figure 10, the public sector is the largest financier of RH services in Kenya contributing 40% (Kshs. 6.8 billion) of the total expenditures compared to 34% in 2005/06 while households contributed 29% (Kshs. 5 billions) in 2009/10. Donors contributed 24% and 22% of the total RH spending in 2005/06 and 2009/10 respectively with the private firms contributing 8.3% of total spending on reproductive health in 2009/10.

Figure 9: Expenditure on General Health and RH
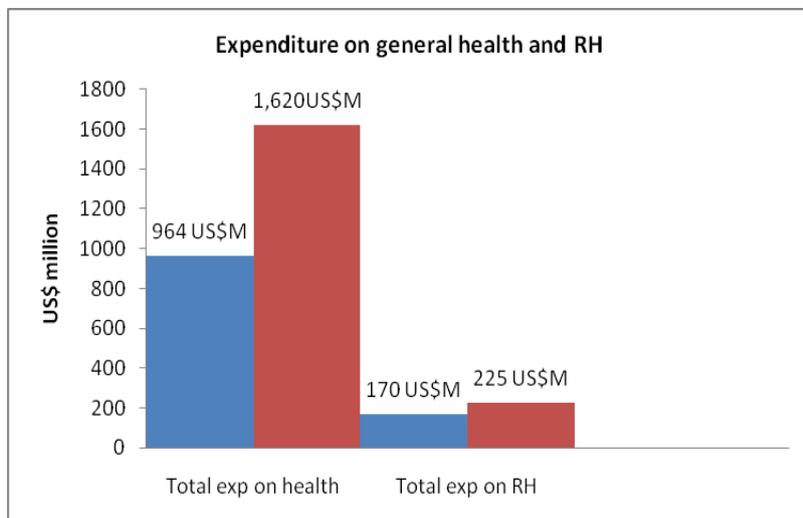
Figure 10: Financing sources of RH services, 2005/06 and 2009/10
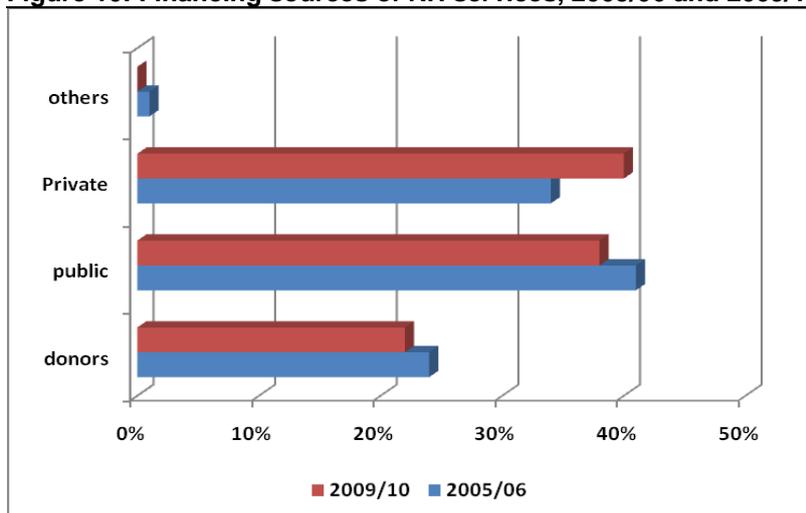
4.3. Flow of Funds through the health system

The NHA report for 2005/06 and 2009/10 shows the flow of funds from various sources through the various financing agents or intermediaries up to the payment of service delivery. The NHA shows how much is contributed by each financing source and shows the flow of the contributed funds to the health system. The flow of RH resources also follows the same pattern as depicted by the NHA framework from the various funding sources of RH through the various financing agent of RH up to the providers.

Figure 11 depicts the flow of funds from the main sources of financing through the various financing agents to health providers. The total flow of funds for general health into the health sector for the year 2009/10 was approximately Kshs. 122.9 Billion. This amount includes money spent on administration and vertical programmes. The main sources of health financing in Kenya are, the Government through taxes, development partners either "on budget" or "off budget", households through prepayment schemes or user fees; NGOs and firms. These financing sources contribute to health care in a variety of ways through the various financing agents as shown in the financing map and the figure 11 below.

4.4. Public financing for RH/FP

Reproductive health receives little attention within the government budgets. From a Health Budget analysis by the Civil society entitled "health budget – the case of RH/FP", only Kshs 51.6 million was dedicated to reproductive health out of a total health budget of Kshs 30 billion in 2005 indicating that the total health expenditures were 581 times bigger than reproductive health expenditures. In 2010, the estimates increased to about Kshs 1.2 billion that was committed to reproductive health out of a health budget of Kshs 47 billion. The reproductive budget item under vote 328: Family Planning, Maternal and Child Health (MCH) with family commodities listed under item 2211000(specialized materials and supplies).

The low priority accorded to reproductive health is also reflected in two key indicators that include per capital spending on RH which was about Kshs 30.5 in 2009/10, compared to Kshs 1.5 in 2005/06. The reproductive health portion of the government health budget was 2.58% in 2009/10 compared to 0.17% in 2005/06 as shown by table 8 below.

Figure 11: Flow of resources through the health system in Kenya
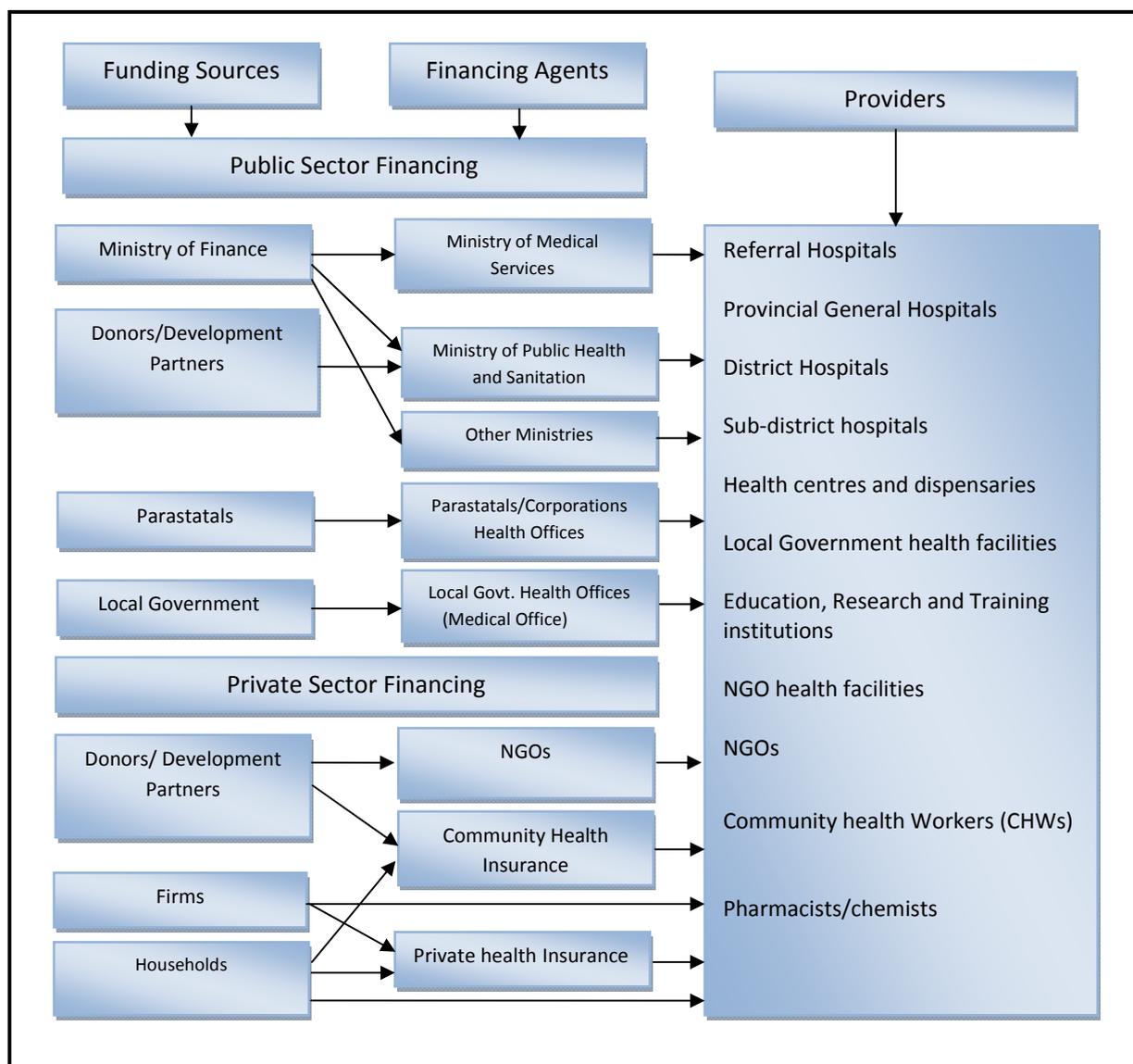
Table 8: Reproductive Health Commitments per capita

	2005/06	2006/07	2007/08	2008/09	2009/10
Total RH Commitments per capita in Kshs	1.5	1.4	1.9	53.2	30.5
Total RH as % of Total Health (Commitments)	0.17%	0.15%	0.20%	5.89%	2.58%

Source: Budget estimates – 2005/06 – 2009/10

4.5. NHA Matrices with RH expenditures

Several NHA matrices for RHA sub-account were generated by the NHA of 2005/06 and 2009/10. This report extracts and summarizes these matrices with some modification. The first matrice that shows FS XHF is shown by Table 9. The matrice shows the sources of funding for RH in Kenya for 2009/10. From FSXHF matrice, the central government is the largest financing source for RH services contributing Kshs. 6.2 billion followed by households who contributed Kshs. 5 billion during the same period. Donors contributed Kshs. 3.76 billion while private firms contributed Kshs. 1.4 billion in absolute terms.

Table 9: RH expenditures for Financing sources and financing agents - (FSXHF) (Kshs. Millions)

		Financing sources							
	FSXHF	Govt	Local Authorities	Parastatal funds	Private firms	HHs	Donors	Total	%
Financing agent	MoH	6,092					1,879	7,971	**46.69**
	Local authorities	68	214		5		2	290	**1.70**
	Social security-NHIF					1,507		1,507	**8.83**
	Private insurance			528	1,410	206		2,142	**12.55**
	HH OOP					3,300		3,300	**19.33**
	GOs						1,608	1,608	**9.42**
	Parastatals			1				1	**0.01**
	Private firms				1			1	**0.01**
	Donors						263	264	**1.55**
	Total	6,200	214	530	1,415	5,001	3,754	17,073	**100**
	%	**36.31**	**1.25**	**3.10**	**8.29**	**29.29**	**21.99**	**100**	

Source: Kenya NHA 2009/10

Table 10 shows the HF×HP matrice and highlights the role of various financing agents in managing reproductive health expenditure. Overall, 46.3% of the RH resources flowed through the Ministries of health in 2009/10 as compared to 45.7% in 2005/06. Households, through out of pocket spending on RH, controlled 19.3% in 2009/10 down from 26.3% in 2005/6

Table 10: RH expenditures for Financing agents and health providers - (HFXHP) (Kshs. Millions)

		Financing agent								
		MoHs	Local Authority	NHIF	Private Insurance	HHs	NGOs	Donors	Total	Percent
Health Providers	Government Hospitals.	6,246		248	72	1,196	40	100	7,903	**46.3**
	Private Hospitals			328	846	606			1,781	**10.4**
	FBOs Hosp.			232	352	357	70		1,011	**5.9**
	Government Specialty (e.g. Pumwani hospital)		109						109	**0.6**
	Office of physicians etc				337	753			1,089	**6.4**
	CHWs					3	256		259	**1.5**
	Government HCs & Disp.	930	181		0.4	224			1,335	**7.8**
	FBO HCs and disp.				1	136	3		141	**0.8**
	Chemists				170	12			183	**1.1**
	Public health programs	698					953	163	1,817	**10.6**
	health admin and Insurance	97		699	334		286		1,414	**8.3**
	Donors				22				22	**0.1**
	Providers N.S.K				8	0.276			9	**0.1**
	Total	7,791	290	1,507	2,142	3,288	1,608	263	17,073	**100**
	Percent	**45.6**	**1.7**	**8.8**	**12.5**	**19.3**	**9.1**	**1.5**	**100**	

Table 11 below shows the HPXHF matrice that shows the breakdown of RH spending for providers by health functions for 2009/10.

From the matrice/table 11, Public hospitals continue to utilize the largest portion of total health expenditure on RH in 2009/10 at 46.7% followed HH through out of pocket at 19.3%. Public health centres and dispensaries used only 8 percent in 2009/10, down from 10 percent in 2005/06. However public facilities still remain the major provider of RH services. The amount of total health expenditures on RH utilized by Private Employer insurance increased from 9.3% in 2005/06 to 12.5% in 2009/10.

Table 11: RH expenditures for Health providers and health functions - (HPXHF) (Kshs. Millions)

<table>
<tr><th colspan="2" rowspan="2"></th><th colspan="10">Health providers</th><th></th></tr>
<tr><th>Govt Hosp</th><th>Private Hosp</th><th>FBO Hosp</th><th>Office of physicians etc</th><th>CHWs</th><th>Govt HCs & Dispensaries</th><th>P. Health Programs</th><th>Admin &Ins</th><th>Others</th><th>Total</th><th></th></tr>
<tr><td rowspan="11">Health Function</td><td>IP curative</td><td>3,205</td><td>1,215</td><td>755</td><td></td><td></td><td></td><td></td><td></td><td>64</td><td>5,239</td><td>30.81</td></tr>
<tr><td>OP curative</td><td>4,000</td><td>435</td><td>255</td><td>1,026</td><td></td><td>1,073</td><td></td><td></td><td>141</td><td>6,930</td><td>40.75</td></tr>
<tr><td>Medical goods</td><td>0.72</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>182</td><td>183</td><td>1.08</td></tr>
<tr><td>MCH/FP</td><td></td><td></td><td></td><td></td><td>195</td><td></td><td>1,160</td><td></td><td></td><td>1,355</td><td>7.97</td></tr>
<tr><td>H. admin&</td><td></td><td></td><td></td><td></td><td></td><td></td><td>216</td><td>1,415</td><td></td><td>1,631</td><td>9.59</td></tr>
<tr><td>health Ins</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.00</td></tr>
<tr><td>Capital formation</td><td>697</td><td></td><td></td><td></td><td></td><td>261</td><td>53</td><td></td><td></td><td>1,011</td><td>5.95</td></tr>
<tr><td>M&E - DHS</td><td></td><td></td><td></td><td></td><td>65</td><td></td><td>328</td><td></td><td></td><td>393</td><td>2.31</td></tr>
<tr><td>TA</td><td></td><td></td><td></td><td></td><td></td><td></td><td>60</td><td></td><td></td><td>60</td><td>0.35</td></tr>
<tr><td>Others</td><td>0.8</td><td>130</td><td></td><td></td><td>64</td><td></td><td></td><td></td><td>9</td><td>204</td><td>1.20</td></tr>
<tr><td>Total</td><td>7,904</td><td>1,780</td><td>1,010</td><td>1,026</td><td>324</td><td>1,334</td><td>1,817</td><td>1,415</td><td>396</td><td>17,005</td><td>100</td></tr>
<tr><td></td><td>%</td><td>46.48</td><td>10.47</td><td>5.94</td><td>6.03</td><td>1.91</td><td>7.84</td><td>10.69</td><td>8.32</td><td>2.33</td><td>100</td><td></td></tr>
</table>

The Matrice/table 12 shows the financing agents by health function (HPXHF).

Table 12: RH expenditures for Financing agents and health functions - (HPXHF) (Kshs. Millions)

		Financing agents									total	%
		MoH	LAs	NHIF	Private insurance	HH	NGOs	Parast	Private firms	Donors	total	%
Health Function	IP curative	2,001	42	807	579	1,748	58			5	5,240	30.69
	OP curative	4,238	217		857	1,525	56			96	6,989	40.93
	Medical goods				170	13					183	1.07
	MCH/FP	584				3	765	1	1		1,354	7.93
	Health admin& Ins	149		699	334		286			163	1,631	9.55
	Capital formation	991	31								1,022	5.99
	M&E – DHS	9					384				393	2.30
	TA						60				60	0.35
	Others				202						202	1.18
	Total	7,972	290	1,506	2,142	3,289	1,609	1	1	264	17,074	100.00
	%	46.69	1.70	8.82	12.55	19.26	9.42	0.01	0.01	1.55	100.00	

4.6. Expenditures by financing agents

The bulk of the resources mobilized by financing sources rarely pass directly to the end users, but rather through financing agents who determine what proportions and which services or activities will consume the resources mobilized. Figure 12 below shows the role of various financing agents in managing reproductive health expenditure. Overall, 46.3% of the RH resources passed through the public sector (Ministries of health) in 2009/10 as compared to 45.7% in 2005/06. Households, through out of pocket spending on RH, controlled 19.3% in 2009/10 down from 26.3% in 2005/06.

Figure 12: Trend in financing agents, 2005/06 and 2009/10
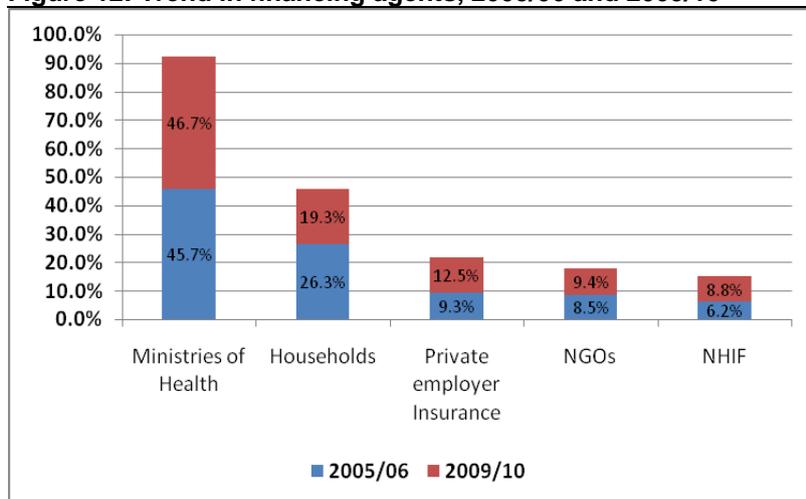
4.7. Key providers of RH services

As figure 13 shows, the public sector plays a major role in supplying RH services. Public hospitals utilized the largest portion of total health expenditure on RH in 2009/10 at 46.7% followed by providers of public health programs (10.6%) and private hospitals (10.4%). down from 10 percent in 2005/06. However public facilities still remain the major provider of RH services. The amount of total health expenditures on RH utilized by Private Employer insurance increased from 9.3% to 12.5% on 2005/06 and 2009/10 respectively.

Figure 13: Health providers of RH services, 2005/06 and 2009/10
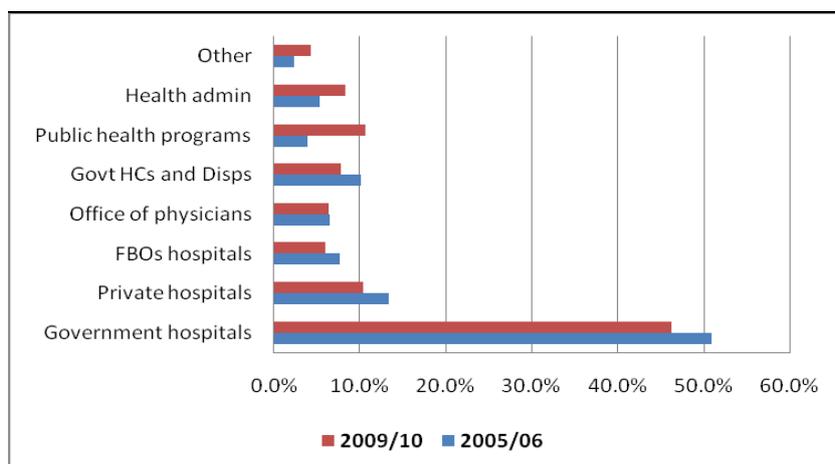
4.8. Expenditures on RH activities

Figure 14 shows the expenditures on RH by activities or function. Outpatient curative care consumed the largest share of total health expenditure on RH, at 41% in 2009/10 up from 25% reported in 2005/06. Inpatient curative care that includes deliveries and sterilizations, as well as other services that could not be disaggregated accounted for 30% of the total health expenditure on reproductive health in 2009/10 down from 62% in 2005/06.

Figure 14: RH activities (functions), 2005/06 and 2009/10
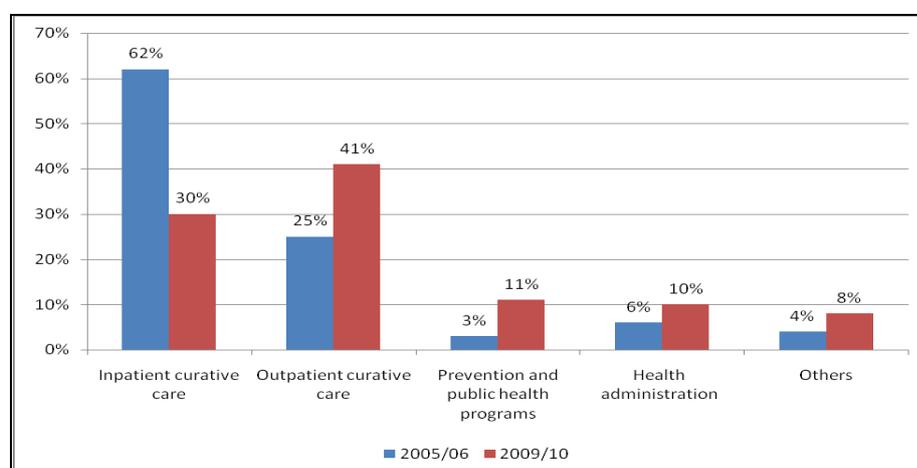
4.9. Out of Pocket spending on RH and FP

Given the importance of household out of pocket spending on RH, it is very important to analyze where households spend their money. According to the 2005/06 NHA, Households spend majority of the out of pocket resources for RH at health facilities. Public hospitals accounted for 36.4% of the total household spending on reproductive health. Among the private health facilities, private clinics and private hospitals received 15% and 22.9% of household resources in 2005/06. In terms of what was purchased by households, 57.8% of household resources were used for maternal and antenatal services and 41.8% was used to buy family planning services.

4.10. Spending on contraceptives

Although spending on contraceptives has been increasing over, the NHA estimations for 2005/06 and 2009/10 underestimate the resources going to family planning commodities mainly because of relying on distributional factors/ratios to apportion expenditures on RH by activities. However, it is worth noting that when the two periods are considered – 2005/06 and 2009/10, the resources going to family planning commodities increased in absolute terms from Kshs 13 million to 171 million, an increase of about 122%.

4.11. Spending by health insurance

Coverage of health insurance in Kenya is limited both in terms of the numbers covered and the resources controlled by the insurance sector – National Hospital Insurance Fund (NHIF) and Private health Insurance. In 2005/06, private health insurance controlled 9.3% of the total expenditures on RH compared to 12.5% in 2009/10. NHIF controlled 6.2% of total RH resources in 2005/06 as opposed to 8.8%. In total, health insurance accounted for 21.3% of resources mobilized for RH up from 15.5% of RH resources mobilized for RH in 2005/06as shown by table figure 15.

Figure 15: Spending by health insurance
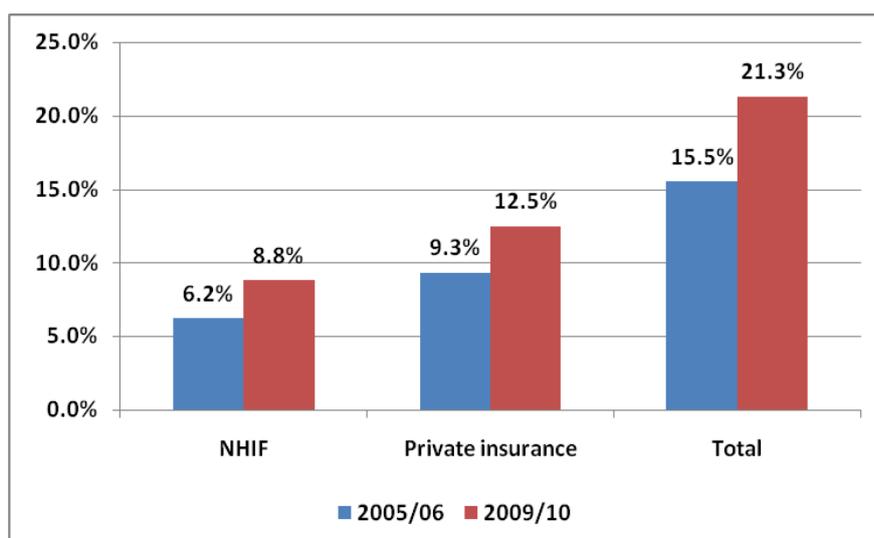
4.12. Breakdown of RH spending by beneficiary

The breakdown of RH spending by beneficiary shows the RH expenditure in the health system distributed among the population group. It answers the question, "Who benefits from RH spending?" The population groups are defined on the basis of sex, age, social economic status, health status and geographical place of residence.

Breakdown of RH spending by beneficiaries groups is one of the most challenging health accounts activity (WHO, 2003). It requires reliable health status data and population that can be linked to reproductive health expenditures. In 2005/06 and 2009/10, these were not generated due to lack of reliable data on utilization of RH services. However, for the general health, an analysis of who benefited from expenditures on general health was undertaken as household utilization on general health services was available from the Household Health Expenditure and Utilization Survey of 2007.

4.13. Benefit Incidence Analysis to inform SRH tracking

To generate the RH spending by beneficiary, the utilization statistics on RH services need to be generated alongside the NHA-RHA estimations. The utilization information needs to be broken down by specific categories that include age, sex, social economic groups (wealth index) etc. This kind of RH utilization statistics broken down by the specified categories is difficult to get from administrative records and special HH surveys, in most cases cross sectional surveys are usually undertaken targeting the population groups that consume RH services.

The RH utilization statistics broken down by the beneficiary groups are combined with data on RH spending to generate estimates of spending on RH by beneficiary – sex, age, social economic status. This kind of analysis is referred to as Benefit Incidence Analysis (BIA). BIA for the purpose of generating RH spending by beneficiary therefore require estimating RH spending using RH sub account within the NHA framework. The accounting exercise in this case will also include a special household survey to assess the share of out-of-pocket expenditures (OOPE) in the total spending on sexual/reproductive health, including HIV/AIDS. Results from the specialized household expenditure survey are therefore a critical direct input to resource tracking. They are also important as they have the potential to assess a level of detail usually not obtained from other sources, for example the costs of transportation or informal payments.

Since special surveys to generate RH utilization are expensive, a module on RH utilization can be developed and "piggy backed" in other routine surveys like the DHS. This will however depend on the sample size since a survey targeting RH consuming population groups require a large sample size to generate the required RH indicators.

Because surveys are subject to both sampling and non-sampling errors, in health accounting they are best used in combination with other data; for example data from health facilities and other health service providers. This process of triangulation and integrating data sources increases the validity and reliability of the accounting process.

The process of estimating the benefit incidence with reference to RH is as follows:

▪ Users of RH health services are grouped by social economic category (income or wealth index), urban/rural areas, age and sex

▪ The expenditure on RH is then divided by the total utilization of RH services to generate the net benefit incidence to the specific population

▪ To generate spending on RH by beneficiary the benefit is then multiplied by the beneficiary group's RH utilization rates

Table 13: Data needed for the BIA information from the special HH Survey and corresponding Indicators

Information	Indicator
Number of people who consumed RH services per year	% distribution of consumption of RH services by income quintiles, age group, rural/urban and sex
Number of outpatient consultations/visits for RH services per year	% distribution of RH consultations by income quintiles, age group, rural/urban and sex Per capita or per head RH consultations/outpatient per year
Number of admission days for RH services per year	% distribution of RH admissions by income quintiles, age group, rural/urban and sex Per capita or per head RH admissions per year
Total out of pocket spending on RH services by level of care	% distribution of out-of-pocket spending on RH by income quintiles, age group, rural/urban and sex Per capita out-pocket spending on RH per year

Chapter 5: Innovative approaches for financing RH financing in Kenya

This chapter discusses some of the innovative financing models in Kenya in the perspective of increasing resources to finance RH services. Some of the models/mechanisms that are explored include – the Output Based Approach (OBA), social franchising and the Performance-based financing (PBF) – a strategy for improving how money is spent on health, and making the resource 'go farther" or reach more needy Kenyans.

5.1. The Output Based Aid (OBA) approach

The poor performance of the reproductive and child health related indicators in many countries of Africa and Asia are a major concern for governments especially in their endeavour to achieve the Millennium Development Goals (MDGs). It is also a well known fact that the maternal and infant morbidity and mortality are poorest among low-income populations groups. Weak and inefficient health systems have sustained these inequities in access and utilization of essential health services.

The Government of Kenya with the support of German Development Bank (KFW) introduced the Output Based Aid (OBA) approach, an innovative way of improving the health of the poorer members of the Kenyan community, in 2005. The programme objectives were to improve access to and uptake of RH services by economically disadvantaged groups of the population through the introduction of a voucher scheme. Beneficiaries of the scheme in targeted areas purchase vouchers at a highly subsidized price. The voucher entitles them to reproductive health services free of charge at any one of the accredited service providers.

The voucher scheme was designed to promote better targeting of poor communities whilst increasing their freedom of choice and purchasing power. At the same time, competition between the public, non-government and private sectors encourages service providers to improve their responsiveness to clients and the quality of their services.

Phase I of the OBA managed to set up service delivery points for safe motherhood (SMH), family planning (FP) and gender-based violence (GBV) recovery services in two informal

settlements in Nairobi and three regions: Kiambu, Kisumu and Kitui (which were districts before the subdivision).

A recent evaluation of the OBA approach in Kenya indicated that the uptake for the Safe Motherhood package of services (including normal delivery and caesarean section), as measured by redeemed vouchers increased to a high of 77% of vouchers redeemed. However, challenges have been identified around cost effectiveness, demand and access to FP services, reimbursement rates and the accreditation of health providers. Despite these challenges, the voucher scheme remains an effective system at putting the purchasing power of women into the hands of women and also enabling choice in poor urban areas.

5.2. Performance Based Financing (PBF)

Even though the need to introduce performance-based financing was recognized in the Health Policy Framework of 1994, little has been done towards this end. Resources continue to be allocated according to population-based indicators, an approach that does not introduce efficiency in resource use. Moreover, most health resources are controlled at the center, and the facilities do not even know their value. There is no incentive to rationalize their use due to the perception that the center will always cover any shortfall.

The envisaged devolution of funds through the HSSF and HMSF offers a good opportunity for introducing performance-based financing in the health sector. Performance-based financing or output-based financing is also being piloted in Northeastern Province by UNICEF. Under the pilot scheme, health facilities are scored across a number of parameters. If a facility scores 100 percent, it receives the maximum payment of Kshs. 112,000; a score of 50 percent results in half payment, Kshs. 56,000. The World Bank is also piloting performance based financing in a few remote districts in Kenya that include Samburu.

5.3. Social franchising model

Social franchise is a model that creates a network of private medical practitioners (doctors, nurses, midwives, pharmacists). The network of health providers offer a standard set of services at lower costs under a shared brand name. Franchise members are normally offered training,

brand and commodity advertising, inter-franchise referrals, a branding that shows high-quality standards, and other benefits. Social franchising draws on commercial franchising techniques to increase access to and use of socially beneficial services, and to improve the quality of these services.

Social franchising models in Kenya include Tunza and Amua Clinics that are promoting RH services through private clinics in Kenya. They help to reduce the social and cultural barriers to accessing RH services through use of social franchising techniques. They are also helping to keep down the prices of RH services.

Chapter 6: Conclusions and recommendations for future country reports

This review provides a mapping and review of literature on NHA including NHA and RH sub-account as well as issues of concepts and definition relating to RH and the estimation process as pertaining to RHA. Using this review, issues of critical importance in designing a framework for constructing and estimating RHA in Kenya are discussed. The paper also provides an illustrative example of an NHA and RH sub-account estimation experience in Kenya, including discussion and interpretation of results.

In Kenya, critical actors in the reproductive health system interact to undertake transactions that lead to the production of RH services. Actors involved in RH financing mobilize, allocate and utilize RH funds. Actors that mobilize RH resources are referred to as financing sources while those that allocate RH resources are referred to as financing agents. Entities or actors that receive funds from financing agents, providers, generate RH related services for consumption by beneficiaries. The actors involved financing and production of RH services are categorised by ownership that is by either public or private and the type RH services produced. In the process of interaction actors exchange resources and produce RH good and services within the RH system.

For construction of RHAs, it is the transactions between the actors in carrying out their designated activities that are critical. The classification of actors, activities and transactions into important categories that share common characteristics are therefore important in constructing the RHA. The aim of the RHA is to generate an illustrative representation of the sources of RH funds, the allocation of RH funds and also capturing of the transactions that occur in the RH system. Data for estimation of RHA comes from both secondary and primary sources.

6.1. Challenges facing financing of RH and construction of RHA

6.1.1 Challenges facing financing of RH in Kenya

Poor maternal and child health remains a major public health challenge facing Kenya. Even though the country's infant and under five mortality rates fell considerably, from 77 to 52 deaths per 100 live births and 115 to 74 deaths per 1000 live births respectively, maternal mortality has remained high and is estimated to be at 488/100,000 (KDHS,2008/09). While family planning is

considered one of the cost effective ways of improving maternal and child health, the unmet need for family planning remains high with the age group 15-24 years reporting an unmet family need of 30% (KDHS,2008/09). The unmet need also varies widely by province ranging fromn15% in Nairobi to 32% in Nyanza. Teen pregnancy is a leading contributor of Kenya's high maternal mortality. By age of 19 years, nearly one-third of women are either pregnant or have delivered a baby; the KDHS of 2008/09 found that 13% of 16 years olds had had a baby or were pregnant. The WHO estimates that 13% f all maternal deaths globally were among adolescent mothers as a result of complications with unsafe abortions (WHO, 2008).

According to the Kenya NHA of 2009/10, Kenya spend approximately Kshs. 17 billion on RH. An analysis by Population Reference Bureau (2011) estimated that an additional Kshs 5.3 billion spend on family planning could result in a fourfold saving of Kshs. 20.3 billion, including saving of Kshs. 8.6 billion in education, Kshs. 2.8 billion on Immunization, Kshs. 2.7 billion on water and sanitation, Kshs. 5.6 on maternal health and Kshs. 0.6 billion on Malaria.

In Kenya, households are contributing a substantial amount of resources through out of pocket spending (29%) to the overall financing of reproductive health. Reduction of out of pocket spending on RH services should therefore be a key policy goal. This requires a strong commitment from both development partners and the government to increase and strengthen spending on reproductive health services.

The financing for reproductive health needs therefore to be substantially increased in order to achieve the MDGs set for the country.

6.1.2. Challenges with construction of RHA in Kenya

The secondary sources in Kenya have played a critical role in informing the construction of RHAs. For instance, data from the public source of RHA financing has largely been sourced from government audited accounts. One major concern with government sources has been the fact that government information is not disaggregated to the level (e.g. may not have line items on RH-specific services) desired in the sub-analysis tables. In such scenarios, the NHA team collects data not only on expenditures but also on unit cost, utilization of services and other indicators that allows for estimates to be made to distribute funds according to the RHA breakdown. The data collected on ministries of health expenditure on RH were also highly

aggregative and could hardly be broken down into budget line items, functions and providers. This made it difficult to estimate NHA matrices by providers and by functions.

Information collected from most of the providers that include NGOs could also not easily be broken by the respective functional classification as proposed by the producer guide. With regard to data from private insurance, firms and employers, the NHA process in Kenya especially the RHA suffered from lack of data from this sources that have functional details the health accounts required. The private insurance firms also excluded patient or client payments in terms of co-payments and deductibles.

For the household contribution to the financing of RH in Kenya, the source of information was a household health expenditure and utilization survey undertaken in 2007. However, the available data were not sufficient enough to estimate the Out of Pocket Spending on SRH. The team ended up using distributive variables like utilization statistics and unit costs to derive some estimates of the OOPE on SRH which was either highly underestimated or over estimated. A special Household Health Expenditure and Utilization Survey targeting RH services will therefore be required in future to estimate a robust OOPE on SRH.

To determine who benefits from RH spending in Kenya, a breakdown of RH spending by beneficiaries groups is critical. However breakdown of RH spending by beneficiaries is one of the most challenging health accounts activity (WHO, 2003). It requires reliable health status data and population that can be linked to reproductive health expenditures. In period, 2005/06 and 2009/10, these tables were not produced in Kenya due to lack of reliable data on utilization of RH services data. Future estimations of RHA it will be important to undertake a household survey specific to SRH and undertake some benefit incidence analysis by combining spending on RH with household utilization of RH services to generate data on who benefits RH spending

6.2. Recommendations for improving construction of RHA

To develop a more complete picture of RHA accounts, a number of steps or activities that have been discussed in the above section are therefore important to complement what was undertaken by the NHA team in Kenya:

- A costing of RH services study at the provider level is important. The costing will aim at generating unit costs of producing RH services by functional categories;

- Undertake facility based surveys as another avenue for collecting data on providers (this was not undertaken in 2005/06 and 2009/10) to collect information on specific RH expenditures. If resources allow, the facility surveys can also be a mechanisms for conducting a patient record review of services administered and consumed to RH clients. The facility based surveys also supplement data from the government budgetary documents. It should however be noted that facility surveys are difficult to implement since many of this facilities use accounting systems that do not necessarily correspond with NHA categories. For instance facilities may tend to record financial spending in terms of inputs such as salaries, personnel, maintenance etc. ;

- A special Household Health Expenditure and Utilization Survey targeting RH services will therefore be required in future to estimate a robust OOPE on SRH;

- Future estimations of RHA it will be important to undertake a targeted household survey specific to SRH i.e., a survey population that use RH services and /or acquire RH commodities;

- A benefit incidence analysis that combines spending on RH with household utilization of RH services to generate data on who benefits RH spending. *Benefit incidence analysis* is a tool that investigates the extent to which the financial benefits of public spending on social services accrue to different population groups (e.g. the poor, adolescents, older women and men) (Van de Walle, 1995; Demery, 2000). Benefit- incidence analysis has long been used in the public finance field, to determine who benefits from public spending on specific programmes (Van de Walle, 1995). This will help in constructing the RH spending by beneficiary table.

The above activities will require the support of UNFPA or any other development partner interested with RHA.

Countries like Kenya, Tanzania, Rwanda and Ethiopia, which have undertaken several rounds of NHA with RH subaccounts, and have qualified NHA practitioners with experience in constructing RH sub accounts, should be supported in the next round.

6.3. Institutionalization of RHA to ensure the RH estimations are available when needed

Ideally, institutionalization occurs when RHAs are conducted on an annual or regular basis that is supported both politically and financially by the country government. Use of RHA data on a recurrent basis for making RH policy decisions is essential for Government ownership. The following key steps are therefore critical for the institutionalization agenda to be pushed forward:

- Expanding the NHA team to include the representation of key NGOs and development partners. This will ideally ensure these key players understand and appreciate why the RHA accounts are required and the kind of information required;

- Development of a standardized data collection tool that targets the donors and NGOs. This can later be computerized so that expenditure information on RH is made available on regular basis from the NGOs. This should be followed by an intensive advocacy targeting this two sources of RHA data to ensure that the tool is populated on regular basis and then send to the NHA team;

- Institutionalization also requires an ongoing technical team to work on RHA and respond promptly to request from policy makers and other stakeholders. The number of the qualified NHA team is reducing and more targeted training is required to create a critical mass of RHA practitioners. The entry point could be the University of Nairobi where RHA can be trained to economics student who are potential employees of the government. Support will also be required to help the universities revised their economics curriculum to include NHA/RHA resource tracking module. This will help in term of introducing NHA/RHA resource tracking at an early stage to potential government economists. Supporting the development of capacity on RHA accounts will substantially reduce the costs involved in generating routine estimates of resource flows of RH.

References

Agyepong IA (1999). Reforming health service delivery at district level in Ghana: the perspective of a district medical officer. Health Policy and Planning, 14, pp. 59-69.

Aitken, Iain *W. (*1999)*. "Implementation and Integration of Reproductive Health Services in a. Decentralized System."*

Aitken, Iain and Laura Reichenbach. (1994). Reproductive and Sexual Health Services: Expanding Access and Enhancing Quality. In Gita Sen et al. (Eds.), *Population Policies Reconsidered: Health Empowerment, and Rights.* Boston: Harvard School of Public Health.

Ambrose S (2000). 50 years is not enough. US Network for Global Economic Justice.

Berman, P.A. (1997), National health accounts in developing countries: appropriate methods and recent applications. *Health Economics*, 6, pp. 11-30.

Bernard, J. and A. Tsui (1995), Indicators for reproductive health program evaluation. Carolina Population Center, University of North Caroline, Chapel Hill.

Borghi J (2000). The cost of providing maternal health care and alternative ways of financing these services.

Demery, L. (2000), Benefit Incidence: A Practitioner's Guide. Poverty and Social Development Group, World Bank, Washington DC (Unpublished mimeo).

Family Care International (1999). Meeting the Cairo Challenge. Family Care International, New York.

Global Health Resource Tracking Working Group (2005), *Following the Money in Global Health.* Recommendations for Global Health Resource Tracking. Executive Summary. Center for Global Development, Washington D.C.

Gribble, J.N., V. Jennings and M. Nikula (2004), Mind the gap: responding to the global funding crisis in family planning. *The Journal of Family Planning and Reproductive Health Care*, 30, pp. 155-157.

ICPD (1994), ICPD Programme of action. Cairo
(available at http://www.unfpa.org/icpd/icpd_poa.htm)

IIHMR and FGI (2000), Financing reproductive and child health in Rajasthan: the sources and uses of funds.

Langer A, Nigenda G, Catino J (2000). Health Sector Reform and Reproductive Health in Latin America and the Caribbean: strengthening the links. Bulletin World Health Organisation, 78, pp. 667-676.

Susna De, *Importance of NHA Subaccounts* (Bethesda, MD: Health Systems 20/20 Project, 2008).

Susna De and Laurel Hatt, "Reproductive and Child Health Subaccounts to Track Resource Allocations and Flows," presentation at Scaling-Up High Impact FP/MNCH Best Practices, Bangkok, Sept. 4, 2007.

De, *Importance of NHA Subaccounts*; and De and Hatt, "Reproductive and Child Health Subaccounts to Track Resource Allocations and Flows."

De, *Importance of NHA Subaccounts*; and USAID, "Using Reproductive Health Subaccounts to Advocate for Increased Resources for Family Planning," *Repositioning in Action E-Bulletin* (August 2008), accessed at www.usaid.gov/our_work/global_health/pop/techareas/repositioning/repfp_ebulletin/080808_en. html, on January 4, 2010.

USAID (2009) "Using Reproductive Health Subaccounts to Advocate for Increased Resources for Family Planning"; and Health Systems 20/20 Project, "National Health Accounts Subaccounts: Tracking Health Expenditures to Meet the Millennium Development Goals," *Project Brief.*

PHRp*lus* (2003) Understanding NHA: The Methodology and Implementation Process

Rannan-Eliya, R. P., Berman, P., Eltigani, E.E., de Silva, I., Somanathan, A., Sumathiratne, V (2000) *Expenditures for Reproductive Health and Family Planning Services in Egypt and Sri Lanka*. The POLICY Project, The Futures Group International, Inc

Tinker A. (1998). Improving Women's Health in Pakistan. World Bank, Washington. World Bank (1999). Safe Motherhood and the World Bank. The World Bank

World Health Organisation (1996). Mother - Baby Package: Implementing safe motherhood in countries. Maternal Health and Safe Motherhood Division.

World Health Organisation (1997). Decentralization and Health Systems: An Overview of International Experience. Technical Seminar Series.

WHO (World Health Organization) (2003), *Guide to producing national health accounts. With special applications for low-income and middle-income countries*. WHO, Geneva. (available at http://whqlibdoc.who.int/publications/2003/9241546077.pdf).

WHO (World Health Organization) (2004), Unsafe Abortion: Global and Regional Estimates of Unsafe Abortion and Associated Mortality in 2000, 4 th Edition. WHO, Geneva.

Willekens, F.J. (1994), Monitoring international migration flows in Europe. Towards a statistical data base combining data from different sources. *European Journal of Population*, 10, pp. 1- 42.

Willekens, F.J. (1999), Modelling approaches to the indirect estimation of migration flows: from entropy to EM. *Mathematical Population Studies*, 7(3), pp. 239-278

Willekens, F.J. (2005), Towards a System of Reproductive Health Accounts. Netherlands Interdisciplinary Demographic Institute Series Report, NIDI, The Hague.

Wouters, A., S. Bennett and C. Leighton (1998), Alternative provider payment methods: Incentives for improving health care delivery. PHR Primer for Policymakers. Partnerships for Health Reform, Abt Associates, Bethesda, MD.

Zeitlin, Govindaraj and Chen. (1994). Financing Reproductive and Sexual Health Services. In Gita Sen et al. (Eds.), *Population Policies Reconsidered: Health Empowerment, and Rights.* Boston: Harvard School of Public Health.

Annexes

Table I.1. WHO classification of financing sources

Code Description
FS.1 Public funds
FS.1.1 Territorial government funds
FS.1.1.1 Central government revenue
FS.1.1.2 Regional and municipal government revenue
FS.1.2 other public funds
FS.1.2.1 Return on assets held by a public entity
FS.1.2.2 Other
FS.2 Private Funds
FS.2.1 Employer funds
FS.2.2 Household funds
FS.2.3 Non-profit institutions serving individuals
FS.2.4 other private funds
FS.2.4.1 Return on assets held by a private entity
FS.2.4.2 Other
FS.3 Rest of the world funds
Source: WHO, 2003

Table: 2: OECD classification of financing agents

ICHA-HF code Description
HF.1 General Government
HF.1.1 Territorial government
HF.1.1.1 Central government
HF.1.1.2 State/provincial government
HF.1.1.3 Local/municipal government
HF.1.2. Social security funds
HF.2 Private Sector
HF.2.1 Private social insurance
HF.2.2 Other private insurance
HF.2.3 Private Households' out-of-pocket payment
HF.2.4 Non-profit institutions serving households (other than social insurance)
HF.2.5 Private Firms and corporations (other than health insurance)
HF.3 Rest of the world
Source: WHO, 2003

Table: 3: Classification scheme for providers

Code Description
HP.1 Hospitals
HP.1.1 General Hospitals
HP.1.2 Mental health and substance abuse hospitals
HP.1.3 Specialty (other than mental health and substance abuse) hospitals
HP.1.4 Hospitals of non-allopathic systems of medicine
HP.2 Nursing and residential care facilities
HP.2.1 Nursing care facilities
HP.2.2 Residential mental retardation, mental health and substance abuse facilities

HP.2.3 Community care facilities for the elderly
HP.2.9 All other residential care facilities
HP.3 Providers of ambulatory health care
HP.3.1 Offices of physicians
HP.3.2 Offices of dentists
HP.3.3 Offices of other health practitioners
HP.3.4 Outpatient care centres
HP.3.4.1 Family planning centres
HP.3.4.2 Outpatient mental health and substance abuse centres
HP.3.4.3 Free-standing ambulatory surgery centres
HP.3.4.4 Dialysis care centres
HP.3.4.5 All other outpatient multi- specialty and cooperative service centres
HP.3.4.9 All other outpatient community and other integrated care centres
HP.3.5 Medical and diagnostic laboratories
HP.3.6 Providers of home health care services
HP.3.9 other providers of ambulatory health care
HP.3.9.1 Ambulance services
HP.3.9.2 Blood and organ banks
HP.3.9.3 Alternative or traditional practitioners
HP.3.9.9 All other ambulatory health care services
HP.4 Retail sale and other providers of medical goods
HP.4.1 Dispensing chemists
HP.4.2 Retail sale and other suppliers of optical glasses and other vision products
HP.4.3 Retail sale and other suppliers of hearing aids
HP.4.4 Retail sale and other suppliers of medical appliances (other than optical glasses and hearing aids)
HP.4.9 All other miscellaneous sale and other suppliers of pharmaceuticals and medical goods
HP.5 Provision and administration of public health programmes
HP.6 General Health administration and insurance
HP.6.1 Government administration of health
HP.6.2 Social security funds
HP.6.3 Other social insurance
HP.6.4 Other (private) insurance
HP.6.9 All other providers of health administration
HP.7 All other industries (rest of the economy)
HP.7.1 Establishments as providers of occupational health care services
HP.7.2 Private Households as providers of home care
HP.7.3 All other industries as secondary producers of health care
HP.8 Institutions providing health-related services
HP.8.1 Research institutions
HP 8.2 Education and training institutions
HP.8.3 Other institutions providing health-related services
HP.9 Rest of the world
HP.nsk Provider not specified by kind

International Classification for Health Accounts — Functional Classification of Health Care (ICHA-HC)

HC: 1-7 DIRECT HEALTH CARE FUNCTIONS
HC.1 Services of curative care
HC.1.1 Inpatient curative care
HC.1.2 Day cases of curative care
HC.1.3 Outpatient curative care
HC.1.3.1 Basic medical and diagnostic services
HC.1.3.2 Outpatient dental care
HC.1.3.3 All other specialized medical services
HC.1.3.4 All other outpatient curative care
HC.1.4 Services of curative home care
HC.2 Services of rehabilitative care
HC.2.1 Inpatient rehabilitative care
HC.2.2 Day cases of rehabilitative care
HC.2.3 Outpatient rehabilitative care
HC.2.4 Services of rehabilitative home care
HC.3 Services of long-term nursing care
HC.3.1 Inpatient long-term nursing care
HC.3.2 Day cases of long-term nursing care
HC.3.3 Long-term nursing care: home care
HC.4 Ancillary services to medical care
HC.4.1 Clinical laboratory
HC.4.2 Diagnostic imaging
HC.4.3 Patient transport and emergency rescue
HC.4.9 All other miscellaneous ancillary services
HC.5 Medical goods dispensed to outpatients
HC.5.1 Pharmaceuticals and other medical nondurables
HC.5.1.1 Prescribed medicines
HC.5.1.2 Over-the-counter medicines
HC 5.1.3 Other medical nondurables
HC.5.2 Therapeutic appliances and other medical durables
HC.5.2.1 Glasses and other vision products
HC.5.2.2 Orthopaedic appliances and other prosthetics
HC.5.2.3 Hearing aids
HC.5.2.4 Medico-technical devices, including wheelchairs
HC.5.2.9 All other miscellaneous medical goods
HC.6 Prevention and public health services
HC.6.1 Maternal and child health; family planning and counseling
HC.6.2 School health services
HC.6.3 Prevention of communicable diseases
HC.6.4 Prevention of no communicable diseases
HC.6.5 Occupational health care
HC.6.9 All other miscellaneous public health services
HC.7.1 General Government administration of health
HC.7.1.1 General Government administration of health (except social security)
HC.7.1.2 Administration, operation and support of social security funds
HC.7.2 Health administration and health insurance: private
HC.7.2.1 Health administration and health insurance: social insurance
HC.7.2.2 Health administration and health insurance: other private
HC.nsk HC expenditure not specified by kind

HC.R.1–5 HEALTH-RELATED FUNCTIONS
HC.R.1 Capital formation for health care provider institutions
HC.R.2 Education and training of health personnel
HC.R.3 Research and development in health
HC.R.4 Food, hygiene and drinking- water control
HC.R.5 Environmental health
HC.R.nsk HC.R expenditure not specified by kind
Source: WHO, 2003
Selected classifications of reproductive health and AIDS activities

Bernard and Tsui (1995) consider five broad categories that are also related to objectives:

- Safe pregnancy
  - Maternal and neonatal health
  - Post-abortion care
- STD/HIV
- Women's nutrition
- Breastfeeding
- Adolescent's reproductive health services

The categories include a range of activities. Viewing activities in relation to the objectives they serve, provides a good basis for the monitoring/evaluation of the activities and the formulation of a set of indicators to measure the performance of the activities.

Rannan-Eliya *et al.* (2000) define the package of reproductive health services as consisting of:

- Family planning services: All programs, goods and services intended to assist women control their fertility, and all counseling, health education and information in support of the same.
- Maternal health services: All special programs designed to provide antenatal and postnatal care to mothers, including provision of dietary supplements for malnourished pregnant and lactating mothers, such as iron and vitamins.
- Childbirth services: Services to provide medical care for women delivering and giving birth.
- Infant care: All services intended to promote and improve the health and development of infants (defined as children aged less than 1 year), including baby health care, growth monitoring and growth promotion, and provision of dietary supplements such as micronutrients.
- Other personal reproductive health services for women: All other clinical services for women, which intend to enable women to safely exercise their reproductive health functions, to be operationalized as the equivalent of all obstetric and gynecological services.

For the purpose of their study, Rannan-Eliya *et al.* did not include services intended to treat sexually transmitted diseases. The reason for excluding the services is not substantive in nature, but is related to data limitation.

Other classifications are related more to the expenditures or the use of funds. The organization Abt Associates distinguishes between direct health care (HC) expenditures and indirect expenditures or health-related spending (see e.g. De *et al*. 2004b). The indirect or health-related (HCR) expenditures are for activities that may overlap with other areas of the NHA:

- Mitigation activities, such as

1. Nutritional support for pregnant women
2. Caring for HIV/AIDS orphans

3. Empowerment and human right issues related to reproductive health and HIV/AIDS (Odumosu et al. 2002, p. 7)
   - Training and supportive services, such as
   - Education and training of health personal
   - Operational research and development
   - Capital formation to providers, such as
   - Lab facilities
   - Drug supply and storage systems

The Indian Institute for Health Management Research (IIHMR) and the Policy Project, the Futures Group International (2000) distinguish activities based on the use of funds:

- Antenatal care
- Childbirth
- Postnatal care
- Family planning
- Child health care
- Abortion services
- RTI services

The identification of activities (including activities that involve the provision of goods and services) is critical for the specification of transactions. The development of a classification of activities in the area of reproductive health may benefit from the experience of SIDALAC, PHR*plus* and others in developing HIV/AIDS accounts.

De *et al*. (2004) distinguish the following services:

- Family planning services
- Retail pharmaceutical sales of products such as oral contraceptives, condoms and spermicidals.
- Outpatient services (counseling, IUD insertions, Injectables)
- Inpatient services (female and male surgical sterilization)
- Services that support or promote family planning
- Information, education, communication (IEC), public awareness, health education campaigns
- Training, research
4. Prenatal care and delivery