

# NATIONAL HEALTH ACCOUNTS RWANDA 2006

WITH HIV/AIDS, MALARIA, AND  
REPRODUCTIVE HEALTH SUBACCOUNTS



**USAID**  
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**World Health  
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June 2008

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## June 2008

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# **NATIONAL HEALTH ACCOUNTS RWANDA 2006 WITH HIV/AIDS, MALARIA, AND REPRODUCTIVE HEALTH SUBACCOUNTS**

## **DISCLAIMER**

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# ACRONYMS

<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>ART</b>	Antiretroviral Therapy
<b>BTC</b>	Belgian Technical Cooperation
<b>CAMERWA</b>	<i>Centrale d'Achat des Médicaments Essentiels au Rwanda</i> (National Medical Stores of Rwanda)
<b>ARBEF</b>	<i>Association Rwandaise Pour le Bien-Etre Familial</i>
<b>CHUB</b>	<i>Centre Hospitalier Universitaire de Butare</i> (University Hospital of Butare)
<b>CHUK</b>	<i>Centre Hospitalier Universitaire de Kigali</i> (University Hospital of Kigali)
<b>CHW</b>	Community Health Worker
<b>CMH</b>	Commission on Macroeconomics and Health
<b>CNLS</b>	<i>Commission Nationale de Lutte contre le SIDA</i> (National AIDS Commission)
<b>CPI</b>	Consumer Price Index
<b>CSR</b>	<i>Caisse Sociale du Rwanda</i> (Social Security)
<b>DFID</b>	Department for International Development
<b>DSGAS</b>	Department of Health, Gender and Social Affairs
<b>DHS</b>	Demographic and Health Survey
<b>EICV</b>	<i>Enquête Intégrale sur les Conditions de Vie des Ménages</i> (Integrated Living Conditions Survey)
<b>FARG</b>	<i>Fonds National pour l'Assistance aux Rescapés du Génocide</i> (Victims of Genocide Fund)
<b>GDP</b>	Gross Domestic Product
<b>GF</b>	Global Fund to Fight AIDS, Tuberculosis and Malaria
<b>GoR</b>	Government of Rwanda
<b>HBM</b>	Home-based Management
<b>HH</b>	Household
<b>HIV</b>	Human Immunodeficiency Virus
<b>IEC</b>	Information, Education and Communication
<b>IPPF</b>	International Planned Parenthood Federation
<b>IPT</b>	Intermittent Preventive Therapy

<b>JSI</b>	John Snow International
<b>LLIN</b>	Long-lasting Insecticide-treated Net
<b>MAP</b>	Multicountry AIDS Program
<b>MIFOTRA</b>	Ministry of Public Service, Skills Development and Labour
<b>MoF</b>	Ministry of Finance and Economic Planning
<b>MoH</b>	Ministry of Health
<b>NGO</b>	Nongovernmental Organization
<b>NHA</b>	National Health Accounts
<b>NISR</b>	National Institute of Statistics, Rwanda
<b>NUR</b>	National University of Rwanda
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>ONAPO</b>	<i>Office National de la Population</i> (National Population Office)
<b>OOP</b>	Out of Pocket
<b>PACFA</b>	Protection and Care of Families against AIDS
<b>PBF</b>	Performance-based Financing
<b>PEPFAR</b>	President's Emergency Plan for AIDS Relief
<b>PLHIV</b>	Person/People Living with HIV
<b>PMI</b>	President's Malaria Initiative
<b>PMTCT</b>	Prevention of Mother-to-Child Transmission
<b>PNLP</b>	<i>Programme National de Lutte contre le Paludisme</i> (National Program to Fight Malaria)
<b>PRB</b>	Population Reference Bureau
<b>PSI</b>	Population Services International
<b>RAMA</b>	<i>Rwandaise d'Assurance Maladie</i>
<b>RH</b>	Reproductive Health
<b>RWF</b>	Rwandan Franc
<b>SIS</b>	<i>Système d'Information Sanitaire</i> (Health Information System)
<b>UNGASS</b>	United Nations General Assembly Special Session
<b>USAID</b>	United States Agency for International Development
<b>VCT</b>	Voluntary Counseling and Testing

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# EXECUTIVE SUMMARY

## BACKGROUND

Rwanda, a small country in the sub-Saharan Africa region and one of the poorest countries in the world, is nevertheless a leader in doing National Health Accounts (NHA) estimations. The full report that accompanies this executive summary describes Rwanda's fifth general NHA estimation (1998, 2000, 2002, 2003, 2006). In addition, Rwanda has carried out multiple NHA subaccounts: for HIV and AIDS, for malaria, and for reproductive health (RH). NHA provides trend data that allow policymakers to understand the current financing and future financing needs of the country's health care system.

## THE NHA CONCEPT AND APPLICATIONS

NHA is an internationally recognized methodology for tracking all financial resource flows in the health care system of a given entity. Actual expenditures, rather than budget data, are used to fill a series of tables that document resource flows from sources, through programs, to the final providers and uses of health finances. All actors in the health system – public, private, and donor – are included. NHA subaccounts are done for individual diseases (HIV/AIDS, malaria, tuberculosis) and specific health care areas (RH, child health).

While the NHA methodology allows some flexibility to disaggregate by certain health functions or include country-specific providers or programs, it also urges the country's NHA steering committee and technical team to follow the standard NHA framework to the extent possible. This allows for comparisons of the country's expenditures over time, and with other countries that carry out NHA. Most importantly, it contributes to transparent and effective use of NHA findings in advocacy and policymaking, and later in evaluating if intended policy goals – for example, equity in the burden of households' health expenditures, and quality improvement through performance-based financing of health service provision – are being achieved in a sustainable way.

## METHODOLOGY

The 2006 Rwanda NHA and HIV/AIDS, malaria, and RH subaccounts followed the methodology and estimation techniques presented in the *Guide to Producing National Health Accounts: with special applications for low- and middle-income countries* (published in 2003 by the World Health Organization with contributions from the World Bank and United States Agency for International Development) and built upon earlier NHA and subaccounts estimations.

Data collection, which took place in 2007, relied on both secondary and primary sources. (See Annex C of the full report for a detailed description of data sources and overall methodology.) Sources of secondary data include Ministry of Finance budgets, National Institute of Statistics data, findings of the World Bank-supported Integrated Living Conditions Survey, executed program budgets, and health care facility and *mutuelle* (mutual health organization) records. Primary data collection – done to triangulate secondary data as well as capture expenditures where such information did not exist – included surveys of nongovernmental organizations (NGOs), employers, and insurance companies. With the numbers of NGOs, donors, employers, insurance companies, etc. increasing in Rwanda every year, the health system in 2006 is considerably more complex than in previous estimations. This complexity made it

necessary to sample the entities targeted by the NHA surveys. Information on donor spending came from the records of the Ministries of Health and Finance and of organizations that implement donor programs, and from donor surveys. In all, the NHA team cleaned and analyzed 30 datasets in October–November 2007, contacting respondents where data were ambiguous. Report writing took place in early 2008.

## FINDINGS

### General health expenditures

**Increases in spending by all major financing sources (public, private, donor) more than doubled total health expenditure (THE) in Rwanda between 2003 and 2006.** As Table ES-I shows, THE<sub>general</sub> rose from RWF 78.4 billion (US\$ 142.1 million) to RWF 170 billion (US\$ 307.3 million).

**TABLE ES-I: NHA TREND STATISTICS, 1998–2006**

Indicators	1998*	2000*	2002*	2003*	2006
Total population**	7,883,000	7,691,783	8,128,553	8,388,667	9,058,392
Exchange rate US\$ 1=RWF***	317	393	475	539	552
Total real GDP <sup>δ</sup>	RWF 903,596,620,489 US\$ 1,637,721,790	RWF 995,646,509,881 US\$ 1,804,557,418	RWF 1,091,939,192,568 US\$ 1,979,082,888	RWF 1,183,678,667,693 US\$ 2,145,355,906	RWF 1,583,000,000,000 US\$ 2,869,105,013
Total GoR expenditure and net lending <sup>δδ</sup>	RWF 167,981,026,375 US\$ 304,456,857	RWF 212,334,986,166 US\$ 384,846,098	RWF 180,677,536,165 US\$ 327,468,620	RWF 238,444,711,887 US\$ 432,168,615	RWF 417,200,000,000 US\$ 756,153,261
THE <sub>general</sub> per NHA (US\$ 2006)	RWF 45,482,827,219 US\$ 82,435,254	RWF 40,262,074,605 US\$ 72,972,912	RWF 44,570,823,334 US\$ 80,782,294	RWF 78,417,516,472 US\$ 142,127,662	RWF 169,574,434,271 US\$ 307,344,825
THE <sub>general</sub> per capita (US\$ 2006)	RWF 5748 US\$ 10.42	RWF 5234 US\$ 9.49	RWF 5483 US\$ 9.94	RWF 9348 US\$ 16.94	RWF 18720 US\$ 33.93
THE <sub>general</sub> as % of nominal GDP	5%	4%	4%	8.8%	11%
GoR health expenditure as % of GoR total expenditure	2.5%	4.7%	6.1%	9%	6.5%
<b>Financing sources distribution as a % of THE<sub>general</sub></b>					
Public (include loans & grants)	10%	18%	25%	32%	19%



Indicators	1998*	2000*	2002*	2003*	2006
Private	40%	30%	42%	25%	28%
Donor	50%	52%	33%	42%	53%
Other	0%	0%	0%	1%	0%
<b>Household (HH) spending<sup>888</sup></b>					
as % of THE <sub>general</sub>	32%	26%	31%	20%	26%
Out-of-pocket (OOP) <sup>ξ</sup> as % of THE <sub>general</sub>	33% <sup>ξξ</sup>	25%	25%	17%	23%
HH spending per capita (US\$)	RWF 1870 US\$ 3.39	RWF 1297 US\$ 2.35	RWF 1712 US\$ 3.10	RWF 1626 US\$ 2.95	RWF 4228 US\$ 7.66
<b>Financing agents distribution as a % of THE<sub>general</sub></b>					
Public	38%	30%	48%	45%	49%
Private	40%	64%	51%	47%	23%
Donor	22%	6%	2%	8%	28%
<b>Provider distribution as a % of THE<sub>general</sub><sup>ξξξ</sup></b>					
Public facilities	66%	39%	55%	53%	56%
Agréé facilities	10%	40%	25%	23%	7%
Private facilities	24%	21%	20%	24%	37%

\* All US\$ amounts for 1998, 2000, 2002, and 2003 are in constant 2006 US\$ to facilitate comparison across years. The Consumer Price Index (CPI) was used for the conversion (69.91 for 1998, 70.88 for 2000, 74.71 for 2002, and 80.27 for 2003). Source for CPI data: NISR (<http://www.statistics.gov.rw>).

\*\* The 1998 population figure is based on the 1992 census and the 2000 and 2002 figures are based on the 2002 census. The 2003 figure is estimated from the 2002 census at a growth rate of 3.2%. Due to the genocide and subsequent repatriation, it is difficult to determine precise population trends for Rwanda during the 1990s. The 2006 number is a projected amount from the 2005 census report.

\*\*\* The exchange was derived from an un-weighted average of monthly official exchange rates from National Bank of Rwanda (BNR) official statistics (see [www.bnr.rw](http://www.bnr.rw))

<sup>8</sup> From BNR (see [www.bnr.rw](http://www.bnr.rw)); 2006 GDP from NISR, accessed January 2008.

<sup>888</sup> Includes spending on recurrent budget, development budget, net lending, arrears, and increase in BNR government deposit.

<sup>889</sup> Includes contributions to insurance and direct payments to providers.

<sup>ξ</sup> OOP includes only direct payments to providers.

<sup>ξξ</sup> OOP expenditures are higher than HH expenditures because public firms and private firms are noted as giving funds to HH OOP.

<sup>ξξξ</sup> For time comparison purposes, provider expenditures have been broken down into the three categories of public facilities, government-assisted health facilities (*agréés*) and private facilities in keeping with all previous NHAs. The above percentages represent the share of total facility expenditure broken down into public, *agréé* and private providers. However, greater disaggregation is available for the 2006 NHA as detailed in Annex A. It should be noted that expenditures on for-profit providers like "traditional healers" and "independent pharmacies" were allocated to private facilities.

**The largest share of THE came from donor spending.** Donor spending decreased from Rwanda's first NHA estimation in 1998, until the third one, in 2002, reflecting a fall-off in the post-genocide assistance given to Rwanda. Since then, donor spending on health has steadily increased, due largely to the funds flowing from new global disease initiatives such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, the President's Emergency Plan for AIDS Relief (PEPFAR), and the President's Malaria Initiative. Donor expenditures now are responsible for the largest share of THE<sub>general</sub>, from 42 percent of THE in 2003 to 53 percent in 2006, or RWF 32.6 billion (US\$ 59.0 million) to RWF 90.5 billion (US\$ 164.0 million).

**Private spending on health overall grew by almost two-and-a-half times.** Household spending on health care (the major portion of private spending on health) increased substantially. In fact, out-of-pocket (OOP) expenditures tripled, from RWF 15.5 billion (US\$ 28.1 million) to RWF 44.4 billion (US\$ 70.7 million). This may be attributable to several factors: Though THE has more than doubled, most of the new monies go to programs for targeted diseases, whereas households spend on curative services and pharmaceuticals; OOP spending is increasingly on proprietary drugs/independent pharmacies (see below) rather than generic drugs offered at public facilities; gross domestic product has risen, and people may have more discretionary income for health care; data for traditional healers has become more robust; more households are participating in mutuelles and pay co-payments; health care utilization has risen from 0.3 per capita in 2003 to 0.7 per capita in 2006.

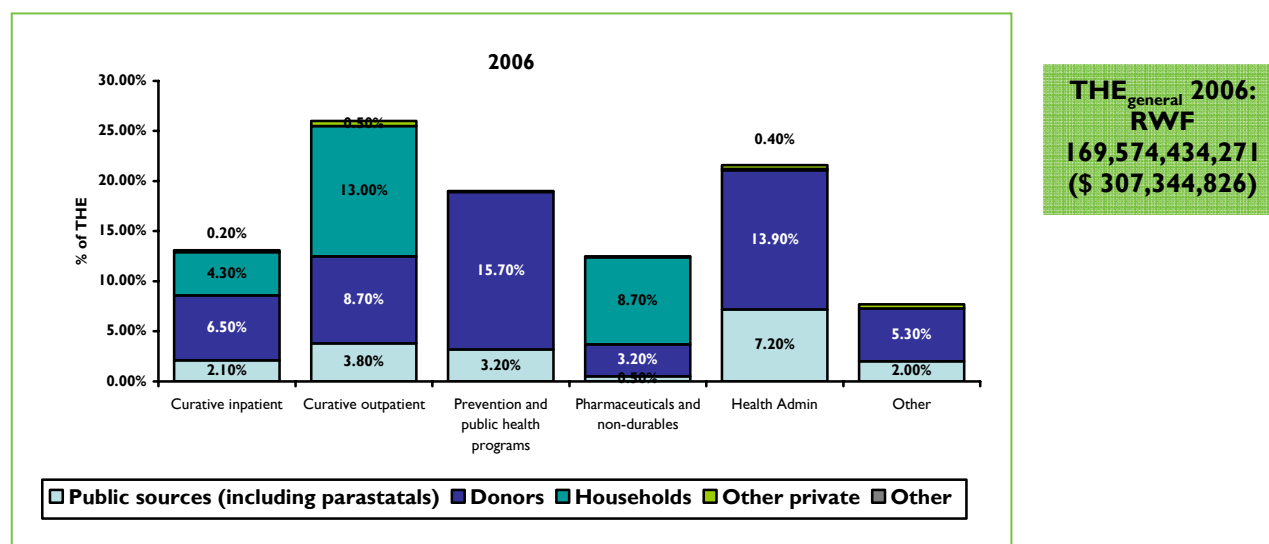
**Government spending on health increased absolutely, though its relative share has declined.** Public financing of health increased from RWF 24.9 billion (US\$ 45.1 million) in 2003 to RWF 32.8 billion (US\$ 57.8 million) in 2006. A part of this increment may actually be from donors, who increasingly contribute directly to the Ministry of Finance (MoF) for general budget support rather than earmarking their funds for health. The government share of THE fell (from 32 percent to 19 percent of THE) over the period due to the increase in donor contributions outside the MoF. Government expenditure on health as a percentage of total government expenditure declined between 2003 and 2006, from 9 percent to 7 percent, meaning that Rwanda fell short of the Abuja declaration target (15 percent of public spending going to essential health services by 2015) after having moved steadily toward the target from 1998 to 2003.

**Government agencies (Ministry of Health and other ministries, National AIDS Control Commission [CNLS]) manage 40 percent of health funds.** Other major financing agents are NGOs and other implementing agencies (28 percent) and households, via OOP spending (23 percent). Private groups manage less than in previous years.

**Mutuelles are largely financed by households.** While households finance 70% of mutuelles, these schemes are still subsidized by donors (13%), the government (9%), and private firms (8%).

Figure ES-I shows the spending, by major finance source, on various health care functions in 2006.

**FIGURE ES-I: FINANCING SOURCES OF OVERALL HEALTH CARE FUNCTIONS IN 2006**



**A little more than half of THE<sub>general</sub> goes to personal care.** In 2006, absolute funding on virtually all health care functions increased from 2003. Thirty-nine percent of THE goes to curative care (two-thirds to outpatient care, one-third to inpatient care), 13 percent to drugs and other nondurables. The remaining 48 percent is distributed as follows: prevention and public health programs 19 percent, administration and insurance 21 percent, and capital formation and health system strengthening 7 percent.

**Households and donors finance most curative services.** This contrasts with 2003, when donors and government bore expenditure on curative services about equally (about 10 percent of THE). In 2006, households spend primarily on outpatient services, and are the largest financier of this function (13 percent of THE). They also cover the largest share of spending on pharmaceuticals/nondurables (nearly 9 percent); indeed, their spending increased at every type of provider, but rose most dramatically at independent pharmacies. Nearly 9 percent of THE is donor spending on outpatient services.

**Spending on prevention and public health programs increased.** In 2003, spending on this function was RWF 18.4 billion (US\$ 33.4 million); by 2006, it had risen to RWF 32.3 billion (US\$ 58.6 million). Most of this increase is from donor contributions.

**More than one-third of government spending on health goes to administration.** This is more than government covers of curative care, but probably reflects government's role as regulator of the health system.

### HIV/AIDS health expenditures

The latest Demographic and Health Survey (DHS) estimates adult HIV prevalence in Rwanda at 3 percent (Table ES-2), and the Joint United Nations Programme on HIV/AIDS estimates the total number of people living with HIV (PLHIV) at 160,000. Recent years have seen a dramatic scale-up of HIV/AIDS programs, with funding from initiatives like the Global Fund and PEPFAR. CNLS coordinates more of HIV/AIDS funding.

**TABLE ES-2: HIV/AIDS INDICATORS AND NHA FINDINGS FOR EXPENDITURE ON HIV/AIDS SERVICES, 2000-2006**

Indicators	2000*	2002*	2006
HIV seroprevalence rate (adults)	5.1% (estimated)	5.1%**	3%***
Number of PLHIV	200,000 (estimated)	199,279**	160,000 <sup>δ</sup>
THE <sub>general</sub>	RWF 41,027,685,265 (US\$ 74 million)	RWF 44,570,823,334 (US\$ 94 million)	RWF 169,574,434,270 (US\$ 307 million)
Total HIV/AIDS health expenditure (THE <sub>HIV</sub> )	RWF 3,161,151,656 (US\$ 5,729,423)	RWF 6,557,070,605 (US\$ 13,804,359)	RWF 40,482,722,686 (US\$ 73,373,091)
HIV/AIDS health spending per PLHIV	RWF 15,806 (US\$ 28.65)	RWF 32,903 (US\$ 69.27)	RWF 253,017 (US\$ 459.58)
HIV/AIDS health spending as a % of THE <sub>general</sub>	8.0%	14.7%	24%
HIV/AIDS health spending as a % of GDP	0.3%	0.6%	2.6%
THE <sub>HIV</sub> as a % of total HIV/AIDS spending (health and non-health)	-	-	84%
Percent of THE <sub>HIV</sub> that is targeted for HIV/AIDS	-	-	99%

Indicators	2000*	2002*	2006
<b>Financing sources distribution as a % of THE<sub>HIV</sub></b>			
Public	8%	9%	3%
Private	43%	17%	2.4%
Households account for	41%	16%	2%
Donors	49%	75%	94%
<b>Financing agents distribution as a % of THE<sub>HIV</sub></b>			
Public	25%	27%	39% <sup>dd</sup>
Private	43%	16%	54%
Donor and NGO	32%	57%	7%
<b>Providers distribution as a % of THE<sub>HIV</sub></b>			
Public providers	33%	16%	27%
-Public hospitals	24%	11%	17%
-Public health centers	9%	5%	10%
Private providers	9%	3%	5%
-Private for-profit hospitals	8%	2%	5%
-Private for-profit health centers/clinics	1%	1%	0%
Government assisted not-for-profit providers ( <i>agréés</i> )	5%	3%	8%
-Agrée hospitals	2.6%	1%	2%
-Agrée health centers	2.8%	2%	6%
Private pharmacies	7%	3%	0.4%
Provision and administration of public health programs	46%	66%	57%
Traditional healers	-	-	0.2%
Other	0%	9%	2.4%
<b>HIV/AIDS health spending by function</b>			
Prevention and public health programs	46%	66%	29.7%
Curative care	48%	23%	37.7%
-Inpatient	14%	7%	9.8%
-Outpatient	34%	15%	27.9%
Administration	0%	9%	23%
Capital formation	-	-	8%
Pharmaceuticals and other non-durables from independent pharmacies	7%	3%	11.9%
Other	-	-	1.1%

\*All US\$ amounts for 2000 and 2002 are in constant 2006 US\$ to facilitate comparison across years. The CPI was used for the conversion (70.88 for 2000 and 74.71 for 2002). Source for CPI data: NISR (<http://www.statistics.gov.rw>).

\*\*UNAIDS (2004)

\*\*\*DHS 2005

<sup>δ</sup> UNAIDS estimate, 2006

<sup>dd</sup> Includes projects funded by donors that are housed under CNLS (e.g., World Bank MAP, UNDP, African Development Bank)

**The total amount of HIV/AIDS funds has increased dramatically, both absolutely and proportionately.** HIV/AIDS programs now receive 24 percent of THE<sub>general</sub> in Rwanda. Funding has tripled since 2002 (the previous NHA HIV/AIDS subaccount), going from RWF 6.6 billion (US\$ 13.8 million) to RWF 40.5 billion (US\$ 73.4 million).

**Nearly all HIV/AIDS funding (94 percent) comes from donors.** Donor spending has increased almost eightfold, going from RWF 4.9 billion (US\$ 8.9 million) in 2002 to RWF 38.2 billion (US\$ 69.3) in 2006. This donor subsidization has allowed a proportionate decrease in financing from other sources: Households contribute a much smaller percentage than in 2002 (2 percent, down from 16 percent) but only slightly less in absolute terms (about RWF 1.0 billion [US\$ 1.8 million] in 2006). The government

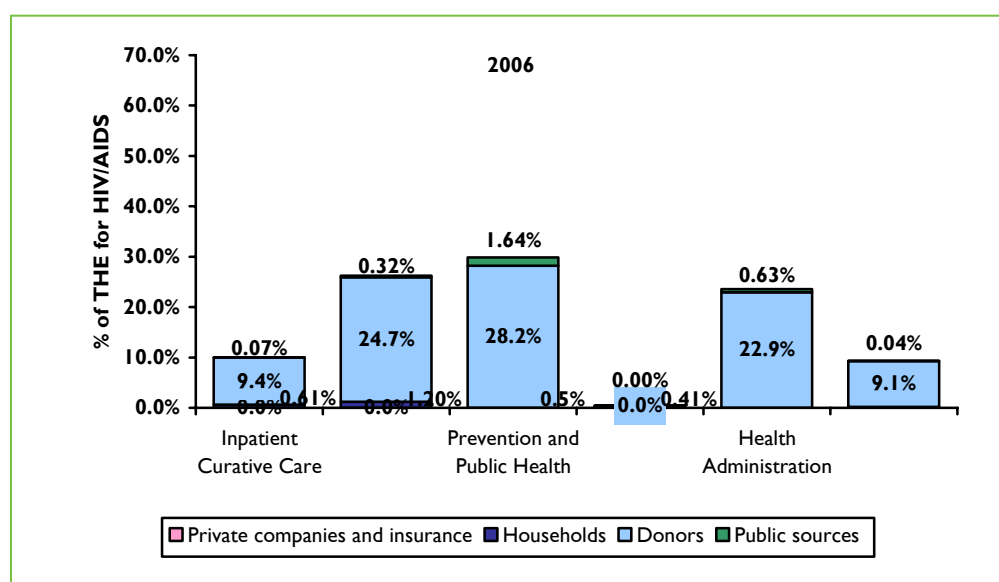
contribution also has dropped proportionately (from 8 percent to 3 percent), but has almost doubled absolutely (from RWF 563.2 million [US\$ 1.0 million] in 2002 to RWF 1.1 billion [US\$ 2.0 million] in 2006).

**The health expenditure burden on PLHIV relative to the general population's burden has abated.** In 2002, PLHIV spent four times more on the health than did the general population. In 2006, they spend 1.5 times more. (For reasons for the increase in household spending, see the above section, General health expenditures.) However, a disparity in OOP spending should be noted: while the richest Rwandans spend six times more per year than the poorest ones, this represents only 2 percent of their total consumption of services, whereas it is 4 percent for poorer Rwandans.

**NGOs and CNLS projects manage most HIV/AIDS funds. In 2002, NGOs and other projects managed the bulk (76 percent) of HIV/AIDS funds.** In 2006, NGOs manage a smaller but still significant 52 percent; CNLS and programs under its auspices (Global Fund, World Bank MAP, etc.) manage 35 percent.

Figure ES-2 shows the spending, by major financing source, on HIV/AIDS functions in 2006.

**FIGURE ES-2: FINANCING SOURCES OF HIV/AIDS HEALTH CARE FUNCTIONS IN 2006**



### **Donors finance the largest share of all HIV and AIDS health and health-related functions.**

Most overall  $THE_{HIV}$  funding goes to prevention and public health programs (29.7 percent of  $THE_{HIV}$ ), administration (23 percent) and outpatient curative care (27.9 percent); lesser percentages go to inpatient care (9.8 percent) and pharmaceuticals/nondurables (less than 1 percent). The largest share of public funding for HIV/AIDS goes to prevention and public health programs (1.64 percent of  $THE_{HIV}$ ) and the largest share of household funding goes to outpatient care.

### **Malaria expenditures**

Malaria continues to be the leading cause of morbidity in Rwanda. In 2006, health facilities diagnosed more than 1.3 million cases. Major interventions to decrease morbidity are: government distribution of long-lasting insecticide-treated nets (LLINs), adoption of artemisinin-based combination therapy (ACT),

intermittent preventive treatment (IPT) for pregnant women, and the Home-based Management Strategy for community health workers.

**Spending on malaria nearly doubled between 2003 and 2006, though malaria's share of THE fell from 18 percent to 14 percent.** In 2003, RWF 13.8 billion (US\$ 25.0 million) was spent on malaria; that figure in 2006 is RWF 23.6 billion (US\$ 42.7 million) (Table ES-3). The fact that malaria receives a smaller share of health spending is attributable to the larger share going to HIV and AIDS. It should be noted that only about 35 percent of malaria expenditures are actually targeted to malaria.

**TABLE ES-3: MALARIA INDICATORS AND NHA SUBACCOUNT FINDINGS FOR EXPENDITURE ON MALARIA SERVICES, 2003 AND 2006**

Indicators	2003*	2006
Malaria morbidity rate (adults)	67.5%	34%
Malaria morbidity rate (< 5 years)	32.5%	38%
THE	RWF 78,417,516,472 (\$142,128,178)	RWF 169,574,434,271 (\$307,345,940)
Total malaria expenditure (THE <sub>malaria</sub> )	RWF 13,782,993,174 (\$24,981,047)	RWF 23,570,420,722 (\$42,720,314)
Malaria spending per capita	RWF 1,643 (\$2.98)	RWF 2,602 (\$4.72)
Malaria OOP spending per capita	RWF 481 (<\$1)	RWF 1,056 (\$1.91)
% of total health expenditures allocated to malaria	17.58%	13.9%
Total malaria spending as % of GDP	1%	1.49%
Targeted spending on malaria	RWF 1,639,996,778 (\$2,972,409)	RWF 8,324,615,580 (\$15,087,932)
Targeted spending as % of THE <sub>malaria</sub>	12%	35%
<b>Financing sources of malaria spending</b>		
Public	24%	5%
Private	37%	45%
Households account for	29%	44%
Donors	38%	50%
<b>Financing agents of malaria spending</b>		
Public	40%	40%
Private	34%	60%
Household OOP accounts for	27%	41%
Donor**	26%	20%
Providers of malaria care and activities		
Public Providers	63%	33%
-Public hospitals	22%	13%
-Public health centers	41%	20%
Private providers	14%	10%
-Private for-profit hospitals	3%	2%
-Private for-profit health centers/clinics	11%	8%
Government assisted not-for-profit providers (Agrées)	15%	12%
-Agrée hospitals	5%	4%
-Agrée health centers	9%	8%
Independent pharmacies	4%	16%
Provision and administration of public health programs	4%	5%

Indicators	2003*	2006
General health care administration and insurance (for malaria)	-	2%
Community health workers	-	20%
Traditional healers	0.4%	0.4%
Other	0.1%	1.6%
<b>Malaria health spending by function</b>		
Prevention and public health programs	3%	4.6%
Curative Care	91%	76.8%
-Inpatient	48%	13.2%
-Outpatient	43%	63.6%
Administration	2%	1.2%
Pharmaceuticals and other non-durables from independent pharmacies	4%	16.1%
Other	0%	1.4%
<b>Spending on preventive activities</b>		
Insecticide-treated nets	6%	27%
Repellents	3%	0%
Prevention programs	3%	5%

\* All US\$ amounts for 2003 are in constant 2006 US\$ to facilitate comparison across years. The CPI was used for the conversion (80.27 for 2003). Source for CPI data: NISR (<http://www.statistics.gov.rw>)

\*\*Includes NPISH (in 2003) and NGOs/Implementing Agencies (in 2006), which are mainly funded by donors.

**Donors and households are the largest financing sources of malaria care.** In 2006, donors contribute 50 percent, households 44 percent. In absolute terms, donor spending doubled between 2003 and 2006, going from RWF 5.3 billion (US\$ 9.6 million) to RWF 11.8 billion (US\$ 21.3 million), and household spending tripled, going from RWF 4.0 billion (US\$ 9.6 million) to RWF 11.8 billion (US\$ 21.3 million). (For reasons for the increase in household spending, see the above section, General health expenditures.)

**Most spending on Malaria is non-earmarked funds.** Of THE<sub>Malaria</sub>, only 35% is actually earmarked for spending on malaria. The costs of malaria treatment are higher than what financing sources program for malaria.

**Private sector expenditures on malaria are the highest of all categories of private sector expenditures on health.** Twenty-two percent of private expenditure on health goes to malaria, though this is slightly less than the 26 percent of 2003. In 2006, donors spend 13 percent of their health funds on malaria, while they spend more than three times that, 42 percent of their funding, on HIV and AIDS. In 2003, 16 percent of donor monies went to malaria. Public sources spend about 4 percent of their resources on malaria, down from 13 percent in 2003 but about the same percentage that they spend on other priority diseases.

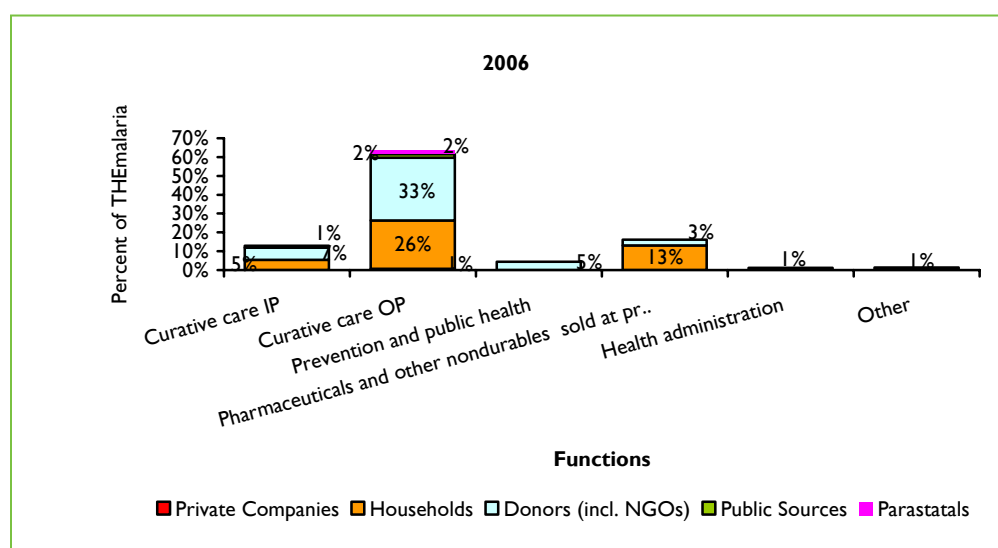
**Concomitant with the above, the private sector is the main financing agent of malaria funds in 2006.** It manages 60 percent of malaria funds (with household OOP spending managing 41 percent), while the public sector manages 40 percent. NGOs and implementing agencies (including direct donor transfers) manage 20% of malaria funds, down from 34% in 2003 (although with higher absolute value of managed funds).

**Income and age influence the seeking of malaria care.** Care seeking diminishes with income quintile: Only 17 percent of malaria goes untreated in the richest income quintile; this percentage grows steadily larger through the income quintiles, reaching 48 percent in the lowest quintile. (The opposite is true for care seeking in health centers and hospitals: 47 percent of the rich seek this care, while only 18

percent of the poorest do.) There is more equality in self-treatment: about a third of malaria cases in all quintiles self-medicate. Children under five are most likely to be treated at health facilities (42 percent vs. 25 percent for those over 50 years of age); again, the percentages are reversed for non-treatment, and percentages show less variation for self-medication.

Figure ES-3 shows the spending, by major financing source, on malaria functions in 2006.

**FIGURE ES-3: FINANCING SOURCES OF MALARIA HEALTH CARE FUNCTIONS IN 2006**



**The bulk of malaria expenditures cover curative care services.** In 2006, almost 77 percent of expenditures on malaria go to curative services, 64 percent on outpatient care, 13 percent on inpatient. This is less than in 2003, when 91 percent went to curative care.

**Spending on LLINs care increased tenfold between 2003 and 2006, though malaria prevention overall receives only 5 percent of malaria expenditures.** This contrasts with the 77 percent of malaria spending going to curative care. In 2006, the government strongly advocated for distribution of LLINs. As a result, its expenditure on nets (financed largely with donor funds) expanded from 13 percent to 82 percent between 2003 and 2006, while household spending on LLINs fell from 73 percent to 3 percent.

**Spending on drugs and other nondurables increased in both absolute and relative terms.** In 2003, this was 4 percent; in 2006, it is 16 percent. Most of this spending comes from households.

### Reproductive health expenditures

The poor RH status of Rwandans – including a high fertility and high population growth rate leading to high population density, one of the highest maternal mortality ratios in East and Southern Africa, and one of lowest rates of contraceptive prevalence in the region – has a negative effect on the country's economic development. Based in part on the present NHA RH subaccount findings, the government of Rwanda acknowledges that improving the health status of women should be a key element of any development strategy.



**Spending on RH increased 65 percent between 2002 and 2006 but represents a smaller percentage of THE.** As with other aspects of health care financing, this smaller percentage (6.2percent from 15.7percent ) is because total spending, in particular the HIV and AIDS “piece of the expenditure pie,” has grown so much. RH expenditures increased from RWF 7.0 billion (US\$ 12.7 million) in 2002 to RWF 10.6 billion (US\$ 19.1 million) in 2006 (see Table ES-4). It should be kept in mind that the bulk of RH expenditures goes to 25 percent of the population, women of reproductive age.

**TABLE ES-4: SUMMARY OF RH SUBACCOUNTS FINDINGS, 2002 AND 2006**

Indicators	2002*	2006
Total RH (THE <sub>RH</sub> ) expenditures	RWF 6,982,368,741 (US \$12,655,180)	RWF 10,561,325,959 (US \$19,141,922)
RH expenditures per woman of reproductive age	RWF 3,378 (US \$6)	RWF 4,609 (US \$8)
RH expenditures as a % of GDP	0.6%	0.7%
RH expenditures as a % of total of overall health spending	15.67%	6.23%
OOP spending per woman of reproductive age	RWF 339 (US\$0.61)	RWF 431.38 (US\$0.78)
% of RH spending that is targeted for RH		40%
THE as percent of total RH spending on health and non-health	99.7%	98.4%
<b>Financing sources of RH spending</b>		
Public	7.7%	14.4%
Private	12.4%	14.3%
Households account for	10.6%	13.2%
Donor	79.8%	71.2%
<b>Financing agents of RH spending</b>		
Public	52%	35%
Private	12%	10%
Household OOP accounts for	10%	9%
Donor	36%	55%
<b>Providers of RH care and activities</b>		
Public providers	9%	53%
-Public hospitals	4.3%	45%
-Public health centers	4.3%	8%
Private providers	9%	12%
-Private for-profit hospitals	4%	6%
-Private for-profit health centers/clinics	5%	6%
Government assisted not-for-profit providers (Agréés)		13%
-Agrée hospitals		6.3%
-Agrée health centers		6.2%
Independent pharmacies	3%	4%
Provision and administration of public health programs	72%	12%
Community health workers		5%
Other	8%	2%
<b>RH health spending by function</b>		
Prevention and public health programs	66%	12%
Curative care	18%	83%
-Inpatient	7%	50.6%
-Outpatient	11%	32.8%

Indicators	2002*	2006
Administration	7%	0%
Capital formation	0%	1%
Pharmaceuticals and other non-durables from independent pharmacies	3%	4%
Other	6%	

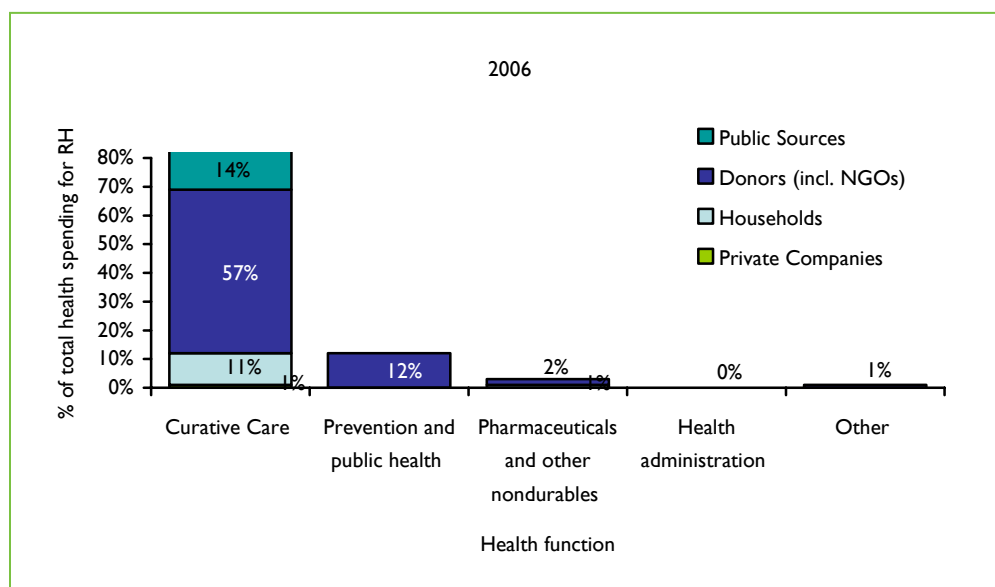
- All US\$ amounts for 2002 are in constant 2006 US\$ to facilitate comparison across years. The CPI was used for the conversion (74.71 for 2002). Source for CPI data: NISR (<http://www.statistics.gov.rw>).

**Donors are still by far the biggest provider of RH financing, but households and public sources increased their relative contributions between 2002 and 2006.** Donors increased their real contributions to RH over this period (from RWF 5.6 billion [US\$ 10.0 million] to RWF 7.5 billion [US\$ 13.6 million]), but this represents a relative decline, from 80 percent to 71 percent. Households doubled their expenditures in real terms (they now finance 13 percent of RH care). Public financing sources nearly tripled theirs, and their percentage grew from 8 percent to 14 percent.

**OOP spending on RH care increased slightly from 2002 to 2006. In 2002, OOP spending was RWF 701.0 million (US\$ 1.3 million), in 2006, RWF 988.4 million (US\$ 1.8 million).** Due to the growth in OOP spending overall, however, this represented a drop from 6 percent to 3 percent of total OOP expenditures on health. OOP spending on RH at independent pharmacies and private health centers has declined, likely because family planning commodities are now widely distributed through public and NGO facilities.

Figure ES-4 shows the spending, by major financing source, on RH functions in 2006.

**FIGURE ES-4: FINANCING SOURCES OF RH FUNCTIONS IN 2006**



**Curative care consumes 82 percent of RH expenditures.** In 2002, curative care consumed only 18 percent of RH expenditures. Curative care includes personal preventive care services (as opposed to collective preventive care programs) such as family planning commodities. Donors pay for over half (57 percent) of these services, public financing sources for 14 percent, and households for 11 percent. Donors also pay the bulk of other health care functions (prevention, pharmaceuticals, administration, and other).

**Breaking RH expenditures down another way shows that maternal health services consume 73 percent of RH expenditures.** In absolute terms, this is RWF 733.4 million (US\$ 1.4 million), a sevenfold increase in maternal care expenditures since 2002. Hospital deliveries account for 51 percent of total RH spending (71 percent of maternal health care spending), prenatal care for 21 percent (29 percent of maternal health care spending). Postnatal care is negligible.

**There is a notable shift in financing of contraceptive commodities.** Absolute spending on contraceptive commodities has nearly tripled since 2002, with donors via NGOs and the Ministry of Health now funding most; previously, household OOP spending financed most of these commodities.

## CONCLUDING REMARKS

Rwanda remains dependent on donor funding in the health sector. Where donor and government financing fails to fully cover health services, households incur the financial burden through OOP payments, or they do not seek care. Households continue to spend the majority of their health funds on curative care directly from a provider rather than through insurance schemes, although this trend may be changing. As the 2006 NHA findings reveal the level of spending from each financing source, the sustainability of health financing as well as the goal of increasing health care utilization should be considered. NHA subaccounts are useful for policymakers to determine whether health funds are properly allocated in the health sector. PLHIV have seen a relative improvement in their level of OOP spending while persons using RH services and malaria goods and services still bear a growing financial burden.

The 2006 NHA estimation shows that the government generally has a larger stewardship role over health funds than in past years. NGOs and implementing agencies still play a large role in the sector as well. As mutuelles and other insurance are scaled up, future NHA estimations should reflect their larger role and the estimation can serve as a useful monitoring and evaluation tool on the schemes' success. This latest NHA also reveals that the private sector is still small but has grown in recent years, especially independent pharmacies that sell pharmaceuticals and other non-durables to households. Spending on preventive care should be maintained to lower overall spending on curative care, but funds for preventive care should be spent efficiently and effectively. Spending on general administration may be affected by more efficient programming, but may not decrease if additional programs and staff are introduced into the growing health sector.

The 2006 NHA report is Rwanda's longest, due to the increasing complexity of the health sector and from having five years of data to draw on and compare. As additional NHA estimations are completed, the country will also be able to draw on the 2006 NHA to analyze trends in Rwanda's health financing.



# I. INTRODUCTION

## I.1 THE NHA CONCEPT AND POLICY OBJECTIVES

National Health Accounts (NHA) is an internationally recognized framework that aims to comprehensively track and document resource flows in the health care system of a country. The framework describes health expenditures in a consistent and transparent manner from financing sources to end uses. The process involves a compilation of available data, the commissioning of primary data collection to fill any gaps, and the analysis and presentation of the data in a user-friendly format as per the international norms described in the *Guide to Producing National Health Accounts; with special application for low- and middle-income countries* (World Health Organization [WHO], World Bank, and United States Agency for International Development [USAID] 2003).<sup>1</sup> NHA is intended to be carried out as a regular exercise in a country, to allow policymakers and stakeholders to monitor spending patterns in the country across years, priority health areas, and diseases. When measuring expenditure on individual priority health areas and diseases, the estimation produced is called a subaccount.

Rwanda has conducted NHA five times (1998, 2000, 2002, 2003, and now for 2006), with subaccount estimations often included in the exercise. Specific objectives of the 2006 NHA and subaccounts are to:

- Inform the policy process in setting health care policy priorities;
- Determine whether resource allocation is aligned to key health care policy priorities;
- Provide data for gauging health system performance and management;
- Uncover equity issues in the distribution of health care resources;
- Compile relevant descriptive statistics for the health system in Rwanda;
- Aid monitoring and evaluation by tracking health expenditure trends;
- Serve as a baseline to contribute to monitoring the effect of ongoing health initiatives such as decentralization, scale-up of *mutuelles de santé* (mutual health organizations), and performance-based financing;
- Contribute to institutionalizing the NHA process through the involvement of local players in all facets of the process including additional training and technical development initiatives;

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<sup>1</sup> The *Guide to Producing National Health Accounts; with special application for low- and middle-income countries* is commonly known as the Producers Guide, or PG, and will be referred to as such in this report.

- Ascertain trends in sources and uses of funding (pre- and post-donor influx)<sup>2</sup> for three priorities, namely HIV/AIDS, malaria, and reproductive health (RH); and
- Identify the financial priority of each subaccount relative to each other and in the context of general health spending.

## 1.2 SOCIOECONOMIC STATUS OF RWANDA

According to the National Institute of Statistics of Rwanda (NISR), the country had an estimated nominal gross domestic product (GDP) of RWF 174,755 (US \$317) per capita in 2006.<sup>3</sup> When compared with the overall sub-Saharan Africa average GDP per capita of RWF 415,526 (US\$ 745, 2005), Rwanda ranks as one of the poorest countries in the world (United Nations Development Programme [UNDP] 2007).

Rwanda's economy is recuperating from the war and genocide of 1994, facilitated by both foreign aid inflow and the recovery of domestic production. The second Integrated Living Conditions Survey 2005/06 (*Enquête intégrale sur les conditions de vie des ménage*, or EICV2) revealed that, between 2001 and 2006, consumption per capita grew, in real terms, at an average rate of around 3.0 percent per year. As a result, poverty declined from 60.4 to 56.9 percent (NISR and World Bank 2006).

Nevertheless, Rwanda's social indicators remain poor. Along with progress in economic growth and poverty reduction, there has also been significant population growth, approximately 3.5 per year. Therefore, although the percentage of the population living in poverty has fallen, population growth has increased the total number of Rwandans living in poverty, from an estimated 4.8 million in 2000/01 to 5.4 million in 2005/06 (NISR and World Bank 2006).

## 1.3 OVERVIEW OF THE RWANDAN HEALTH SYSTEM

### 1.3.1 PUBLIC SECTOR

Rwanda's public health system is based on a primary health care approach and is organized in three tiers, with the Ministry of Health (MoH) responsible for setting policy and overall health sector planning.<sup>4</sup> This organization resulted from the decentralization process of 2005.

The three-tier system applies to health care administration and facilities. Regarding the administrative structure, the first tier is the central-level MoH, which acts as the steward, coordinating the sector from the national perspective. The second tier comprises 30 health districts charged mainly with planning, supervision, and delivery of health services throughout the health district. The third tier is the primary "sector" level.<sup>5</sup> Each sector is served on average by one health center that delivers most of the primary health services such as prevention, community health promotion (family planning, sensitization on hygiene, prevention of sexually transmitted infections [STIs]) and curative treatment of uncomplicated diseases like diarrhea, respiratory tract infections, malaria, and normal deliveries.

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<sup>2</sup> Donor influx refers to an increase in donor spending due to the introduction of new funding mechanisms like the Global Fund to Fight AIDS, Tuberculosis and Malaria, President's Malaria Initiative (PMI), and President's Emergency Plan for AIDS Relief (PEPFAR) etc.

<sup>3</sup> <http://www.statistics.gov.rw/>, accessed January 2008.

<sup>4</sup> Administratively, Rwanda's health system was a two-tier system in 2006: MoH and the District Health System. Facilities, the third tier, are organized further into another three tiers, as mentioned in the following paragraph

<sup>5</sup> MoH HMIS 2006 and Rwanda Service Provisional Assessment (SPA) Survey 2007.

The health facilities are also organized into three tiers: referral hospitals, district hospitals, and health centers. Rwanda has two fully public referral hospitals, namely the University Hospital of Butare (*Centre Hospitalier Universitaire de Butare* [CHUB]) and University Teaching Hospital of Kigali (*Centre Hospitalier Universitaire de Kigali* [CHUK]). There are 34 district hospitals that aim at providing a complementary health care package, and 402 health centers that aim at providing a minimum health care package as determined by the national standards for health care. A fourth tier of primary health delivery is being formalized and will be anchored in the use of community health workers (CHWs) at the cell and *umudugudu* (village) levels; it will deliver new initiatives such as home-based management of under-5 (children under 5 years of age) uncomplicated malaria, simple diarrhea, and provision of family planning commodities.

### **1.3.2 GOVERNMENT-ASSISTED NOT-FOR-PROFIT HEALTH FACILITIES**

Forty percent of all health facilities are under the management of faith-based organizations, mainly Catholic and Protestant, which operate under a memorandum of understanding with the Government of Rwanda (GoR). The agreement integrates these *agrée* facilities into the mainstream public health care delivery, based on MoH policies. It commits them to provide almost all the functions of public facilities; in turn, the GoR provides them with staff and staff salaries, covers some of their operating costs, and offers them access to financial resources via performance-based financing. Their staff can also access government-sponsored training and sit on district health management teams.<sup>6</sup>

### **1.3.3 PRIVATE SECTOR**

The private health sector remains small.<sup>7</sup> Private facilities are found throughout the main Rwandan cities such as Kigali, Huye, Musanze, and Rubavu; there are very few private facilities in rural areas. The GoR is strengthening its collaboration with the private sector, based on (i) a greater participation of the private sector in the provision of services to the entire population, (ii) improved accessibility of this sector to facilities services, such as GoR in-service training, (iii) improved supervision of the sector by the Health Care Task Force through information sharing and access to norms and standards, and (iv) a reinforcement of the MoH Health Care Task Force charged with accreditation and supervision of the private sector. A formal agreement detailing the nature of cooperation between the MoH and private sector has been established to ensure good collaboration.

### **1.3.4 TRADITIONAL MEDICINE**

Historically, traditional practitioners and traditional birth attendants provided health services and medicine to much of the population. The health sector has modernized over time; nevertheless, a significant proportion of the population still accesses traditional health services for various reasons. The GoR recognizing this fact through a legal framework that allows traditional medical services to operate alongside modern health services at the district level. Collaboration with the Butare Institute for Scientific and Technological Research ensures the rational development of traditional health care in the country. The Pharmacy Task Force has also embraced research into the use of traditional medicines.

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<sup>6</sup> MoH, National Population Office [*National de la Population*, ONAPO], and ORC Macro 2003.

<sup>7</sup> King Fayçal Hospital and the Neuropsychiatric Hospital of Ndera are categorized in the provider figures as private institutions in the 2006 NHA report. In the NHA tables, the former was labeled a private referral hospital and the latter was given a separate code. There are varying views of how these hospitals should be categorized. Both receive funding through both public and private sources but are run with relative autonomy from the government, unlike public referral hospitals, which are run exclusively by the government. During the planning stages of the 2006 NHA, the team decided to classify the two institutions as “private providers” to distinguish them from public referral hospitals.

## 1.4 HEALTH POLICY OBJECTIVES, 2006

Four major interventions were implemented in 2006 to improve the health system and reduce the financial burden of people seeking health care.

- The second phase of the administrative reforms, which led to the elimination of the health district structure;
- Public administrative reforms, which led to a strong reduction of manpower at the national/central level (MoH) in favor of increasing capacity at the service delivery level;
- Scale-up of community-based health insurance coverage to all 30 districts in the form of *mutuelles de santé* and introduction of a national subsidy for those too poor to pay the insurance premium;
- Roll-out of performance-based financing for health centers and district hospitals in 23 districts, and an introduction of community performance-based financing.

The 2006 NHA will be useful to measure the effects of these interventions on health financing patterns in the country. Future NHA estimations can be compared with the 2006 findings for this purpose.

While Rwanda has made important policy decisions in recent years, comparisons with health status indicators of other sub-Saharan Africa countries show that Rwanda needs to implement changes that will improve the health status of its population.

**TABLE 1.0: KEY DEVELOPMENT AND HEALTH INDICATORS, SELECTED SUB-SAHARAN AFRICA COUNTRIES, 2005**

Development Indicator	Kenya	Tanzania	Uganda	Rwanda	Burundi	Ethiopia	Malawi	South Africa
Population (millions)	35.6	38.5	28.9	9.2	7.9	79.0	13.2	47.9
Population growth rate (%)	2.6	2.4	3.2	2.7	3.6	2.5	2.5	0.5
GDP per capita (US\$)	547	316	303	238	106	157	161	5,109
Infant mortality rate (per 1,000 births)	79	76	79	118	114	109	79	55
Maternal mortality rate (per 100,000 live births)	560	950	435	750	1100	720	980	400
Literacy rate (%)	73.6	69.4	66.8	64.9	59.3	35.9		82.4

Source: UNDP (2007) and Demographic and Health Survey (DHS) (2005)



## I.5 ORGANIZATION OF THE REPORT

This report presents the findings of Rwanda's 2006 NHA exercise. Where applicable, it compares the 2006 findings to past NHA findings (Table I.1) to illustrate shifts in health financing and entities operating in the health sector over time.

**TABLE I.1: YEAR OF PREVIOUS ESTIMATION COMPARED WITH 2006 DATA**

Health area	1998	2000	2002	2003
General NHA	X	X	X	X
HIV/AIDS		X	X	
Malaria				X
RH			X	

A chapter is dedicated to each area of the exercise: general (overall) health, and the HIV/AIDS, malaria, and RH subaccounts. The chapters present levels of expenditure and the entities involved in the spending of health funds.

Each chapter is organized by discussing the patterns and trends of:

- the overall envelope of health financing;
- financing sources (the source of health resources);
- financing agents (entities that manage health funds and determine the amount and targeted use of health resources);
- household out-of-pocket (OOP) (resources originating at and managed by households);
- providers (entities that ultimately provide the health service);
- health functions (the end use of health funds, or types of services being produced); and
- additional analyses (e.g., family planning commodities within the RH subaccount chapter).

Following the chapters on findings is a concluding chapter and annexes with a detailed methodology and the NHA tables (including both targeted and untargeted spending).

The reader should keep the following in mind while reading the report. Due to rounding, percentages in figures may not always add up to 100 percent. Also, values on absolute spending are in constant 2006 Rwandan francs (RWF) and U.S. dollars to adjust for inflation and allow for comparisons of expenditure over time.

The Rwanda NHA technical team, which did the estimations and wrote this report, hope other health experts will find the NHA results useful for research purposes and for additional analysis to explain the underlying causes behind certain findings.

## I.6 BOUNDARIES/SCOPE OF THE 2006 NHA

The 2006 NHA and subaccounts track the flow of health funds through the health sector within the 2006 calendar year. They include goods and services accounted for in the year they were provided, rather than when they were actually paid for.

“Health-related activities” were captured by the 2006 NHA and can be viewed in the NHA tables in Annex A. A health-related activity is an activity that may overlap with sectors other than health, such as education, overall “social” expenditure, research and development, and infrastructure.

Certain health services or products, such as condom provision, could fall into more than one subaccount (Table I.2). In these cases, the NHA team must decide where to allocate that particular expenditure.

**TABLE I.2: OVERLAPPING SERVICES AND SUBACCOUNT ALLOCATION**

Overlapping service	HIV/AIDS	Malaria	RH
STI services	XX		X
Condoms (depends on primary purpose of purchase)	X		X
HIV/AIDS services	XX		X
PMTCT for HIV/AIDS	XX		X
Intermittent preventive therapy (IPT) and antimalarial chemoprophylaxis (given to pregnant mothers for malaria prevention)		XX	X
HIV/AIDS curative care (as a co-infection of malaria)	XX	X	

Note: X refers to where a service could be allocated. XX refers to where the service was allocated in this round of NHA

As a general rule, the NHA team followed the boundaries defined in the System of Health Accounts and the Producers’ Guide.

## 2. NHA FINDINGS: GENERAL HEALTH EXPENDITURES

### 2.1 DEFINITION OF TOTAL HEALTH EXPENDITURE

NHA tracks all health expenditures and estimates total health expenditure ( $THE_{general}$ ) in Rwanda for a given year.  $THE_{general}$  is the total value of consumed goods and services for “activities whose primary purpose is to restore, improve and maintain health for the nation and for individuals during a defined period of time” (Producers’ Guide: 20, 3.02). It comprises expenditures from all sources, public, private, and donor.

### 2.2 SUMMARY STATISTICS OF GENERAL NHA 2006

As Rwanda has conducted NHA estimations for five separate years, trend statistics are available (Table 2.0). All time series comparisons of absolute amounts in the report are adjusted to constant RWF and US\$ 2006 to account for inflation.

**TABLE 2.0: NHA TREND STATISTICS, 1998–2006**

Indicators	1998*	2000*	2002*	2003*	2006
Total population**	7,883,000	7,691,783	8,128,553	8,388,667	9,058,392
Exchange rate US\$ 1=RWF***	317	393	475	539	552
Total real GDP <sup>δ</sup>	RWF 903,596,620,489 US\$ 1,637,721,790	RWF 995,646,509,881 US\$ 1,804,557,418	RWF 1,091,939,192,568 US\$ 1,979,082,888	RWF 1,183,678,667,693 US\$ 2,145,355,906	RWF 1,583,000,000,000 US\$ 2,869,105,013
Total GoR expenditure and net lending <sup>δδ</sup>	RWF 167,981,026,375 US\$ 304,456,857	RWF 212,334,986,166 US\$ 384,846,098	RWF 180,677,536,165 US\$ 327,468,620	RWF 238,444,711,887 US\$ 432,168,615	RWF 417,200,000,000 US\$ 756,153,261
$THE_{general}$ per NHA (US\$ 2006)	RWF 45,482,827,219 US\$ 82,435,254	RWF 40,262,074,605 US\$ 72,972,912	RWF 44,570,823,334 US\$ 80,782,294	RWF 78,417,516,472 US\$ 142,127,662	RWF 169,574,434,271 US\$ 307,344,825
$THE_{general}$ per capita (US\$ 2006)	RWF 5748 US\$ 10.42	RWF 5234 US\$ 9.49	RWF 5483 US\$ 9.94	RWF 9348 US\$ 16.94	RWF 18720 US\$ 33.93
$THE_{general}$ as % of nominal GDP	5%	4%	4%	7%	11%
GoR health expenditure as % of GoR total expenditure	2.5%	4.7%	6.1%	8.8%	6.5%

Indicators	1998*	2000*	2002*	2003*	2006
<b>Financing sources distribution as a % of THE<sub>general</sub></b>					
Public (include loans & grants)	10%	18%	25%	32%	19%
Private	40%	30%	42%	25%	28%
Donor	50%	52%	33%	42%	53%
Other	0%	0%	0%	1%	0%
<b>Household (HH) spending<sup>888</sup></b>					
As % of THE <sub>general</sub>	32%	26%	31%	20%	26%
Out-of-pocket (OOP) <sup>ε</sup> as % of THE <sub>general</sub>	33% <sup>ξξ</sup>	25%	25%	17%	23%
HH spending per capita (US\$)	RWF 1870 US\$ 3.39	RWF 1297 US\$ 2.35	RWF 1712 US\$ 3.10	RWF 1626 US\$ 2.95	RWF 4228 US\$ 7.66
<b>Financing agents distribution as a % of THE<sub>general</sub></b>					
Public	38%	30%	48%	45%	49%
Private	40%	64%	51%	47%	23%
Donor	22%	6%	2%	8%	28%
<b>Provider distribution as a % of THE<sub>general</sub><sup>ξξξ</sup></b>					
Public facilities	66%	39%	55%	53%	56%
Agréé facilities	10%	40%	25%	23%	7%
Private facilities	24%	21%	20%	24%	37%

\* All US\$ amounts for 1998, 2000, 2002, and 2003 are in constant 2006 currency to facilitate comparison across years. The Consumer Price Index (CPI) was used for the conversion (69.91 for 1998, 70.88 for 2000, 74.71 for 2002, and 80.27 for 2003). Source for CPI data: NISR (<http://www.statistics.gov.rw>).

\*\* The 1998 population figure is based on the 1992 census and the 2000 and 2002 figures are based on the 2002 census. The 2003 figure is estimated from the 2002 census at a growth rate of 3.2%. Due to the genocide and subsequent repatriation, it is difficult to determine precise population trends for Rwanda during the 1990s. The 2006 number is a projected amount from the 2005 census report.

\*\*\* The exchange was derived from an unweighted average of monthly official exchange rates from National Bank of Rwanda (BNR) official statistics (see [www.bnr.rw](http://www.bnr.rw))

<sup>δ</sup> From BNR (see [www.bnr.rw](http://www.bnr.rw)); 2006 GDP from NISR, accessed January 2008.

<sup>88</sup> Includes spending on recurrent budget, development budget, net lending, arrears, and increase in BNR government deposit.

<sup>888</sup> Includes contributions to insurance and direct payments to providers.

<sup>ε</sup> OOP includes only direct payments to providers.

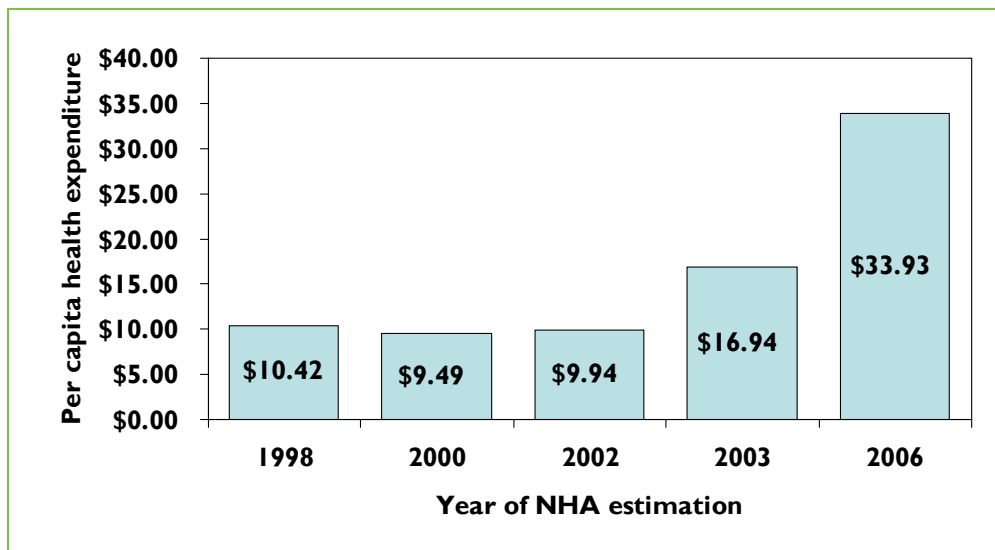
<sup>ξξ</sup> OOP expenditures are higher than HH expenditures because public firms and private firms are noted as giving funds to HH OOP.

<sup>ξξξ</sup> For time comparison purposes, provider expenditures have been broken down into the three categories of public facilities, government-assisted health facilities (agréés) and private facilities in keeping with all previous NHAs. The above percentages represent the share of total facility expenditure broken down into public, agréé and private providers. However, greater disaggregation is available for the 2006 NHA as detailed in Annex A. It should be noted that expenditures on for-profit providers like "traditional healers" and "independent pharmacies" were allocated to private facilities.

## 2.3 TOTAL RESOURCE ENVELOPE AND TRENDS IN THE<sub>GENERAL</sub>

In 2006, THE<sub>general</sub> was RWF 169,574,434,271 (US\$ 307,344,825). This represents a 2.2-fold increase from the last NHA estimation (2003). Health expenditure per capita has increased dramatically in recent years, in an upward trend since 2002 (Figure 2.0).

**FIGURE 2.0: PER CAPITA THE<sub>GENERAL</sub> TRENDS, 1998-2006**



\* Reported in constant 2006 currency to facilitate comparisons across years

In 2006, per capita spending in Rwanda was US\$ 34. This includes all health services rendered in the country, including public health campaigns, administrative costs, and other services. It also includes funding targeted for subgroups of the population, such as people living with HIV (PLHIV). The WHO Commission on Macroeconomics and Health (CMH) recommends US\$ 34 per capita health spending to provide basic health services to the population (not specific to Rwanda). While Rwanda has made impressive strides in the level of per capita spending on health, the level of spending on basic health services has not reached the CMH's recommended target.

## 2.4 FINANCING SOURCES OF OVERALL HEALTH SPENDING

As noted above, THE<sub>general</sub> includes contributions from public sources (taxes, loans, grants, and parastatal employers), donors, and private sources (households, private companies, local foundations, etc.). The contribution from each financing source and its share of the total is presented in Figure 2.1.

**FIGURE 2.1: CONTRIBUTIONS TO THE<sub>GENERAL</sub> BY FINANCING SOURCE, 2006**

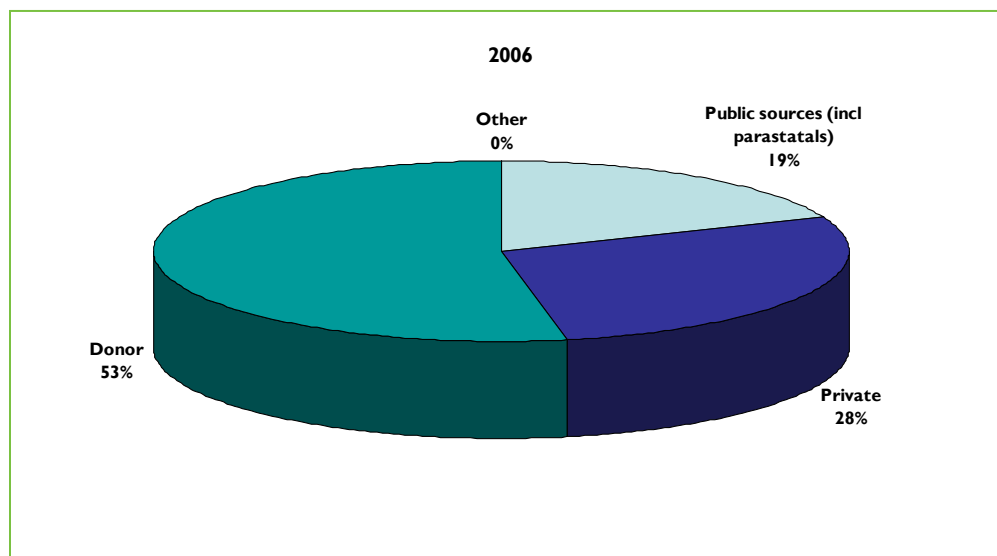


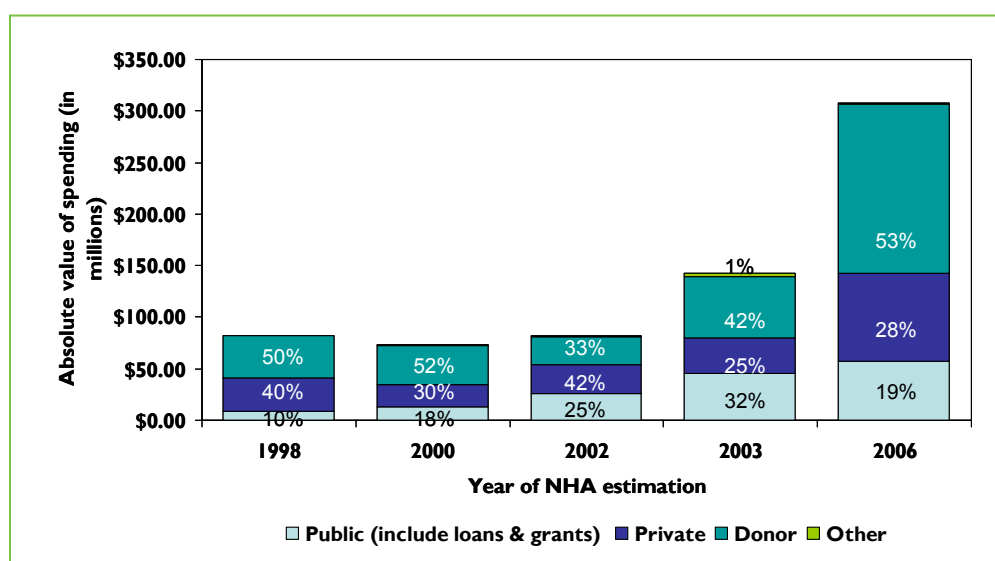
Table 2.1 and Figure 2.2 show trends in expenditure amounts coming of financing sources for the five NHA estimations from 1998 to 2006. There is variation among the sources, both in absolute amounts and percentages; this volatility impedes long-term health planning. Nevertheless, certain trends can be identified.

**TABLE 2.1: TRENDS IN FINANCING OF GENRAL HEALTH CARE, 1998-2006, IN US\$ 2006**

	1998*	2000*	2002*	2003*	2006	Magnitude of increase from 2003
Public	RWF 4,652,741,247 \$ 8,432,851	RWF 7,235,474,461 \$ 13,113,920	RWF 14,259,477,274 \$ 425,844,560	RWF 24,856,760,099 \$ 45,051,582	RWF 31,838,175,784 \$ 57,705,035	1.3
Private	RWF 17,940,680,371 \$ 32,516,548	RWF 12,029,847,607 \$ 21,803,472	RWF 15,356,686,968 \$ 27,833,195	RWF 19,472,274,551 \$ 35,292,483	RWF 47,044,952,681 \$ 85,266,525	2.4
Donor	RWF 22,889,405,602 \$ 41,485,855	RWF 20,920,250,822 \$ 37,916,865	RWF 14,901,755,474 \$ 27,008,655	RWF 32,582,985,641 \$ 59,054,964	RWF 90,477,444,573 \$ 163,985,654	2.8
Other	-	RWF 76,501,716 \$ 138,655	RWF 52,903,617 \$ 95,885	RWF 1,505,496,181 \$ 2,728,633	RWF 213,861,233 \$ 387,612	0.1
THE	RWF 45,482,827,220 \$ 82,435,254	RWF 40,262,074,606 \$ 72,972,912	RWF 44,570,823,334 \$ 80,782,295	RWF 78,417,516,472 \$ 142,127,662	RWF 169,574,434,271 \$ 307,344,826	2.2

\* Reported in constant 2006 currency to facilitate comparisons across years

**FIGURE 2.2: ABSOLUTE CONTRIBUTION TO THE<sub>GENERAL</sub> BY SOURCE, 1998-2006**



\* Reported in constant 2006 currency to facilitate comparisons across years

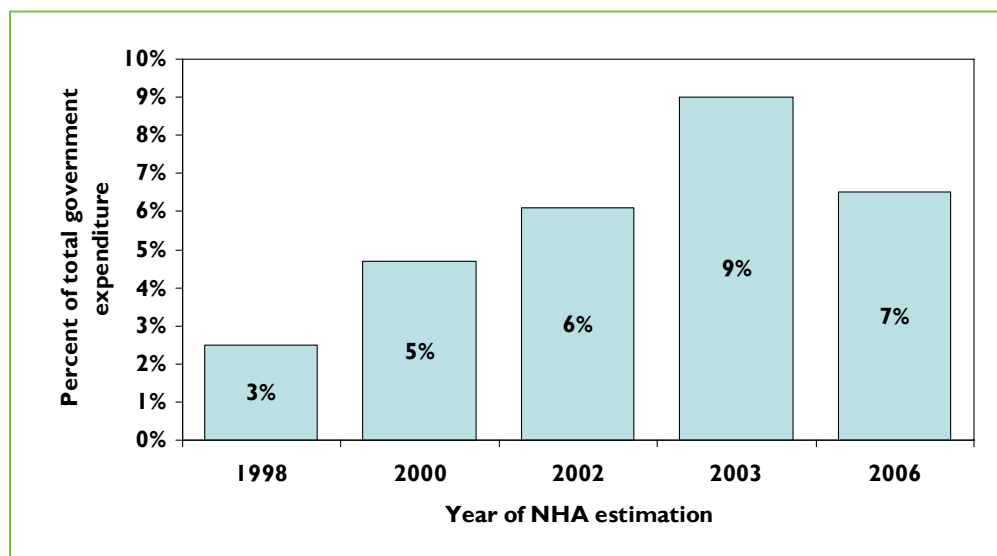
Donors have been the largest contributor to THE<sub>general</sub> in Rwanda overall. In 1998, health financing was donor dependent due to the heavy infrastructure and reconstruction efforts following the genocide and war. The donor share decreased as public and private contributions increased. Then, between 2003 and 2006, donor funding nearly tripled, to RWF 90.5 billion (US \$164 million) or 53 percent, reverting somewhat to 1998 dependency levels.

The recent jump in growth in THE<sub>general</sub> is attributable primarily to donor spending, and to a smaller extent to private expenditures, which contributed RWF 47 billion (US\$ 85.3 million). Private spending on health (largely by households) rose each year since 2000 and more than doubled between 2003 and 2006. It now exceeds public spending levels, unlike in previous years. Some reasons for this increase are cited in section 2.5.2.

Public spending has increased steadily, though its 2006 expenditure of RWF 31.8 billion (US\$ 57.7 million) represented the smallest percentage (19 percent) of health spending.

Figure 2.3 shows the trend of government spending on health as a percentage of total government expenditure. As part of the Abuja declaration of 2001, African governments pledged to allocate 15 percent of government spending to health.

**FIGURE 2.3: GOVERNMENT EXPENDITURE ON HEALTH AS A PERCENTAGE OF TOTAL GOVERNMENT EXPENDITURE, 1998-2006**



While Rwanda's percentage allocation to health has declined, this does not mean the government is contributing less to health. In fact, in 2006, total government spending on health has increased immensely (see Tables 2.0 and 2.1), perhaps because more donors are not earmarking funds for health but rather are contributing directly to the Ministry of Finance and Economic Planning (MoF) for general budget support.

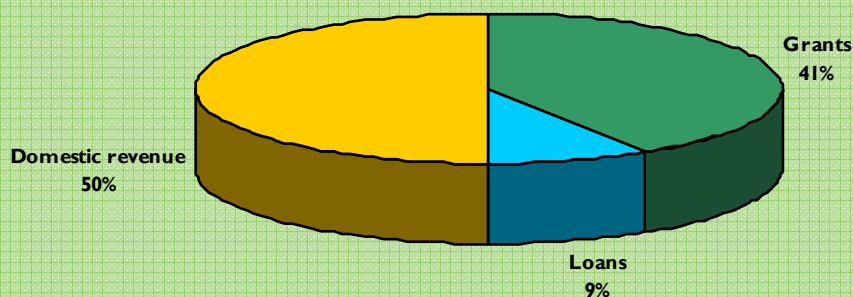
## 2.5 FINANCING AGENTS: MANAGERS AND IMPLEMENTERS OF OVERALL HEALTH FUNDS

Financing agents receive funds from financing sources to pay providers for health care functions (health

### UNAIDS/NHA Collaboration for NASA Matrix and HIV Subaccounts Tables

*NHA defines public spending at the financing source level as any funding coming from the Ministry of Finance. However, as the figure below shows, the MoF pools loans, grants, and domestic revenue, and therefore may include donor monies in the form of budgetary support.*

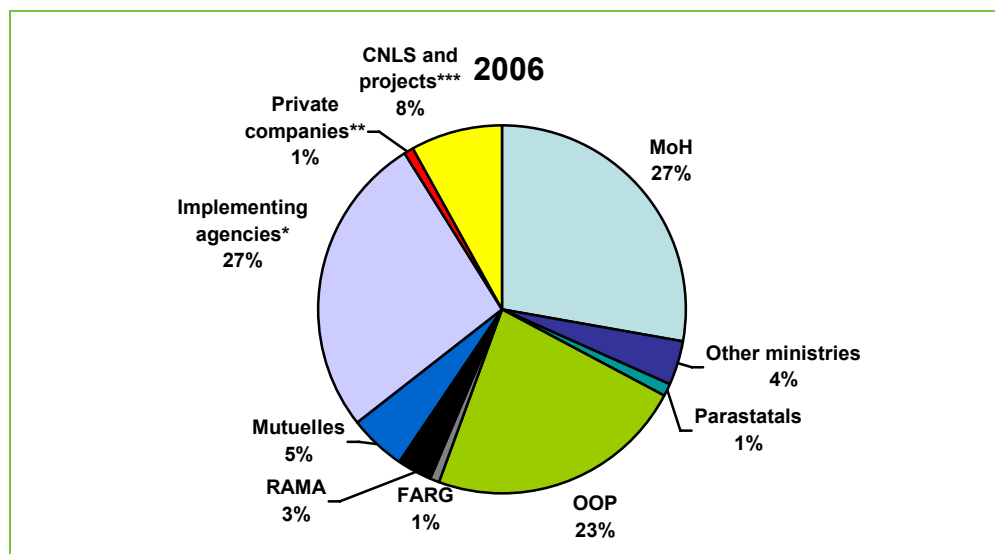
#### RWANDA MOF FINANCING SOURCES, 2006





services and products that are rendered). They are managers of funds, exercising programmatic control over the allocation of resources, and not mere intermediaries or pass-throughs. Figure 2.4 shows the managers of health care funds in 2006.

**FIGURE 2.4: MANAGERS OF TOTAL HEALTH EXPENDITURE IN RWANDA, 2006**



\* Includes direct donor transfers

\*\* Direct transfer to health facilities

\*\*\*Includes National AIDS Commission (*Commission Nationale de Lutte contre le SIDA*, CNLS) administration costs as well as projects operating under CNLS auspices, such as the World Bank Multicountry AIDS Program (MAP); Global Fund to Fight AIDS, Tuberculosis and Malaria; African Development Bank; and UNDP.

Overall, there were 17 financing agents in Rwanda (Table 2.2), which demonstrates the pluralistic nature of the country's health system. Government financing agents (including the MoH, other ministries, and the CNLS) manage the largest share of health spending. Households (in terms of OOP spending), the MoH, and nongovernmental organizations (NGOs)/implementing agencies each manage around a quarter of  $THE_{general}$ .

**TABLE 2.2: SHARE OF THE<sub>GENERAL</sub> BY FINANCING AGENT, 2003 AND 2006**

	Financing Agent (Managers)	2003*	2006	Magnitude of increase from 2003
Public	MoH (MINISANTE)	RWF 15,645,293,666 \$28,356,280	RWF 47,309,782,878 \$ 85,746,516	3.0
	Other ministries	RWF 871,722,369 \$1,579,951	RWF 7,067,972,109 \$ 12,810,331	8.0
	CNLS proper		RWF 1,046,758,213 \$ 1,897,195	
	CNLS projects		RWF 12,627,650,198 \$22,886,958	
	Local municipal govts (districts)	RWF 6,736,289,255 \$12,209,173	RWF 65,222,465 \$118,212	0.0
	Social Security Fund (CSR)	RWF 1,795,845,677 \$3,254,877	RWF 11,961,537 \$21,680	0.0
	FARG	RWF 5,346,613,577 \$9,690,459	RWF 1,009,461,573 \$1,829,597	0.2
	Social insurance (RAMA+MMI)	RWF 3,705,899,154 \$6,716,749	RWF 4,742,882,011 \$8,596,227	1.3
	Mutuelles (premium paid by employer)**		RWF 334,470,816 \$606,211	
	Mutuelles (community based)		RWF 8,104,396,820 \$14,688,797	
	Parastatal companies	RWF 1,384,054,866 \$2,508,527	RWF 885,923,877 \$1,605,691	0.6
Public	Private employees insurance programme		RWF 327,506,739 \$593,589	
	Private insurance (SORAS, COGEAR, etc)	RWF 470,921,922 \$853,521	RWF 326,327,506 \$591,452	0.7
	Private household OOP payments	RWF 13,641,572,643 \$24,724,640	RWF 38,295,662,832 \$69,408,893	2.8
	Private nonparastatal firms	RWF 1,766,947,677 \$3,202,501	RWF 852,802,486 \$1,545,660	0.5
	Non-governmental organizations (NGOs)	RWF 21,098,399,426 \$38,239,750	RWF 38,389,951,169 \$69,579,786	1.8
	Rest of World***	RWF 5,874,042,555 \$10,646,396	RWF 8,175,701,041 \$14,818,032	1.4
	Other/not specified by kind	RWF 79,913,685 \$144,839		
	Total	RWF 78,417,516,472 \$ 142,127,662	RWF 169,574,434,271 \$307,344,826	2.2

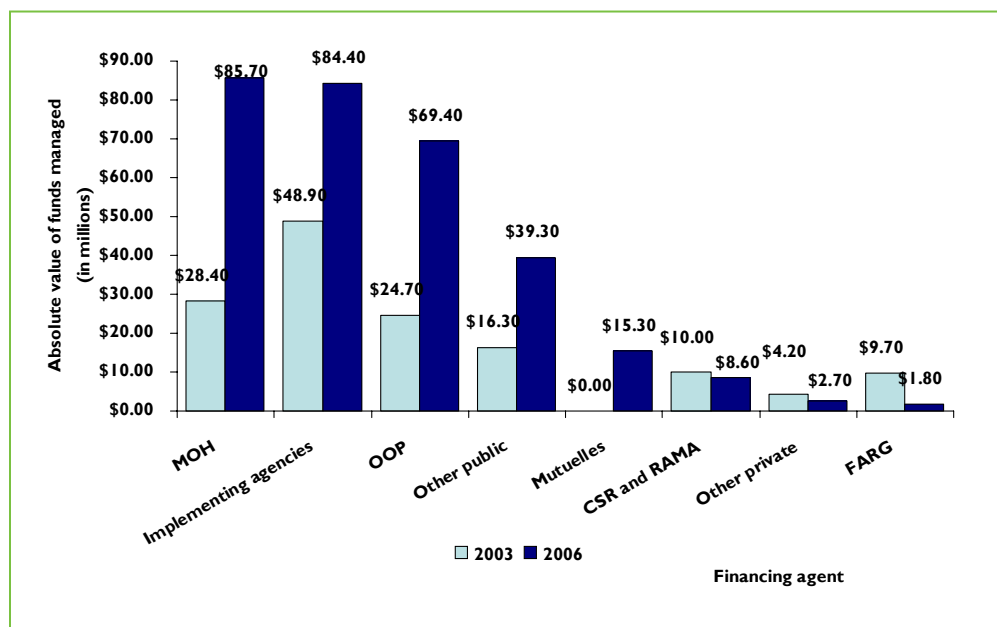
\* Reported in constant 2006 currency to facilitate comparisons across years

\*\*This category of mutuelles includes mutuelles for employees (and their families) of firms, where the employer pays the premiums as part of an employee's benefits package. They are distinct from mutuelles open to the general public.

\*\*\* Rest of the world includes direct-donor transfers. For example, the GFATM (an external financing source) can contract directly with a provider, thereby exercising programmatic control over those funds rather than directing them through another implementing agency.

As Figure 2.5 shows, the share of funds managed by the MoH tripled between 2003 and 2006. Household OOP spending also grew significantly. Mutuelles were still in a nascent stage in 2003 and thus data are not available for tracking the change in the level of spending by mutuelles.

**FIGURE 2.5: FINANCING AGENTS SHARE OF THE GENERAL, 2003 AND 2006**



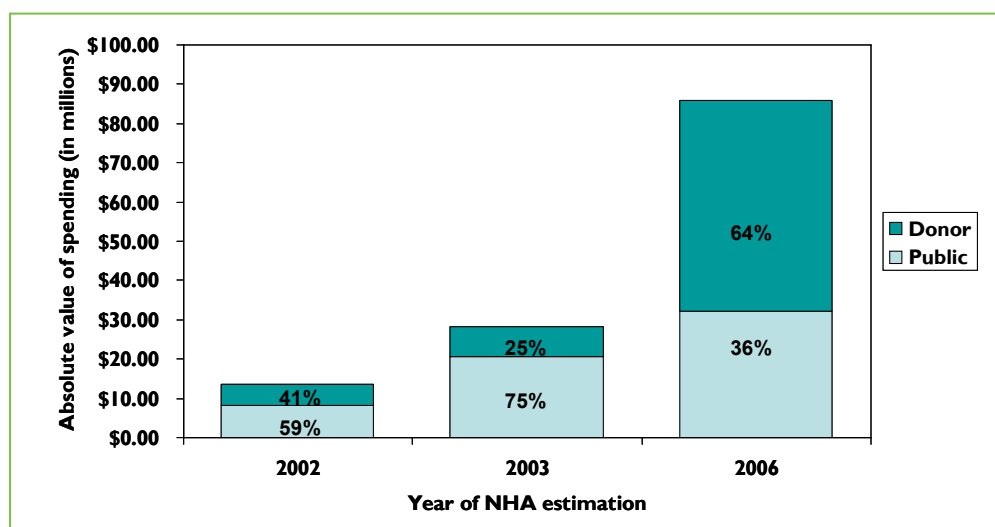
\* Reported in constant 2006 currency to facilitate comparisons across years

The share of funds managed by Social Security (*Caisse Sociale du Rwanda* [CSR]), *Rwandaise d'Assurance Maladie* (RAMA), Victims of Genocide Fund (*Fonds National pour l'Assistance aux Rescapés du Génocide* [FARG]), and other private financing agents such as private companies decreased between 2003 and 2006.

### 2.5.1 THE MOH AS A FINANCING AGENT

Previous NHA estimates show that the MoH was mainly funded from public sources (Figure 2.6). However, in 2006 donors contributed 64 percent of the RWF 47 billion (US\$ 85.7 million) that was under the programmatic control of the MoH.

**FIGURE 2.6: TRENDS IN MOH FUNDING, 2002-2006**



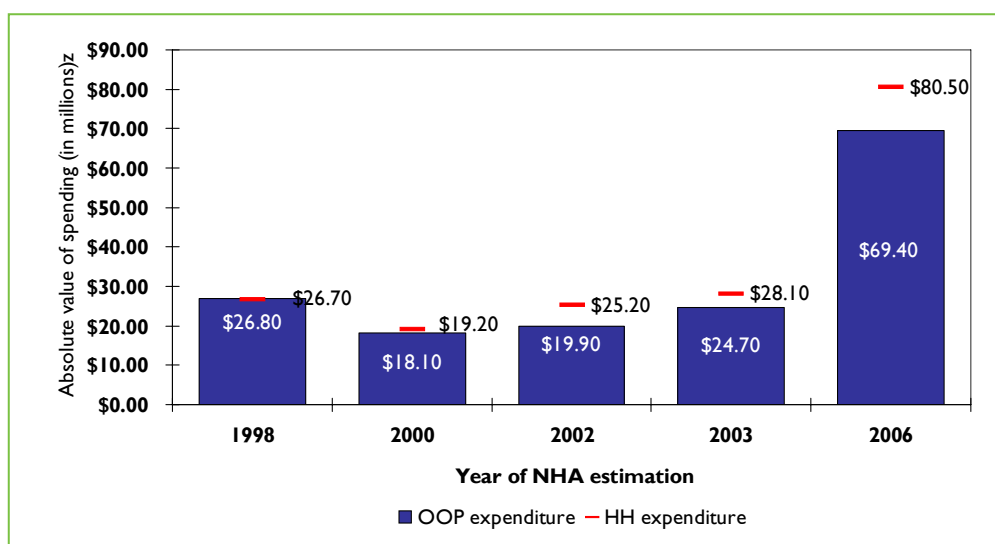
\* Reported in constant 2006 currency to facilitate comparisons across years

## 2.5.2 OOP SPENDING: HOUSEHOLDS AS FINANCING AGENTS

Household spending occurs mainly in the form of OOP expenditures. The remaining household amount accounts for household contributions to insurance schemes.

Figure 2.7 shows household and OOP spending as percentages of  $THE_{general}$ ; they constitute about a quarter of all spending. In 2006, OOP spending on health increased markedly in absolute terms: In 2003 households contributed RWF 15.5 billion (US\$ 28.1 million) to  $THE_{general}$ ; by 2006, household OOP spending had increased threefold, to RWF 44.4 billion (US \$70.7 million).

**FIGURE 2.7: TRENDS IN HOUSEHOLD AND OOP SPENDING, 1998-2006**



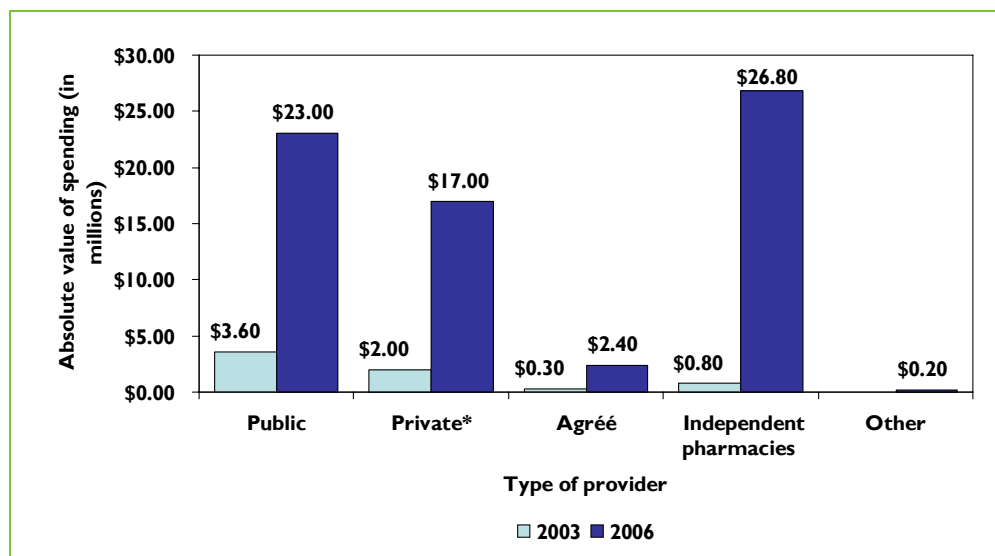
\* Reported in constant 2006 currency to facilitate comparisons across years

Some factors that may explain the increase in household spending are:

- Households are paying increased copayments to mutuelles.
- Though  $THE_{general}$  more than doubled between 2003 and 2006, most of the increase was in the area of targeted spending on diseases.
- Most of the OOP spending went to private pharmacies (39 percent, as shown in Figure 2.8). The Rwandan population may have had a higher propensity for proprietary drugs compared with generic medicines offered in the public sector and insurance mechanisms.
- 2006 data for traditional healers, who are paid out of pocket, were more robust than those data in previous years.
- GDP increased, so there may have been an increase in disposable income and therefore an increase in utilization. While the private sector is small, it is growing.
- Health care utilization was 0.3 per capita in 2003 and 0.7 per capita in 2006.

As Figure 2.8 shows, household spending has increased at every type of health provider since 2003, but it rose the most dramatically at independent pharmacies. Public health facilities receive more OOP payments than private or *agrée* facilities.

**FIGURE 2.8: PROVIDERS CONSUMING HOUSEHOLD OOP FUNDS, 2003 AND 2006**



Note: Reported in constant 2006 currency to facilitate comparisons across years

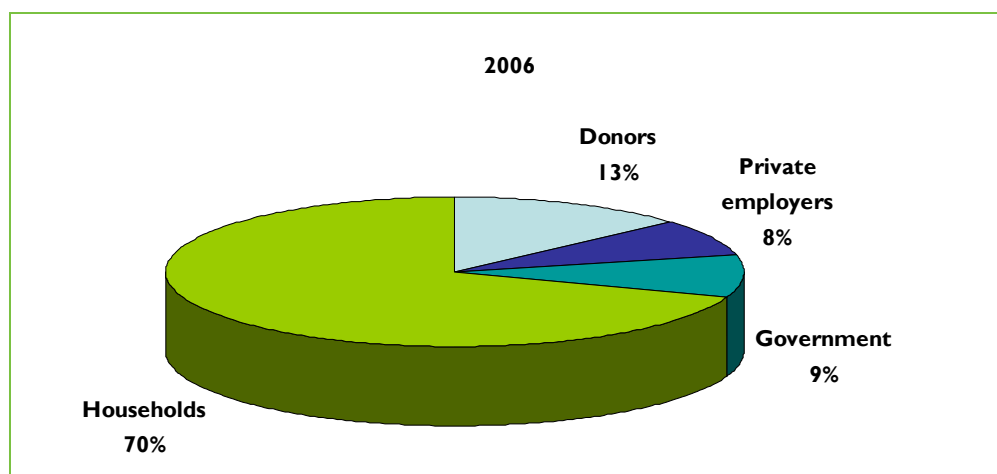
\* Includes traditional healers

### 2.5.3 MUTUELLES AS FINANCING AGENTS

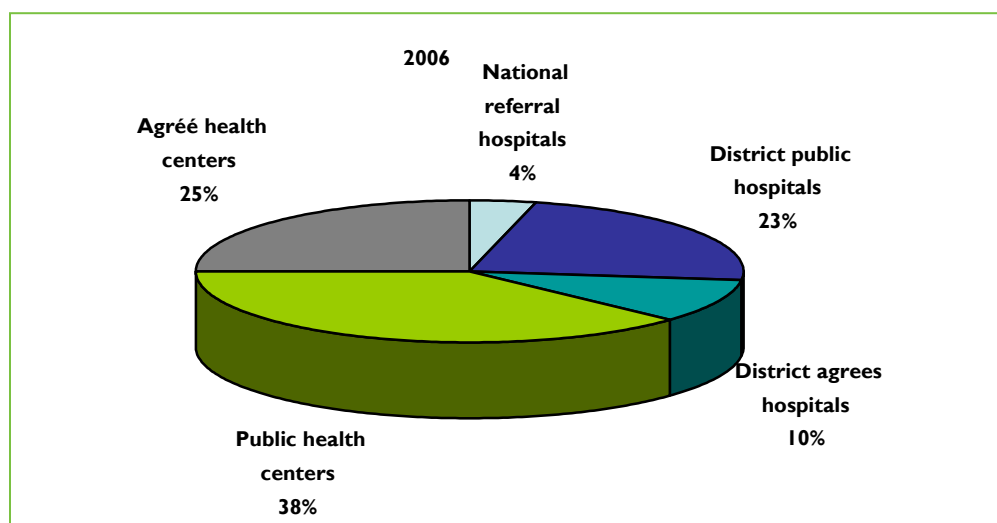
One of the ongoing policy actions to stabilize and improve the health care financing mechanisms in Rwanda is through concerted and effective community health insurance (mutuelles).<sup>8</sup> NHA findings show that mutuelles had limited control over the total health care resource envelope (5.2 percent). In actual numbers, their contribution amounted to RWF 8.8 billion (US \$15.9 million). However, the situation may not change significantly even if enrollment increases to 100 percent because the overall premium level paid by each member is relatively small.

Households were the main financing source for mutuelles, providing 70 percent of expenditures on mutuelles (Figure 2.9).

**FIGURE 2.9: FINANCING SOURCES OF MUTUELLES, 2006**



**FIGURE 2.10: PROVIDERS CONSUMING MUTUELLES FUNDS, 2006**



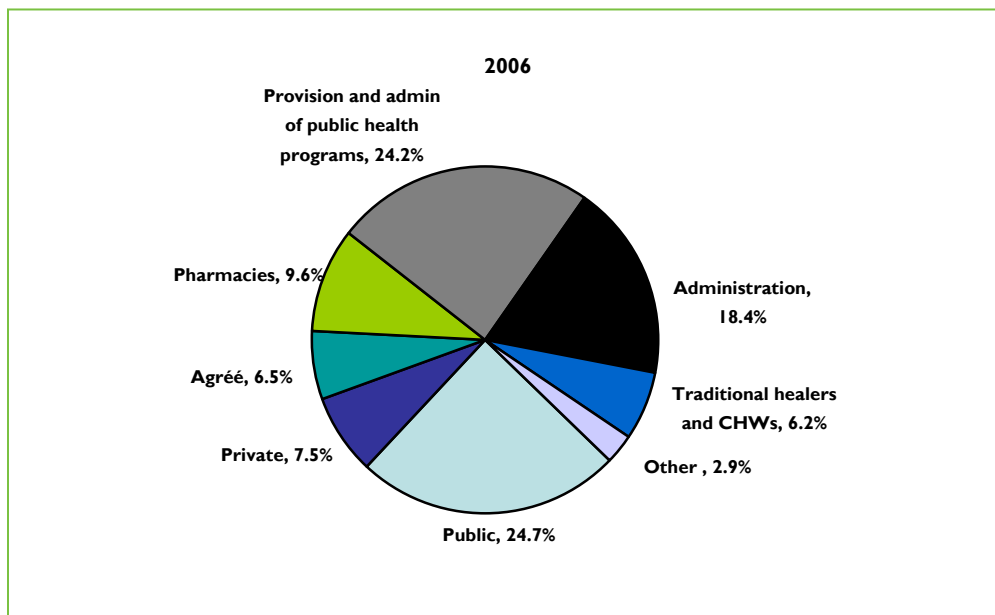
<sup>8</sup> Mutuelles are community-based social insurance schemes. Mutuelles aim to increase access to health care by reducing household OOP payments.

## 2.6 PROVIDERS OF OVERALL HEALTH

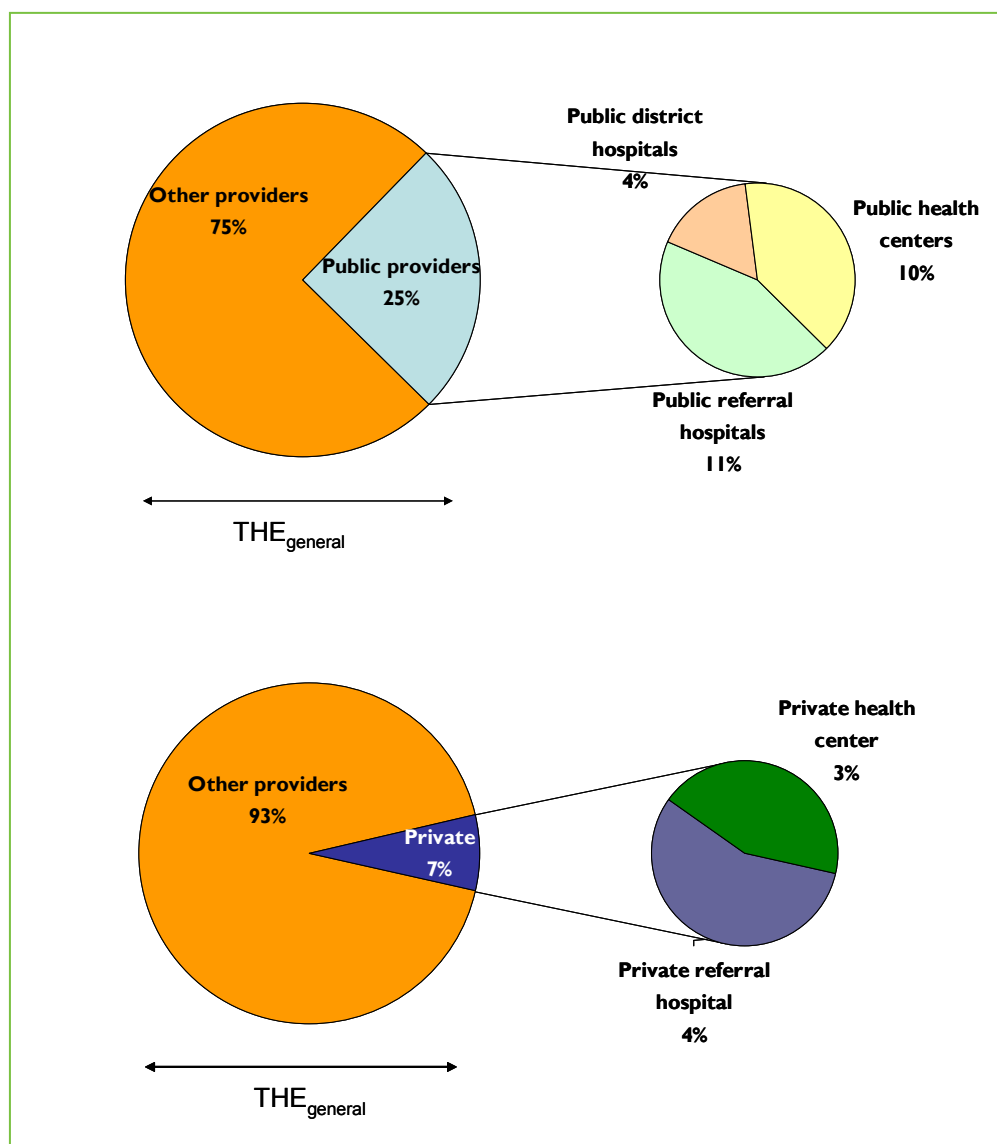
NHA data can be used to track which entities are providing health services in the country. Figure 2.11 shows the breakdown of all providers of health activities in 2006; Figure 2.12 shows this spending breakdown by public and private providers, and details each by type of facility.

The flow of funds from the financing agents to providers and from providers to health functions are detailed in Annex A.

**FIGURE 2.11: DISTRIBUTION OF PROVIDERS OF SERVICES AND COMMODITIES, 2006**



**FIGURE 2.12: BREAKDOWN BY PUBLIC AND PRIVATE PROVIDERS, 2006**



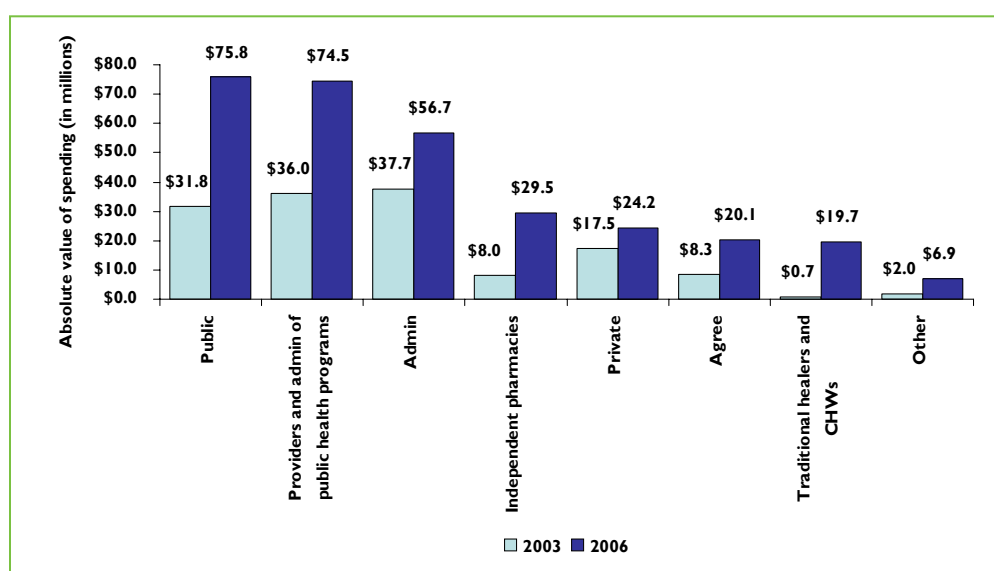
Public facilities (national referral and district hospitals, and health centers) consumed the largest amount of funds (Table 2.3 and Figure 2.13) in 2003 and 2006. Providers of public health programs also received large amounts of funds.



**TABLE 2.3: ABSOLUTE VALUES OF FUNDS CONSUMED, BY PROVIDER, 2003 AND 2006**

Provider	2003*	2006	Magnitude of increase from 2003
Public (hospitals and health centers)	RWF 17,546,587,489 \$ 31,802,276	RWF 41,819,705,198 \$ 75,796,037	2.4
Private (hospitals and clinics)	RWF 9,669,414,814 \$ 17,525,310	RWF 13,333,644,395 \$ 24,166,536	1.3
Agréé (district hospitals and health centers)	RWF 4,599,037,043 \$ 8,335,515	RWF 11,089,337,894 \$ 20,098,847	2.4
Independent pharmacies	RWF 4,434,774,095 \$ 8,037,797	RWF 16,273,418,809 \$ 29,494,724	3.7
Providers and admin. of public health programs	RWF 19,880,194,975 \$ 36,031,817	RWF 41,115,591,300 \$ 74,519,867	2.1
General health administration	RWF 20,801,415,079 \$ 37,701,481	RWF 31,278,832,851 \$ 56,691,255	1.5
Traditional healers and community health workers	RWF 381,012,905 \$ 690,566	RWF 10,848,811,036 \$ 19,662,905	28.5
Other	RWF 1,105,080,072 \$ 2,002,900	RWF 3,815,092,789 \$ 6,914,657	4.3
Total	RWF 78,417,516,472 \$ 142,127,662	RWF 169,574,434,271 \$ 307,344,826	2.2

\* Reported in constant 2006 currency to facilitate comparisons across years

**FIGURE 2.13: COMPARISON OF LEVEL OF FUNDS CONSUMED, BY TYPE OF PROVIDER, 2003 AND 2006**

\* Reported in constant 2006 currency to facilitate comparisons across years

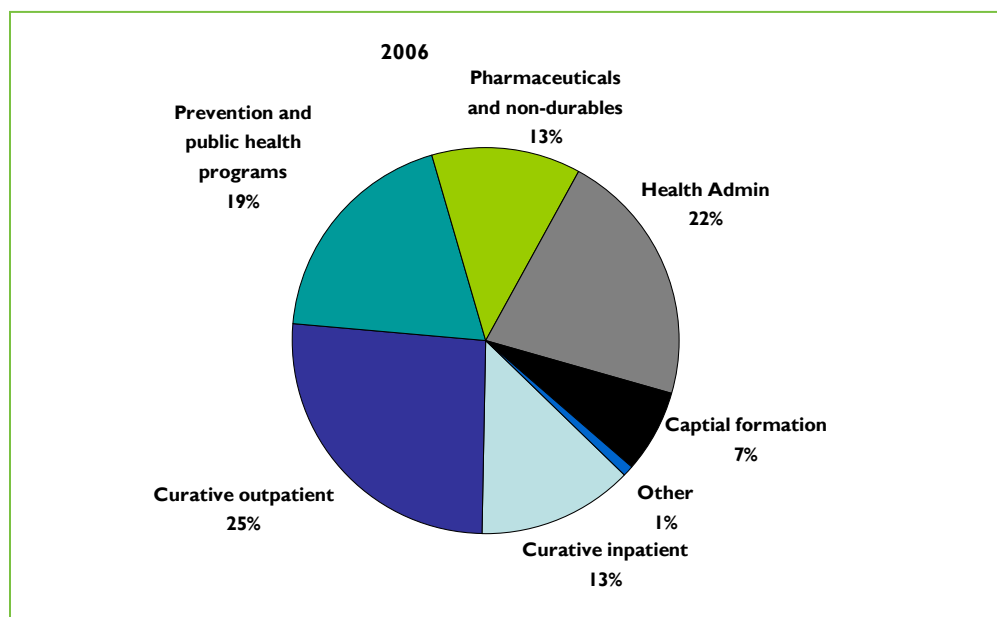
Excluding traditional healers and community health workers,<sup>9</sup> spending at independent pharmacies experienced the largest percentage increase, nearly quadrupling from 2003 to 2006. In the same period, spending on providers of general health administration grew, but at a lower rate, and so their share of  $THE_{general}$  decreased. Spending at private facilities (largely clinics) grew less rapidly than spending at public and *agr  e* facilities.

Between 2003 and 2006, the government worked towards regulating the private sector (independent pharmacies and clinics) through accreditation programs. Many back-street drug shops and clinics closed, which may explain the increase in utilization of independent pharmacies and public health facilities between 2003 and 2006.

## 2.7 USES OF HEALTH CARE FUNDS

General health care functions include personal care, population-level care (prevention and public health programs), health administration, and capital formation. Personal care includes inpatient and outpatient care,<sup>10</sup> drugs purchased at independent pharmacies, home-based care, and even preventive services offered to individuals, such as vaccinations. Figure 2.14 shows the services on which health expenditures were made in 2006; Figure 2.15 breaks out spending on prevention and public health services.

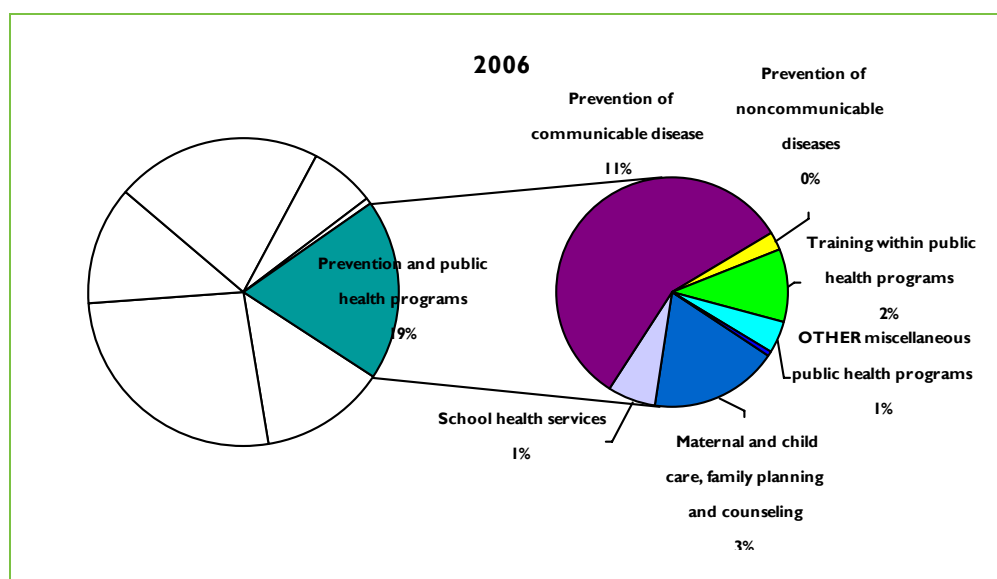
**FIGURE 2.14: WHAT DO HEALTH FUNDS BUY? HEALTH SERVICES CONSUMED IN 2006**



<sup>9</sup> Excluded because data were more robust in 2006 than in previous years; thus data may not be comparable.

<sup>10</sup> An inpatient is a patient who is formally admitted to an institution for treatment and/or care and stays for a minimum of one night. Outpatient care is medical and paramedical services delivered to outpatients (someone not formally admitted to the facility and who does not stay overnight) (Organisation for Economic Co-operation and Development [OECD] 2000)

**FIGURE 2.15: PREVENTION AND PUBLIC HEALTH PROGRAMS DISAGGREGATED, 2006**



The total spent on personal care in 2006 represented 52 percent of  $THE_{general}$ . Curative services accounted for 38 percent of  $THE_{general}$ , of which outpatient care consumed 25 percent and inpatient care (hospitalizations) consumed 13 percent; another 13 percent of  $THE_{general}$  was expended on drugs and other nondurables, mainly at private pharmacies. Prevention and public health programs consumed 19 percent, while health administration and insurance accounted for 22 percent. Capital formation, health system strengthening and infrastructure, accounted for 7 percent of  $THE_{general}$ .

Among prevention and public health programs, those targeting communicable diseases consumed the largest percentage, followed by maternal and child care.

In 2006, absolute spending was higher on every health function with the exception of functions not specified by kind, or other (Table 2.4, Figure 2.16). Spending on pharmaceuticals and other nondurables increased by the largest magnitude (five times higher in 2006 than in 2003). Outpatient curative care increased the most in value and became the largest end use of health funds in 2006.

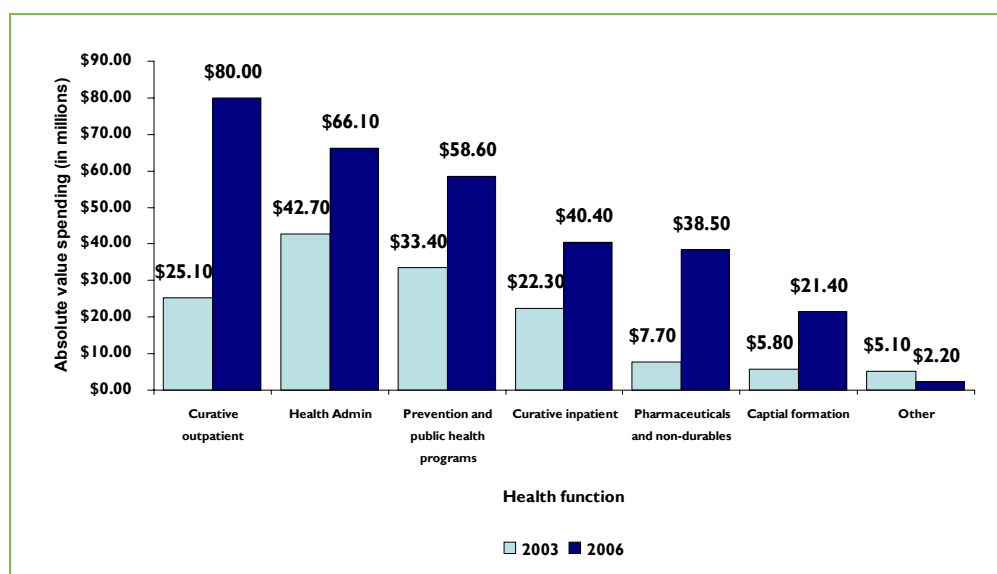
**TABLE 2.4: ABSOLUTE VALUES OF SPENDING BY TYPE OF HEALTH FUNCTION, 2003 AND 2006**

Health function	2003	2006	Magnitude of increase from 2003
Curative inpatient	RWF 12,320,398,874 \$ 22,330,081	RWF 22,309,316,746 \$ 40,434,474	1.8
Curative outpatient	RWF 13,849,937,515 \$ 25,102,290	RWF 44,134,254,211 \$ 79,991,036	3.2
Prevention and public health programs	RWF 18,431,756,084 \$ 33,406,597	RWF 32,311,125,588 \$ 58,562,231	1.8
Pharmaceuticals and nondurables	RWF 4,221,056,191 \$ 7,650,444	RWF 21,251,457,433 \$ 38,517,159	5
Health administration	RWF 23,576,846,490 \$ 42,731,806	RWF 36,491,542,125 \$ 66,139,019	1.5

Health function	2003	2006	Magnitude of increase from 2003
Capital formation	RWF 3,190,281,786 \$ 5,782,219	RWF 11,829,084,546 \$ 21,439,599	3.7
Other	RWF 2,827,239,532 \$ 5,124,224	RWF 1,224,865,331 \$ 2,220,005	0.4
Total	RWF 78,417,516,472 \$ 142,127,662	RWF 169,574,434,271 \$ 307,344,826	2.2

\* Reported in constant 2006 currency to facilitate comparisons across years

**FIGURE 2.16: COMPARISON OF ABSOLUTE VALUES OF SPENDING ON HEALTH FUNCTIONS, 2003 AND 2006**

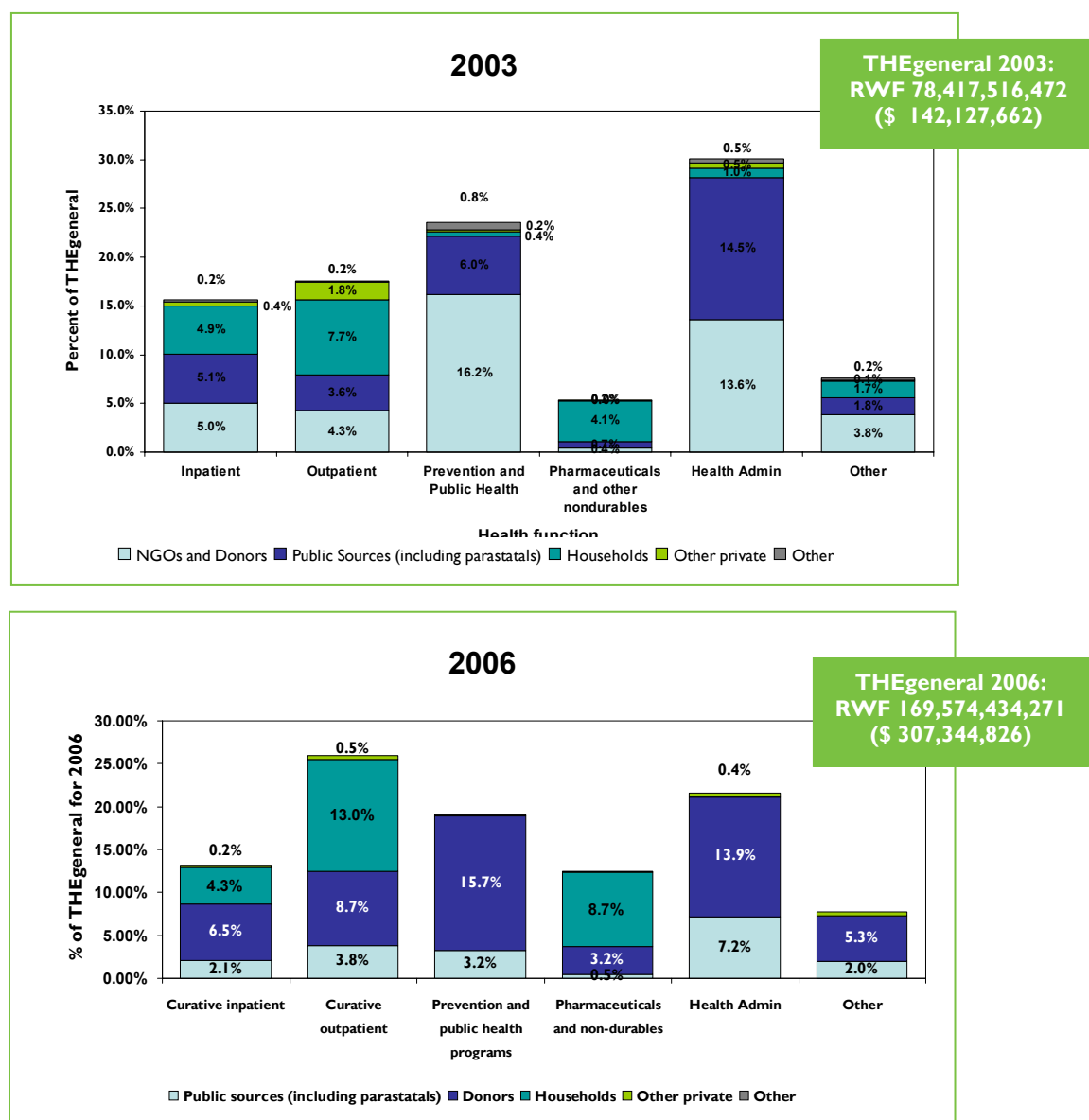


\* Reported in constant 2006 currency to facilitate comparisons across years

## 2.7.1 WHO FINANCES WHAT HEALTH FUNCTIONS?

A third of all government spending on health is on administration, more than what public sources spent on curative care (see Figure 2.17). This does not necessarily mean that too much is spent on administration if the role of the government is primarily regulation of the health sector.

**FIGURE 2.17: FINANCING SOURCES OF OVERALL HEALTH CARE FUNCTIONS IN 2003 AND 2006**



In 2003, households, donors, and public financing sources spent on curative services in about the same proportions. By 2006, the financial burden fell mostly on households and donors. Households spent health funds primarily on outpatient services (and are the largest financier of this function) and pharmaceuticals in 2006. Private companies and private insurance also spent their health funds primarily on outpatient services.

In absolute terms, spending on prevention and public health increased, principally due to contributions by donors on these health services.

Funding for pharmaceuticals and nondurables rose dramatically, from 4.2 percent to 13 percent of  $THE_{general}$ , and was shouldered mainly by households.

## 2.7.2 PRIORITY AREAS OF HEALTH

HIV/AIDS, malaria, and RH are the three major priority areas for the GoR, consuming 42.9 percent of total health resources (Figure 2.18).

**FIGURE 2.18. RWANDA'S HEALTH CARE PRIORITIES, 2006**

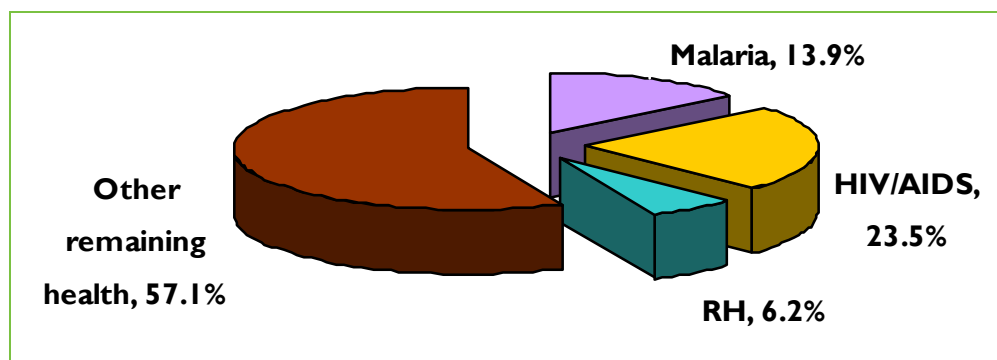


Figure 2.19 shows the level of spending by each financier on the different areas of health in 2006. The figure also shows how each financing source allocates its resources to specific health areas.

Donors allocate a significant proportion of their resources to HIV/AIDS. In 2006, PEPFAR and the Global Fund, among many other donors, stepped up the level of funding for this disease.

In contrast, the private sector is incurring a significant burden of costs for treating or preventing malaria (which was the leading cause of morbidity in Rwanda).

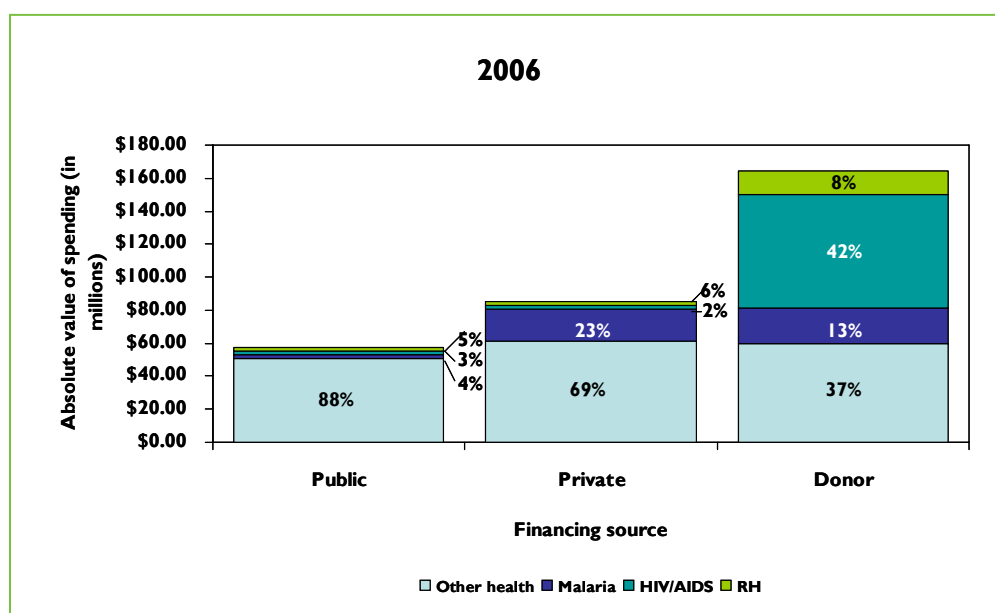
The Rwandan Demographic and Health Survey (DHS) 2005 (NISR and ORC Macro 2005)<sup>11</sup> reported poor health outcomes for RH. As a health area, RH received fewer contributions from health sector development partners in comparison with the other diseases noted here.

The next three chapters discuss the subaccount estimations conducted in tandem with the NHA on general health.

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<sup>11</sup> This publication will be referred to henceforth in this report as the DHS 2005.

**FIGURE 2.19. WHO IS FINANCING WHAT PRIORITY AREAS IN RWANDA?**



\* Reported in constant 2006 currency to facilitate comparisons across years

## 2.8 SUMMARY FINDINGS OF THE GENERAL NHA 2006

- Total health care expenditure has doubled.** Between 2003 and 2006,  $THE_{general}$  rose from RWF 78.4 billion (US\$ 142 million) to 169.6 billion (US\$ 307 million) largely due to increases in donor spending followed by household spending. Public spending increased from RWF 24.9 billion (US\$ 45 million) to RWF 31.8 billion (US\$ 58 million).  $THE_{general}$  as a percentage of GDP increased from 7 percent to 11 percent.
- Expenditure by donors and households has increased sizably.** Donor spending increased nearly threefold, from RWF 32.6 billion (US\$ 59 million) to RWF 90.5 billion (US\$ 164 million), while private spending (mainly by households) increased from RWF 19.5 billion (US\$ 35 million) to RWF 47 billion (US\$ 85 million). Possible reasons for this are the following:
  - Households pay increased copayments to mutuelles.
  - Though  $THE_{general}$  has more than doubled between 2003 and 2006, most of the increase was in the area of targeted spending on diseases.
  - Most of the OOP spending went to private pharmacies (39 percent). The Rwandan population may have had a higher utility for proprietary drugs compared with generic medicines offered in the public sector and insurance mechanisms.
  - Data for traditional healers in 2006 were more robust than in previous years.
  - GDP increased, which may have led to an increase in disposable income and therefore an increase in utilization. While the private sector is small, it is growing.
  - Health care utilization was 0.3 per capita in 2003 and 0.7 per capita in 2006.
- Spending on curative care has increased greatly, likely due to an increase in health-seeking behavior, which often falls on households.**

- **Households also shoulder the largest burden of curative care spending and drugs bought at independent pharmacies.**
- **Donors now contribute over half of all health expenditures.** In 2006, donors now contribute 53 percent of THE<sub>general</sub>, followed by private sources at 28 percent and the public sector at 19 percent. The high donor contribution is due partly to an influx in HIV/AIDS and other disease-specific spending.
- **Donors direct their health funding primarily to prevention and public health programs, health administration, and curative care.**
- **The MoH is now largely financed by donors (64 percent); the government funds 36 percent.**
- **MoH programmatic control over health care funds has increased.** The NHA findings show that the MoH now controls 28 percent of health funds in Rwanda, closely followed by implementing agencies at 27 percent and households at 23 percent.
- **Mutuelles are largely financed by households (70 percent). However, in 2006, mutuelles were subsidized by donors, private firms, and the government.**
- **Government investment in health as a share of overall government spending decreased from 9 percent in 2003 to 6.5 percent in 2006.** The goals of the Abuja declaration state that governments should spend 15 percent of their funds on health by the year 2015. However, total government spending was dramatically higher in 2006, which accounts for the decreased percentage for health care. Absolute government spending on health continues to increase.



## 3. HIV/AIDS SUBACCOUNTS

### 3.1 BACKGROUND

The Republic of Rwanda, with one of the highest population densities in the world, faces a challenge in fighting the HIV/AIDS epidemic. It desperately needs qualified health professionals to address the epidemic. There is one doctor for every 50,000 people and one nurse for every 3,900 people; the impact of this lack of human resources is most severe in rural areas (United Nations General Assembly Special Session on HIV/AIDS [UNGASS] 2008). However, Rwanda has strong political leadership in the HIV/AIDS area and this is a critical catalyst for action at the national level.

In recent years, the country experienced a dramatic scale-up of HIV/AIDS programs due to an increase in available funding. In particular, donor funds for HIV/AIDS rose dramatically with the introduction of such funding mechanisms as the Global Fund to Fight AIDS, Tuberculosis and Malaria (2003), and PEPFAR (2004). The government created the National AIDS Control Commission (*Commission Nationale de Lutte contre le SIDA* [CNLS]) in 2000 after restructuring the National Program for HIV/AIDS Control, which has helped the government coordinate many of the ongoing activities from donors and public funding. The NHA HIV/AIDS subaccount sheds light on actual expenditures by these sources and others. It also provides insight into the financial burden of HIV/AIDS on PLHIV in comparison with the general population and the financial impact before and since the donor influx began.

### 3.2 HIV PREVALENCE IN RWANDA

UNAIDS estimates the total number of PLHIV in Rwanda was 160,000 in 2006.<sup>12</sup> Of the 160,000, an estimated 6 percent of adults were considered in need of antiretroviral therapy (ART) but not receiving it, 20 percent were in need and on ART, and 74 percent did not need ART.<sup>13</sup>

Recognizing the threat of the disease, both the GoR and donors working on the issue of HIV are committed to halt and reverse the spread of the epidemic in the period 2008-2012. The health sector during the timeframe of Rwanda's Economic Development and Poverty Reduction Strategy aims to ensure that (i) HIV counseling and prevention of mother-to-child transmission (PMTCT) services are routine during prenatal and postnatal visits, (ii) circumcision of young males will be promoted to reduce transmission, (iii) screening and testing of children will be expanded, (iv) evidence-based measures will be taken to combat ignorance and disseminate knowledge about the causes of HIV, (v) promotion of condom use will be scaled up, (vi) awareness programs will take into account the drivers of the epidemic including cultural norms, poverty, and gender inequality, and (vii) populations at high risk of exposure are targeted.

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<sup>12</sup> Similar estimates exist, such as one from the spectrum mathematical model within the GoR at 151,504. The NHA selected the UNAIDS estimate based on the level of detail indicated in computing the number, and because it is the internationally accepted number.

<sup>13</sup> Figures based on *World Health Report* ([www.who.int/whr/en/](http://www.who.int/whr/en/)) and Rwandan MoH data. See methodology in Annex C for further information on sources of data.

### 3.3 TOTAL RESOURCE ENVELOPE FOR HIV/AIDS HEALTH CARE

As Table 3.0 shows, total spending on HIV/AIDS (THE<sub>HIV</sub>)-related health services in 2006 is RWF 40,482,722,686 (US\$ 73 million), 24 percent of THE<sub>general</sub>. In absolute terms, HIV/AIDS health spending has increased fivefold. HIV/AIDS health spending is 84 percent of total HIV/AIDS (including non-health spending like legal support to PLHIV, stigma reduction campaigns, and income support).

**TABLE 3.0: HIV/AIDS INDICATORS AND NHA FINDINGS FOR EXPENDITURE ON HIV/AIDS SERVICES, 2000-2006**

Indicators	2000*	2002*	2006
HIV seroprevalence rate (adults)	5.1% (estimated)	5.1%**	3%***
Number of PLHIV	200,000 (estimated)	199,279**	160,000 <sup>δ</sup>
Total HIV/AIDS health expenditure (THE <sub>HIV</sub> )	RWF 3,161,151,656 (US\$ 5,729,423)	RWF 6,557,070,605 (US\$ 13,804,359)	RWF 40,482,722,686 (US\$ 73,373,091)
HIV/AIDS health spending per PLHIV	RWF 15,806 (US\$ 28.65)	RWF 32,903 (US\$ 69.27)	RWF 253,017 (US\$ 459.58)
HIV/AIDS health spending as a % of THE <sub>general</sub>	8.0%	14.7%	24%
HIV/AIDS health spending as a % of GDP	0.3%	0.6%	2.6%
THE <sub>HIV</sub> as a % of total HIV/AIDS spending (health and non-health)	-	-	84%
Percent of THE <sub>HIV</sub> that is targeted for HIV/AIDS	-	-	99%
<b>Financing sources distribution as a % of THE<sub>HIV</sub></b>			
Public	8%	9%	3%
Private	43%	17%	2.4%
Households account for	41%	16%	2%
Donors	49%	75%	94%
<b>Financing agents distribution as a % of THE<sub>HIV</sub></b>			
Public	25%	27%	39% <sup>δδ</sup>
Private	43%	16%	54%
Donor and NGO	32%	57%	7%
<b>Providers distribution as a % of THE<sub>HIV</sub></b>			
Public providers	33%	16%	27%
-Public hospitals	24%	11%	17%
-Public health centers	9%	5%	10%
Private providers	9%	3%	5%
-Private for-profit hospitals	8%	2%	5%
-Private for-profit health centers/clinics	1%	1%	0%
Government assisted not-for-profit providers (agrées)	5%	3%	8%
-Agrée hospitals	2.6%	1%	2%
-Agrée health centers	2.8%	2%	6%
Private pharmacies	7%	3%	0.4%
Provision and administration of public health programs	46%	66%	57%
Traditional healers	-	-	0.2%
Other	0%	9%	2.4%
<b>HIV/AIDS health spending by function</b>			
Prevention and public health programs	46%	66%	29.7%
Curative care	48%	23%	37.7%

Indicators	2000*	2002*	2006
-Inpatient	14%	7%	9.8%
-Outpatient	34%	15%	27.9%
Administration	0%	9%	23%
Capital formation	-	-	8%
Pharmaceuticals and other non-durables from independent pharmacies	7%	3%	11.9%
Other	-	-	1.1%

\*All US\$ amounts for 2000 and 2002 are in constant 2006 US\$ to facilitate comparison across years. The CPI was used for the conversion (70.88 for 2000 and 74.71 for 2002). Source for CPI data: NISR (<http://www.statistics.gov.rw>).

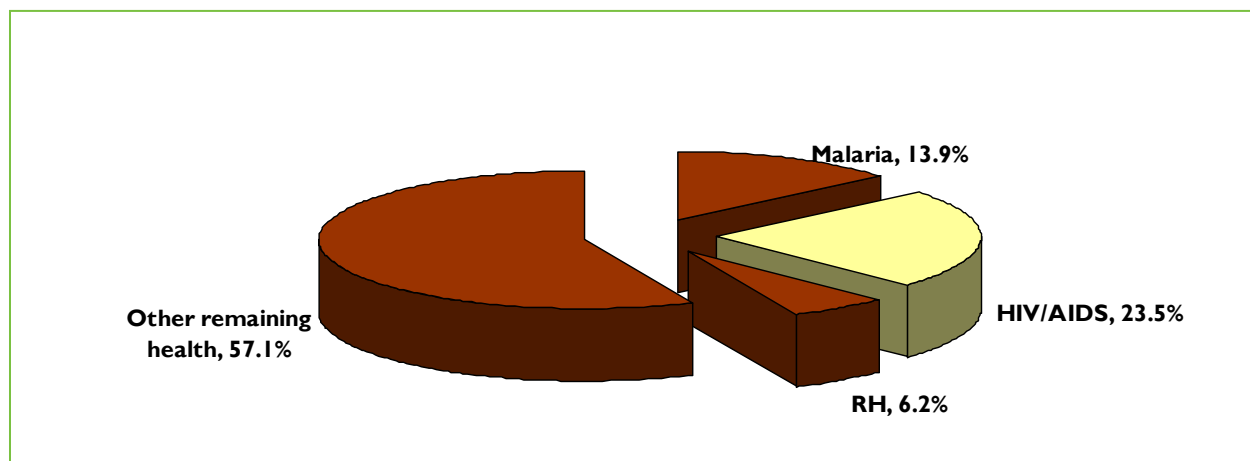
\*\*UNAIDS (2004) [www.unaids.org](http://www.unaids.org)

\*\*\*DHS 2005

□ UNAIDS estimate, 2006 [www.unaids.org](http://www.unaids.org)

□ Includes projects funded by donors that are housed under CNLS (e.g., World Bank MAP, UNDP, African Development Bank)

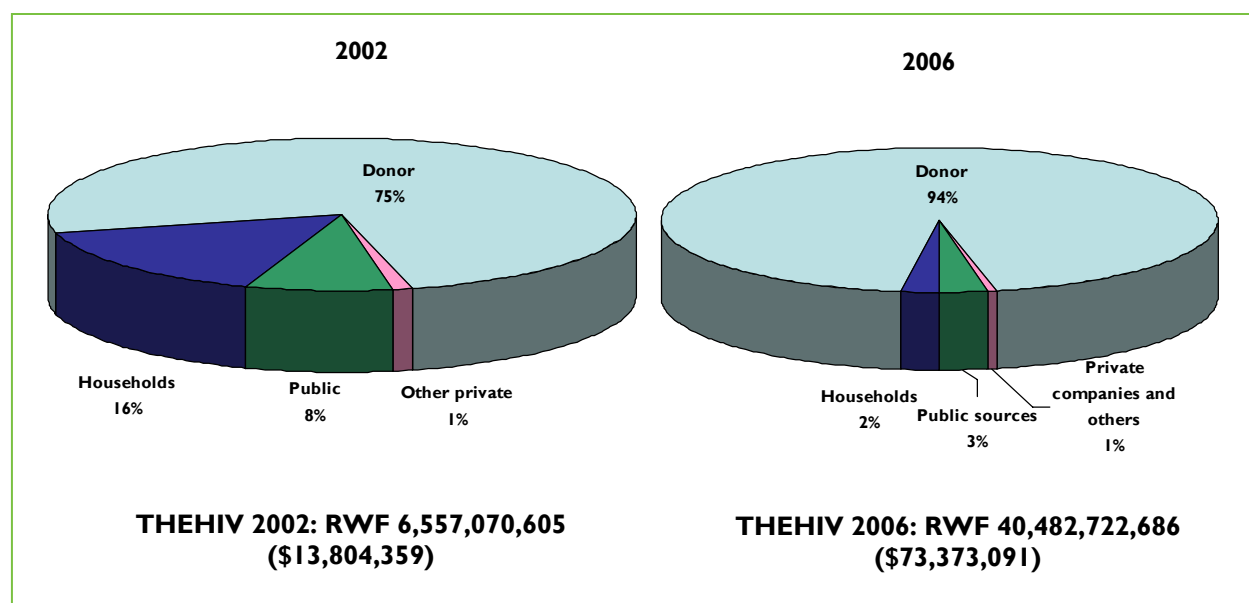
**FIGURE 3.0. MALARIA, HIV/AIDS, AND RH IN THE CONTEXT OF GENERAL HEALTH EXPENDITURES, 2006**



### 3.4 FINANCING SOURCES FOR HIV/AIDS SERVICES

Most funding for HIV/AIDS services in Rwanda comes from donors (94 percent in 2006, up from 75 percent in 2002), followed by public sources at 3 percent, households at 2 percent, and other private sources below 1 percent (Figure 3.1). In absolute terms, donor contributions increased eightfold between 2002 and 2006 (Table 3.1) – perhaps not surprisingly, as grant monies had begun to flow from new global initiatives such as the Global Fund and PEPFAR. The level of the household contribution is smaller in 2006 than in 2002, in absolute and relative terms. Relatively, the percentage contribution from public financing sources is smaller for  $THE_{HIV}$ , even though the contribution has almost doubled in absolute terms.

**FIGURE 3.1: WHERE DO HIV/AIDS MONIES COME FROM, 2002 AND 2006?**



\* Reported in constant 2006 currency to facilitate comparisons across years

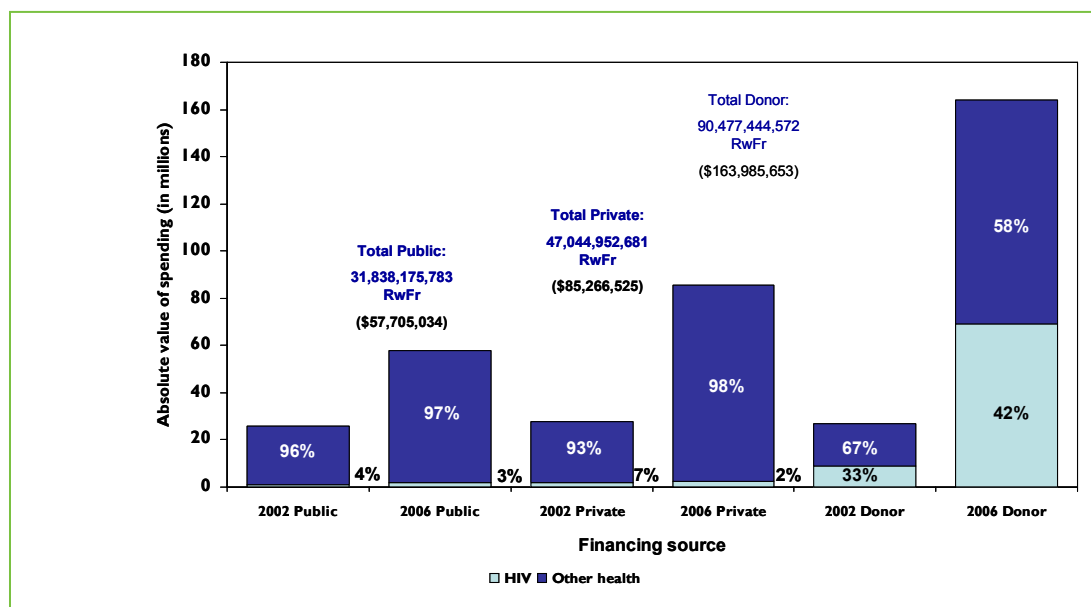
**TABLE 3.1: ABSOLUTE VALUES OF FINANCING SOURCE CONTRIBUTIONS TO HIV/AIDS SERVICES, 2002 AND 2006**

Financing source	2002*		2006		Magnitude of increase from 2002
Public (incl parastatals)	RWF 563,167,283	US\$ 1,020,711	RWF 1,079,984,145	US\$ 1,957,415	1.9
Households	RWF 1,020,258,690	US\$ 1,849,166	RWF 950,475,493	US\$ 1,722,687	0.9
Other private	RWF 74,743,084	US\$ 135,468	RWF 11,272,061	US\$ 20,430	0.2
Donor	RWF 4,897,853,051	US\$ 8,877,103	RWF 38,227,129,752	US\$ 69,284,680	7.8
Other	RWF 1,048,496	US\$ 1,900	RWF 213,861,233	US\$ 387,612	204.0

\* Reported in 2006 currency to adjust for inflation when comparing across years

Figure 3.2 shows the financing source contributions to HIV/AIDS services in the context of general health. As noted above, in absolute terms, public spending on HIV/AIDS has doubled since 2002; private spending has decreased slightly. Donor allocations to HIV/AIDS have doubled, from 11 percent to 22.5 percent of total health spending, a result of a dramatic increase in absolute donor spending on HIV/AIDS.

**FIGURE 3.2: SHARE OF FINANCING SOURCES' HEALTH RESOURCES GOING TO HIV/AIDS, 2002 AND 2006**



Reported in constant 2006 currency to facilitate comparisons across years

The figure also illustrates how public and donor sources financially prioritize HIV/AIDS. In 2002, 4 percent of public expenditures went to HIV/AIDS activities. This percentage stayed relatively constant in 2006. In 2002, one-third, or 33 percent, of donor expenditure was for HIV/AIDS; in 2006, this percentage was 42 percent.<sup>14</sup>

### 3.5 FINANCING AGENTS: MANAGERS AND IMPLEMENTERS OF HIV/AIDS HEALTH FUNDS

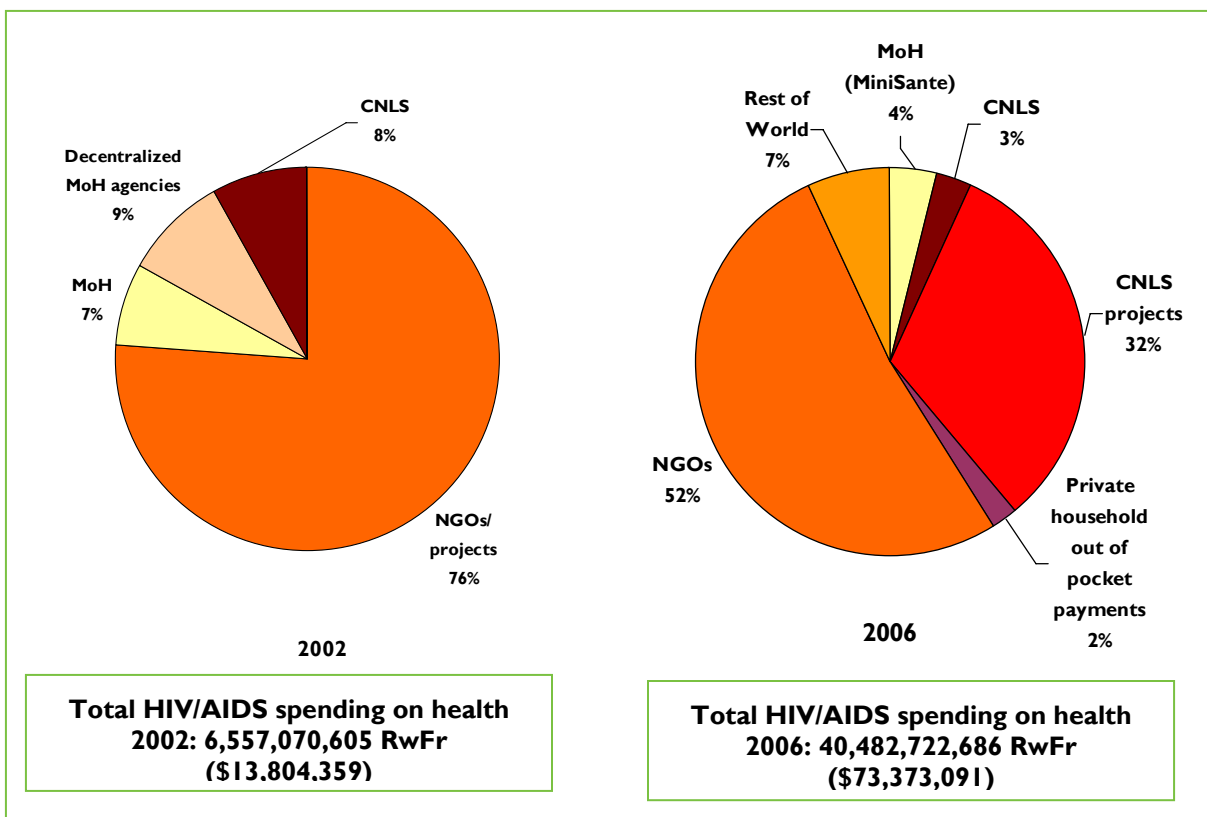
As mentioned above, financing agents are entities that exercise programmatic control over the funds received from financing sources. It should be noted that particularly in regard to HIV/AIDS spending, funds may have multiple pass-throughs before they reach providers. The NHA team interviewed key informants to identify the entity with the most programmatic control over the funds; that entity was then treated as the financing agent.

As Figure 3.3 shows, a major shift in financing agents occurred between 2002 and 2006: In 2002, NGOs managed 76 percent of  $THE_{HIV}$ ; by 2006, their share had shrunk to 52 percent. In contrast, the CNLS, which managed only 8 percent of  $THE_{HIV}$  in 2002, in 2006 had projects that represented one-third of  $THE_{HIV}$ . CNLS projects now include grants from the Global Fund, World Bank MAP, UNDP, and others;

<sup>14</sup> These percentages include untargeted spending counted under the HIV subaccount in order to account for “general” health spending in facilities that see AIDS patients. For example, the HIV subaccount counts a percentage of a doctor’s salary when the doctor sees PLHIV. See Annex C on the NHA methodology for further information on untargeted spending.

in 2002, these funds were in the NGO/projects category. This is the result of better coordination of HIV/AIDS programs on the part of the GoR.<sup>15</sup>

**FIGURE 3.3: MANAGERS OF THE<sub>HIV</sub> IN RWANDA, 2002 AND 2006**

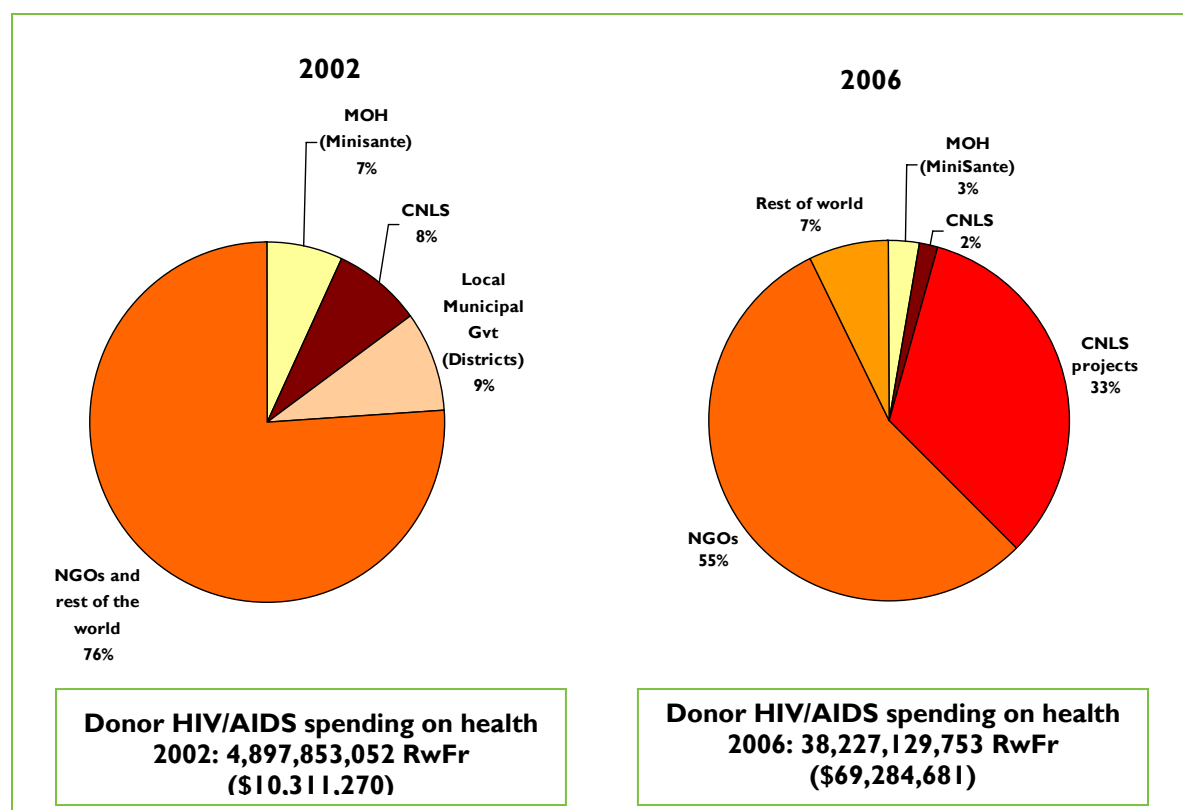


\* Reported in constant 2006 currency to facilitate comparisons across years

As Figure 3.4 illustrates, because donor funding comprises so great a percentage of THE<sub>HIV</sub>, managers of donor funds for HIV services are virtually identical to those of overall HIV funding in both 2002 and 2006.

<sup>15</sup> The category “CNLS projects” in Figure 3.5 was created as a result of the issue of multiple financing agents. The Global Fund, for example, passes funding through its country office, but the country office is housed within the CNLS, which helps program the funds. To recognize the government’s coordination of these country program funds, NHA created the category of CNLS programs. Expenditures on CNLS programs is distinct from expenditure on the CNLS proper (the CNLS office housing public employees), which exists mainly for administration and program management purposes.

**FIGURE 3.4: MANAGERS OF DONOR HIV/AIDS FUNDS IN RWANDA, 2002 AND 2006**



\* Reported in constant 2006 currency to facilitate comparisons across years

### 3.6 HOUSEHOLD OOP SPENDING ON HIV SERVICES

As households make decisions on whether and how to spend OOP on health, and HIV services in particular, they act as both financing sources and agents.

As noted above, households spent RWF 1,020,258,690 (US\$ 1,849,166) on HIV/AIDS services in 2002 and RWF 950,475,493 (US\$ 1,722,687) in 2006; this likely lowered OOP spending per HIV-positive individual from \$10.16 to \$9.78 (Table 3.2). Given that PLHIV tend to seek more health care than the general population, it is expected that they will spend slightly more on health care. Nevertheless, in 2006, PLHIV spend only 1.5 times more on health care than does the general population; in 2002, they had spent four times more. While this is due in part to increased subsidization of health care and a drop in HIV prevalence, it is mainly due to the doubling of OOP spending on general health care. (See section 2.5.2 for possible reasons for increased general OOP spending.)

**TABLE 3.2: HOUSEHOLDS IN RWANDA AS FINANCING AGENTS: OOP SPENDING ON HEALTH BY PLHIV AND THE GENERAL POPULATION, 2002 AND 2006**

	2002*	2006
HIV OOP per HIV-positive individual	\$10.16	\$9.78
General OOP per capita	\$2.85	\$ 7.66
Magnitude of increase in OOP spending by HIV-positive individuals	4	1.5

\* Reported in constant 2006 currency to facilitate comparisons across years

In 2006, OOP spending goes primarily to public hospitals and public health centers (each at 23 percent of OOP), followed by independent pharmacies at 19 percent and traditional healers at 11 percent (Figure 3.5). This represents a decrease in OOP expenditures at public facilities since 2002 (from 35 percent at hospitals and 27 percent at health centers), but an increase in OOP expenditures at private/independent pharmacies (up from 16 percent in 2002). It should be noted that the decrease in OOP spending at public hospitals does not necessarily indicate a lower utilization rate of the hospitals for HIV/AIDS care.

**FIGURE 3.5: PROVIDERS CONSUMING HOUSEHOLD OOP HIV/AIDS FUNDS, 2002 AND 2006**

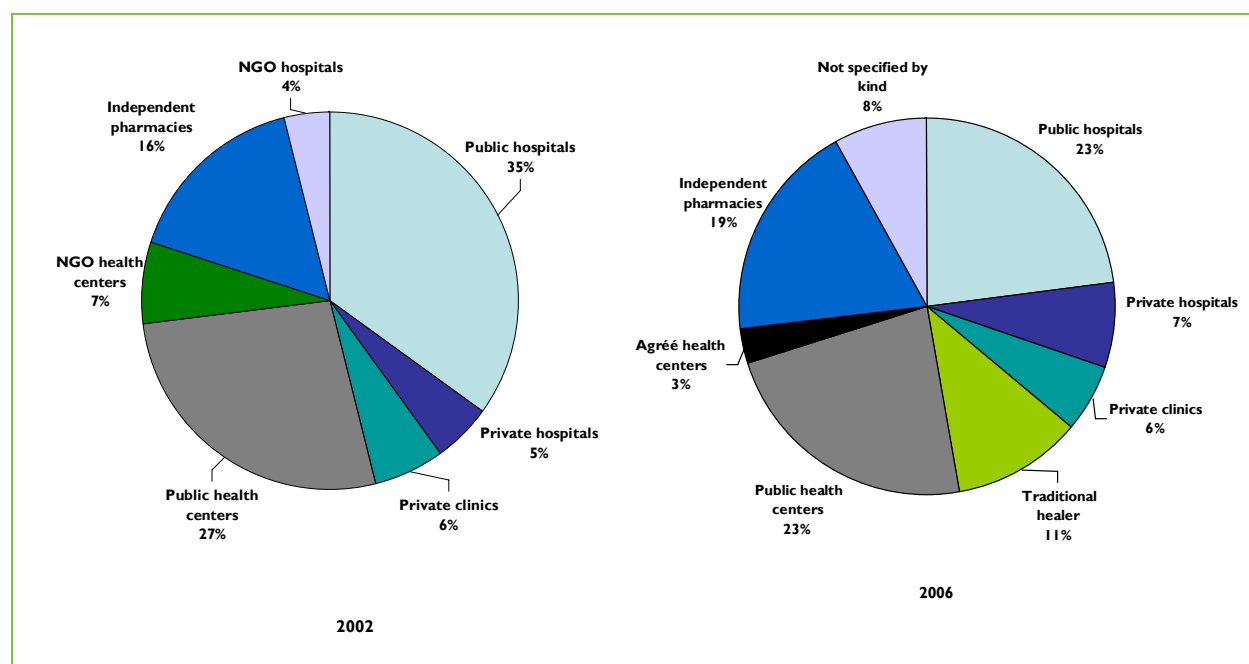
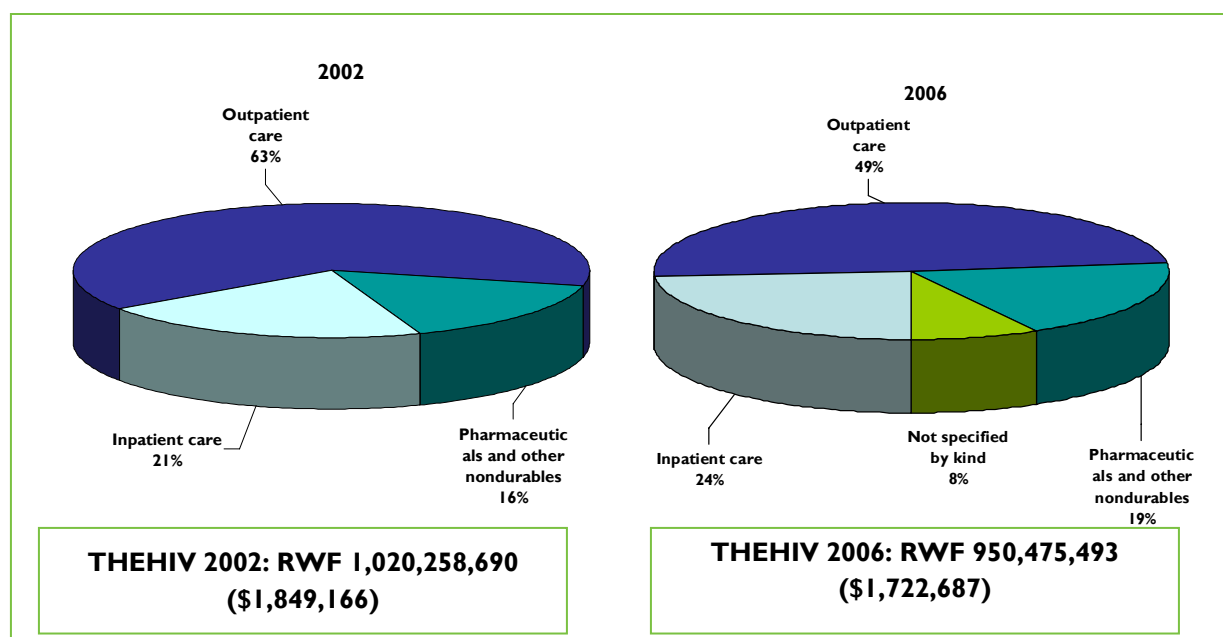


Figure 3.6 shows the breakdown of household OOP spending on inpatient and outpatient care and pharmacies. The relative share of expenditures has shifted from outpatient care (which decreased from 63 percent of household OOP expenditures on HIV services in 2002 to 49 percent in 2006) to inpatient care (which has increased from 21 percent in 2002 to 24 percent in 2006).

Subaccount findings from 2006 show a significant percentage (11 percent) of household OOP spending going to traditional healers, a category not included in 2002 findings due to a lack of quality data for that year (see Annex C for data sources of spending on traditional healers in 2006).



**FIGURE 3.6. HIV SERVICES BOUGHT WITH HOUSEHOLD OOP SPENDING, 2002 AND 2006**



\* Reported in constant 2006 currency to facilitate comparisons across years

### 3.7 ADDITIONAL ANALYSIS OF PLHIV OOP SPENDING AND UTILIZATION

The Rwandan DHS 2005, a nationally representative population-based survey, revealed HIV prevalence in adults to be 3 percent. The study also estimated prevalence among urban populations at 7.3 percent compared with 2.2 percent in rural populations. The relative ease of movement within a small country and frequent contact with people in the urban areas poses a high risk of infection to the large rural population (83 percent of the population).

Nurses provided a majority of the medical care for people living with HIV, even for the wealthiest Rwandans (Table 3.3). For the urban poor, nurses provide 94 percent of outpatient visits; only 3 percent of urban patients are much more likely to visit a doctor instead of a nurse. For the richest fifth of city-dwellers, 44 percent of outpatient visits are to doctors.

**TABLE 3.3: OOP SPENDING PER VISIT, BY PERSON PROVIDING CARE**

		For those with non-zero spending, amount spent on visit (RWF)		
	No spending	Lower Quartile	Median	Upper Quartile
Doctor	20.6%	150	400	1,200
Nurse	16.5%	100	200	395
Healer	49.6%	200	500	1,000
Other	52.1%	100	200	500
Total	23.9%	100	200	500

Traditional healers are mentioned in 15 percent of PLHIV outpatient visits. Most of these are in rural areas. (Because five out of every six respondents are rural, the table for rural areas closely resembles the national total, and is not shown separately here.)

The poorest Rwandans living with HIV use fewer traditional healers than those with slightly higher incomes, perhaps because traditional healers charge nearly as much as doctors, and substantially more than nurses (Table 3.3).

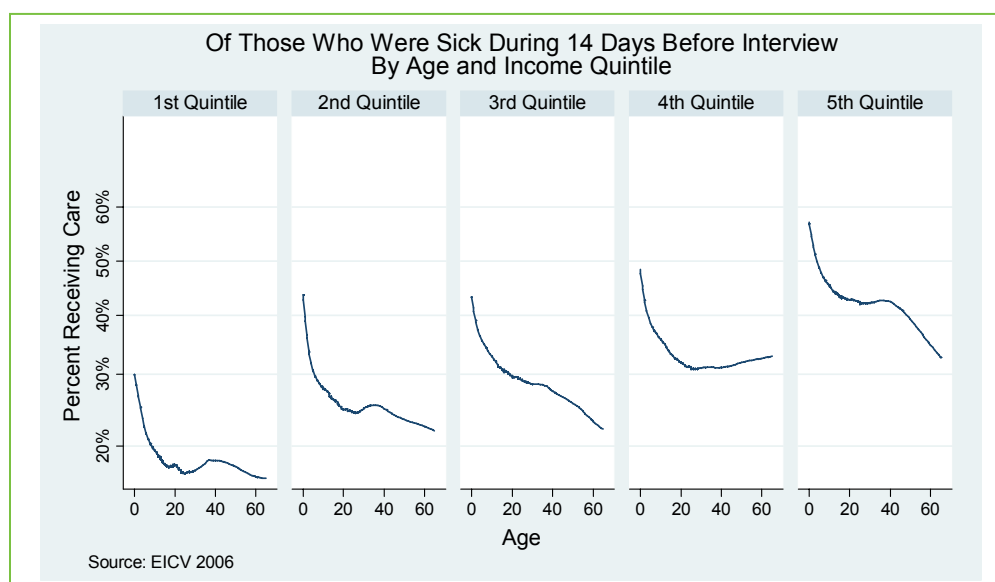
The richest Rwandans spent more than six times as much annually as the poorest (Table 3.4).<sup>16</sup> As a share of their total income, however, the richest spend about 2 percent of total consumption, compared with nearly 4 percent for the poorest quintile. The greatest difference is between the richest fifth and the remaining 80 percent of the population.

**TABLE 3.4: SPENDING ON CARE, BY INCOME QUINTILE**

	Annual Spending	Percent of Income
Poorest	1,149	3.6%
Second Quintile	2,294	4.0%
Third Quintile	2,181	2.7%
Fourth Quintile	3,481	2.9%
Richest	7,368	1.9%

Nearly 20 percent of the respondents to the EICV2 interview said they had experienced a health problem during the two weeks preceding the interview. Just under a third of these saw a health provider during that period. (Some patients with an illness that began more than 14 days before the interview might have seen a provider outside the two-week recall period.) Children were significantly more likely to receive care than adults (Figure 3.7).

**FIGURE 3.7: PATIENTS WHO RECEIVED MEDICAL CARE, BY AGE AND INCOME QUINTILE**



<sup>16</sup> The 95% confidence interval is that the richest quintile spent 4.5 to 8 times as much as the poorest quintile.

At every age, high-income households (PLHIV) are more likely to obtain care. Adults and children over the age of two in the richest fifth of the households (as measured by consumption) are about twice as likely to receive care as those in the poorest fifth (Table 3.5). Infants of two years or younger are about 70 percent more likely to receive care if they live in a high-income household than if they live in the poorest households.

**TABLE 3.5: PATIENTS WHO RECEIVED MEDICAL CARE, BY AGE AND INCOME QUINTILE**

Age	Expenditure quintile					Total
	Poorest	2nd Quintile	3rd Quintile	4th Quintile	Richest	
Less than 2	31%	45%	45%	46%	54%	45%
2 to 4	25%	33%	35%	42%	51%	37%
5 to 14	16%	20%	29%	29%	39%	26%
15 to 24	15%	28%	34%	34%	41%	31%
25 to 34	22%	29%	26%	28%	45%	32%
35 to 44	20%	25%	34%	34%	48%	31%
45 to 55	17%	24%	21%	31%	37%	26%
Over 55	18%	23%	19%	27%	35%	25%
Total	20%	27%	31%	34%	43%	31%

About half of all visits occurred at health care centers (Table 3.6). However, richer households, and those in urban areas are more likely to visit other types of providers. Among the richest fifth of urban households, nearly one-third of outpatient visits are to hospitals and another 9 percent are to clinics. Very few poor people visit hospitals, and almost none visit clinics. The “other” locations in Table 3.6 include the homes of patients and providers, which are common locations for traditional healers, as well as pharmacies and a few other less common venues.

**TABLE 3.6: PLACE OF MEDICAL CARE, BY INCOME AND PLACE OF RESIDENCE**

	Expenditure quintile					
	Poorest	2nd Quintile	3rd Quintile	4th Quintile	Richest	Total
Rwanda						
Hospital	7%	8%	8%	11%	23%	13%
Clinic	0%	0%	0%	1%	4%	1%
Dispensary	13%	10%	11%	16%	17%	14%
Health care center	51%	52%	54%	52%	40%	49%
Other	30%	31%	27%	20%	16%	23%
Urban Areas						
Hospital	3%	21%	12%	15%	30%	24%
Clinic	0%	0%	0%	3%	9%	6%
Dispensary	12%	6%	21%	39%	23%	23%
Health care center	45%	22%	54%	35%	27%	31%
Other	39%	51%	13%	8%	11%	15%
Total	100%	100%	100%	100%	100%	100%

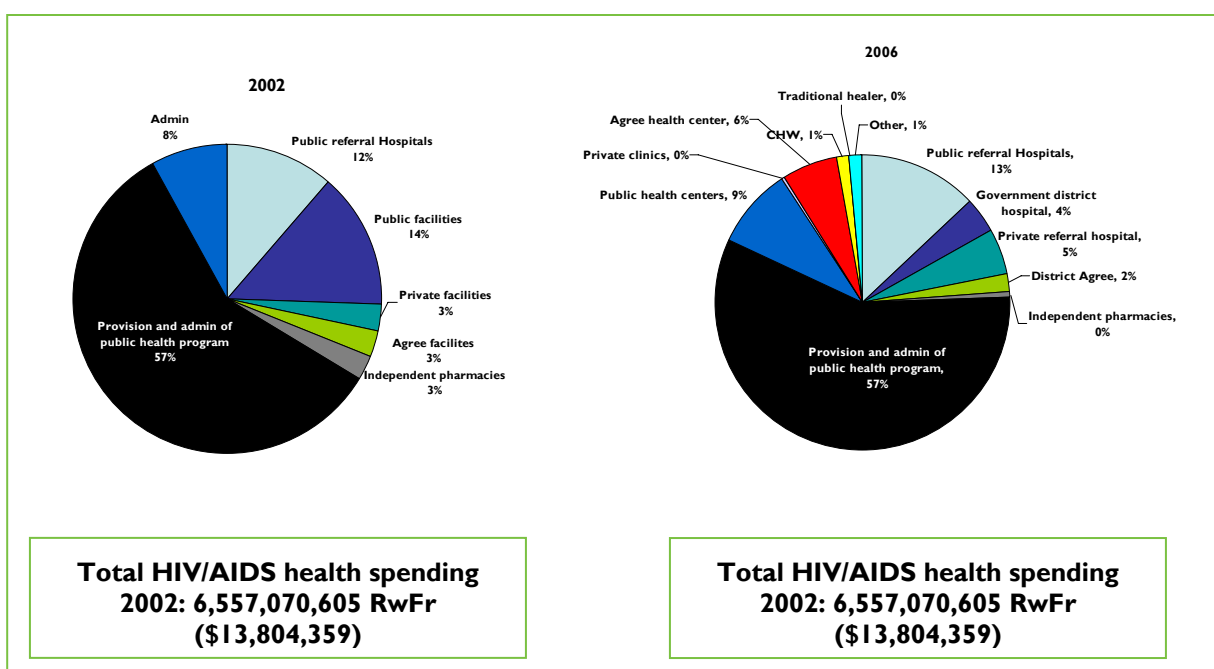
**TABLE 3.7: PERSON CONSULTED FOR MEDICAL CARE, BY INCOME AND PLACE OF RESIDENCE**

	Expenditure quintile					
	Poorest	2nd Quintile	3rd Quintile	4th Quintile	Richest	Total
<b>Rwanda</b>						
Doctor	12%	10%	13%	17%	31%	19%
Nurse	65%	64%	60%	66%	56%	61%
Healer	17%	22%	19%	13%	8%	15%
Other	7%	4%	8%	5%	5%	5%
<b>Urban Areas</b>						
Doctor	3%	21%	15%	32%	44%	35%
Nurse	94%	69%	71%	64%	50%	58%
Healer	3%	7%	13%	3%	3%	4%
Other	0%	3%	1%	0%	3%	2%
Total	100%	100%	100%	100%	100%	100%

### 3.8 PROVIDERS OF HIV/AIDS HEALTH SERVICES

As Figure 3.8 shows, in 2006, expenditures on HIV/AIDS services are made mainly at providers and administrators of public health programs (57 percent), followed by public referral hospitals at 13 percent. This is similar to the provider breakdown in 2002, although *agréé* hospitals and health centers comprise a larger share in 2006.

**FIGURE 3.8: DISTRIBUTION OF PROVIDERS OF HIV/AIDS SERVICES AND COMMODITIES, 2002 AND 2006**



## 3.9 HIV-RELATED HEALTH FUNCTIONS

### 3.9.1 HIV/AIDS HEALTH SERVICES CONSUMED

As Figure 3.9 shows, HIV/AIDS funds are consumed mainly by prevention and public health programs (29.7 percent) and outpatient curative care (27.9 percent).

**FIGURE 3.9: WHAT DO HEALTH FUNDS BUY? HIV/AIDS HEALTH SERVICES CONSUMED, 2006**

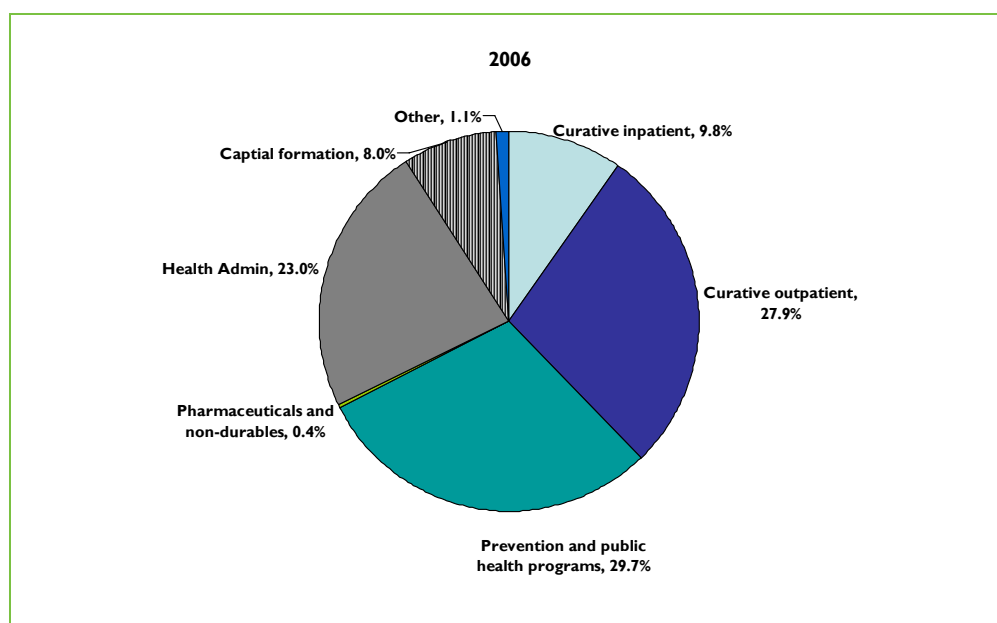
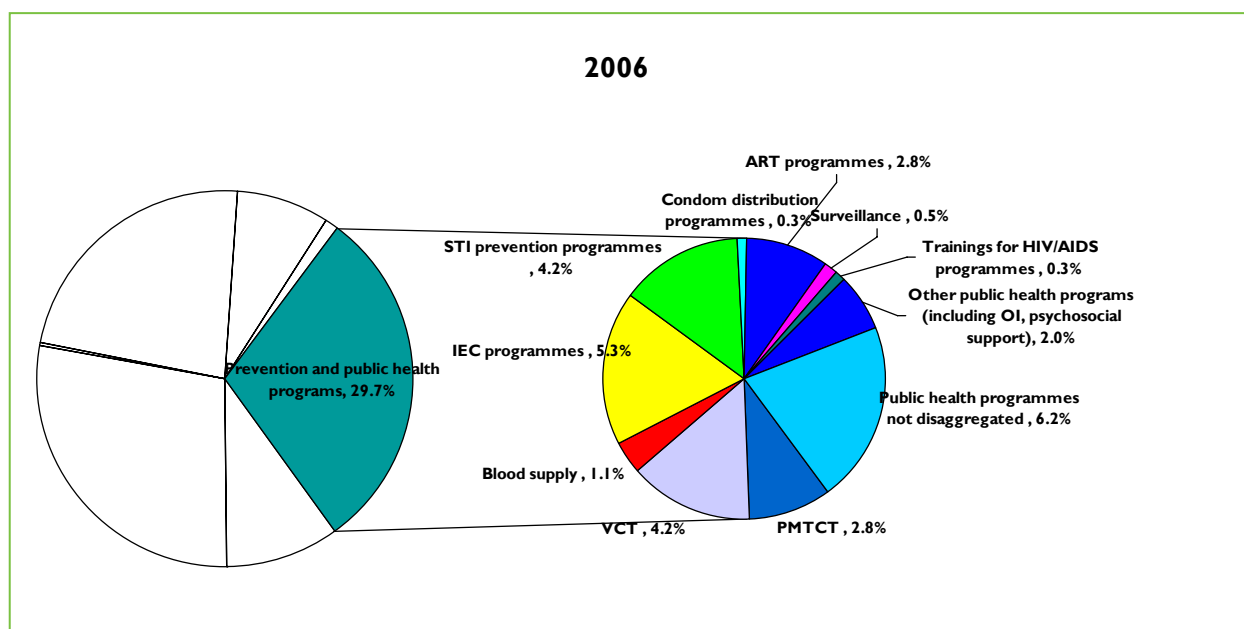


Figure 3.10 shows the disaggregation of prevention and public health programs achieved by the 2006 subaccount. Out of the amount of prevention and public health programs that could be disaggregated, 18 percent went to information, education and communication (IEC) programs (5.3 percent of  $THE_{HIV}$ ). STI prevention programs and voluntary counseling and testing (VCT) also consume significant portions of prevention and public health programs.

Spending on these health functions was counted under THE because they were considered expenditures with the primary purpose of improving or maintaining health. The 2006 subaccount also captured health-related and non-health functions, listed in Annex A.

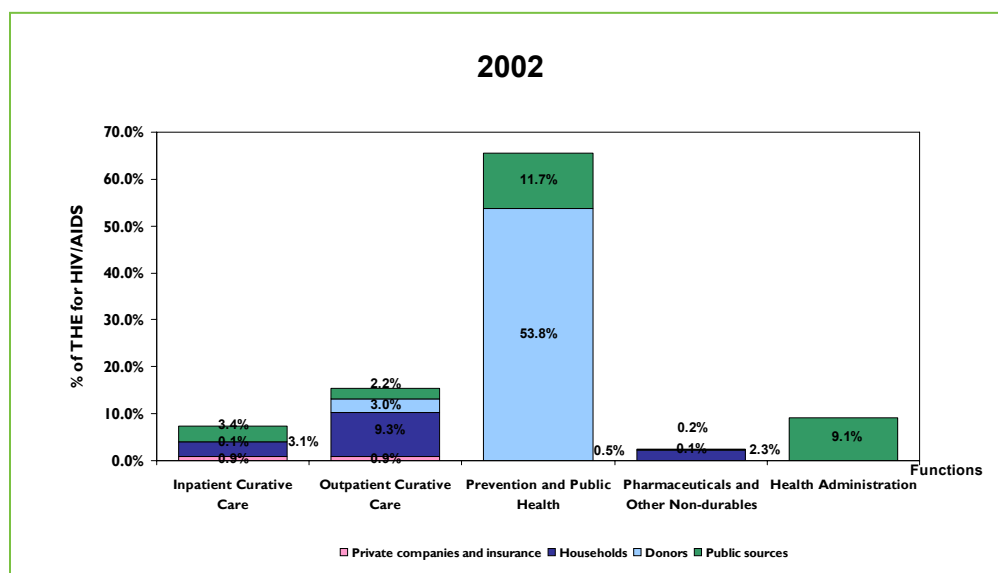
**FIGURE 3.10: BREAKDOWN OF EXPENDITURES ON PREVENTION AND PUBLIC HEALTH PROGRAMS, 2006**

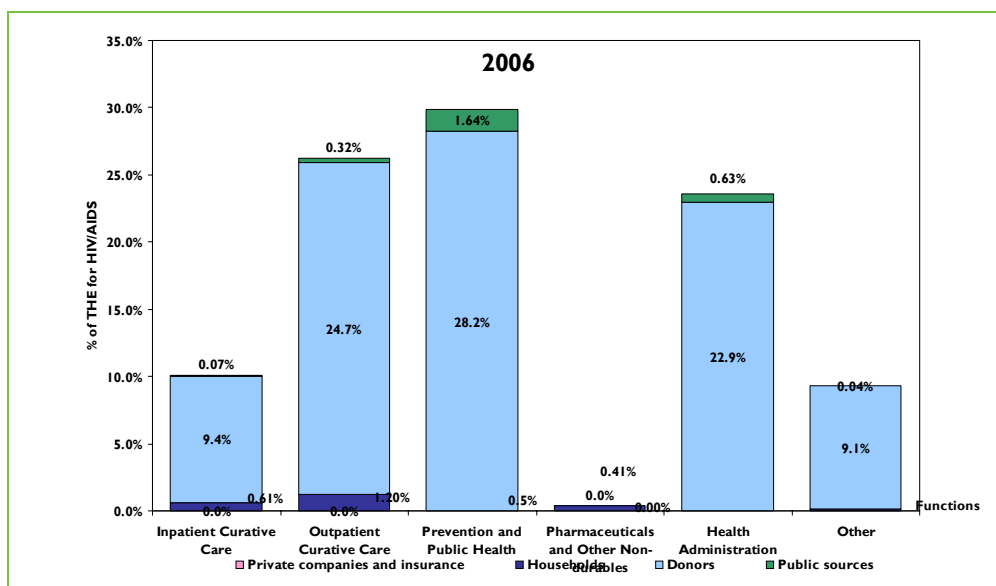


### 3.9.2 WHO FINANCES WHAT HEALTH FUNCTIONS?

Figure 3.11 shows which financing source spent on which HIV-related health function in 2002 and 2006. In 2006, donors finance the largest share of services across all functional categories. Public sources contribute the highest percentage (1.7 percent) of their HIV/AIDS monies to prevention and public health programs. Households contribute the largest percentage (1.2 percent) of their funds to outpatient care. Donor monies are distributed to prevention and public health (28.2 percent), health administration (22.9 percent), and outpatient curative care (24.7 percent).

**FIGURE 3.11: FINANCING SOURCES FOR HIV/AIDS-RELATED HEALTH CARE FUNCTIONS, 2002 AND 2006**





### UNAIDS/NHA Collaboration for NASA Matrix and HIV Subaccounts Tables

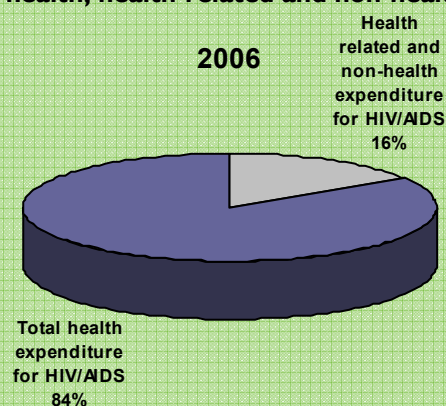
In addition to tracking HIV/AIDS health expenditures, the HIV subaccounts captured spending on health-related or non-health HIV/AIDS activities, such as income generation and legal services for PLHIV. The non-health spending component is considered external to  $THE_{HIV}$  (in order to maintain consistency with the general NHA framework) and analyzed separately. Data collection on HIV/AIDS spending was conducted by the NHA team, CNLS, and UNAIDS.

To track HIV-related expenditure for 2006, Rwanda submitted reports using two different frameworks, the National AIDS Spending Assessment (NASA) and the HIV subaccounts. The subaccounts and NASA matrix differ slightly to cater to different groups of stakeholders, but both report on HIV spending in a calendar year (as is the case in Rwanda). The subaccounts preserve the distinction between health and non-health expenditures to help meet the needs of health stakeholders. The NASA approach aims to inform a multisectoral AIDS perspective and can contribute to the HIV and AIDS resource gap estimation process. The NASA matrix is also necessary for reporting purposes to the United Nations General Assembly Special Session (UNGASS) on HIV/AIDS.

As per international NHA norms, the HIV/AIDS subaccounts reflect expenditures. Therefore, it differs from commitments and from disbursements, and captures in monetary terms the transactions for actual services rendered. To ensure complementary and harmonized findings, the two teams worked together during the data analysis stage. NASA spending categories were mapped to NHA codes and then populated using the values from the HIV subaccounts tables.

UNAIDS considers all spending on condoms to be an HIV expenditure while NHA attributes some of it to family planning. Therefore, data from the NHA RH subaccount was added to the NASA table. For trend analysis, spending data for 2005 collected according to NASA methodology were used, as reported in the 2006 UNGASS Report. The chapter on findings from this report can be found in Annex D.

**HIV/AIDS health, health-related and non-health spending**





### 3.10 SUMMARY

- **HIV/AIDS health expenditure increased fivefold between 2002 and 2006** (from RWF 6,557,070,605 [US\$ 14 million] to RWF 40,482,722,686 [US\$ 73 million]), **fueled mainly by donors**. HIV/AIDS health expenditures represent 24 percent of THE in Rwanda, making it the largest priority area.
- **In 2006, donors account for the vast share of HIV/AIDS expenditures**. Donors account for 94 percent of THE<sub>HIV</sub>, followed by public sources (3 percent), households (2 percent), and other private sources (1 percent). Donor funds coming into Rwanda in 2006 were twice as likely to be spent on HIV/AIDS services as in 2002.
- **The government now manages a larger share of HIV/AIDS activities (39 percent in 2006 as compared with 27 percent in 2002)**. By housing major projects such as World Bank's MAP, Global Fund, UNDP, and others under the auspices of CNLS, the government is able to track and coordinate HIV programs. As a result, independent NGOs and implementing agencies (via direct donor transfers) are managing smaller proportions of HIV/AIDS monies.
- **PLHIV in the richest quintile in Rwanda spend six times more annually on health than the poorest**, but only spend 2 percent of their total consumption as opposed to 4 percent by the latter. Nurses provide 94 percent of health care, mainly outpatient. In every income quintile, children are the most likely to obtain care.
- **Prevention and public health programs consume the largest share of HIV/AIDS funds, followed by curative care and health administration**. Within public health programs, IEC programs accounted for 18 percent (5.3 percent) of THE<sub>HIV</sub>.
- **Households have shifted some of their spending to inpatient care from outpatient care since 2002**.
- **The burden of health expenditure on PLHIV compared with the general population's health spending has decreased slightly since 2002**. Per capita spending by PLHIV has fallen, from \$10.16 to \$9.78.



## 4. MALARIA SUBACCOUNTS

### 4.1 INTRODUCTION

Malaria is the leading cause of morbidity in Rwanda, with a reported 1,357,170 cases diagnosed at the country's health facilities in 2006 (NISR 2006). Major interventions that were targeted at drastically decreasing the malaria burden include the following:

- The distribution of 1.4 million long-lasting insecticide-treated nets (LLINs) for children was integrated with a one-week measles vaccination campaign, bringing the rate of coverage from 17.4 percent in 2005 to 91 percent in 2006 among children under five.
- The MoH adopted a new policy for malaria treatment using the artemisinin-based combination therapy (ACT) of arthemether and lumefantrine (Coartem®), and purchased 2,649,600 doses of Coartem® for the 12-month period October 1, 2006 to September 30, 2007. The ACTs were introduced for distribution through public, private, and community-level channels. Other lines of treatment were prohibited to curb the then-increasing cases of malaria drug resistance.
- National IPT coverage in pregnant women includes the administration of two doses of sulfadoxine–pyrimethamine (SP) during the second and the third quarters of the pregnancy. This is combined with folic acid, iron, and mebendazole. The coverage of women on IPT increased to 43 percent in May 2006 and over 63 percent by the end of 2006 for the second dose.
- The Home-Based Management (HBM) Strategy of CHWs trained to detect malaria, provide preliminary treatment, and refer patients to health facilities was scaled up in six additional endemic districts and, by December 2006, boasted coverage over the catchment areas of 100 health centers and 7,719 CHWs. In most HBM districts, more than 80 percent of children are treated within 24 hours after developing a fever.

This chapter investigates the structures and relative financial burdens associated with malaria, and uses subaccount expenditure findings to identify causal or effective explanations. The cost-effective interventions listed above were scaled up in 2006, and in response, malaria health outcomes showed a significantly positive response (WHO 2006). In respect to changes from 2003 subaccount findings, readers should keep in mind that 2003 was before Global Fund and PMI contributions to the malaria funding basket started arriving, whereas 2006 is post-Global Fund and PMI.

The 2006 malaria subaccount findings are useful not only in comparison with the 2003 baseline, but will also help to measure the true effects of the aforementioned interventions in the future.

### 4.2 TOTAL RESOURCE ENVELOPE FOR MALARIA

As Table 4.0 shows, absolute spending on malaria ( $THE_{\text{malaria}}$ ) has nearly doubled, from RWF 13 billion (US\$ 25 million) in 2003 to RWF 23 billion (US\$ 43 million) in 2006. There has been a decrease in malaria's relative share of THE, from 17.6 percent to 13.9 percent (Figures 4.0 and 4.1), attributable to an increase in spending on HIV/AIDS.

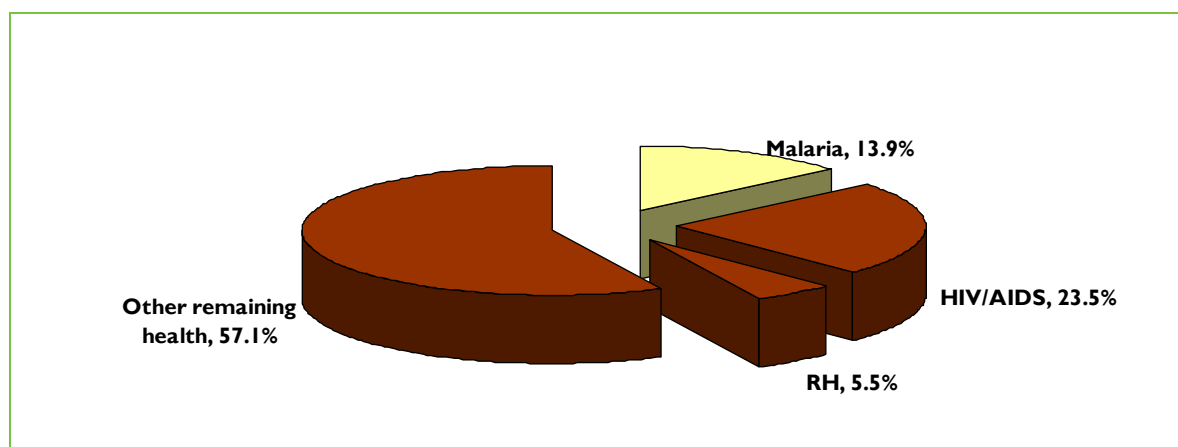
**TABLE 4.0: MALARIA INDICATORS AND NHA SUBACCOUNT FINDINGS FOR EXPENDITURE ON MALARIA SERVICES, 2003 AND 2006**

Indicators	2003*	2006
Malaria morbidity rate (adults)	67.5%	34%
Malaria morbidity rate (< 5 years)	32.5%	38%
THE	RWF 78,417,516,472 (\$142,128,178)	RWF 169,574,434,271 (\$307,345,940)
Total malaria expenditure (THE <sub>malaria</sub> )	RWF 13,782,993,174 (\$24,981,047)	RWF 23,570,420,722 (\$42,720,314)
Malaria spending per capita	RWF 1,643 (\$2.98)	RWF 2,602 (\$4.72)
Malaria OOP spending per capita	RWF 481 (<\$1)	RWF 1,056 (\$1.91)
% of total health expenditures allocated to malaria	17.58%	13.9%
Total malaria spending as % of GDP	1%	1.49%
Targeted spending on malaria	RWF 1,639,996,778 (\$2,972,409)	RWF 8,324,615,580 (\$15,087,932)
Targeted spending as % of THE <sub>malaria</sub>	12%	35%
<b>Financing sources of malaria spending</b>		
Public	24%	5%
Private	37%	45%
Households account for	29%	44%
Donors	38%	50%
<b>Providers of malaria care and activities</b>		
Public Providers	63%	33%
-Public hospitals	22%	13%
-Public health centers	41%	20%
Private providers	14%	10%
-Private for-profit hospitals	3%	2%
-Private for-profit health centers/clinics	11%	8%
Government assisted not-for-profit providers (Agrées)	15%	12%
-Agrée hospitals	5%	4%
-Agrée health centers	9%	8%
Independent pharmacies	4%	16%
Provision and administration of public health programs	4%	5%
General health care administration and insurance (for malaria)	-	2%
Community health workers	-	20%
Traditional healers	0.4%	0.4%
Other	0.1%	1.6%
<b>Malaria health spending by function</b>		
Prevention and public health programs	3%	4.6%
Curative care	91%	76.8%
-Inpatient	48%	13.2%
-Outpatient	43%	63.6%
Administration	2%	1.2%
Pharmaceuticals and other non-durables from independent pharmacies	4%	16.1%
Other	0%	1.4%
<b>Spending on preventive activities</b>		
Insecticide-treated nets	6%	27%
Repellents	3%	0%
Prevention programs	3%	5%

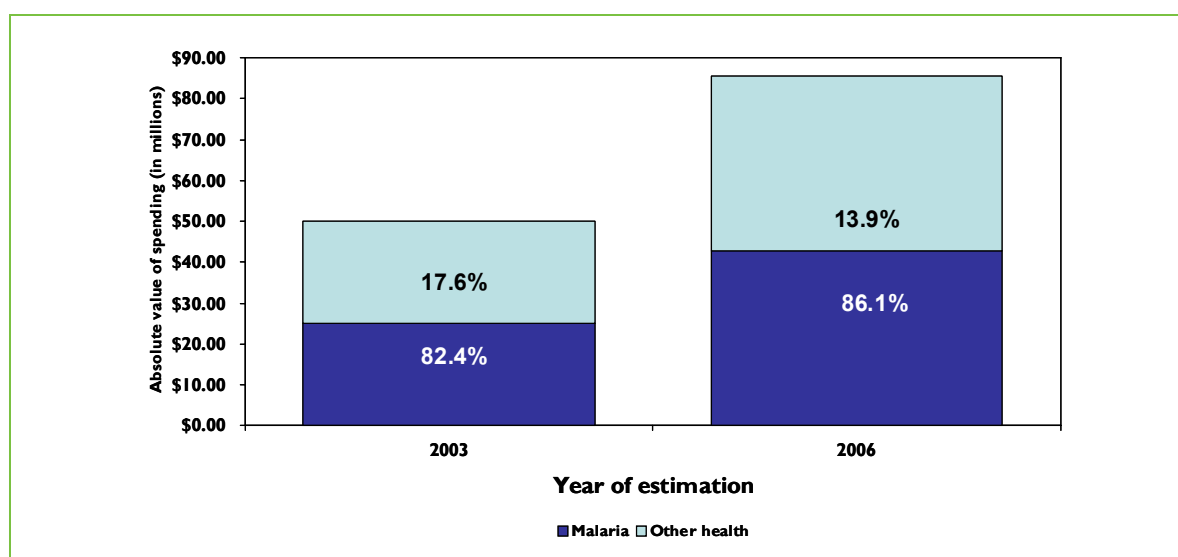
\* All US\$ amounts for 2003 are in constant 2006 US\$ to facilitate comparison across years. The CPI was used for the conversion (80.27 for 2003). Source for CPI data:

NISR (<http://www.statistics.gov.rw>)

**FIGURE 4.0: MALARIA, HIV/AIDS, AND RH IN THE CONTEXT OF GENERAL HEALTH EXPENDITURES, 2006**



**FIGURE 4.1: SPENDING ON MALARIA AND GENERAL HEALTH CARE, 2003 AND 2006**



\* Reported in constant 2006 currency to facilitate comparisons across years

It should be noted that targeted, or earmarked, spending on malaria represents 35 percent of this estimate. Earmarked funds are those whose primary purpose is explicitly treatment and/or control of malaria. Sixty-five percent of spending on malaria is untargeted, that is, expenditures are incurred to provide health services in general and are not specific to the treatment of any particular disease or health condition.<sup>17</sup>

<sup>17</sup> Examples of untargeted expenditures are staff salaries and maintenance/other operating costs of public health facilities.

### 4.3 FINANCING SOURCES OF MALARIA FUNDING

In 2006, donors are the largest financing sources of malaria, contributing 50 percent of all malaria resources (Figure 4.2). Households are the second largest contributor, at 44 percent, followed by public sources (5 percent) and other private sources (1 percent). In relative terms, donors and households now contribute significantly larger percentages of malaria funding than they did in 2003, while the percentage from public sources is decreasing.

**FIGURE 4.2: WHERE DO MALARIA FUNDS COME FROM, 2003 AND 2006?**

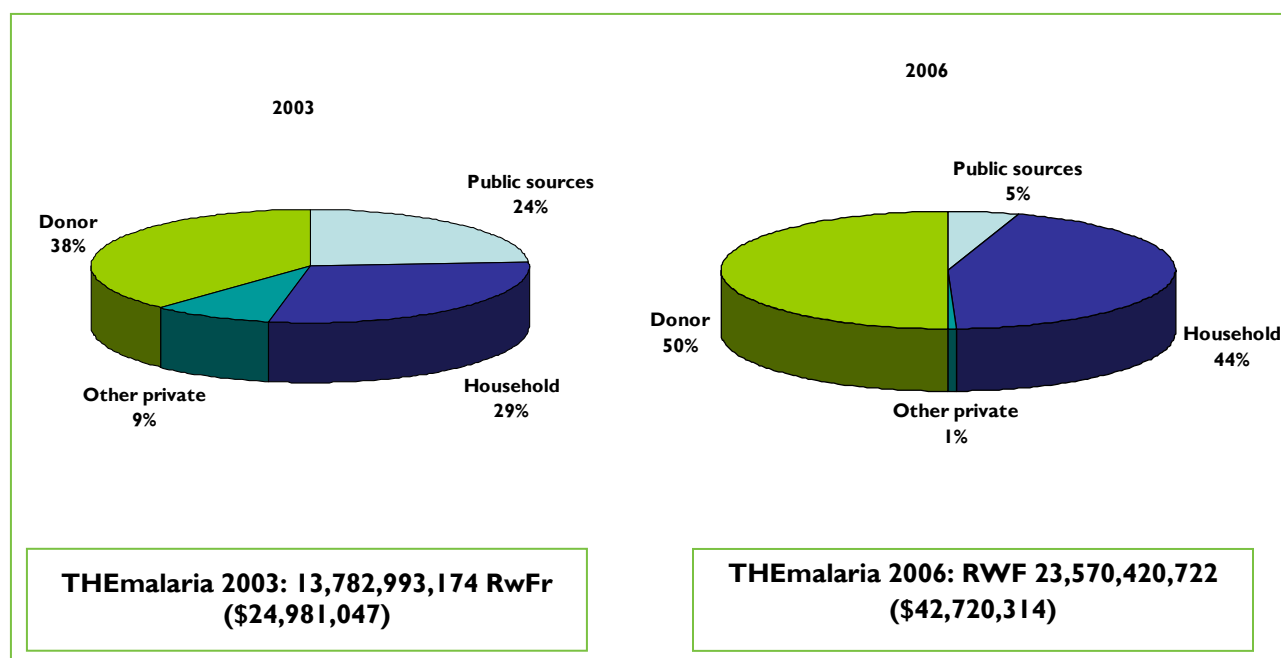


Table 4.1 compares absolute spending on malaria by financing source across years. In 2006, public sources contributes less than half of what they did in 2003. Household contributions almost tripled, while donor contributions doubled.

**TABLE 4.1: ABSOLUTE VALUES OF FINANCING SOURCE CONTRIBUTIONS TO MALARIA SERVICES, 2003 AND 2006**

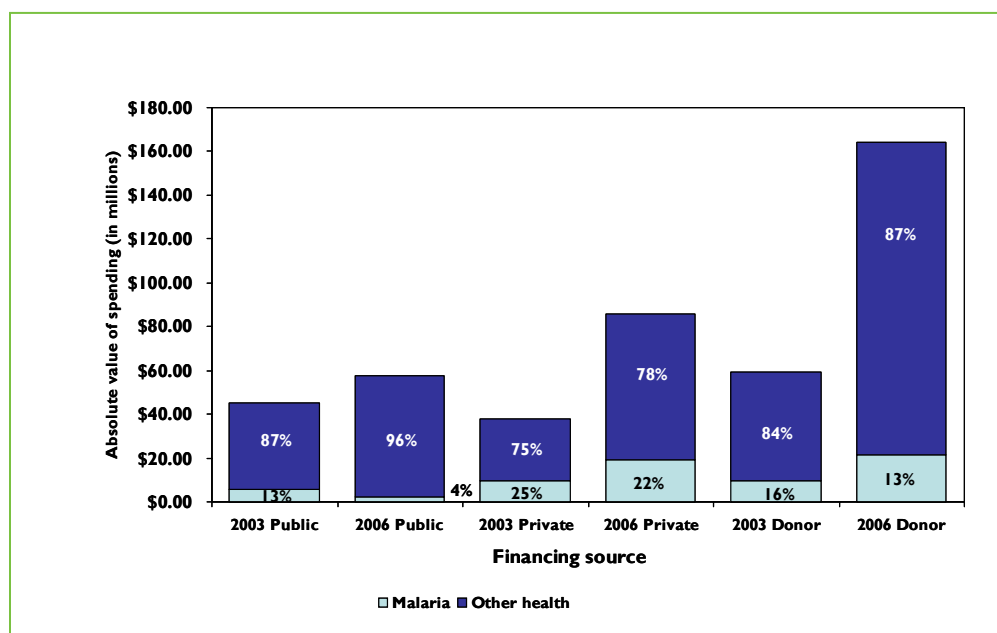
Financing source	2003*		2006		Magnitude of increase from 2003
	RWF	US\$	RWF	US\$	
Public (incl parastatals)	3,269,757,737	5,926,287	1,187,280,318	2,151,892	0.4
Households	3,991,014,186	7,233,531	10,461,212,952	18,960,472	2.6
Other private	1,066,100,339	1,932,258	154,808,934	280,584	0.1
Donor	5,285,272,943	9,579,317	11,767,118,518	21,327,366	2.2
Other	170,847,970	309,654	0	0	0.0

\* Reported in constant 2006 currency to facilitate comparisons across years

Household contributions likely increased so greatly for reasons similar to the increased OOP spending on general health: much of the increase in total health spending was targeted on HIV/AIDS; GDP increased and may have provided people with more disposable income, leading to increased utilization of health services; in-kind contributions for traditional healers was well documented in 2006; etc.

As Figure 4.3 shows, in 2006, private contributions to malaria rank highest among private source contributions to health (22 percent). Donors spend 13 percent of their health funds on malaria; HIV/AIDS gets three times more (42 percent) of their spending. Public sources contribute approximately 4 percent of their resources to malaria, similar to other priority areas. Private sources contribute more funds in absolute terms, but less than in 2003 relative to general health.

**FIGURE 4.3: SHARE OF FINANCING SOURCES' HEALTH RESOURCES GOING TO MALARIA SERVICES, 2003 AND 2006**

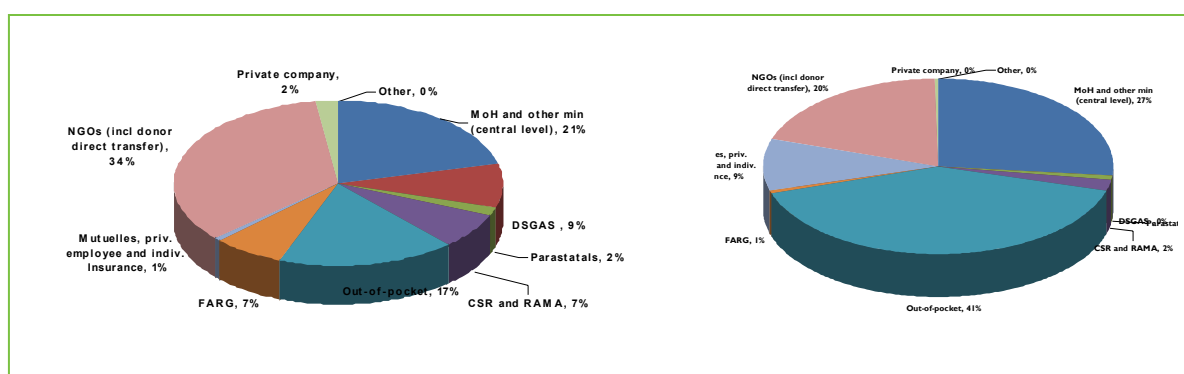


\* Reported in constant 2006 currency to facilitate comparisons across years

## 4.4 FINANCING AGENTS: MANAGERS AND IMPLEMENTERS OF MALARIA HEALTH FUNDS

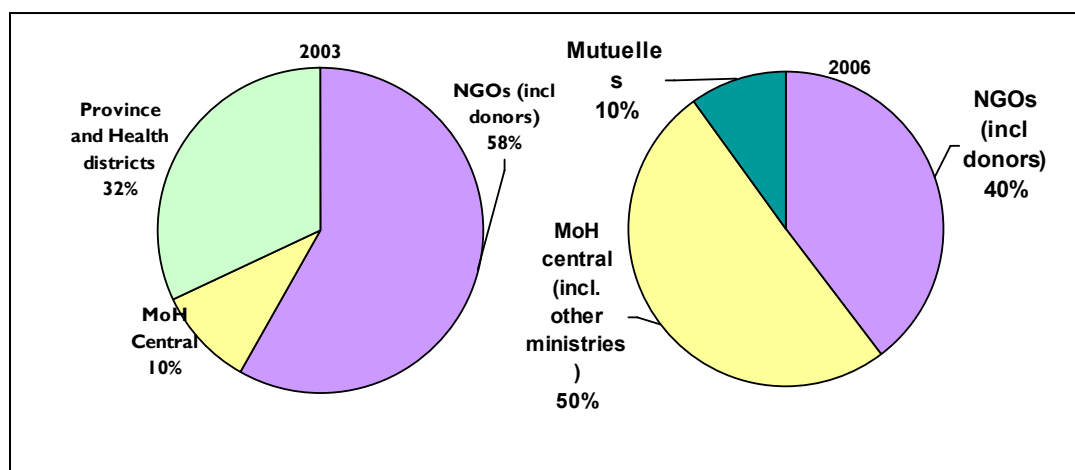
In 2006, 59 percent of financing agents were private, with household OOP spending managing up to 41 percent of funds, followed by public (39 percent), and the rest of the world (2 percent) (Figure 4.4). This represents a shift in the financial management of malaria. The GoR is managing more funds than it did in 2003 (from RWF 1.5 billion [US\$ 2.8 million] in 2003 to RWF 6 billion [US\$ 11 million] in 2006). NGOs and donors managed RWF 3.6 billion (US\$ 6.5 million) in 2003 and RWF 4.7 billion (US\$ 8.4 million) in 2006. The increased public management and resource allocation has taken the form of procurement and distribution of LLINs, distribution of free nets at health facilities for infants participating in measles vaccination campaigns and pregnant women seeking antenatal, etc. For a detailed look at the flow of funds and malaria commodities through the health system in 2006, please see Annex C.

**FIGURE 4.4: MANAGERS OF MALARIA FUNDS IN RWANDA, 2003 AND 2006**



In 2003, NGOs and donors managed the largest share of malaria funds, followed by the MoH and the Department of Health, Gender and Social Affairs (DSGAS).<sup>18</sup> In 2006, households manage the largest share, followed by the government and then NGOs.

**FIGURE 4.5: FINANCING AGENTS OF DONOR MALARIA FUNDS, 2003 AND 2006**



<sup>18</sup> DSGAS (provincial level) no longer exists; it was an agency of the health system, which was revamped in 2005.



The MoH manages a larger percentage and absolute value of donor malaria funds in 2006 than it did in 2003 (RWF 546 million [US\$ 990 thousand] in 2003 compared with RWF 5.9 billion [US\$ 10.8 million] in 2006) (Figure 4.5). In 2003, 58 percent of donor funding for malaria was channeled through NGOs, with only 10 percent handled by the MoH and 32 percent by province and health districts (presumably through NGO projects). In 2006, the MoH and other ministries handle 50 percent of donor malaria funds. NGOs handle 40 percent of these funds (18 percent less than in 2003).

The shift to increased GoR management of these donor funds through the MoH shows that the government is more aware of the ongoing interventions and donor monies are increasingly coordinated with the government's strategic plan for battling malaria. This is in part due to the 2003 malaria subaccount findings that showed that the government was managing a small percentage of malaria resources.

## 4.5 HOUSEHOLD OOP SPENDING

Table 4.2 shows amounts of OOP spending on malaria in 2003 and 2006.

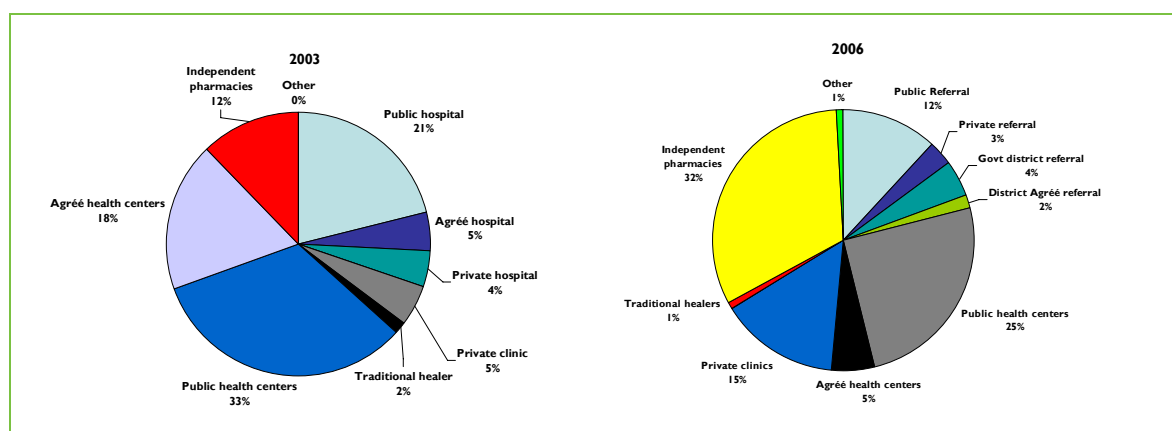
**TABLE 4.2: HOUSEHOLDS AS FINANCING AGENTS: OOP SPENDING ON MALARIA SERVICES, 2003 AND 2006**

	2003*	2006
Malaria OOP expenditure	RWF 3,748,897,207 US\$ 6,794,681	RWF 9,568,284,436 US\$ 17,342,017
Malaria OOP per capita	RWF 447 US\$ 0.81	RWF 1,056 US\$ 1.91
Malaria HH as a percentage of general HH	26%	24%

\* Reported in constant 2006 currency to facilitate comparisons across years

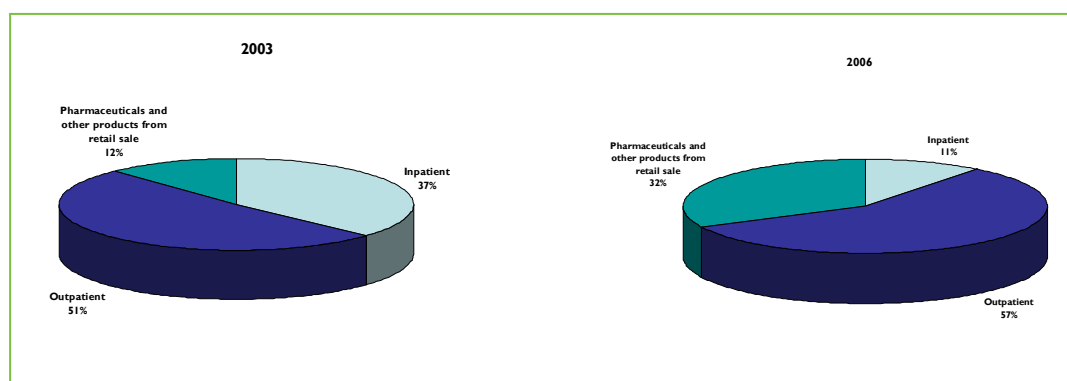
In 2006, public hospitals and health centers consume a combined 41 percent of total household OOP spending on malaria (Figure 4.6). Independent pharmacies consume 32 percent followed by private hospitals and clinics at 18 percent. Spending at independent pharmacies grew in both absolute and relative terms (12 percent to 32 percent in 2006). Agrée hospitals and health centers consumed 23 percent of OOP health funds in 2003 and 7 percent in 2006, representing less in both relative and absolute terms. Spending at traditional healers increased slightly.

**FIGURE 4.6: PROVIDERS CONSUMING HOUSEHOLD OOP MALARIA FUNDS, 2003 AND 2006**



Outpatient care receives the largest allocation of malaria OOP spending in 2006, followed by pharmaceuticals and inpatient care (Figure 4.7). In 2003, inpatient care consumed more spending, in absolute and relative terms. OOP spending on pharmaceuticals increased between 2003 and 2006.

**FIGURE 4.7: SERVICES BOUGHT WITH HOUSEHOLD OOP SPENDING, 2003 AND 2006**

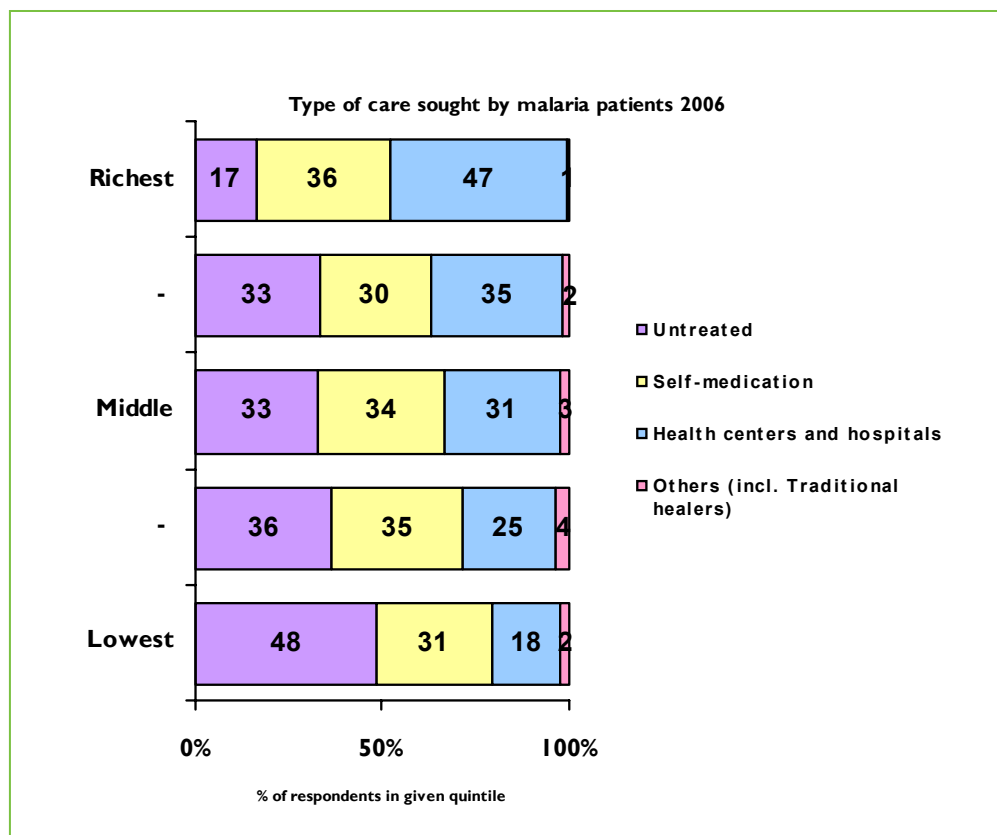


## 4.6 INCOME INEQUALITIES ON HEALTH CARE-SEEKING BEHAVIOR BY HOUSEHOLDS

This section describes a special analysis done regarding the health-seeking behavior of malaria patients. See Annex C for the methodology of this special analysis.

Rwandans in the lower-income quintiles are likely to go untreated for malaria (Figure 4.8). About a third of those afflicted self-medicate for malaria regardless of income. The richest are most likely to seek care at health facilities and least likely to use traditional healers.

**FIGURE 4.8: INCOME DETERMINANTS OF MALARIA CARE-SEEKING BEHAVIOR, 2006**

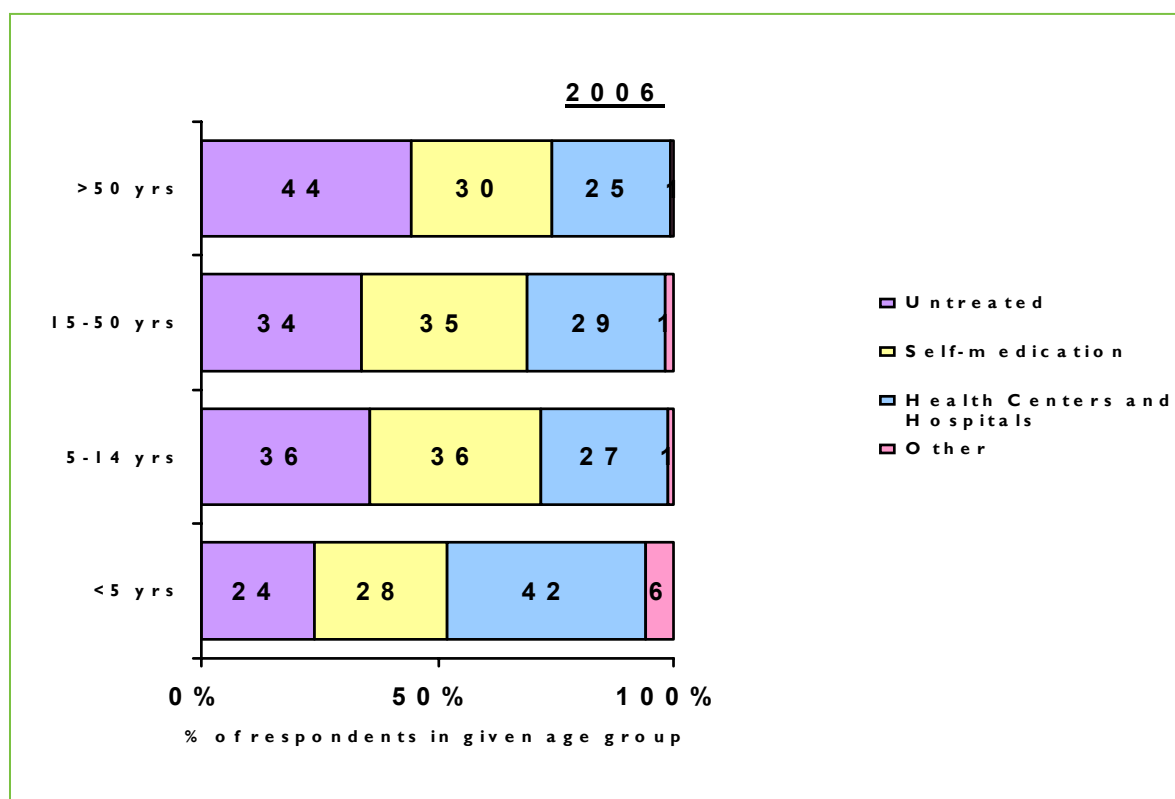


Source 2006 data: EICV data (2000 HH)

Note: Some patients classified as untreated may have received treatment before the 14-day recall period. See Annex C for further explanation of EICV2 data and the NHA team's analysis.

Children under five are the most likely age group to be treated at health facilities and the least likely to go untreated or be self-medicated (Figure 4.9). People over 50 are the most likely to go untreated for malaria.

**FIGURE 4.9: AGE DETERMINES TYPE OF MALARIA CARE SOUGHT**

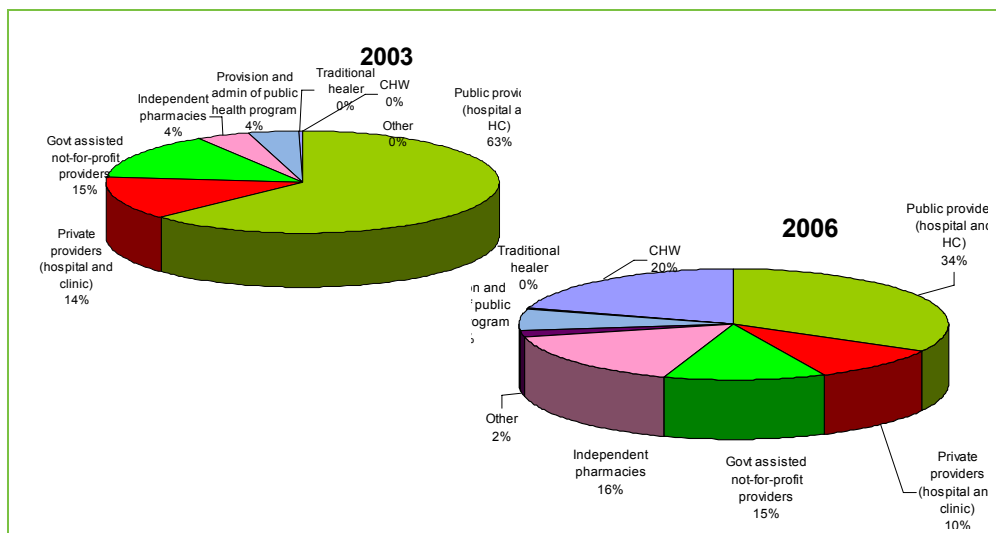


## 4.7 PROVIDERS OF MALARIA HEALTH SERVICES IN RWANDA

In 2006, public and agréé providers account for half of all spending due to a growth in numbers of CHWs and independent pharmacies (Figure 4.10). In 2006, CHWs are providing much of the MoH-funded malaria services, primarily bednet distribution. Independent pharmacies consume 16 percent of total malaria spending.

In contrast, in 2003 public and agréé providers counted for three-quarters of spending, due to the lack of CHWs at that time.

**FIGURE 4.10: DISTRIBUTION OF PROVIDERS OF MALARIA SERVICES AND COMMODITIES, 2003 AND 2006**



## 4.8 HEALTH FUNCTIONS: MALARIA HEALTH SERVICES CONSUMED IN RWANDA

Figure 4.11 shows that, in 2006, 76.8 percent of  $THE_{malaria}$  is spent on inpatient and outpatient curative malaria services. Drugs and other nondurables account for 16.1 percent.

**FIGURE 4.11: WHAT DO HEALTH FUNDS BUY?**

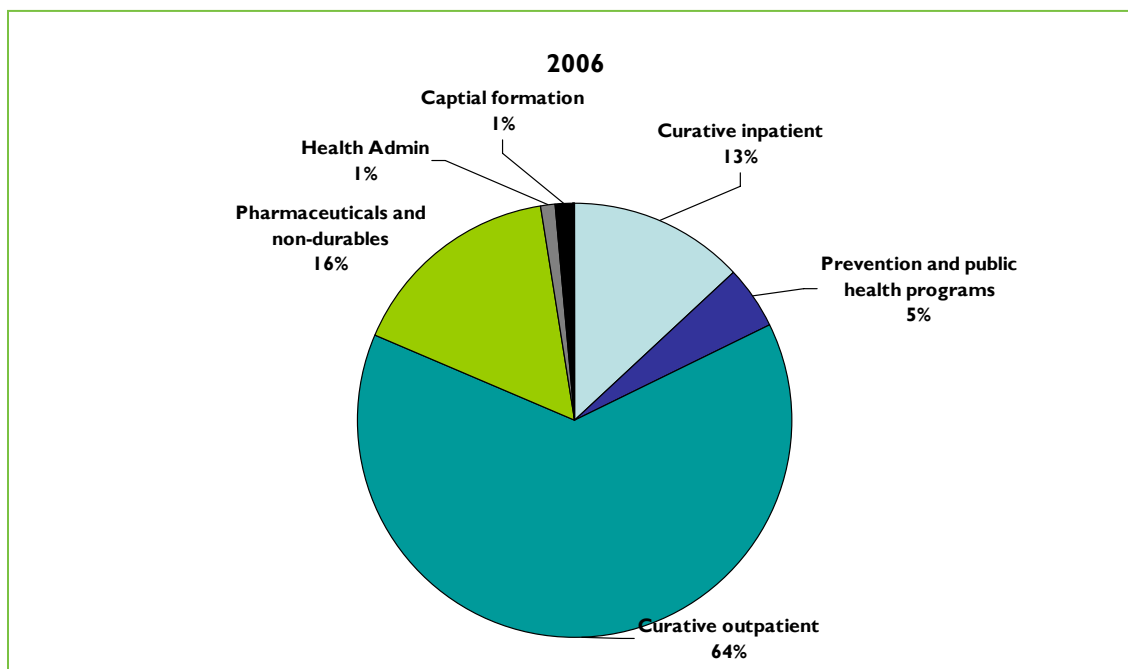
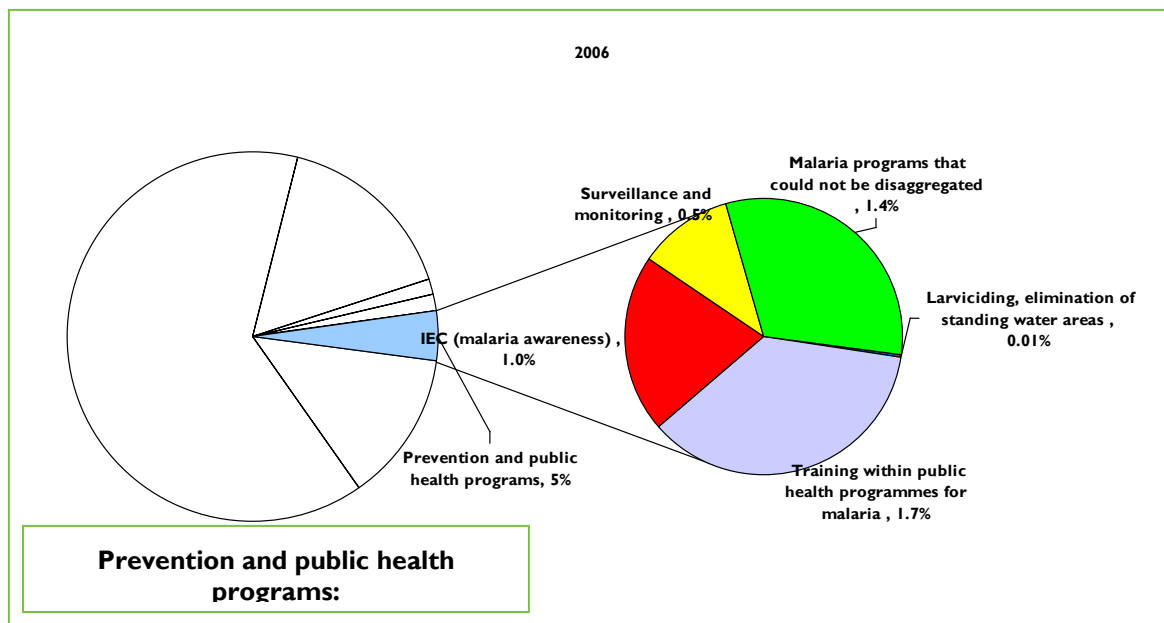


Figure 4.12 breaks down spending on malaria prevention and public health programs. Training programs consume the largest share (1.7 percent of  $THE_{\text{malaria}}$ ), followed by IEC, surveillance and monitoring, and larviciding.

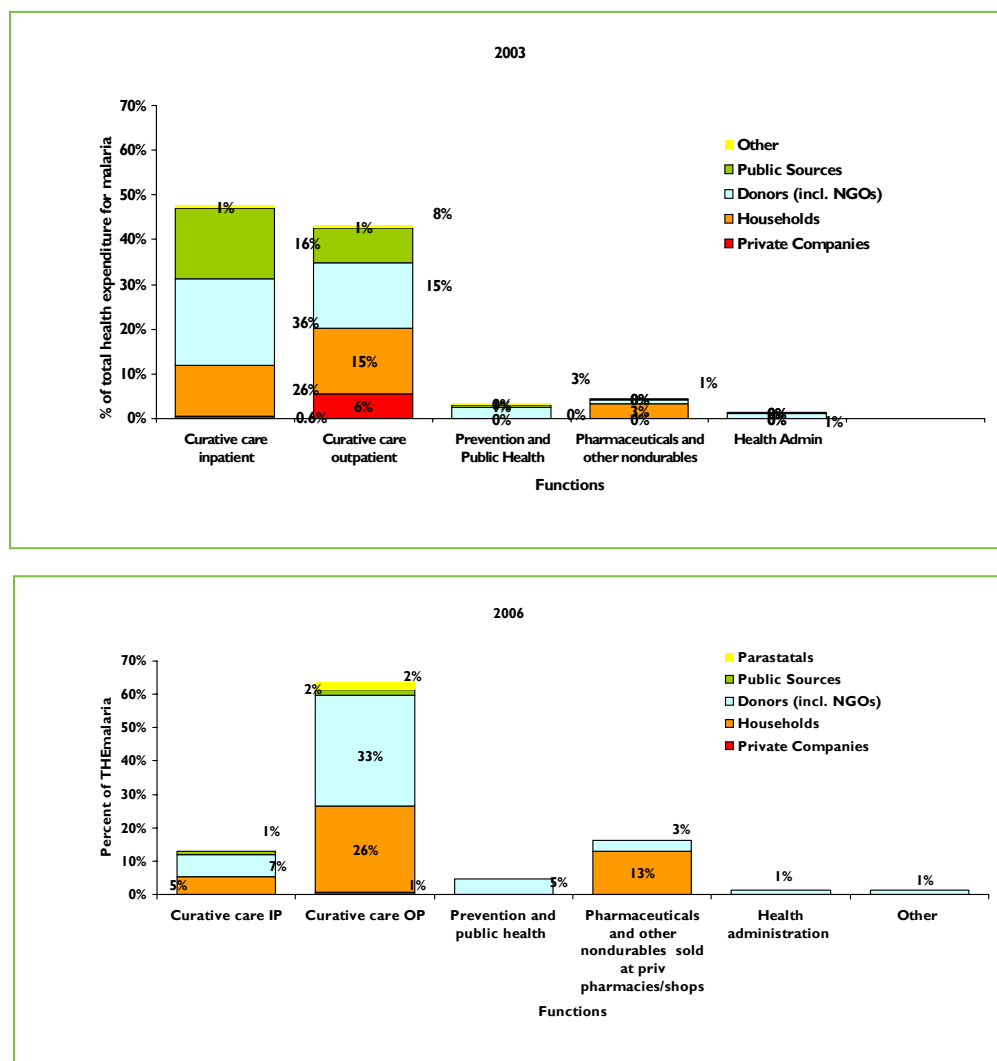
**FIGURE 4.12: BREAKDOWN OF 2006 PREVENTION AND PUBLIC HEALTH PROGRAMS**



## 4.9 WHO FINANCES WHAT HEALTH FUNCTIONS?

Figure 4.13 shows the malaria-related health care functions on which financing sources spent their resources in 2003 and 2006. The findings reveal slight shifts from 2003.

**FIGURE 4.13: FINANCING SOURCES OF MALARIA HEALTH CARE FUNCTIONS, 2003 AND 2006**



In 2006, 16 percent of THE<sub>malaria</sub> goes to pharmaceuticals and nondurables sold at private shops and pharmacies. About 76 percent of THE<sub>malaria</sub> is spent on inpatient and outpatient curative services. Inpatient care consumes 13 percent, outpatient care 64 percent.) This level of spending on curative care is a relative decrease overall from 2003, when spending on inpatient and outpatient curative care totaled 86 percent, but the share of spending on outpatient care rose significantly relative to the other functions. It should be noted, however, that THE<sub>malaria</sub> increased in real terms: actual spending on curative care increased from RWF 14,392,433,912 (US\$ 26,085,536) in 2003 to RWF 18,101,913,306 (\$ 32,808,775) in 2006, in constant 2006 dollars.

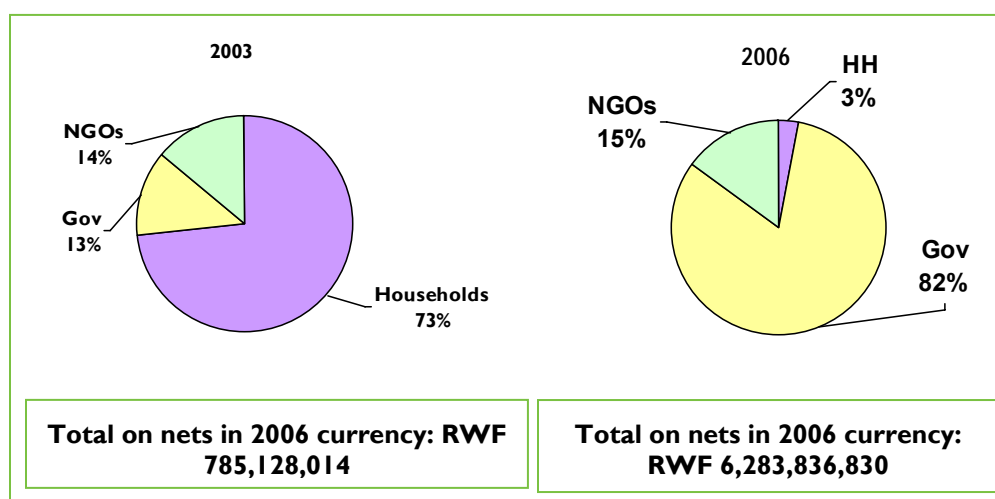
Most of the increased spending on drugs and other nondurables (from 4 percent to 16 percent) was financed by households. The percentage of THE<sub>malaria</sub> for prevention and public health programs remained relatively constant and was financed almost entirely by donors.

In 2006, donors still finance the largest portion of curative care (40 percent), followed by households (31 percent). Households have increased spending at private pharmacies and shops and spend more than the government on curative care.

## 4.10 ADDITIONAL ANALYSIS ON MALARIA PREVENTIVE COMMODITIES

The GoR was a strong advocate of prevention interventions in 2006, and the NHA findings reveal that in effect there has been a tenfold increase in spending on LLINs. Household spending on LLINs decreased from 73 percent in 2003 to 3 percent in 2006, while the contribution of government (largely through use of donor funds) increased from 13 to 82 percent.

**FIGURE 4.14: PAYERS (FINANCING AGENTS) OF PREVENTIVE COMMODITIES FOR MALARIA, 2003 AND 2006**



## 4.11 SUMMARY

- Malaria spending has doubled since 2003.** Malaria expenditures decreased relative to other health priorities from 2003 to 2006, but in absolute terms, malaria spending has doubled since 2003, from RWF 13.8 billion (US\$ 25 million) to RWF 23.6 (US\$ 42.7 million). However, it should be noted that only 35 percent of this is specifically targeted for malaria.
- Relative financial priority of malaria has decreased for public sources but remains the same for donors and private sources.** In 2003, 13 percent of public health funds went to malaria versus 3.7 percent in 2006. In 2003, 16 percent of all donor health funds went to malaria versus 13 percent in 2006. In 2003, 26 percent of all private health funds (mainly households) went to malaria versus 22 percent in 2006.



- **Donor and household shares of all malaria funds contribute substantially more than public malaria funds.** In 2006, households contribute RWF 10.5 billion (US\$ 19 million) and donors contribute RWF 11.8 billion (US\$ 21.3). Public sources contribute RWF 1.2 billion (US\$ 2.2 million). In 2003, NGOs and donors managed the largest share of malaria funds. By 2006, this had shifted; malaria spending is managed mostly by households through OOP spending (41 percent), followed by the government (27 percent) and NGOs (20 percent). This in particular illustrates the increase in MoH programmatic management of health funds.
- **There has been an increase in spending on public health and prevention programs, (largely by donors); however, a large portion of malaria resources are spent on curative care.** In 2003, RWF 6.6 billion (US\$ 11.9 million) was spent on inpatient curative care and RWF 6 billion (US\$ 10.8 million) was spent on outpatient curative care. In 2006, RWF 3.1 billion (US\$ 5.6 million) was spent on inpatient curative care and RWF 15 billion (US\$ 27.2 million) was spent on outpatient curative care.
- **LLINs are subsidized substantially by the government, decreasing the burden on households.**
- **CHWs now consume a larger share of malaria resources, reflective of their role in providing home-based malaria care and LLIN distribution.**



## 5. REPRODUCTIVE HEALTH SUBACCOUNTS

### 5.1 INTRODUCTION

RH is a critical issue in Rwanda. The country has one of the highest maternal mortality ratios in East and Southern Africa (Table 5.0), one of lowest rates of contraceptive prevalence in the region, and a relatively high number of births per woman of reproductive age.

This poor RH status of Rwandans has grave implications for the country's development. Evidence from the EICV2 confirms that the high population growth rate, fertility rate, and population density have constrained economic development. Acknowledging that improving the health status of women should be a key element of any development strategy, the GoR has placed it at the forefront of the national agenda.<sup>19</sup>

Investments in women yield strong benefits to the family as a whole; a woman's death during childbirth often means death for the newborn, and both death and disability translate into emotional, social, and economic hardships for her children, extended family, and even the community at large. Ensuring access to quality RH care can reduce maternal morbidity and mortality.

**TABLE 5.0: RWANDA RH INDICATORS, 2006**

Table 5.0: Rwanda RH Indicators (2006)	
Number of women of reproductive age	2,291,233
Population growth rate	2.6%
<b>Sexual and RH Indicators</b>	
Maternal mortality ratio (per 100,000 live births)	750
<b>Fertility Indicators</b>	
Total fertility rate (# of children/ woman in reproductive years)	6.1
<b>Family Planning Indicators (DHS 2005)</b>	
% of women in union using traditional contraceptive method	18%
% of women in union using periodic abstinence	7%
% of all women 15-49 using any modern contraceptive method	6%
Total contraceptive commodity rate	10%
<b>Deliveries (DHS 2005)</b>	
% of women with access to antenatal care	94%
% of births taking place at home	70%
% of births attended by health professional	39%
% of births followed by at least one postnatal visit (doesn't include deliveries in facilities, which are assumed to include postnatal evaluation)	33%

<sup>19</sup> This decision was in part informed by the preliminary 2006 NHA subaccount findings.

The national health strategy (HSSP) outlined the following strategies to improve the RH status of women and to reduce the population growth rate:

- Increase contraceptive utilization through;
  - Sensitization to increase public demand and utilisation of contraceptives
  - Ensured availability of contraceptives through improved distribution

In order to achieve such goals, the government has outlined specific actions:

- Implement incentives to improve use of health services among women
- Ensure access to pharmaceuticals (offer subsidies for RH-related drugs)
- Decentralize primary care, including RH services
- Train health workers to deliver RH services
- Develop community-based interventions and train CHWs
- Design and implement performance-based payment contracting schemes for high-impact services, including deliveries.

Similar to the last RH subaccounts (2002), the 2006 subaccounts created four core tables for RH expenditures, on services and products whose primary purpose was to

- Limit and space births
- Support and promote the limiting/spacing of births and maternal health through training and IEC campaigns
- Deliver healthy babies, followed by postnatal care.

It should be noted that the subaccounts did not track expenditures on general gynecological care, largely because this is extremely difficult to estimate due to current record-keeping practices, and the paucity of fertility counseling services in the country.

Expenditures on social marketing or general provision of condoms were included in RH spending if condoms were used primarily for family planning purposes, and not primarily for preventing the spread of HIV/AIDS.

## 5.2 TOTAL RESOURCE ENVELOPE FOR RH HEALTH CARE

Total RH expenditure in 2006 was RWF 10,561,325,959 (US\$ 19,141,922), 6.2 percent of THE<sub>general</sub> and 0.7 percent of the GDP (Table 5.1, Figure 5.0). While there was a 1.5-fold increase in absolute RH expenditure between 2002 and 2006, RH spending fell relative to other health services. Total RH expenditure in 2002 was RWF 6,982,368,741 (US\$ 12,655,179) in constant 2006 dollars, or 16 percent of 2002 THE<sub>general</sub> (Figure 5.1).

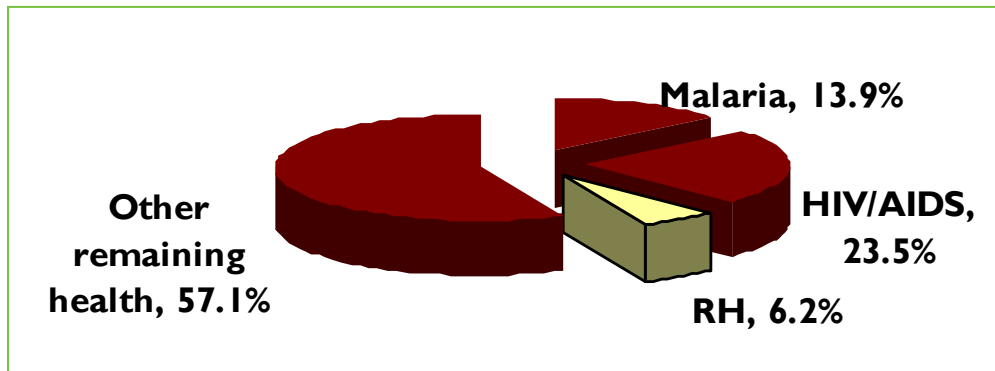
RH spending is targeted to 25 percent of the population, principally (but not exclusively) women of reproductive age. Spending equated to RWF 3,378 (US\$ 6.12) per woman of reproductive age in 2002 and to RWF 4,609 (US\$ 8.40) per woman of reproductive age in 2006.

**TABLE 5.1: SUMMARY OF RH SUBACCOUNTS FINDINGS, 2002 AND 2006**

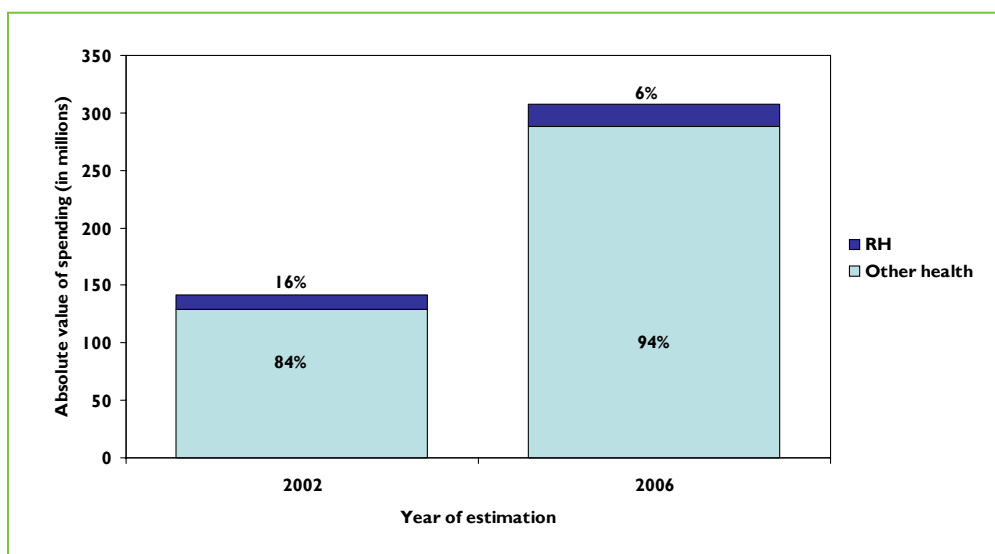
Indicators	2002*	2006
Total RH (THERh) expenditures	RWF 6,982,368,741 (US \$12,655,180)	RWF 10,561,325,959 (US \$19,141,922)
RH expenditures per woman of reproductive age	RWF 3,378 (US \$6)	RWF 4,609 (US \$8)
RH expenditures as a % of GDP	0.6%	0.7%
RH expenditures as a % of total of overall health spending	15.67%	6.23%
OOP spending per woman of reproductive age	RWF 339 (US\$0.61)	RWF 431.38 (US\$0.78)
% of RH spending that is targeted for RH		40%
THE as percent of total RH spending on health and non-health	99.7%	98.4%
Financing Sources of RH spending		
Public	7.7%	14.4%
Private	12.4%	14.3%
<i>Households account for</i>	10.6%	13.2%
Donor	79.8%	71.2%
Financing agents of RH spending		
Public	52%	35%
Private	12%	10%
<i>Household OOP accounts for</i>	10%	9%
Donor	36%	55%
Providers of RH care and activities		
Public providers	9%	53%
-Public hospitals	4.3%	45%
-Public health centers	4.3%	8%
Private providers	9%	12%
-Private for-profit hospitals	4%	6%
-Private for-profit health centers/clinics	5%	6%
Government assisted not-for-profit providers (Agréés)		13%
-Agrée hospitals		6.3%
-Agrée health centers		6.2%
Independent pharmacies	3%	4%
Provision and administration of public health programs	72%	12%
Community health workers		5%
Other	8%	2%
RH health spending by function		
Prevention and public health programs	66%	12%
Curative care	18%	83%
-Inpatient	7%	50.6%
-Outpatient	11%	32.8%
Administration	7%	0%
Capital formation	0%	1%
Pharmaceuticals and other non-durables from independent pharmacies	3%	4%
Other	6%	

\* All US\$ amounts for 2002 are in constant 2006 US\$ to facilitate comparison across years. The CPI was used for the conversion (74.71 for 2002). Source for CPI data: NISR (<http://www.statistics.gov.rw>).

**FIGURE 5.0: MALARIA, HIV/AIDS, AND RH IN THE CONTEXT OF GENERAL HEALTH EXPENDITURES, 2006**



**FIGURE 5.1: RH AND GENERAL HEALTH SPENDING, 2002 AND 2006**

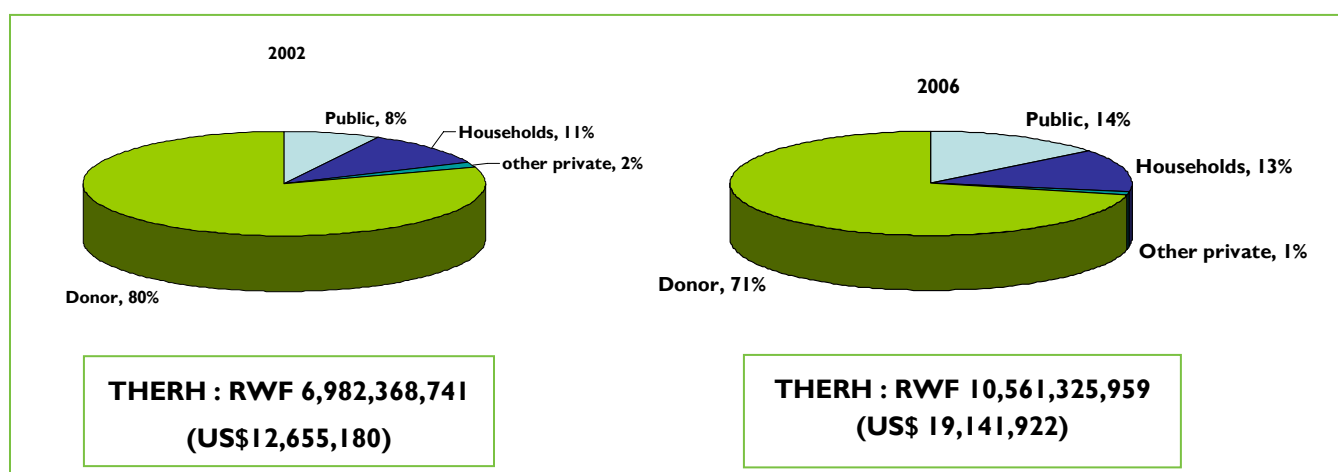


\* Reported in constant 2006 currency to facilitate comparisons across years

### 5.3 FINANCING SOURCES OF RH FUNDING

THE<sub>RH</sub> has slightly increased since 2002. Public sources have increased their contribution to THE<sub>RH</sub>, from 8 percent to 14 percent (Figure 5.2); however, donors were the major contributor in both years (80 percent and 71 percent, respectively).

**FIGURE 5.2: FINANCING SOURCES OF RH AS A PROPORTION OF RH EXPENDITURES, 2002 AND 2006**



In absolute terms, household spending on RH health has doubled since 2002, and public spending has tripled (Table 5.2). Donor spending has stayed relatively the same.

**TABLE 5.2: ABSOLUTE VALUES OF FINANCING SOURCES' CONTRIBUTIONS TO RH SERVICES, 2002 AND 2006**

Financing source	2002*		2006		Magnitude of increase from 2002
	RWF	US\$	RWF	US\$	
Public (incl parastatals)	538,343,178	975,719	1,525,779,422	2,765,396	2.8
Households	742,259,301	1,345,306	1,390,099,133	2,519,482	1.9
Other private	127,171,924	230,492	77,054,441	139,657	0.6
Donor	5,571,021,853	10,097,187	7,524,476,170	13,637,721	1.3
Other	3,572,483	6,475	0	0	-

\* Reported in constant 2006 currency to facilitate comparisons across years

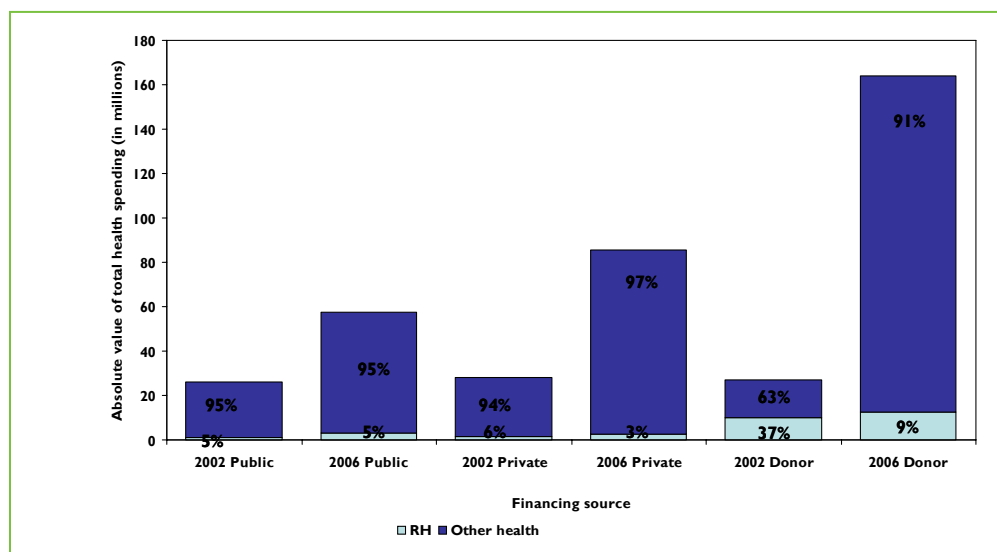
## 5.4 FINANCING SOURCE CONTRIBUTION IN THE CONTEXT OF GENERAL HEALTH

When looked at by sector (public, private, and donor), absolute spending on RH has not increased dramatically from any single financing source. As already noted, donors remain the largest financiers of RH services in the country.

As Figure 5.3 shows, donor RH allocations as a percentage of  $THE_{general}$  have decreased (in constant terms) from 37 percent to 9 percent. This is largely due to the denominator increments through HIV

and AIDS funds. Also in relative terms, public spending has remained constant (5 percent) as a proportion of  $THE_{general}$ .

**FIGURE 5.3: SHARE OF FINANCING SOURCES' HEALTH RESOURCES GOING TO RH, 2002 AND 2006**



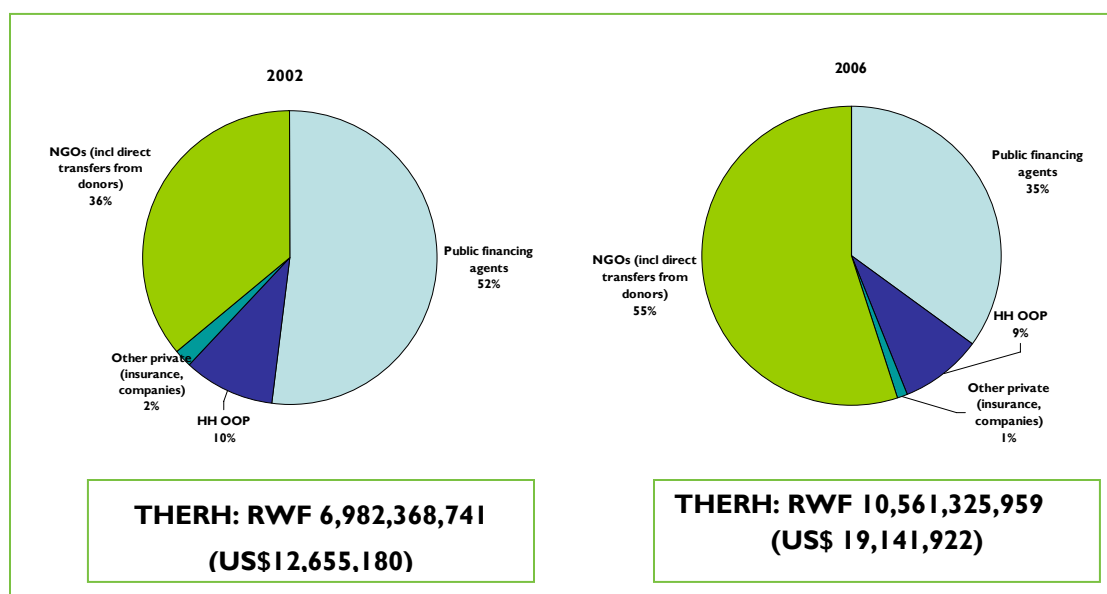
\* Reported in constant 2006 currency to facilitate comparisons across years

## 5.5 FINANCING AGENTS: MANAGERS AND IMPLEMENTERS OF RH FUNDS

Figure 5.4 shows the percentage of funds that are managed by various financing agents. More than half (55 percent) of all RH funds were channeled through implementing NGOs in 2006, followed by public financing agents (35 percent) and household OOP payments (9 percent). (Mutuelles are included under public financing agents in 2006.) This represents a shift away from public financing agents like the MoH, which managed 52 percent of RH funds in 2002, and contrasts with the other priority areas (HIV and malaria), for which the government is managing more of the resource envelopes.

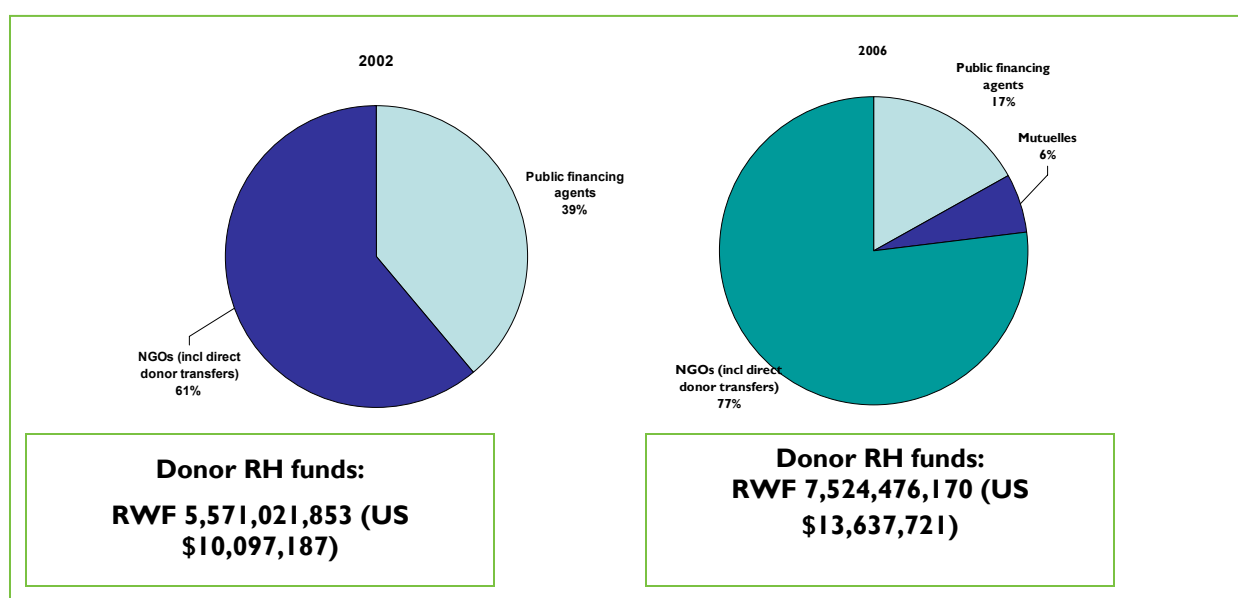


**FIGURE 5.4: MANAGERS OF RH FUNDS IN RWANDA, 2002 AND 2006**



Donors, which finance 71.2 percent of RH spending, transfer 17 percent of their RH funds to government entities, 6 percent to mutuelles (untargeted spending), and the remaining 77 percent to implementing agencies/NGOs (Figure 5.5). Households, whose share of RH spending was 13.3 percent, contributed 71 percent of their RH funds through direct OOP payments. Central government revenue, making up 14.4 percent of total RH funds, was channeled largely to the MoH (71 percent) and the remainder to other financing agents.

**FIGURE 5.5: MANAGERS OF DONOR RH FUNDS IN RWANDA, 2002 AND 2006**



## 5.6 HOUSEHOLD OOP SPENDING

OOP spending, as well as OOP spending per woman of reproductive age, is slightly higher in 2006 than in 2002 (Table 5.3). RH OOP spending as a percentage of general OOP spending halved as a result of the large increase in general OOP spending.

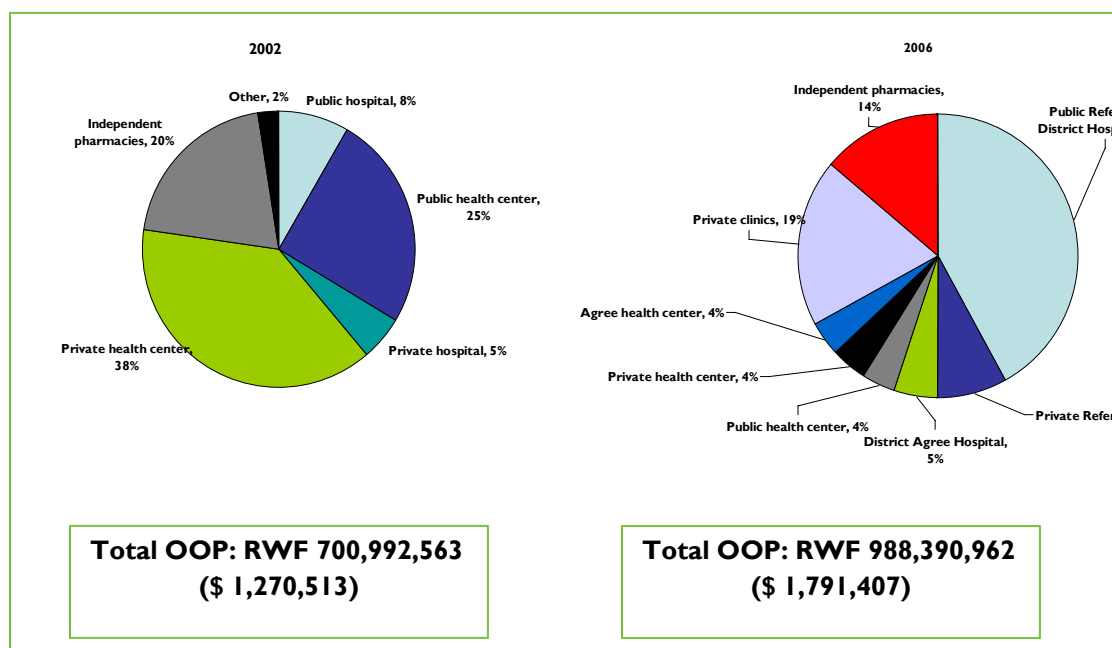
**TABLE 5.3: HOUSEHOLD OOP SPENDING, 2002 AND 2006**

	<b>Rwanda 2002*</b>	<b>Rwanda 2006</b>
RH OOP expenditure	RWF 700,992,563 (US\$ 1,270,512)	RWF 988,390,962 (US\$ 1,791,407)
RH OOP per woman of reproductive age	RWF 339 (US\$0.61)	RWF 431.38 (US\$0.78)
RH OOP as a percentage of general OOP	6%	3%

\* Reported in constant 2006 currency to facilitate comparisons across years

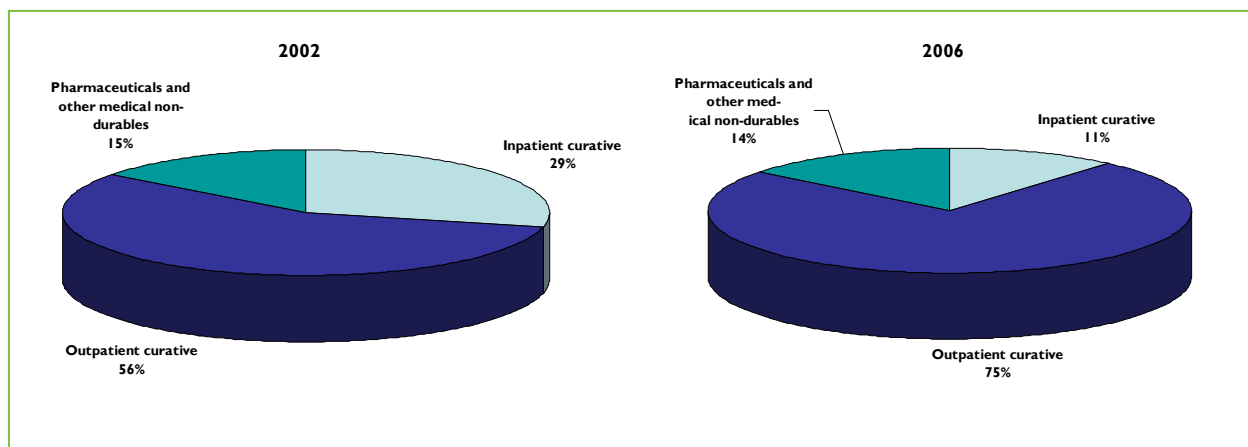
In 2006, households are spending less out of pocket at independent pharmacies for RH (14 percent, in contrast to 20 percent in 2002) (Figure 5.6). Family planning commodities were widely distributed through facilities and NGOs in 2006, which likely explains this trend.

**FIGURE 5.6: RH OOP SPENDING BY PROVIDER, 2002 AND 2006**



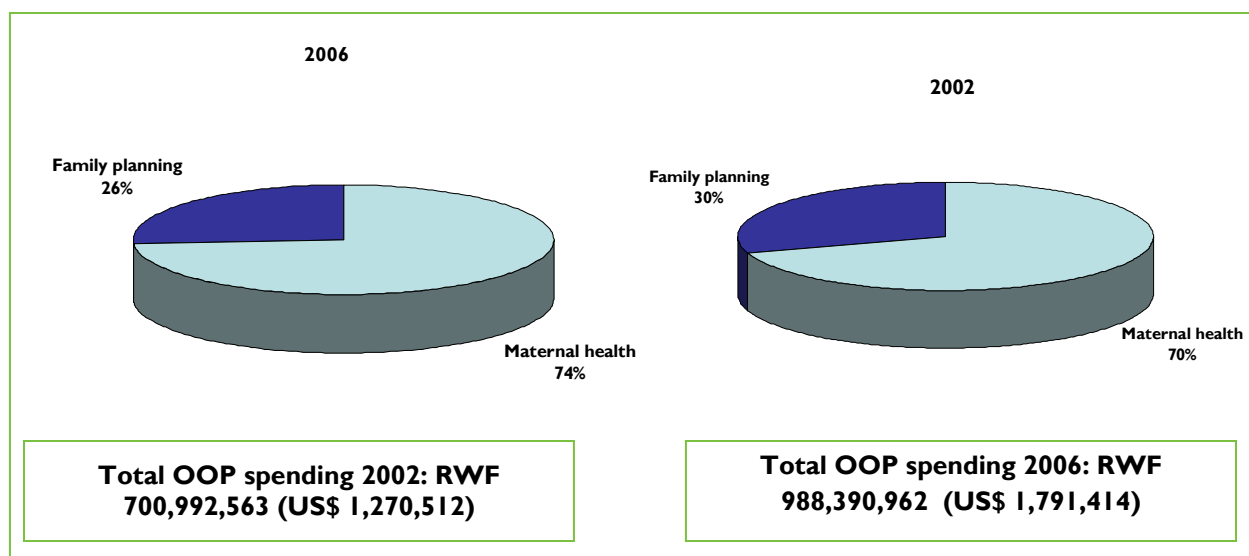
In 2006, 75 percent of household OOP spending on RH goes to outpatient curative care, followed by pharmaceuticals (mostly contraceptives) at 14 percent and inpatient curative care at 11 percent (Figure 5.7). In 2002, 56 percent went to outpatient curative care, 29 percent to inpatient curative care, and 15 percent to pharmaceuticals.

**FIGURE 5.7: SERVICES BOUGHT WITH HOUSEHOLD OOP SPENDING, 2002 AND 2006**



Between 2002 and 2006, households increased their spending on maternal health and decreased spending on family planning (Figure 5.8). This could be explained by the fact that donors provide more family planning commodities for free or at discounted rates in 2006.

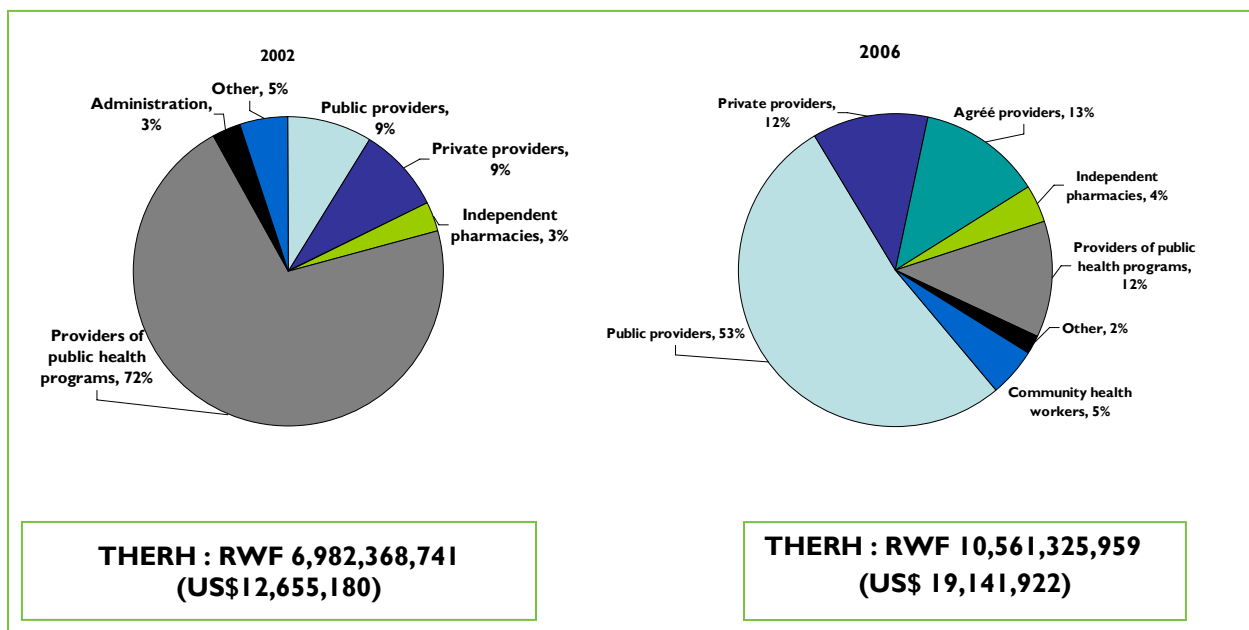
**FIGURE 5.8: BREAKDOWN OF OOP SPENDING BY AREA OF RH CARE, 2002 AND 2006**



## 5.7 PROVIDERS OF RH SERVICES IN RWANDA

Figure 5.9 shows the proportion of spending that went to various providers of RH services.

**FIGURE 5.9: RH SPENDING BY PROVIDER**



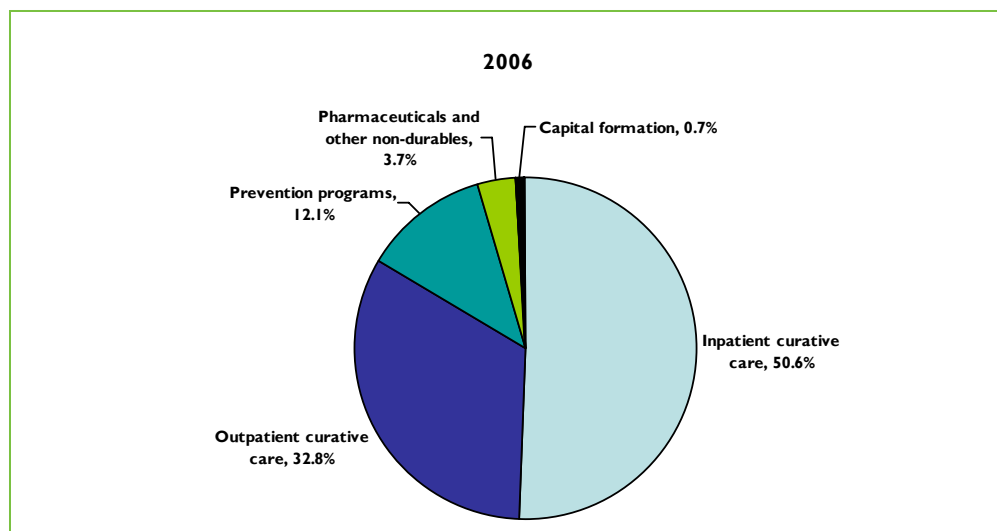
The 2006 NHA disaggregates public providers into public referral hospitals, district hospitals, and public health centers (see RH subaccount tables Annex A). Public referral hospitals consume the largest percentage of  $THE_{RH}$  spending at 40 percent. Eighty-six percent of spending at public referral hospitals is for inpatient care such as deliveries. Agrée providers consume the second largest percentage at 13 percent of  $THE_{RH}$ . The share of provision of public health programs decreased to 12 percent, from 72 percent in 2002.

A higher percentage of spending (19 percent) goes to private clinics from all household OOP payments. Households also spend at public hospitals (31 percent public referral and 11 percent government district) and independent pharmacies (14 percent).

## 5.8 HEALTH FUNCTIONS: RH HEALTH SERVICES CONSUMED IN RWANDA

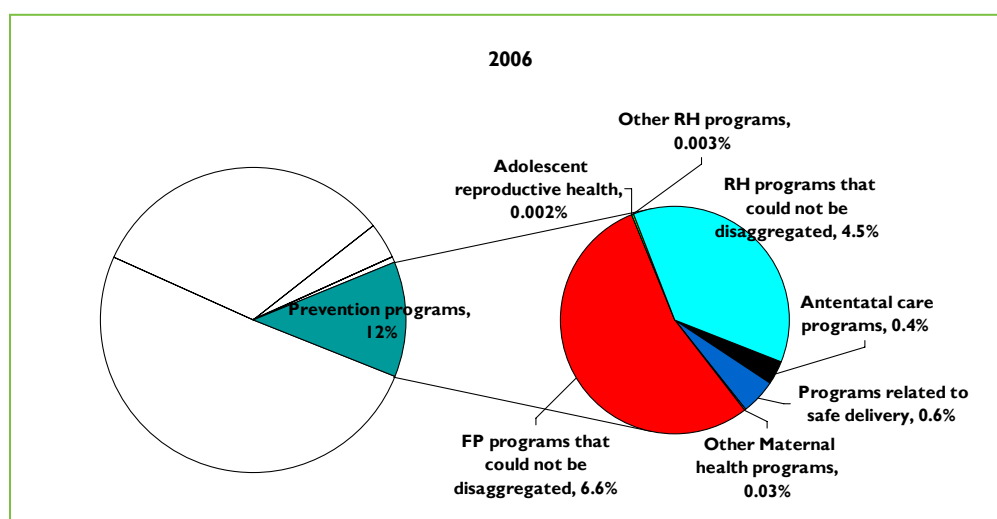
Figure 5.10 shows the proportion of spending that went to various RH functions.

**FIGURE 5.10: WHAT DO HEALTH FUNDS BUY? RH HEALTH SERVICES CONSUMED IN 2006**



As Figure 5.11 shows, family planning programs consume the largest portion of prevention program funds in 2006 (6.6 percent of  $THE_{RH}$ , as well as an assumed portion of RH programs that could not be disaggregated).<sup>20</sup>

**FIGURE 5.11: BREAKDOWN OF PREVENTION AND PUBLIC HEALTH PROGRAMS**

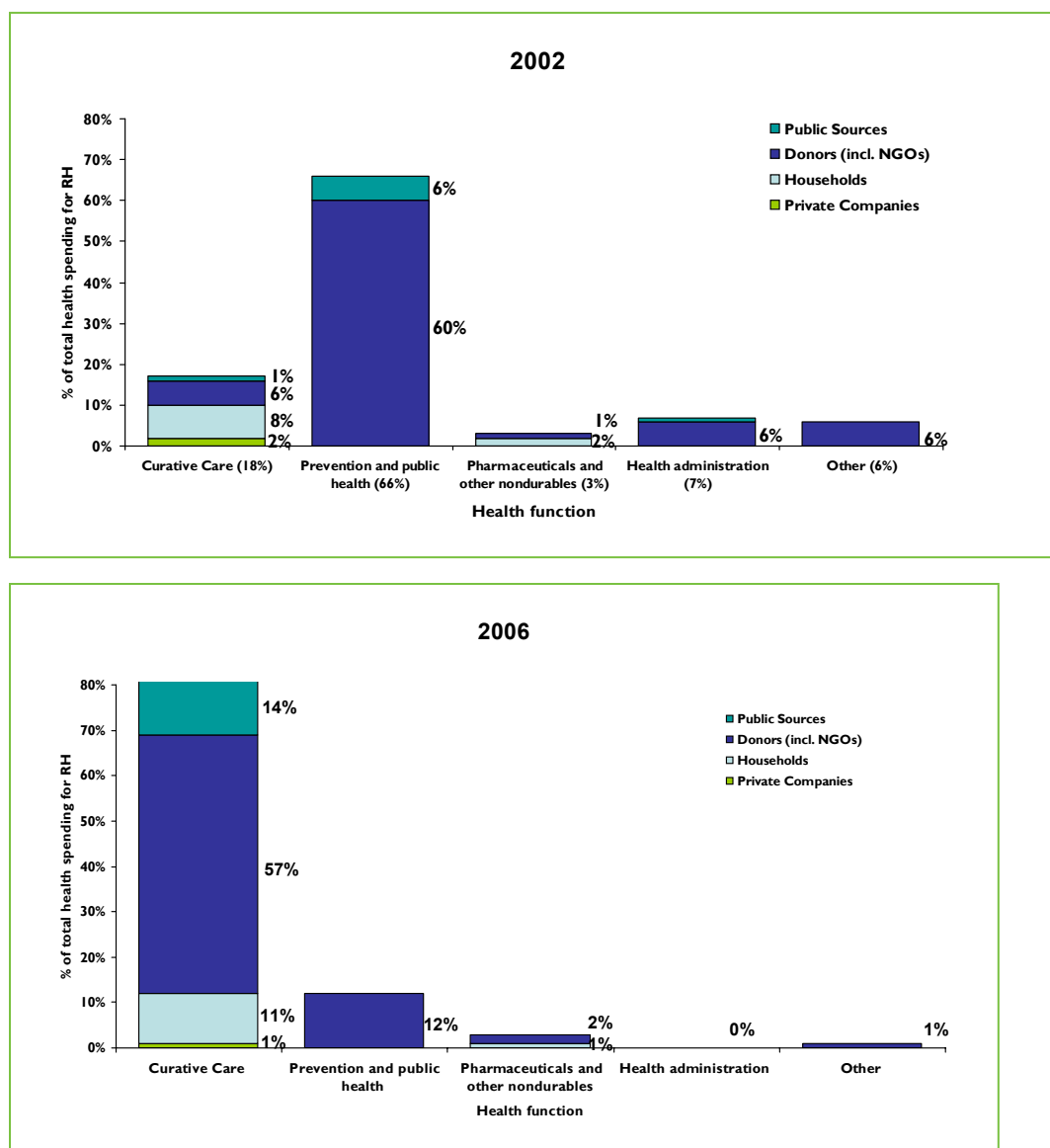


<sup>20</sup> Whereas the process attempted to ensure that personal and administrative costs were teased out of program expenditures, analysis was limited by the level of disaggregation provided by the original expenditure records. Where a program was unable to clearly disaggregate the portion of program expenses that went to an actual service, the amount was kept under the program expenditure budget line.

## 5.9 WHO FINANCES WHAT HEALTH FUNCTIONS?

In 2006 RH expenditures principally pay for the provision of curative care,<sup>21</sup> the cost of which is heavily borne by donors (57 percent), and households (11 percent) (Figure 5.12).

**FIGURE 5.12: FINANCING SOURCES OF RH HEALTH CARE FUNCTIONS, 2002 AND 2006**



Spending patterns on services changed dramatically between 2002 and 2006. In 2002, most expenditure on RH went to prevention and public health programs. Public sources funded 6 percent of all spending on these prevention services; donors funded the rest. In 2006, public sources do not contribute

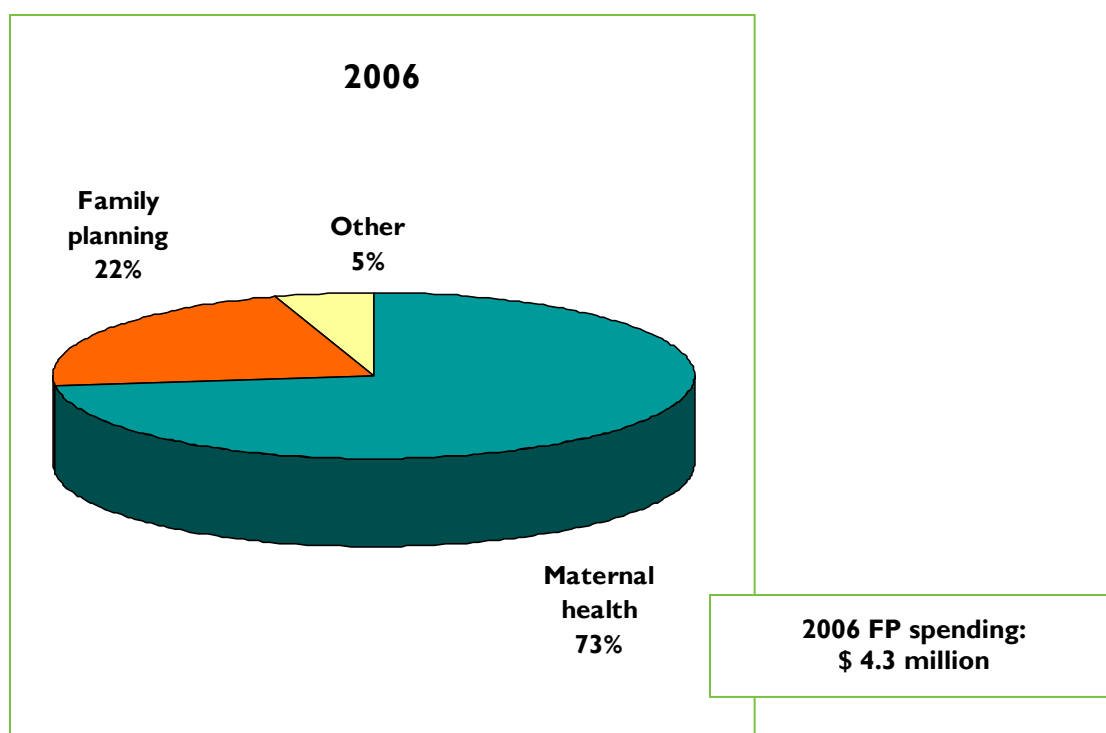
<sup>21</sup> Curative is used here in keeping with the NHA terminology in the *Producers Guide* and OECD System of Health Accounts. It refers to personal health care as opposed to collective health care (such as that delivered through public health prevention programs) and includes preventive personal care services such as family planning given as both inpatient and outpatient care.

significantly to RH prevention and public health programs. The share of  $THE_{RH}$  of these programs also dropped, from 66 percent to 12 percent.

## 5.10 MATERNAL HEALTH SPENDING IN RWANDA

In 2006, RH funds are largely consumed by maternal health care (Figure 5.13).<sup>22</sup>

**FIGURE 5.13: BREAKDOWN OF RH SPENDING BY RH CATEGORIES, 2006**



From 2002 to 2006, a shift occurred in RH spending, with expenditure increasingly going to maternal health care provided at facilities (Table 5.4). Figure 62 shows this large increase in total expenditure on maternal care, broken down by types of maternal care. In 2006, 21 percent of  $THE_{RH}$  were for prenatal care. Inpatient care, i.e., deliveries in hospitals, accounts for 51 percent of  $THE_{RH}$ . While RH spending increased by 65 percent between 2002 and 2006, curative maternal care increased sevenfold. Figure 5.13 shows that OOP spending in fact decreased. This is principally accounted for by the increase in curative care funding coming from donors.

<sup>22</sup> These findings are unavailable for 2002 because prevention and public health programs were not broken down into maternal-child health or family planning in that year. Only OOP spending achieved that level of disaggregation, which is shown in Figure 5.8.

**TABLE 5.4: MATERNAL HEALTH INDICATORS AND OOP SPENDING ON MATERNAL CARE, 2002 AND 2006**

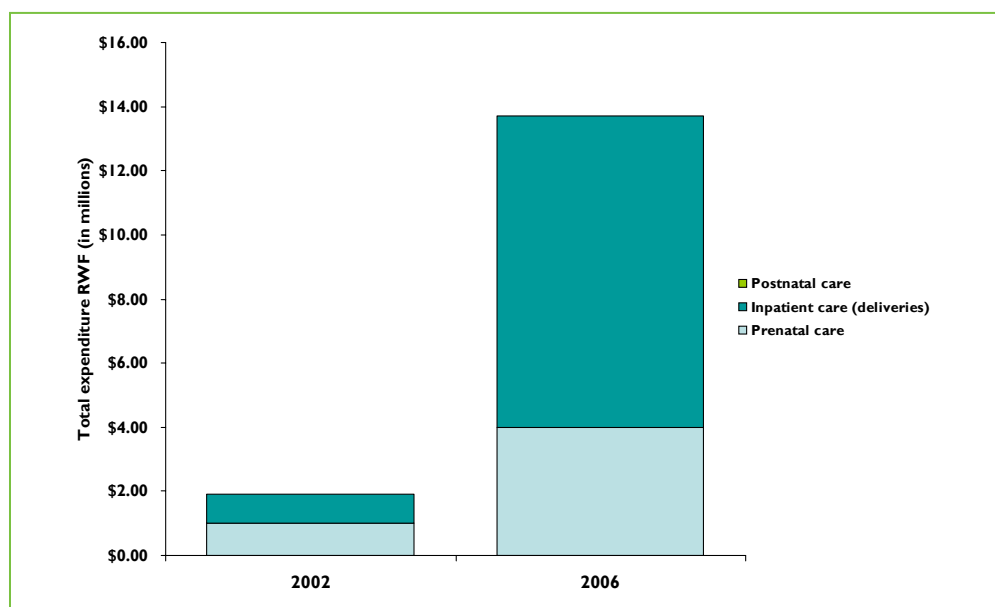
	<b>Rwanda 2002*</b>	<b>Rwanda 2006</b>
OOP spending on maternal health care	RWF 492,681,480 US\$ 892,960	RWF 733,412,735 US\$ 1,329,272
Total number of births at a facility	99,201**	132,734**
OOP spending per birth at a facility	RWF 8,286 US\$ 15.02	RWF 5,525 US\$ 10.01
Number of women of reproductive age	2,067,022***	2,291,233***
OOP spending per woman of reproductive age	RWF 253 US\$ >1	RWF 320 US\$ >1

\* Reported in constant 2006 currency to facilitate comparisons across years

\*\*DHS 2000, 2004

\*\*\*Rwandan Census 2002, 2006

**FIGURE 5.14: SPENDING TRENDS IN MATERNAL CARE, 2002 AND 2006**



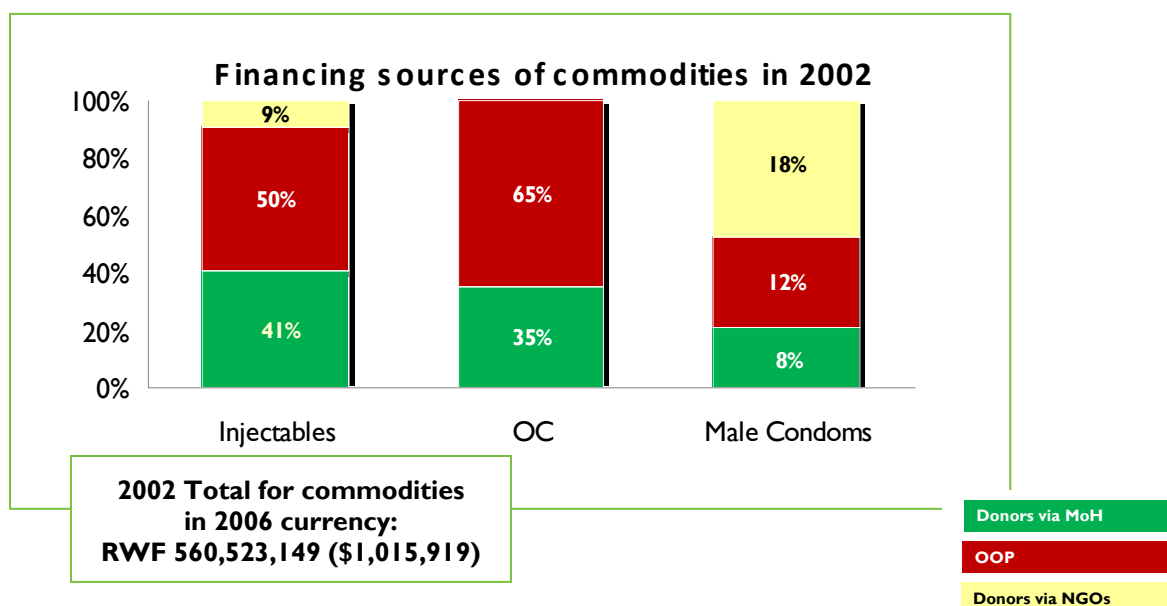
\* Reported in constant 2006 currency to facilitate comparisons across years



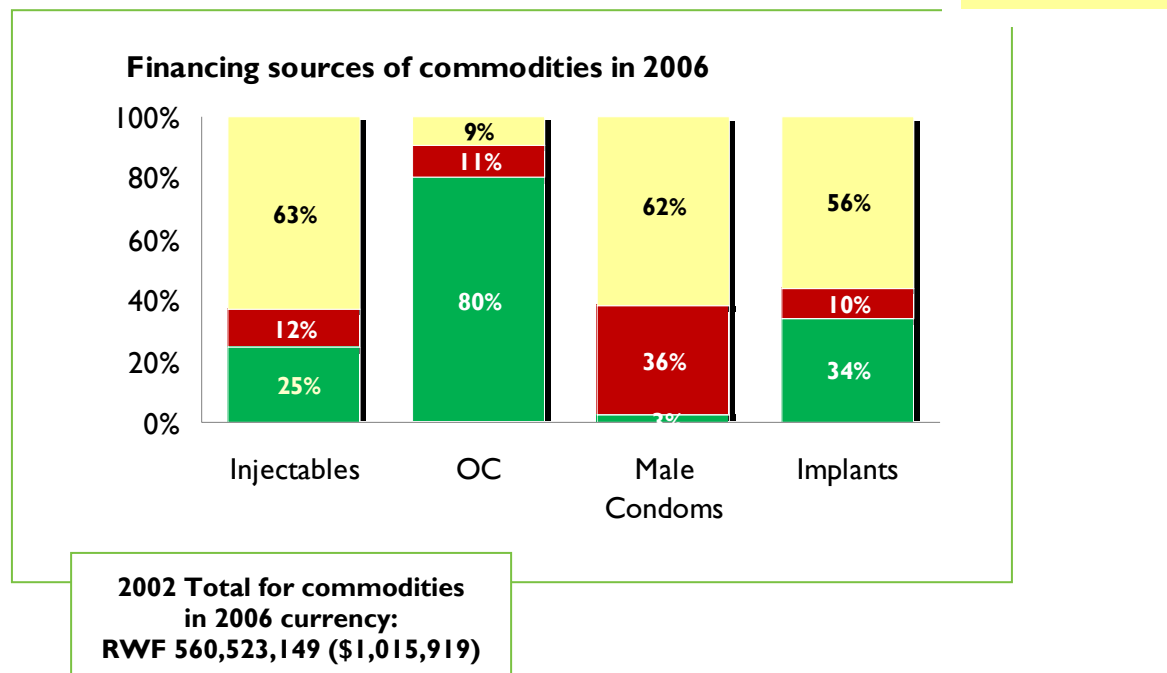
## 5.11 FAMILY PLANNING COMMODITIES

Absolute spending on contraceptive commodities has nearly tripled since 2002 (Figure 5.15). Donors channeled funds through NGOs and the MoH (see Annex C for more details on RH commodities funding flows). Donor plus household OOP spending amounted to RWF 560,523,149 (US\$ 1,015,919) in 2002 and RWF 1,493,897,845 (US\$ 2,707,612) in 2006. The donor via NGO route (social marketing) accounts for the largest share of expenditures for each commodity type (except for oral contraceptives) in 2006. Compared with 2002, the household OOP share has decreased.

**FIGURE 5.15: FINANCING SOURCES OF RH COMMODITIES IN RWANDA**



## 5.12



## 5.12 SUMMARY OF RH FINDINGS

- **Total RH spending is RWF 10.6 billion (US\$ 19.1 million) in 2006, representing a slight increase from the 2002 level of spending. RH accounts for 6.2 percent of THE<sub>general</sub>.**
- **The proportion of funds allocated to RH in comparison to THE<sub>general</sub> is smaller than the proportion of funds allocated to the other major disease interventions.** RH received fewer contributions from health sector development partners than other disease interventions like HIV/AIDS and malaria.

**More than half of all RH funds are channeled through implementing NGOs in 2006.** This level represents movement away from public financing agents like the MoH (which managed over half the RH funds in 2002). This trend is also happening with donor funds. The shift in management of RH funds is different from what those we observed in HIV/AIDS and malaria priority interventions, where the government is becoming an increasingly larger manager in relative and absolute terms. As the GoR targets efforts on RH, it will be essential to ensure strong leadership and coordination of RH funds to priority interventions.

- **In 2006 RH expenditures are principally spent on the provision of curative care <sup>23</sup> rather than programs, the cost of which is heavily borne by donors (57 percent) and households (11 percent).** Curative care is spending largely associated with deliveries and antenatal care.
- **There was a shift in spending towards maternal care services, and away from family planning (particularly by households).** More contraceptive commodities were subsidized by donors than in earlier years. The spending on maternal care is happening mainly at public facilities

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<sup>23</sup> Curative is used here in keeping with the NHA terminology in the *Producers Guide* and *System of Health Accounts*. It refers to personal health care as opposed to collective health care (such as that delivered through public health prevention programs) and includes preventive personal care services such as family planning given as both inpatient and outpatient care.

## 6. CONCLUSION

Rwanda is one of the few countries in the sub-Saharan Africa region with multiple years of comparable expenditure data. The NHA framework allows for expenditure to fall within certain categories yet is flexible to disaggregate within those categories, according to the country context, at each level: financing sources, financing agents, providers, and health functions. While the 2006 NHA exercise provides policymakers and stakeholders insight into the country's complex health financing system in its entirety, the four earlier years of NHA data grant an opportunity to observe trends.

### 6.1 OVERALL HEALTH SPENDING

Findings from the 2006 NHA reveal that THE has more than doubled since 2003 due to an increase in absolute spending from all financing sources (public, private, and donor). Donors increased spending by the largest percentage; they also constitute the largest source of funding for health (53 percent). Public spending on health increased in absolute value by US\$ 10 million since the last NHA estimation in 2003. THE is 11 percent of nominal GDP in 2006, the latter figure having increased from US\$ 2.15 to US\$ 2.87 billion (constant US\$ 2006) since 2003. Household spending on health has also risen substantially and in 2006 is 2.4 times higher than in 2003.

Public programmatic control over health funds has increased overall; the MoH now controls three times more funds than it did in 2003. Sixty-four percent of these funds derive from donors, and the remaining 36 percent come from public sources. Mutuelles have emerged as a growing force in the country in 2006 and are financed mainly by households (70 percent). Funds flowing through mutuelles go to public or *agrée* providers. However, households spend the majority of their health funds at independent pharmacies or directly at the provider, rather than through insurance schemes.

Public providers consume slightly more funds than providers of public health programs, a reverse from the 2003 NHA findings. Administration, the largest consumer of funds in 2003, is the third largest in 2006. Curative care is the largest consumed health service, jumping dramatically from 2003. Curative care (especially outpatient) is financed mainly by households in 2006, although donors and the public contribute significantly to overall curative care consumption. Prevention and public health programs consume a large portion of THE as well.

### 6.2 HIV/AIDS HEALTH SPENDING

Total HIV/AIDS health expenditure, at 24 percent of THE<sub>general</sub>, reached RWF 40.5 billion (US\$ 73.4 million) in 2006. This level of spending represents a threefold increase since the last HIV/AIDS subaccount in the pre-Global Fund and PEPFAR year of 2002.

The main financiers of HIV/AIDS health spending in Rwanda are donors, at 94 percent of all spending, followed by public sources (3 percent), households (2 percent), and other private sources (1 percent). Donor funds coming into Rwanda in 2006 are twice as likely to be spent on HIV/AIDS services as in 2002.

Public agents like the MoH and CNLS manage 39 percent of HIV/AIDS health funds in 2006 compared with 27 percent in 2002, indicating a coordinated government approach to this priority health area. Households affected by HIV/AIDS act as financing agents with their OOP payments. In 2006, spending is \$9.78 per PLHIV, a slight decrease from its level in 2002. However, since general OOP spending has increased in recent years, the OOP burden on PLHIV is only 1.5 times higher than that for the general population, compared with four times higher in 2002. Households have shifted some of their HIV/AIDS funds to inpatient care from outpatient care since 2002.

The richest quintile of PLHIV in Rwanda spends six times more annually on health than the poorest, but spends only 2 percent of their total consumption as opposed to 4 percent by the poorest. Nurses provide 94 percent of health care, mainly outpatient. In every income quintile, children are the most likely to obtain care. Prevention and public health programs consume the largest share of HIV/AIDS funds, followed by curative care and health administration. Within public health programs, IEC programs account for 18 percent (5.3 percent) of THE<sub>HIV</sub>.

Most of HIV/AIDS spending is on health; however, 16 percent of HIV/AIDS monies are allocated to non-health and health-related programs and functions.

### 6.3 MALARIA HEALTH SPENDING

The total resource envelope for malaria reached RWF 23.6 billion (US\$ 42.7 million) in 2006, double the amount from the last malaria subaccount, in 2003. It is 14 percent of THE, although malaria is the leading cause of morbidity in the country. A notable finding from the malaria subaccount is that only 35 percent of total malaria spending is actually targeted for the disease; the remainder is made up of untargeted spending at providers that is considered a malaria expenditure, to account for certain expenses like capital formation of facilities used to treat malaria patients and doctors' salaries.

Donors and households are the main financiers of malaria funds in Rwanda. Additionally, the public allocation of funding to malaria has decreased from 13 percent to 3.7 percent since 2003. Twenty-six percent of all private spending (mainly household spending), goes to malaria.

There has been an increase in spending on public health and prevention programs (largely by donors); however, a large portion of malaria resources are spent on curative care. In 2003, RWF 6.6 billion (US\$ 11.9 million) was spent on inpatient curative care and RWF 6 billion (US\$ 10.8 million) was spent on outpatient curative. In 2006, RWF 3.1 billion (US\$ 5.6 million) is spent on inpatient and RWF 15 billion (US\$ 27.2 million) is spent on outpatient curative. Bednets are substantially subsidized by the government, decreasing the burden on households.

CHWs now consume a larger share of malaria resources, reflective of their role in providing home-based malaria care and bednet distribution.

### 6.4 RH SPENDING

RH accounts for 5.5 percent of total health spending, RWF 10.6 billion (US\$ 19.1 million) in 2006. Absolute spending increased slightly from the 2002 level of spending. RH receives fewer contributions from health sector development partners in comparison with other disease interventions like HIV/AIDS and malaria.

Additionally, more than half of all RH funds are channeled through implementing NGOs in 2006, which is a different trend than observed in HIV/AIDS and malaria priority interventions, where the government is becoming an increasingly larger manager in relative and absolute terms.

More contraceptive commodities are subsidized by donors than in earlier years. Curative care, spending largely associated with deliveries and antenatal care, consumes the most funds, primarily from donors (57 percent), and households (11 percent). There has been a shift in spending to maternal care services, mainly at public facilities. This shift away from family planning was a result in part of household spending.



## 7. NEXT STEPS

The findings from overall health, HIV/AIDS, malaria, and RH bring to light issues related to the equity, efficiency, and sustainability of the health financing system in Rwanda. This report highlights allocation levels and funding flows to different priority areas, health services, providers, and end users. Temporal analyses allow the government and relevant stakeholders to observe trends in health financing and management. The next steps are to translate the findings from the report into actionable items to improve health financing and to inform policy decisions to strengthen the health system more broadly.

The 2006 NHA captures an enormous volume of information and can serve as a useful baseline in future estimations. NHA should be produced on a regular basis, resulting in regular updates serving to achieve the health system's strategic objectives..





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# **ANNEX A. NHA TABLES: GENERAL AND HIV/AIDS, MALARIA, AND RH SUBACCOUNTS**



# FINANCING SOURCE x FINANCING AGENT (FSxHF)

General NHA 2006

## Financing Source (FS)

Code	Financing Agent (HF)			FS.2 Private Funds				FS.3	FS.nsk	Row Total
		FS.1.1.1 Central Gov Revenue	FS. 1.2 Other Public funds	FS.2.1.1 Parastatal Employers	FS.2.1.2 Private Employers	FS.2.2 Households	FS.2.4 Other private funds	Rest of the World (Donors)	Not specified by any kind	
		FS.1.1.1.4 could not be disaggregated								
HF.1.1.1.1	MoH (MiniSante)	17,358,485,575	338,016,744					29,613,280,559		47,309,782,878
HF.1.1.1.2	Other Ministries	7,004,214,161						63,757,948		7,067,972,109
HF.1.1.1.3.1	CNLS proper	288,080,280	530,000					544,286,700	213,861,233	1,046,758,213
HF.1.1.1.3.2	CNLS projects	13,584,348						12,614,065,851		12,627,650,198
HF.1.1.3	Local Municipal Gvt (Districts)							65,222,465		65,222,465
HF.1.2	Social Security Fund (CSR)*			7,497,442	4,464,095					11,961,537
HF.1.3	FARG	993,516,344				15,945,229				1,009,461,573
HF.2.1.1	Gvt Employees Insurance Programme (RAMA+MMI)	542,375,328		3,429,305,194		188,560,896	582,640,593			4,742,882,011
HF.2.1.2	Private Employees Insurance Programme				301,824,745	25,681,994				327,506,739
HF.2.1.3.1	Mutuelles (premium paid by employer)			165,725,571	1,668,347	167,076,897				334,470,816
HF.2.1.3.2	Mutuelles (Community Based)	742,955,220			655,362,000	5,636,026,600		1,070,053,000		8,104,396,820
HF. 2.5.1	Parastatal companies			885,923,877						885,923,877
HF.2.2	Private Insurance Enterprises (other than social insurance: COGEAR, SONARWA, etc)			25,036,769	249,705,435	51,585,303				326,327,506
HF.2.3.	Private household out of pocket payments					38,295,662,832				38,295,662,832
HF.2.4	Non profit institutions (NGOs)	42,928,931				15,945,229		38,331,077,009		38,389,951,169
HF.2.5.2	Private Non Parastatal Firms				852,802,486					852,802,486
HF.3	Rest of World							8,175,701,041		8,175,701,041
HF.nsk	Not specified by any kind									0
	Column Total (THE)	26,986,140,186	338,546,744	4,513,488,853	2,065,827,108	44,396,484,980	582,640,593	90,477,444,573	213,861,233	169,574,434,271
HF.4	Financing Agents spending on Health Related Items	1,061,575,817						2,818,675,229		3,880,251,046
	Column Total (NHE)	28,047,716,004	338,546,744	4,513,488,853	2,065,827,108	44,396,484,980	582,640,593	93,296,119,802	213,861,233	173,454,685,317

\*Includes only the portion of CSR going to health

\*note Parastatals add to their employees' salaries a fixed amount intended for health care. However it is not known how much of this is actually used for health care. So this amount has been excluded from the tables.

**FINANCING AGENT x PROVIDER (HFxP)****General NHA**

		Financing Agent								
		HF.A Public Sector								
		HF.1.1.1.1	HF.1.1.1.2	HF.1.1.1.3.1	HF.1.1.1.3.2	HF.1.1.3	HF.1.2	HF.1.3	HF.2.1.1	HF.2.1.2
	Provider	MoH (MiniSante)	Other Ministries	CNLS proper	CNLS projects	Local Municipal Gvt (Districts)	Social Security Fund (CSR)*	FARG	Gvt Employees Insurance Programme (RAMA+MMI)	Private Employees Insurance Programme
HP.1.1.1.1	National Referral Gvt Hospital	1,786,016,490	875,995,773		3,203,973,446			327,860,394		
HP.1.1.1.2	National Referral Private Hospital	2,050,495,044			1,552,591,126		3,035,017	168,897,778	1,069,786,379	68,519,012
HP.1.1.1.3	National Referral Hospital (could not be disaggregated)									
HP.1.1.2.1	District Gvt. Hospitals	87,188,937	268,454,559		1,095,946,677		2,142,365	119,221,961	647,240,801	44,614,988
HP.1.1.2.2	District Agrees Hospitals	29,675,270	97,260,392		456,644,449		892,652	49,675,817	186,672,851	18,589,578
HP.1.1.2.3	District Hospitals (could not be disaggregated)									
HP.1.2	Mental health hospitals	134,150,895						15,945,229		
HP.3.1	Office of physicians (private clinics)*								728,136,940	14,637,654
HP.3.3.1	Community health workers	4,485,321,000								
HP.3.3.2	Traditional healer									
HP.3.3.3	Other health practitioners	128,584,047								
HP.3.4.2	Outpatient mental health institutions									
HP.3.4.5.1	Public health centers (incl. TRAC HC - just in General NHA)	2,195,968,823	389,041,569		1,431,020,340		3,570,608	198,703,269	851,897,162	74,489,350
HP.3.4.5.2	Government assisted not-for-profit health centers (Agrees)	91,908,914	252,877,020		930,163,221		2,320,895	129,157,125	540,072,889	48,418,078
HP.3.4.5.3	NGO health centers	14,367,737								
HP.3.5	Medical and diagnostic laboratories	51,046,767								
HP.3.9.1	Ambulance services									
HP.3.6	Providers of home health care	1,382,582,579								
HP.3.9.2	Blood banks (CNTS transfusion)	1,499,733,751								
HP.4.1	Dispensing chemists								715,969,471	55,679,953
HP.5	Providers + admin of public health	19,765,392,090		1,006,810,380	3,267,465,761					
HP.6	General health administration and insurance	13,560,268,146	5,184,342,797	39,947,833	682,313,955					
HP.9	Rest of the world				7,531,224					
HP.nsk	Providers not specified by any kind	47,082,389				65,222,465			3,105,518	2,558,126
	<b>Column Total THE</b>	47,309,782,878	7,067,972,109	1,046,758,213	12,627,650,198	65,222,465	11,961,537	1,009,461,573	4,742,882,011	327,506,739
	<b>HF Totals From FS x HF Table</b>	47,309,782,878	7,067,972,109	1,046,758,213	12,627,650,198	65,222,465	11,961,537	1,009,461,573	4,742,882,011	327,506,739
HP.8.1	Research Institutions	2,848,184,712								
HP.8.2	Education and training institutions		847,931,983		42,207,976					
	<b>Subtotal for health related</b>	2,848,184,712	847,931,983	-	42,207,976	-	-	-	-	-
	<b>Column Total: NHE</b>	50,157,967,590	7,915,904,092	1,046,758,213	12,669,858,174	65,222,465	11,961,537	1,009,461,573	4,742,882,011	327,506,739

\*Many private clinics are headed by a nurse, not a physician

213,643,834  
2,634,540,878

**FINANCING AGENT x PROVIDER (HFxP)****General NHA**

	Provider	HF.A Public Sector			HF B: Non Public Sector				HF.3 ROW	HF.nsk	Row Total
		HF.2.1.3.1	HF.2.1.3.2	HF. 2.5.1	HF.2.2	HF.2.3.	HF.2.4	HF.2.5.2	HF.3	HF.nsk	
		Mutuelles (premium paid by employer)	Mutuelles (Community Based)	Parastatal companies	Private insurance Enterprises (other than social insurance: COGEAR, SONARWA)	Private household out of pocket payments	Non profit institutions (NGOs)	Private Non Parastatal Firms	Rest of World	Not specified by any kind	
HP.1.1.1.1	National Referral Gvt Hospital	334,470,816				5,728,373,681	1,840,601,838		4,644,935,357		18,742,227,793
HP.1.1.1.2	National Referral Private Hospital				68,272,300	1,679,367,213		319,781,607	-		6,980,745,476
HP.1.1.1.3	National Referral Hospital (could not be disaggregated)										-
HP.1.1.2.1	District Gvt. Hospitals		1,945,055,237		44,454,346	2,118,713,553	688,555,450	442,689	-		7,062,031,563
HP.1.1.2.2	District Agrees Hospitals		810,439,682		18,522,644	1,326,581,338	1,796,889,758	191,604	-		4,792,036,036
HP.1.1.2.3	District Hospitals (could not be disaggregated)										-
HP.1.2	Mental health hospitals					50,796,368	15,945,229		82,244,968		299,082,689
HP.3.1	Office of physicians (private clinics)*			618,843,331	14,584,949	3,519,525,545		493,046,371			5,388,774,790
HP.3.3.1	Community health workers						1,823,992,966				6,309,313,966
HP.3.3.2	Traditional healer					4,148,660,041					4,148,660,041
HP.3.3.3	Other health practitioners					262,252,983					390,837,030
HP.3.4.2	Outpatient mental health institutions										-
HP.3.4.5.1	Public health centers (incl. TRAC HC - just in General NHA)		3,241,758,728		74,221,141	4,585,506,592	2,969,268,261		-		16,015,445,842
HP.3.4.5.2	Government assisted not-for-profit health centers (Agrees)		2,107,143,173		48,243,742	1,009	2,146,995,793		-		6,297,301,858
HP.3.4.5.3	NGO health centers					38,620,612	612,053,092				665,041,441
HP.3.5	Medical and diagnostic laboratories										51,046,767
HP.3.9.1	Ambulance services										-
HP.3.6	Providers of home health care										1,382,582,579
HP.3.9.2	Blood banks (CNTS transfusion)										1,499,733,751
HP.4.1	Dispensing chemists			93,789,820	55,479,470	14,767,197,470	585,302,625				16,273,418,809
HP.5	Providers + admin of public health						13,849,285,821		3,226,637,248		41,115,591,300
HP.6	General health administration and insurance						11,590,076,650		221,883,469		31,278,832,851
HP.9	Rest of the world			173,290,726				38,822,880			219,644,829
HP.nsk	Providers not specified by any kind				2,548,915	70,066,428	470,983,686	517,337			662,084,863
	<b>Column Total THE</b>	334,470,816	8,104,396,820	885,923,877	326,327,506	38,295,662,832	38,389,951,169	852,802,486	8,175,701,041	-	<b>169,574,434,271</b>
	<b>HF Totals From FS x HF Table</b>	334,470,816	8,104,396,820	885,923,877	326,327,506	38,295,662,832	38,389,951,169	852,802,486	8,175,701,041	-	<b>169,574,434,271</b>
HP.8.1	Research Institutions						102,774,265				2,950,958,977
HP.8.2	Education and training institutions						2,461,534				892,601,493
	<b>Subtotal for health related</b>	-	-	-	-	-	105,235,799	-	-	-	3,843,560,470
	<b>Column Total: NHE</b>	334,470,816	8,104,396,820	885,923,877	326,327,506	38,295,662,832	38,495,186,968	852,802,486	8,175,701,041	-	<b>173,417,994,741</b>

\*Many private clinics are headed by a nurse, not a physician

As a % of HH

**FINANCING AGENTS x FUNCTION (HF x HC)****General NHA**

		Financing Agent											
		HF.A Public Sector											
		HF.1.1.1.1	HF.1.1.1.2	HF.1.1.1.3.1	HF.1.1.1.3.2	HF.1.1.3	HF.1.2	HF.1.3	HF.2.1.1	HF.2.1.2	HF.2.1.3.1	HF.2.1.3.2	HF. 2.5.1
Function		MoH (MiniSante)	Other Ministries	CNLS proper	CNLS projects	Local Municipal Gvt (Districts)	Social Security Fund (CSR)	FARG	Gvt Employees Insurance Programme (RAMA+MMI)	Private Employees Insurance Programme	Mutuelles (premium paid by employer)	Mutuelles (Community Based)	Parastatal companies
HC.1.1	In patient curative care	3,541,524,393	841,482,972	-	1,766,209,544	-	3,950,878	473,360,936	406,907,797	23,083,060	247,508,404	2,539,917,963	237,797,439
HC.1.3	Out patient curative care	6,762,779,734	619,947,789	-	1,484,163,660	-	8,010,659	536,100,638	1,372,622,268	33,598,822	86,962,412	5,564,478,857	508,881,137
HC.1.4	Services of curative home	1,446,980,647	-	-	-	-	-	-	-	-	-	-	-
HC.4.1	Clinical lab (BNC, biolab,	6,820,000	-	-	-	-	-	-	-	-	-	-	-
HC.4.2	Diagnostic imaging	15,968,290	-	-	-	-	-	-	-	-	-	-	-
HC.5.1	Pharmaceuticals and other	284,790,232	-	-	4,653,248,393	-	-	-	715,969,471	55,679,953	-	-	93,501,139
HC.5.2.1	Glasses and other vision	-	-	-	-	-	-	-	-	-	-	-	288,681
HC.6.1	Maternal and child care,	2,072,842,247	-	-	-	-	-	-	-	-	-	-	-
HC.6.2	School health services	-	-	-	-	-	-	-	-	-	-	-	-
HC.6.3	Prevention of communicable	8,293,641,987	149,275,175	1,006,810,380	1,142,785,838	-	-	-	-	-	-	-	-
HC.6.3.1.2	Blood supply	1,499,733,751	-	-	-	-	-	-	-	-	-	-	-
HC.6.4	Prevention of	195,076,499	-	-	-	-	-	-	-	-	-	-	-
HC.6.6	Training within public health programs	821,176,196	-	-	-	-	-	-	-	-	-	-	-
HC.6.9	OTHER miscellaneous public health programs	432,528,681	-	-	-	-	-	-	-	-	-	-	-
HC.6.10	Public health programs that could not be disaggregated	-	-	-	-	-	-	-	-	-	-	-	-
HC.7.2.2.1 +	local and external	17,926,977	-	-	-	-	-	-	-	-	-	-	-
HC.7.2.2.3	Health administration and insurance (not disaggregated)	14,047,638,784	5,035,067,622	39,947,833	2,814,525,102	-	-	-	2,247,382,475	215,144,904	-	-	-
HCR.1	Capital formation for health care provider institutions	7,166,778,468	422,198,552	-	766,717,662	-	-	-	-	-	-	-	27,889,331
HC.nsk	Not specified by kind	703,575,993	-	-	-	65,222,465	-	-	-	-	-	-	17,566,149
	Column Total THE	47,309,782,878	7,067,972,109	1,046,758,213		65,222,465	11,961,537	1,009,461,573	4,742,882,011	327,506,739	334,470,816	8,104,396,820	885,923,877
HCR.2	Education & Training	-	847,931,983	-	42,207,976	-	-	-	-	-	-	-	-
HCR.3	Research & Development	2,848,184,712	-	-	-	-	-	-	-	-	-	-	-
	Sub total column	2,848,184,712	847,931,983	-	42,207,976	-	-	-	-	-	-	-	-
	Column Total NHE	50,157,967,590	7,915,904,092	1,046,758,213		65,222,465	11,961,537	1,009,461,573	4,742,882,011	327,506,739	334,470,816	8,104,396,820	885,923,877



**FINANCING AGENTS x FUNCTION (HF x HC)****General NHA**

Function		HF B: Non Public Sector				HF.3 ROW	HF.nsk	
		HF.2.2	HF.2.3.	HF.2.4	HF.2.5.2	HF.3	HF.nsk	-
		Private Insurance Enterprises (other than social insurance: COGEAR, SONAPWA, etc)	Private household out of pocket payments	Non profit institutions (NGOs)	Private Non Parastatal Firms	Rest of World	Not specified by any kind	Row Total
HC.1.1	In patient curative care	22,999,946	5,438,768,459	3,218,019,617	54,419,252	3,493,366,088	-	22,309,316,746
HC.1.3	Out patient curative care	33,477,845	18,019,630,475	6,230,193,096	192,611,937	1,233,814,237	-	42,687,273,565
HC.1.4	Services of curative home care	-	-	-	-	-	-	1,446,980,647
HC.4.1	Clinical lab (BNC, biolab,	-	-	-	-	-	-	6,820,000
HC.4.2	Diagnostic imaging	-	-	-	-	-	-	15,968,290
HC.5.1	Pharmaceuticals and other	55,479,470	14,767,197,470	585,302,625	-	-	-	21,211,168,753
HC.5.2.1	Glasses and other vision	-	-	40,000,000	-	-	-	40,288,681
HC.6.1	Maternal and child care, family	-	-	1,695,533,768	-	1,956,499,326	-	5,724,875,341
HC.6.2	School health services	-	-	2,192,741,602	-	-	-	2,192,741,602
HC.6.3	Prevention of communicable	-	-	6,148,734,427	-	442,866,124	-	17,184,113,932
HC.6.3.1.2	Blood supply	-	-	-	-	-	-	1,499,733,751
HC.6.4	Prevention of	-	-	610,012,423	-	-	-	805,088,922
HC.6.6	Training within public health programs	-	-	2,479,386,057	-	-	-	3,300,562,253
HC.6.9	OTHER miscellaneous public health programs	-	-	988,717,015	-	27,035,161	-	1,448,280,857
HC.6.10	Public health programs that could not be disaggregated	-	-	155,728,930	-	-	-	155,728,930
HC.7.2.2.1 +	local and external	-	-	2,919,225,631	-	-	-	2,937,152,608
HC.7.2.2.3	Health administration and insurance (not disaggregated)	214,370,245	-	7,933,931,536	-	1,006,381,017	-	33,554,389,517
HCR.1	Capital formation for health care provider institutions	-	-	2,905,924,384	539,576,150	-	-	11,829,084,546
HC.nsk	Not specified by kind	-	70,066,428	286,500,059	66,195,148	15,739,089	-	1,224,865,331
	<b>Column Total THE</b>	326,327,506	38,295,662,832	38,389,951,169	852,802,486	8,175,701,041	-	<b>169,574,434,271</b>
HCR.2	Education & Training	-	-	-	-	-	-	892,601,493
HCR.3	Research & Development	-	-	-	-	-	-	2,950,958,977
	<i>Sub total column</i>	-	-	-	-	-	-	3,843,560,470
	<b>Column Total NHE</b>	326,327,506	38,295,662,832	38,389,951,169	852,802,486	8,175,701,041	-	<b>173,417,994,741</b>

		Provider										
		HP.1.1.1.1	HP.1.1.1.2	HP.1.1.2.1	HP.1.1.2.2	HP.1.2	-	HP.3.3.1	HP.3.3.2	HP.3.3.3	HP.3.4.5.1	HP.3.4.5.2
	Function	National Referral Gvt Hospital	National Referral Private Hospital	District Gvt. Hospitals	District Agrees Hospitals	Mental health hospitals	Office of physicians (private clinics)*	Community health workers	Traditional healer	Other health practitioners	Public health centers (incl. TRAC HC-- just in General NHA)	Government assisted not-for- profit health centers (Agrees)
HC.1.1	In patient curative care	10,718,356,485	2,104,408,975	3,572,770,109	2,144,871,830	204,057,508	79,468,793	-	-	-	874,846,295	911,555,905
HC.1.3	Out patient curative care	6,235,282,510	2,955,947,836	2,170,904,587	2,104,502,299	95,025,181	4,978,378,162	4,485,321,000	4,148,660,041	390,837,030	10,528,975,995	3,636,489,496
HC.1.4	Services of curative home care	-	-	-	-	-	-	-	-	-	-	-
HC.4.1	Clinical lab (BNC, biolab,	-	-	-	-	-	-	-	-	-	-	-
HC.4.2	Diagnostic imaging	-	-	15,968,290	-	-	-	-	-	-	-	-
HC.5.1	Pharmaceuticals and other	1,535,571,970	791,052,227	558,389,807	232,662,420	-	-	-	-	-	930,649,679	604,922,291
HC.5.2.1	Glasses and other vision	-	-	-	-	-	-	-	-	-	-	-
HC.6.1	Maternal and child care, family	-	-	-	-	-	-	-	-	-	1,224,130,901	-
HC.6.2	School health services	-	-	-	-	-	-	76,932,761	-	-	-	-
HC.6.3	Prevention of communicable disease (e.g., HIV/AIDS,	-	-	-	-	-	-	528,673,323	-	-	-	-
HC.6.3.1.2	Blood supply	-	-	-	-	-	-	-	-	-	-	-
HC.6.4	Prevention of noncommunicable diseases	-	-	-	-	-	-	-	-	-	158,755,445	-
HC.6.6	Training within public health	-	-	-	-	-	-	932,077,665	-	-	-	-
HC.6.9	OTHER miscellaneous public	-	-	-	-	-	-	82,498,465	-	-	-	-
HC.6.10	Public health programs that	-	-	-	-	-	-	-	-	-	-	-
HC.7.2.2.1 + HC.7.2.2.2	local and external consultancies	-	-	-	-	-	-	81,076,437	-	-	-	-
HC.7.2.2.3	Health administration and insurance (not disaggregated)	-	679,212,830	479,444,351	199,768,479	-	-	122,734,315	-	-	1,336,647,344	519,398,046
HCR.1	Capital formation for health care provider institutions	253,016,828	450,123,609	264,554,419	110,231,008	-	247,683,874	-	-	-	961,440,184	624,936,119
HC.nsk	Not specified by kind	-	-	-	-	-	83,243,961	-	-	-	-	-
	Column Total-THE	18,742,227,793	6,980,745,476	7,062,031,563	4,792,036,036	299,082,689	5,388,774,790	6,309,313,966	4,148,660,041	390,837,030	16,015,445,842	6,297,301,858
HCR.2	Education & Training											
HCR.3	Research & Development											
	Column Total-NHE											

### PROVIDER x FUNCTION (HP x HC)

## General NHA

[illegible]

Annex A-4

# **PROVIDER x FUNCTION (HP x HC)**

**General NHA**

		HP.8.1	HP.8.2	HP.8.3	
		Research Institutions	Education and training institutions	Other health related institutions	
	<b>Function</b>				NHE Row Total
HC.1.1	In patient curative care				
HC.1.3	Out patient curative care				
HC.1.4	Services of curative home				
HC.4.1	Clinical lab (BNC, biolab,				
HC.4.2	Diagnostic imaging				
HC.5.1	Pharmaceuticals and other				
HC.5.2.1	Glasses and other vision				
HC.6.1	Maternal and child care, family				
HC.6.2	School health services				
HC.6.3	Prevention of communicable disease (e.g., HIV/AIDS,				
HC.6.3.1.2	Blood supply				
HC 6.4	Prevention of noncommunicable diseases				
HC 6.6	Training within public health				
HC.6.9	OTHER miscellaneous public				
HC.6.10	Public health programs that				
HC.7.2.2.1 + HC.7.2.2.2	local and external consultancies				
HC.7.2.2.3	Health administration and insurance (not disaggregated)				
HCR.1	Capital formation for health care provider institutions				
HC.nsk	Not specified by kind				
	<b>Column Total-THE</b>				
HCR.2	Education & Training	0	892,601,493	0	892,601,493
HCR.3	Research & Development	2,950,958,977	0	0	2,950,958,977
	<b>Column Total-NHE</b>	2,950,958,977	892,601,493	-	<b>173,417,994,741</b>

**FINANCING SOURCE x FINANCING AGENT (FSxHF)****HIV/AIDS Subaccounts (Targeted and untargeted)****Financing Source (FS)**

Code	Financing Agent (HF)	Financing Source (FS)		FS.2 Private Funds				FS.3	FS.nsk	Row Total	FS.Addendum - Govt	FS.Addendum - Donors
		FS.1.1.1 Central Gov Revenue	FS. 1.2 Other Public funds	FS.2.1.1 Parastatal Employers	FS.2.1.2 Private Employers	FS.2.2 Households	FS.2.4 Other private funds	Rest of the World (Donors)	Not specified by any kind		Non-health spending	Non-health spending
		FS.1.1.1.4 could not be disaggregated										
HF.1.1.1.1	MoH (MiniSante)	556,520,854	560,534					1,102,439,970		1,659,521,358		
HF.1.1.1.2	Other Ministries (except CNLS)	165,528,526						5,506,336		171,034,863		
HF.1.1.1.3.1	CNLS	288,080,280	530,000					587,134,348	213,861,233	1,089,605,861		
HF.1.1.1.3.2.1	CNLS-UNDP							160,410,358		160,410,358		
HF.1.1.1.3.2.2	CNLS-BAD	13,584,348						251,801,927		265,386,274		
HF.1.1.1.3.2.3	CNLS-MAP							5,063,564,586		5,063,564,586		
HF.1.1.1.3.2.4	CNLS-GF							7,138,288,980		7,138,288,980		
HF.1.1.3	Local Municipal Gvt (Districts)							65,222,465		65,222,465		
HF.1.2	Social Security Fund (CSR)			125,483	74,714					200,197		
HF.1.3	FARG	14,559,589				233,671				14,793,260		
HF.2.1.1	Gvt Employees Insurance Programme (RAMA)	2,272,508		14,368,505		790,055	2,441,216			19,872,283		
HF.2.1.2	Private Employees Insurance Programme				673,900	57,342				731,242		
HF.2.1.3	Mutuelles (Employer-paid & Community based)	8,487,928		1,846,183	7,505,801	86,036,787		12,224,873		116,101,571		
HF. 2.5.1	Parastatal companies			28,113						28,113		
HF.2.2	Private Insurance Enterprises ( <i>other than social insurance: COGEAR, SONARWA, etc</i> )			55,901	557,531	115,177				728,609		
HF.2.3.	Private household out of pocket payments					863,188,381				863,188,381		
HF.2.4	Non profit institutions (NGOs, SWAA, PROFEMME)	13,435,394				54,081		21,138,402,799		21,151,892,275		
HF.2.5.2	Private Non Parastatal Firms				18,900					18,900		
HF.3	Rest of World							2,702,133,111		2,702,133,111		
HF.nsk	Not specified by any kind									0		
	Column Total (THE)	1,062,469,427	1,090,534	16,424,185	8,830,846	950,475,494	2,441,216	38,227,129,753	213,861,233	40,482,722,687		
HF. Health	Financing Agents spending on Health Related Items							358,001,504		358,001,504		
	Column Total (NHE)	1,062,469,427	1,090,534	16,424,185	8,830,846	950,475,494	2,441,216	38,585,131,257	213,861,233	40,840,724,191		
Addendum	Financing agents spending on NONHEALTH										1,325,396,756	5,832,134,709
	Column Total (THAE)	1,062,469,427	1,090,534	16,424,185	8,830,846	950,475,494	2,441,216	38,585,131,257	213,861,233	47,998,255,657		

**FINANCING AGENT x PROVIDER (HFxP)****HIV/AIDS Subaccounts (Targeted and untargeted)**

	Financing Agent	HF.A Public Sector							
		HF.1.1.1.1	HF.1.1.1.2	HF.1.1.1.3.1	HF.1.1.1.3.2.1	HF.1.1.1.3.2.2	HF.1.1.1.3.2.3	HF.1.1.1.3.2.4	HF.1.1.3
		MoH (MiniSante)	Other Ministries (except CNLS)	CNLS	CNLS-UNDP	CNLS-BAD	CNLS-MAP	CNLS-GF	Local Municipal Gvt (Districts)
	Provider								
HP.1.1.1.1	National Referral Gvt Hospital	25,106,822	9,851,042				996,459,831	2,207,513,615	
HP.1.1.1.2	National Referral Private Hospital	51,631,465					513,327,792	1,039,263,335	
HP.1.1.1.3	National Referral Hospital (could not be disaggregated)								
HP.1.1.2.1	District Gvt. Hospitals		2,239,501				362,349,029	733,597,648	
HP.1.1.2.2	District Agrees Hospitals		1,370,509				150,978,762	305,665,687	
HP.1.1.2.3	District Hospitals (could not be disaggregated)								
HP.1.2	Mental health hospitals								
HP.3.1	Office of physicians (private clinics)*								
HP.3.3.1	Community health workers								
HP.3.3.2	Traditional healer								
HP.3.3.3	Other health practitioners								
HP.3.4.2	Outpatient mental health institutions (SCPS)								
HP.3.4.5.1	Public health centers								
HP.3.4.5.2	Government assisted not-for-profit health centers (Agrees)	72,226,483	2,487,832				208,357,593	1,222,662,747	
HP.3.4.5.3	NGO health centers	14,900,745	2,003,476				135,432,435	794,730,785	
HP.3.4.5.9	Mobile health centers								
HP. 3.4.9	TRAC HIV/AIDS Center	113,114,054							
HP.3.9.1	Ambulance services								
HP.3.6	Providers of home health care services	47,961,153							
HP.3.9.2	Blood banks (CNTS transfusion)								
HP.4.1	Dispensing chemists								
HP.5	Providers + admin of public health programs	599,348,858	5,344,394	1,049,658,028	160,410,358	265,386,274	2,696,659,143	145,009,985	
HP.6	General health administration and insurance	735,231,779	147,738,109	39,947,833				682,313,955	
HP. 8	Institutions providing health related services								
HP.9	Rest of the world							7,531,224	
HP.nsk	Providers not specified by any kind								65,222,465
	<b>Column Total THE</b>	1,659,521,358	171,034,863	1,089,605,861	160,410,358	265,386,274	5,063,564,586	7,138,288,980	65,222,465
	<b>HF Totals From FS x HF Table</b>	1,659,521,358	171,034,863	1,089,605,861	160,410,358	265,386,274	5,063,564,586	7,138,288,980	65,222,465
HP.8.1	Research Institutions	117,683,834							
HP.8.2	Education and training institutions	33,203,875					5,517,400	36,690,576	
HP.8.3	Other health related institutions								
	<b>Subtotal for health related</b>	150,887,709	-	-	-	-	5,517,400	36,690,576	-
	<b>Column Total: NHE</b>	1,810,409,068	171,034,863	1,089,605,861	160,410,358	265,386,274	5,069,081,986	7,174,979,556	65,222,465
HP.Addend	Providers of NONHEALTH programs						#REF!		
	<b>subtotal for nonhealth</b>	-	-	-	-	-	#REF!		-
	<b>Column total: THAE (health, health related, nonh</b>	1,810,409,068	171,034,863	1,089,605,861	160,410,358	265,386,274	#REF!	7,174,979,556	65,222,465

\*Many private clinics are headed by a nurse, not a physician

**FINANCING AGENT x PROVIDER (HFxP)****HIV/AIDS Subaccounts (Targeted and untargeted)**

		HF.A Public Sector						HF B: Non Public Sector		
		HF.1.2	HF.1.3	HF.2.1.1	HF.2.1.2	HF.2.1.3	HF.2.5.1	HF.2.2	HF.2.3.	HF.2.4
	Provider	Social Security Fund (CSR)	FARG	Gvt Employees Insurance Programme (RAMA)	Private Employees Insurance Programme	Mutuelles (Employer-paid & Community based)	Parastatal companies	Private Insurance Enterprises (other than social insurance: COGEAR,	Private household out of pocket payments	Non profit institutions (NGOs, SWAA, PROFEMME)
HP.1.1.1.1	National Referral Gvt Hospital		3,652,365			3,726,005			114,409,397	1,173,792,043
HP.1.1.1.2	National Referral Private Hospital	76,422	4,252,846	12,578,795	281,808			280,793	20,687,995	
HP.1.1.1.3	National Referral Hospital (could not be disaggregated)									
HP.1.1.2.1	District Gvt. Hospitals	28,708	1,597,574	3,279,309	84,827	26,063,740		84,521	84,143,557	428,634,575
HP.1.1.2.2	District Agrees Hospitals	22,227	1,236,928	472,048	60,956	20,179,948		60,736	41,863,317	188,222,217
HP.1.1.2.3	District Hospitals (could not be disaggregated)									
HP.1.2	Mental health hospitals									
HP.3.1	Office of physicians (private clinics)*			40,226	809		28,113	806	49,611,576	
HP.3.3.1	Community health workers								194,438	572,880,180
HP.3.3.2	Traditional healer								94,023,410	
HP.3.3.3	Other health practitioners								4,673,784	
HP.3.4.2	Outpatient mental health institutions (SCPS)									
HP.3.4.5.1	Public health centers									
HP.3.4.5.2	Government assisted not-for-profit health centers (Agrees)	40,348	2,245,347	2,045,715	160,348	36,631,874		159,771	196,679,980	1,187,532,695
HP.3.4.5.3	NGO health centers	32,493	1,808,200	1,456,190	142,495	29,500,004		141,982	25,898,452	779,231,412
HP.3.4.5.9	Mobile health centers								16,670	
HP.3.4.9	TRAC HIV/AIDS Center									
HP.3.9.1	Ambulance services									
HP.3.6	Providers of home health care services									
HP.3.9.2	Blood banks (CNTS transfusion)									
HP.4.1	Dispensing chemists								160,919,378	
HP.5	Providers + admin of public health programs									8,002,935,487
HP.6	General health administration and insurance									8,584,434,921
HP.8	Institutions providing health related services									
HP.9	Rest of the world									
HP.nsk	Providers not specified by any kind								70,066,428	234,228,745
	<b>Column Total THE</b>	200,197	14,793,260	19,872,283	731,242	116,101,571	28,113	728,609	863,188,381	21,151,892,275
	<b>HF Totals From FS x HF Table</b>	200,197	14,793,260	19,872,283	731,242	116,101,571	28,113	728,609	863,188,381	21,151,892,275
HP.8.1	Research Institutions									150,100,038
HP.8.2	Education and training institutions									14,805,781
HP.8.3	Other health related institutions									
	<b>Subtotal for health related</b>	-	-	-	-	-	-	-	-	164,905,819
	<b>Column Total: NHE</b>	200,197	14,793,260	19,872,283	731,242	116,101,571	28,113	728,609	863,188,381	21,316,798,094
HP.Addend	Providers of NONHEALTH programs		#REF!							1,940,314,689
	<b>subtotal for nonhealth</b>	-	#REF!	-	-	-	-	-	-	1,940,314,689
	<b>Column total: THAE (health, health related, nonhe</b>	200,197	#REF!	19,872,283	731,242	116,101,571	28,113	728,609	863,188,381	23,257,112,783

\*Many private clinics are headed by a nurse, not a physician

**FINANCING AGENT x PROVIDER (HFxP)****HIV/AIDS Subaccounts (Targeted and untargeted)**

		Non Public	HF.3 ROW	HF.nsk	Row Total	HF, Addendum
		HF.2.5.2	HF.3	HF.nsk		
	Provider	Private Non Parastatal Firms	Rest of World	Not specified by any kind		Non health addendums
HP.1.1.1.1	National Referral Gvt Hospital		723,686,225		5,258,197,343	
HP.1.1.1.2	National Referral Private Hospital		248,211,108		1,890,592,358	
HP.1.1.1.3	National Referral Hospital (could not be disaggregated)				-	
HP.1.1.2.1	District Gvt. Hospitals	4,427	175,207,841		1,817,315,256	
HP.1.1.2.2	District Agrees Hospitals	3,832	73,003,267		783,140,435	
HP.1.1.2.3	District Hospitals (could not be disaggregated)				-	
HP.1.2	Mental health hospitals				-	
HP.3.1	Office of physicians (private clinics)*	10,641			49,692,171	
HP.3.3.1	Community health workers				573,074,618	
HP.3.3.2	Traditional healer				94,023,410	
HP.3.3.3	Other health practitioners				4,673,784	
HP.3.4.2	Outpatient mental health institutions (SCPS)				-	
HP.3.4.5.1	Public health centers		855,475,046		3,786,705,778	
HP.3.4.5.2	Government assisted not-for-profit health centers (Agrees)		556,058,780		2,341,337,448	
HP.3.4.5.3	NGO health centers				-	
HP.3.4.5.9	Mobile health centers				16,670	
HP.3.4.9	TRAC HIV/AIDS Center				113,114,054	
HP.3.9.1	Ambulance services				-	
HP.3.6	Providers of home health care services				47,961,153	
HP.3.9.2	Blood banks (CNTS transfusion)				-	
HP.4.1	Dispensing chemists				160,919,378	
HP.5	Providers + admin of public health programs		54,037,045		12,978,789,572	
					-	
					-	
HP.6	General health administration and insurance		16,453,800		10,206,120,397	
HP.8	Institutions providing health related services				-	
HP.9	Rest of the world				7,531,224	
HP.nsk	Providers not specified by any kind				369,517,638	
	<b>Column Total THE</b>	18,900	2,702,133,111	-	<b>40,482,722,687</b>	
	<b>HF Totals From FS x HF Table</b>	18,900	2,702,133,111	-	<b>40,482,722,687</b>	
HP.8.1	Research Institutions				267,783,872	
HP.8.2	Education and training institutions				90,217,632	
HP.8.3	Other health related institutions				-	
	<b>Subtotal for health related</b>	-	-	-	358,001,504	
	<b>Column Total: NHE</b>	18,900	2,702,133,111	-	<b>40,840,724,191</b>	
HP.Addend	Providers of NONHEALTH programs		#REF!			#REF!
	<b>subtotal for nonhealth</b>	-	#REF!	-		#REF!
	<b>Column total: THAE (health, health related, nonh</b>	18,900	#REF!	-		#REF!

\*Many private clinics are headed by a nurse, not a physician



Annex A-7

**FINANCING AGENTS x FUNCTION (HF x HC)****HIV/AIDS Subaccounts (Targeted and untargeted)**

		Financing Agent													
		HF.A Public Sector													
Function		HF.1.1.1.1	HF.1.1.1.2	HF.1.1.1.3.1	HF.1.1.1.3.2.1	HF.1.1.1.3.2.2	HF.1.1.1.3.2.3	HF.1.1.1.3.2.4	HF.1.1.3	HF.1.2	HF.1.3	HF.2.1.1	HF.2.1.2	HF.2.1.3	HF.2.5.1
		MoH (MiniSante)	Other Ministries (except CNLS)	CNLS	CNLS-UNDP	CNLS-BAD	CNLS-MAP	CNLS-GF	Local Municipal Gvt (Districts)	Social Security Fund (CSR)	FARG	Gvt Employees Insurance Programme (RAMA)	Private Employees Insurance Programme	Mutuelles (Employer-paid & Community based)	Parastatal companies
HC.1.1.1	IP ARV curative care	-	-	-	-	-	-	912,036,685	-	-	-	-	-	-	-
HC.1.1.2	IP OI Treatment	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.1.1.4	IP care that cannot be disaggregated	49,928,388	3,741,371	-	-	-	945,860,266	820,349,277	-	47,607	2,891,927	3,093,159	302,989	42,422,789	-
HC.1.3.5	OP STI Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.1.3.6	OP opportunistic infection treatment	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.1.3.7	OP ARV treatment	-	-	-	-	-	-	3,741,211,708	-	-	-	-	-	-	-
HC1.3.8	OP Psychosocial support	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.1.3.10	OP care that cannot be disaggregated	227,051,180	14,210,988	-	-	-	654,327,514	829,836,146	-	152,590	11,901,332	16,779,124	428,252	73,678,782	28,113
HC.1.3.11	VCT as part of OP care	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.1.3.12	PMTCT service delivery	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.5.1.1.3	Drugs that could not be disaggregated	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.5.1.3.1	Condoms (donated/contributed for prev.	3,689,319	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.6.1.1	PMTCT	47,961,153	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.1	VCT	307,574,200	147,738,109	-	-	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.2	Blood supply	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.4	IEC programmes	10,050,091	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.5	STI prevention programmes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.7	Condom distribution programmes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.8	ART programmes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.9	Surveillance	23,508,299	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.11	Trainings for HIV/AIDS programmes	46,316,535	-	-	-	-	65,516,008	-	-	-	-	-	-	-	-
HC.6.3.1.12	Other public health programs (including	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.13	public health programmes not disaggregated	205,876,046	5,344,394	1,049,658,028	12,383,828	25,966,091	886,378,702	152,541,208	-	-	-	-	-	-	-
HC.7.2.2.1	Local consultancies	17,926,977	-	-	-	-	-	-	-	-	-	-	-	-	-
HC.7.2.2.3	Health administration and health insurance (not disaggregated)	675,219,721	-	39,947,833	148,026,530	239,420,183	1,744,764,434	682,313,955	-	-	-	-	-	-	-
HCR.1	Capital formation for health care provider institutions	44,419,448	-	-	-	-	766,717,662	-	-	-	-	-	-	-	-
HC.nsk	Not specified by kind	-	-	-	-	-	-	-	65,222,465	-	-	-	-	-	-
	<b>Column Total THE</b>	1,659,521,358	171,034,863	1,089,605,861	160,410,358	265,386,274	5,063,564,586	7,138,288,980	65,222,465	200,197	14,793,260	19,872,283	731,242	116,101,571	28,113
HCR.2	Education & Training	33,203,875	-	-	-	-	5,517,400	36,690,576	-	-	-	-	-	-	-
HCR.3	Research & Development	117,683,834	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Sub total column</b>	150,887,709	-	-	-	-	5,517,400	36,690,576	-	-	-	-	-	-	-
	<b>Column Total NHE</b>	1,810,409,068	171,034,863	1,089,605,861	160,410,358	265,386,274	5,069,081,986	7,174,979,556	65,222,465	200,197	14,793,260	19,872,283	731,242	116,101,571	28,113
AD.1.1.2	Monetary benefits to PLWHA, widows, and families	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AD.1.1.5	Social support to PLWHA, widows, and families not disaggregated.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AD.1.2.3	School fees to OVC	-	-	-	-	-	1,318,535,777	-	-	-	1,325,396,756	-	-	-	-
AD.1.2.5	Social support to OVCs not disaggregated	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AD.1.3.1	Income-generating activities	-	-	-	-	-	1,411,665,314	-	-	-	-	-	-	-	-
AD.2	Policy advocacy	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AD.3	Non-health IEC- social stigma reductin	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AD.4	Empowerment and organization (incl. Legal services)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	<b>subtotal column</b>	-	-	-	-	-	2,730,201,091	-	-	-	1,325,396,756	-	-	-	-
-	<b>Column total – THAE (health, hea</b>	1,810,409,068	171,034,863	1,089,605,861	160,410,358	265,386,274	7,799,283,077	-	65,222,465	200,197	1,340,190,016	19,872,283	731,242	116,101,571	28,113

Annex A-7

**FINANCING AGENTS x FUNCTION (HF x HC)****HIV/AIDS Subaccounts (Targeted and untargeted)**

Function		-				HF.3 ROW	HF.nsk	Row Total
		HF.2.2	HF.2.3	HF.2.4	HF.2.5.2	HF.3	HF.nsk	
		Private Insurance Enterprises (other than social insurance: COGEAR,	Private household out of pocket payments	Non profit institutions (NGOs, SWAA, PROFEMME)	Private Non Parastatal Firms	Rest of World	Not specified by any kind	
HC. 1.1.1	IP ARV curative care	-	-	-	-	-	-	912,036,685
HC. 1.1.2	IP OI Treatment	-	-	126,441,201	-	-	-	126,441,201
HC.1.1.4	IP care that cannot be disaggregated	301,898	210,795,503	37,229,480	8,259	823,786,529	-	2,940,759,445
HC. 1.3.5	OP STI Management	-	-	131,893,843	-	-	-	131,893,843
HC. 1.3.6	OP opportunistic infection treatment and	-	-	505,764,805	-	-	-	505,764,805
HC. 1.3.7	OP ARV treatment	-	-	892,116,670	-	-	-	4,633,328,378
HC1.3.8	OP Psychosocial support	-	-	516,147,976	-	-	-	516,147,976
HC 1.3.10	OP care that cannot be disaggregated	426,710	419,604,854	92,173,999	10,641	878,143,474	-	3,218,753,701
HC.1.3.11	VCT as part of OP care	-	-	876,795,887	-	-	-	876,795,887
HC.1.3.12	PMTCT service delivery	-	-	482,270,240	-	929,712,263	-	1,411,982,503
HC 5.1.1.3	Drugs that could not be disaggregated	-	160,919,378	-	-	-	-	160,919,378
HC.5.1.3.1	Condoms (donated/contributed for prev.	-	-	-	-	-	-	3,689,319
HC.6.1.1	PMTCT	-	-	1,104,440,127	-	-	-	1,152,401,280
HC. 6.3.1.1	VCT	-	-	1,236,646,405	-	-	-	1,691,958,714
HC. 6.3.1.2	Blood supply	-	-	445,982,651	-	-	-	445,982,651
HC.6.3.1.4	IEC programmes	-	-	2,138,497,958	-	-	-	2,148,548,049
HC.6.3.1.5	STI prevention programmes	-	-	1,680,803,596	-	-	-	1,680,803,596
HC.6.3.1.7	Condom distribution programmes	-	-	141,646,500	-	-	-	141,646,500
HC.6.3.1.8	ART programmes	-	-	1,122,316,065	-	-	-	1,122,316,065
HC.6.3.1.9	Surveillance	-	-	174,251,628	-	-	-	197,759,927
HC.6.3.1.11	Trainings for HIV/AIDS programmes	-	-	27,546,639	-	-	-	139,379,181
HC.6.3.1.12	Other public health programs (including	-	-	791,001,187	-	-	-	791,001,187
HC.6.3.1.13	public health pprogrammes not disaggregated	-	-	120,600,278	-	70,490,845	-	2,529,239,421
HC.7.2.2.1	Local consultancies	-	-	-	-	-	-	17,926,977
HC.7.2.2.3	Health administration and health insurance (not disaggregated)	-	-	5,775,470,604	-	-	-	9,305,163,260
HCR.1	Capital formation for health care provider institutions	-	-	2,426,830,003	-	-	-	3,237,967,113
HC.nsk	Not specified by kind	-	71,868,647	305,024,535	-	-	-	442,115,647
	<b>Column Total THE</b>	728,609	863,188,381	21,151,892,275	18,900	2,702,133,111	-	<b>40,482,722,687</b>
HCR.2	Education & Training	-	-	14,805,781	-	-	-	90,217,632
HCR.3	Research & Development	-	-	150,100,038	-	-	-	267,783,872
	<i>Sub total column</i>	-	-	164,905,819	-	-	-	358,001,504
	<b>Column Total NHE</b>	728,609	863,188,381	21,316,798,094	18,900	2,702,133,111	-	<b>40,840,724,191</b>
AD.1.1.2	Monetary benefits to PLWHA, widows, and families	-	-	25,054,513	-	-	-	25,054,513
AD.1.1.5	Social support to PLWHA, widows, and families not disaggregated.	-	-	510,395,391	-	-	-	510,395,391
AD.1.2.3	School fees to OVC	-	-	-	-	-	-	2,643,932,534
AD.1.2.5	Social support to OVCs not disaggregated	-	-	1,236,971,795	-	-	-	1,236,971,795
AD.1.3.1	Income-generating activities	-	-	-	-	1,161,618,929	-	2,573,284,243
AD.2	Policy advocacy	-	-	7,228,213	-	-	-	7,228,213
AD.3	Non-helath IEC- social stigma reductin	-	-	59,719,881	-	-	-	59,719,881
AD.4	Empowerment and organization (incl. Legal services)	-	-	100,944,896	-	-	-	100,944,896
-	subtotal column	-	-	1,940,314,689	-	1,161,618,929	-	7,157,531,466
-	<b>Column total -- THAE (health, health)</b>	728,609	863,188,381	23,257,112,783	18,900	3,863,752,040	-	<b>47,998,255,657</b>

		Provider									
		HP.1.1.1.1 National Referral Gvt Hospital	HP.1.1.1.2 National Referral Private Hospital	HP.1.1.2.1 District Gvt. Hospitals	HP.1.1.2.2 District Agrees Hospitals	HP.3.1 Office of physicians (private clinics)*	HP.3.3.1 Community health workers	HP.3.3.2 Traditional healer	HP.3.3.3 Other health practitioners	HP.3.4.5.1 Public health centers	HP.3.4.5.2 Government assisted not-for- profit health
	Function										
HC.1.1.1	IP ARV curative care	153,557,197	79,105,223	502,550,826	23,266,242	-	-	-	-	93,064,968	60,492,229
HC.1.1.2	IP OI Treatment	24,708,957	-	8,985,075	2,632,582	-	-	-	-	54,614,902	35,499,686
HC.1.1.3	Other IP care	-	-	-	-	-	-	-	-	-	-
HC.1.1.4	OP care that cannot be disaggregated	1,610,309,142	345,446,262	473,296,892	178,674,638	2,470,338	-	-	207,400	165,477,734	116,899,217
HC.1.3.5	OP STI Management	70,063,028	-	25,477,465	2,464,157	-	-	-	-	20,538,906	13,350,289
HC.1.3.6	OP opportunistic infection treatment and	98,835,826	-	35,940,300	10,530,327	-	-	-	-	218,459,607	141,998,744
HC.1.3.7	OP ARV treatment	1,658,609,159	711,947,004	156,418,758	249,812,309	-	-	-	-	1,125,176,454	731,364,695
HC1.3.8	OP Psychosocial support	168,406,582	-	61,238,757	20,089,042	-	97,760,629	-	-	101,628,457	66,058,497
HC.1.3.9	Other OP care	-	-	-	-	-	-	-	-	-	-
HC.1.3.10	OP care that cannot be disaggregated	705,849,590	623,751,867	274,186,142	192,116,104	47,221,833	194,438	94,023,410	2,664,165	765,949,907	399,682,191
HC.1.3.11	VCT as part of OP care	363,765,329	-	132,278,301	42,328,894	-	-	-	-	203,746,453	132,435,195
HC.1.3.12	PMTCT service delivery	151,075,706	-	54,936,620	22,890,259	-	-	-	-	717,018,132	466,061,786
HC.1.4	Services of curative home care (HIV/AIDS)	-	-	-	-	-	-	-	-	-	-
HC.5.1.1.1	ARV drugs	-	-	-	-	-	-	-	-	-	-
HC.5.1.1.2	Other drugs	-	-	-	-	-	-	-	-	-	-
HC.5.1.1.3	Drugs that could not be disaggregated	-	-	-	-	-	-	-	-	-	-
HC.5.1.3.1	Condoms (donated/contributed for prev. of	-	-	-	-	-	-	-	-	-	-
HC.6.1.1	PMTCT	-	-	-	-	-	-	-	-	47,961,153	-
HC.6.2	School health services	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.1	VCT	-	-	-	-	-	-	-	-	1,059,054	688,385
HC.6.3.1.2	Blood supply	-	-	-	-	-	34,567,473	-	-	118,666,519	77,133,238
HC.6.3.1.3	Post exposure prophylaxis	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.4	IEC programmes	-	-	-	-	-	3,681,595	-	-	-	-
HC.6.3.1.5	STI prevention programmes	-	-	-	-	-	368,581,836	-	-	-	-
HC.6.3.1.6	Needle Programmes	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.7	Condom distribution programmes	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.8	ART programmes	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.9	Surveillance	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.10	Nutritional programmes	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.11	Trainings for HIV/AIDS programmes	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.12	Other public health programs (including OI , psychosocial support)	-	-	-	-	-	-	-	-	-	-
HC.6.3.1.13	public health programmes not disaggregated	-	-	-	-	-	-	-	-	-	-
HC.7	Health administration and health insurance (not disaggregated)	-	-	-	-	-	-	-	-	-	-
HC.7.2.2.1	Local consultancies	-	-	-	-	-	-	-	-	-	-
HC.7.2.2.2	External consultancies	-	-	-	-	-	-	-	-	-	-
HC.7.2.2.3	Health administration and health insurance (not disaggregated)	-	-	-	-	-	-	-	-	-	-
HCR.1	Capital formation for health care provider institutions	253,016,828	130,342,003	92,006,119	38,335,883	-	-	-	-	153,343,532	99,673,296
HC.nsk	Not specified by kind	-	-	-	-	-	68,288,647	-	1,802,219	-	-
	Column Total-THE	5,258,197,343	1,890,592,358	1,817,315,256	783,140,435	49,692,171	573,074,618	94,023,410	4,673,784	3,786,705,778	2,341,337,448
HCR.2	Education & Training										
HCR.3	Research & Development										
	Column Total-NHE										
AD.1.1.2	Monetary benefits to PLWHA,widows, and families										
AD.1.1.5	Social support to PLWHA, widows, and families not disaggregated.										
AD.1.2.3	School fees to OVC										
AD.1.2.5	Social support to OVCs not disaggregated										
AD.1.3.1	Income-generating activities										
AD.2	Policy advocacy										
AD.3	Non-helath IEC- social stigma reductin Empowerment and organization (incl. Legal services)										
AD.4	Column total – THAE (health, health related, nonhealth)										

**PROVIDER x FUNCTION (HP x HC)**  
**HIV/AIDS Subaccounts (Targeted and untargeted)**

		HP.3.4.5.9	HP.3.4.5.9	HP.3.6	HP.4.1	HP.5	HP.6	HP.9	HP.risk		HP.8.1	HP.8.2	HP.8.3		Providers or NONHEALTH programs
	Function	Mobile health centers	TRAC HIV/AIDS Center	Providers of home health care services	Dispensing chemists	Providers + admin of public health programs	General health administration and insurance	Rest of the world	Providers not specified by any kind	THE Row Total	Research Institutions	Education and training institutions	Other health related institutions	NHE Row Total	
HC.1.1.1	IP ARV curative care	-	-	-	-	-	-	-	-	912,036,685					
HC.1.1.2	IP OI Treatment	-	-	-	-	-	-	-	-	126,441,201					
HC.1.1.3	Other IP care	-	-	-	-	-	-	-	-	-					
HC.1.1.4	IP care that cannot be disaggregated	16,670	-	47,961,153	-	-	-	-	-	2,940,759,445					
HC.1.3.5	OP STI Management	-	-	-	-	-	-	-	-	131,893,843					
HC.1.3.6	OP opportunistic infection treatment and	-	-	-	-	-	-	-	-	505,764,805					
HC.1.3.7	OP ARV treatment	-	-	-	-	-	-	-	-	4,633,328,378					
HC1.3.8	OP Psychosocial support	-	-	-	-	966,012	-	-	-	516,147,976					
HC.1.3.9	Other OP care	-	-	-	-	-	-	-	-	-					
HC.1.3.10	OP care that cannot be disaggregated	-	113,114,054	-	-	-	-	-	-	3,218,753,701					
HC.1.3.11	VCT as part of OP care	-	-	-	-	2,241,714	-	-	-	876,795,887					
HC.1.3.12	PMTCT service delivery	-	-	-	-	-	-	-	-	1,411,982,503					
HC.1.4	Services of curative home care (HIV/AIDS)	-	-	-	-	-	-	-	-	-					
HC.5.1.1.1	ARV drugs	-	-	-	-	-	-	-	-	-					
HC.5.1.1.2	Other drugs	-	-	-	-	-	-	-	-	-					
HC.5.1.1.3	Drugs that could not be disaggregated	-	-	-	160,919,378	-	-	-	-	160,919,378					
HC.5.1.3.1	Condoms (donated/contributed for prev. of	-	-	-	-	3,689,319	-	-	-	3,689,319					
HC.6.1.1	PMTCT	-	-	-	-	1,104,440,127	-	-	-	1,152,401,280					
HC.6.2	School health services	-	-	-	-	-	-	-	-	-					
HC.6.3.1.1	VCT	-	-	-	-	1,542,473,165	147,738,109	-	-	1,691,958,714					
HC.6.3.1.2	Blood supply	-	-	-	-	215,615,420	-	-	-	445,982,651					
HC.6.3.1.3	Post exposure prophylaxis	-	-	-	-	-	-	-	-	-					
HC.6.3.1.4	IEC programmes	-	-	-	-	1,972,016,280	172,850,174	-	-	2,148,548,049					
HC.6.3.1.5	STI prevention programmes	-	-	-	-	1,202,388,718	109,833,043	-	-	1,680,803,596					
HC.6.3.1.6	Needle Programmes	-	-	-	-	-	-	-	-	-					
HC.6.3.1.7	Condom distribution programmes	-	-	-	-	131,988,114	9,658,386	-	-	141,646,500					
HC.6.3.1.8	ART programmes	-	-	-	-	1,122,316,065	-	-	-	1,122,316,065					
HC.6.3.1.9	Surveillance	-	-	-	-	110,356,454	87,403,473	-	-	197,759,927					
HC.6.3.1.10	Nutritional programmes	-	-	-	-	-	-	-	-	-					
HC.6.3.1.11	Trainings for HIV/AIDS programmes	-	-	-	-	66,338,316	73,040,865	-	-	139,379,181					
HC.6.3.1.12	Other public health programs (including OI , psychosocial support)	-	-	-	-	791,001,187	-	-	-	791,001,187					
HC.6.3.1.13	public health programmes not disaggregated	-	-	-	-	2,505,254,397	16,453,800	7,531,224	-	2,529,239,421					
HC.7	Health administration and health insurance (not disaggregated)	-	-	-	-	-	-	-	-	-					
HC.7.2.2.1	Local consultancies	-	-	-	-	-	17,926,977	-	-	17,926,977					
HC.7.2.2.2	External consultancies	-	-	-	-	-	-	-	-	-					
HC.7.2.2.3	Health administration and health insurance (not disaggregated)	-	-	-	-	2,205,197,140	7,099,966,120	-	-	9,305,163,260					
HCR.1	Capital formation for health care provider institutions	-	-	-	-	-	2,471,249,451	-	-	3,237,967,113					
HC.risk	Not specified by kind	-	-	-	-	2,507,143	-	-	369,517,638	442,115,647					
	Column Total-THE	16,670	113,114,054	47,961,153	160,919,378	12,978,789,572	10,206,120,397	7,531,224	369,517,638	40,482,722,687					
HCR.2	Education & Training										0	90,217,832	0	90,217,632	
HCR.3	Research & Development										267,783,872	0	0	267,783,872	
	Column Total-NHE										267,783,872	90,217,632	-	40,840,724,191	
AD.1.1.2	Monetary benefits to PLWHA, widows, and families														25,054,513
AD.1.1.5	Social support to PLWHA, widows, and families not disaggregated.														510,395,391
AD.1.2.3	School fees to OVC														2,643,932,534
AD.1.2.5	Social support to OVCs not disaggregated														1,236,971,795
AD.1.3.1	Income-generating activities														2,573,284,243
AD.2	Policy advocacy														7,228,213
AD.3	Non-helath IEC -social stigma reductin Empowerment and organization (incl. Legal services)														59,719,881
AD.4	Column total ~ THAE (health, health related, nonhealth)														100,944,896
															47,998,255,651

**FINANCING AGENT x PROVIDER (HFxP)**  
**Malaria Subaccounts targeted and untargeted**

		Financing Agent														
		HF.A Public Sector								HF.B: Non Public Sector				HF.3 ROW	HF.nsk	
		HF.1.1.1.1	HF.1.1.1.2	HF.1.2	HF.1.3	HF.2.1.1	HF.2.1.2	HF.2.1.3	HF.2.5.1	HF.2.2	HF.2.3	HF.2.4	HF.2.5.2	HF.3	HF.nsk	
	Provider	MoH (MiniSante)	Other Ministries	Social Security Fund (CSR)	FARG	Gvt Employees Insurance Programme (RAMA)	Private Employees Insurance Programme	Mutuelles (Private & Community based)	Parastatal companies	Private Insurance Enterprises (other than social)	Private household out of pocket payments	Non profit institutions (NGOs)	Private Non Parastatal Firms	Rest of World	Not specified by any kind	Row Total
HP.1.1.1.1	National Referral Gvt Hospital	89,221,908	45,655,865		17,114,313			17,459,377								
HP.1.1.1.2	National Referral Private Hospital	84,890,495		125,650	6,992,368	20,681,577	629,741			627,473	1,133,558,339	326,411,562		242,465,626		1,871,886,989
HP.1.1.1.3	National Referral Hospital (could not be disaggregated)										305,146,201					419,093,504
HP.1.1.2.1	District Gvt. Hospitals	39,086,500	33,960,187	435,329	24,225,903	49,728,026	1,229,108	395,235,224								-
HP.1.1.2.2	District Agrees Hospitals	16,646,582	13,837,191	224,413	12,488,500	4,765,976	667,014	203,744,536		1,224,682	421,585,082	229,965,530	92,965			1,196,768,536
HP.1.1.2.3	District Hospitals (could not be disaggregated)									664,613	157,365,218	448,867,840	61,313			859,333,197
HP.1.2	Mental health hospitals															-
HP.3.1	Office of physicians (private clinics)*					288,966,096	5,809,052		201,952,939	5,788,136	1,396,747,643		76,439,357			1,975,703,223
HP.3.3.1	Community health workers	4,485,321,000										294,186,724				4,779,507,724
HP.3.3.2	Traditional healer										83,780,058					83,780,058
HP.3.3.3	Other health	128,584,047									68,065,140					196,649,187
HP.3.4.2	Outpatient mental															-
HP.3.4.5.1	Public health centers															
HP.3.4.5.2	Government assisted not-for-profit health	351,082,525	63,847,023	1,035,476	57,623,948	52,500,649	2,977,427	940,110,031		2,966,707	2,404,950,486	818,060,736				4,695,155,009
HP.3.4.5.3	NGO health centers	200,708,228	41,500,565													
HP.3.5	Medical and diagnostic laboratories															-
HP.3.9.1	Ambulance services	2,000,000														2,000,000
HP.3.6	Providers of home															
HP.3.9.2	Blood banks (CNTS transfusion)	6,208,098														6,208,098
HP.4.1	Dispensing chemists										3,089,567,595	698,695,027				-
HP.5	Providers + admin of	602,670,461										288,129,742		185,704,394		1,076,504,598
HP.nsk	Providers not											236,754,941				236,754,941
	Column Total THE	6,070,603,761	198,800,831	2,493,927	155,900,598	446,806,269	13,247,670	2,167,620,688	201,952,939	13,199,970	9,568,284,436	4,152,123,415	76,593,635	502,792,583	-	23,570,420,722
	HF Totals From FS	6,070,603,761	198,800,831	2,493,927	155,900,598	446,806,269	13,247,670	2,167,620,688	201,952,939	13,199,970	9,568,284,436	4,152,123,415	76,593,635	502,792,583	-	23,570,420,722
HP.8.1	Research Institutions	103,220,675														103,220,675
HP.8.2	Education and training institutions															-
HP.8.3	Other health related institutions											29,806,595				29,806,595
	Subtotal for health	103,220,675	-	-	-	-	-	-	-	-	-	29,806,595	-	-	-	133,027,270
	Column Total: NHE	6,173,824,436	198,800,831	2,493,927	155,900,598	446,806,269	13,247,670	#####	201,952,939	13,199,970	9,568,284,436	4,181,930,010	76,593,635	502,792,583	-	23,703,447,992

\*=Many private clinics are headed by a nurse, not a physician

Public hospital	7.9%
Public health cer	19.9%
Agree hospital	3.6%
Agree health cer	8.6%
Private hospital	0.0%
Private clinic	8.4%
Pharmacies	16.1%
Provision of pub	4.6%
Administration	1.5%
Other Providers	1.0%
	72%

As a % of OOP

As a % of HH

**FINANCING AGENTS x FUNCTION (HF x HC)****Malaria Subaccounts targeted and untargeted****Financing Agent**

		HF.A Public Sector							
		HF.1.1.1.1	HF.1.1.1.2	HF.1.2	HF.1.3	HF.2.1.1	HF.2.1.2	HF.2.1.3	HF. 2.5.1
		MoH (MiniSante)	Other Ministries	Social Security Fund (CSR)	FARG	Gvt Employees Insurance Programme	Private Employees Insurance Programme	Mutuelles (Private & Community based)	Parastatal companies
Function									
HC.1.1	In patient curative care (incl. For severe malaria)	164,898,044	87,498,614	781,035	58,021,354	61,260,452	4,449,805	661,127,524	-
HC.1.3.9	Nets given as part of Outpatient care	5,172,227,862	-	-	-	-	-	-	-
HC.1.3.10	ACT as part of OP care	-	-	-	-	-	-	-	-
HC.1.3.11	Other OP care	-	-	-	-	-	-	-	-
HC.1.3.12	OP care that could not be	106,653,676	111,302,217	1,712,892	97,879,243	385,545,817	8,797,865	1,506,493,164	201,952,939
HC.1.4	Services of curative home care	6,208,098	-	-	-	-	-	-	-
HC.4.2	Diagnostic imaging	625,634	-	-	-	-	-	-	-
HC.5.1	Pharmaceuticals and other medical	-	-	-	-	-	-	-	-
HC.5.2.5.1	Insecticide treated nets (ITNs)	-	-	-	-	-	-	-	-
HC.6.3.2.1	Larviciding, elimination of standing	-	-	-	-	-	-	-	-
HC.6.3.2.2	Training within public health programmes for malaria	108,172,218	-	-	-	-	-	-	-
HC. 6.3.2.3	IEC (malaria awareness)	51,780,529	-	-	-	-	-	-	-
HC. 6.3.2.4	Surveillance and monitoring	44,910,796	-	-	-	-	-	-	-
HC.6.3.2.6	malaria programs that could not be disaggregated	78,266,051	-	-	-	-	-	-	-
HC.7	Health administration and insurance	69,435,246	-	-	-	-	-	-	-
HCR.1	Capital formation for health care provider institutions	267,425,607	-	-	-	-	-	-	-
HC.nsk	Not specified by kind	-	-	-	-	-	-	-	-
	<b>Column Total THE</b>	6,070,603,761	198,800,831	2,493,927	155,900,598	446,806,269	13,247,670	2,167,620,688	201,952,939
HCR.3	Research & Development	103,220,675	-	-	-	-	-	-	-
HCR.5	Environmental health	-	-	-	-	-	-	-	-
	<i>Sub total column</i>	103,220,675	-	-	-	-	-	-	-
	<b>Column Total NHE</b>	6,173,824,436	198,800,831	2,493,927	155,900,598	446,806,269	13,247,670	2,167,620,688	201,952,939

**FINANCING AGENTS x FUNCTION (HF x HC)****Malaria Subaccounts targeted and untargeted**

		-				HF.3 ROW	HF.nsk	Row Total
		HF.2.2 Private Insurance Enterprises (other than social)	HF.2.3. Private household out of pocket payments	HF.2.4 Non profit institutions (NGOs)	HF.2.5.2 Private Non Parastatal Firms	HF.3 Rest of World	HF.nsk Not specified by any kind	
Function								
HC.1.1	In patient curative care (incl. For severe malaria)	4,433,783	1,012,072,015	854,193,009	154,278	206,235,130	-	3,115,125,043
HC.1.3.9	Nets given as part of Outpatient care	-	41,381,600	236,754,941	-	-	-	5,450,364,403
HC.1.3.10	ACT as part of OP care	-	-	-	-	-	-	-
HC.1.3.11	Other OP care	-	-	66,208,800	-	-	-	66,208,800
HC.1.3.12	OP care that could not be	8,766,187	5,425,263,226	1,496,969,881	76,439,357	36,230,496	-	9,464,006,961
HC.1.4	Services of curative home care	-	-	-	-	-	-	6,208,098
HC.4.2	Diagnostic imaging	-	-	-	-	-	-	625,634
HC.5.1	Pharmaceuticals and other medical	-	2,954,790,195	-	-	-	-	2,954,790,195
HC.5.2.5.1	Insecticide treated nets (ITNs)	-	134,777,400	698,695,027	-	-	-	833,472,427
HC.6.3.2.1	Larviciding, elimination of standing	-	-	2,587,600	-	-	-	2,587,600
HC.6.3.2.2	Training within public health programmes for malaria	-	-	281,320,369	-	-	-	389,492,587
HC.6.3.2.3	IEC (malaria awareness)	-	-	171,752,507	-	-	-	223,533,036
HC.6.3.2.4	Surveillance and monitoring	-	-	75,353,714	-	-	-	120,264,510
HC.6.3.2.6	malaria programs that could not be disaggregated	-	-	-	-	260,326,957	-	338,593,008
HC.7	Health administration and insurance	-	-	213,328,668	-	-	-	282,763,915
HCR.1	Capital formation for health care provider institutions	-	-	54,958,899	-	-	-	322,384,506
HC.nsk	Not specified by kind	-	-	-	-	-	-	-
	<b>Column Total THE</b>	13,199,970	9,568,284,436	4,152,123,415	76,593,635	502,792,583	-	<b>23,570,420,722</b>
HCR.3	Research & Development	-	-	-	-	-	-	103,220,675
HCR.5	Environmental health	-	-	29,806,595	-	-	-	29,806,595
	<i>Sub total column</i>	-	-	29,806,595	-	-	-	133,027,270
	<b>Column Total NHE</b>	13,199,970	9,568,284,436	4,181,930,010	76,593,635	502,792,583	-	<b>23,703,447,992</b>





**PROVIDER x FUNCTION (HP x HC)****Malaria Subaccounts targeted and untargeted**

		HP.3.4.5.1	HP.3.4.5.2	HP.3.5	HP.3.6	HP.4.1	HP.5
	Function	Public health centers	Government assisted not-for-profit health centers (Agrees)	Medical and diagnostic laboratories	Providers of home health care services	Dispensing chemists	Providers + admin of public health programs
HC.1.1	In patient curative care (incl. For severe	291,705,878	285,272,730	-	-	-	46,863,930
HC 1.3.9	Nets given as part of Outpatient care	323,200,503	208,297,949	2,000,000	-	-	-
HC 1.3.10	ACT as part of OP care	-	-	-	-	-	-
HC 1.3.11	Other OP care	-	-	-	-	-	-
HC 1.3.12	OP care that could not be disaggregated	4,080,248,628	1,533,450,587	-	-	-	-
HC.1.4	Services of curative home care (malaria)	-	-	-	6,208,098	-	-
HC.4.1	Clinical lab (BNC, biolab, biomed, etc)	-	-	-	-	-	-
HC.4.2	Diagnostic imaging	-	-	-	-	-	-
HC.5.1	Pharmaceuticals and other medical non	-	-	-	-	2,954,790,195	-
HC 5.1.3.2	Repellants for nets	-	-	-	-	-	-
HC.5.2.5.1	Insecticide treated nets (ITNs)	-	-	-	-	833,472,427	-
HC.6.1.2	IPTp	-	-	-	-	-	-
HC.6.3.2.1	Larviciding, elimination of standing water	-	-	-	-	-	2,587,600
HC.6.3.2.2	Training within public health programmes	-	-	-	-	-	157,828,818
HC. 6.3.2.3	IEC (malaria awareness)	-	-	-	-	-	204,934,179
HC. 6.3.2.4	Surveillance and monitoring	-	-	-	-	-	120,022,375
HC.6.3.2.5	OTHER miscellaneous public health	-	-	-	-	-	-
HC.6.3.2.6	malaria programs that could not be	-	-	-	-	-	263,970,445
HC.7	Health administration and insurance	-	-	-	-	-	12,871,644
HCR.1	Capital formation for health care provider institutions	-	-	-	-	-	267,425,607
HC.nsk	Not specified by kind	-	-	-	-	-	-
	<b>Column Total-THE</b>	<b>4,695,155,009</b>	<b>2,027,021,267</b>	<b>2,000,000</b>	<b>6,208,098</b>	<b>3,788,262,622</b>	<b>1,076,504,598</b>
HCR.2	Education & Training						
HCR.3	Research & Development						
HCR.4	Food, hygiene and drinking water cont						
HCR.5	Environmental health						
HCR.nsk	HCR expenditure not specified by kind						
	<b>Column Total-NHE</b>						

**PROVIDER x FUNCTION (HP x HC)****Malaria Subaccounts targeted and untargeted**

		HP.6	HP.nsk		HP.8.1	HP.8.2	HP.8.3	
	Function	General health administration and insurance	Providers not specified by any kind	THE Row Total	Research Institutions	Education and training institutions	Other health related institutions	NHE Row Total
HC.1.1	In patient curative care (incl. For severe	-	-	3,115,125,043				
HC 1.3.9	Nets given as part of Outpatient care	-	236,754,941	5,450,364,403				
HC 1.3.10	ACT as part of OP care	-	-	-				
HC 1.3.11	Other OP care	-	-	66,208,800				
HC 1.3.12	OP care that could not be disaggregated	-	-	9,464,006,961				
HC.1.4	Services of curative home care (malaria)	-	-	6,208,098				
HC.4.1	Clinical lab (BNC, biolab, biomed, etc)	-	-	-				
HC.4.2	Diagnostic imaging	-	-	625,634				
HC.5.1	Pharmaceuticals and other medical non	-	-	2,954,790,195				
HC 5.1.3.2	Repellants for nets	-	-	-				
HC.5.2.5.1	Insecticide treated nets (ITNs)	-	-	833,472,427				
HC.6.1.2	IPTp	-	-	-				
HC.6.3.2.1	Larviciding, elimination of standing water	-	-	2,587,600				
HC.6.3.2.2	Training within public health programmes	11,034,800	-	389,492,587				
HC. 6.3.2.3	IEC (malaria awareness)	-	-	223,533,036				
HC. 6.3.2.4	Surveillance and monitoring	242,135	-	120,264,510				
HC.6.3.2.5	OTHER miscellaneous public health	-	-	-				
HC.6.3.2.6	malaria programs that could not be	74,622,563	-	338,593,008				
HC.7	Health administration and insurance	269,892,271	-	282,763,915				
HCR.1	Capital formation for health care provider institutions	-	-	322,384,506				
HC.nsk	Not specified by kind	-	-	-				
	Column Total-THE	355,791,768	236,754,941	23,570,420,722				
HCR.2	Education & Training				0	0	0	-
HCR.3	Research & Development				103,220,675	0	0	103,220,675
HCR.4	Food, hygiene and drinking water cont				0	0	0	-
HCR.5	Environmental health				0	0	29,806,595	29,806,595
HCR.nsk	HCR expenditure not specified by kind				0	0	0	-
	Column Total-NHE				103,220,675	-	29,806,595	23,703,447,992

# FINANCING SOURCE x FINANCING AGENT (FSxHF)

## Malaria Subaccounts targeted and untargeted

### Financing Source (FS)

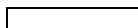
Code	Financing Agent (HF)	Financing Source (FS)								Row Total
				FS.2 Private Funds				FS.3	FS.nsk	
		FS.1.1.1 Central Gov Revenue	FS. 1.2 Other Public funds	FS.2.1.1 Parastatal Employers	FS.2.1.2 Private Employers	FS.2.2 Households	FS.2.4 Other private funds	Rest of the World (Donors)	Not specified by any kind	
FS.1.1.1.4 could not be disaggregated										
HF.1.1.1.1	MoH (MiniSante)	123,944,862	1,599,461					5,945,059,438		6,070,603,761
HF.1.1.1.2	Other Ministries	197,007,511						1,793,320		198,800,831
HF.1.2	Social Security Fund (CSR)			1,563,183	930,744					2,493,927
HF.1.3	FARG	153,438,027				2,462,571				155,900,598
HF.2.1.1	Gvt Employees Insurance Programme (RAMA)	51,094,819		323,059,915		17,763,501	54,888,034			446,806,269
HF.2.1.2	Private Employees Insurance Programme				12,208,832	1,038,838				13,247,670
HF.2.1.3	Mutuelles (Private & Community based)	121,826,297		8,650,875	87,088	868,785,939		1,168,270,490		2,167,620,688
HF. 2.5.1	Parastatal companies			201,952,939						201,952,939
HF.2.2	Private Insurance Enterprises (other than social insurance: COGEAR, SONARWA, etc)			1,012,739	10,100,602	2,086,629				13,199,970
HF.2.3.	Private household out of pocket payments					9,568,284,436				9,568,284,436
HF.2.4	Non profit institutions (NGOs)	2,129,690				791,037		4,149,202,688		4,152,123,415
HF.2.5.2	Private Non Parastatal Firms				76,593,635					76,593,635
HF.3	Rest of World							502,792,583		502,792,583
HF.nsk	Not specified by any kind									0
	Column Total (THE)	649,441,206	1,599,461	536,239,651	99,920,900	10,461,212,952	54,888,034	11,767,118,518	0	23,570,420,722
HF.4	Financing Agents spending on Health Related Items							133,027,270		133,027,270
	Column Total (NHE)	649,441,206	1,599,461	536,239,651	99,920,900	10,461,212,952	54,888,034	11,900,145,788	0	23,703,447,992

\*Includes only the portion of CSR going to health

**FINANCING AGENT x PROVIDER (HFxP)****RH Subaccounts targeted and untargeted**

Financing Agent		HF.A Public Sector							
		HF.1.1.1.1	HF.1.1.1.2	HF.1.2	HF.1.3	HF.2.1.1	HF.2.1.2	HF.2.1.3	HF. 2.5.1
	Provider	MoH (MiniSante)	Other Ministries	Social Security Fund (CSR)	FARG	Gvt Employees Insurance Programme (RAMA)	Private Employees Insurance Programme	Mutuelles (Private & Community based)	Parastatal companies
HP.1.1.1.1	National Referral Gvt Hospital	684,916,022	327,535,778		123,013,220			125,493,450	
HP.1.1.1.2	National Referral Private Hospital	421,160,081		614,287	34,184,910	101,109,933	3,668,046		
HP.1.1.2.1	District Gvt. Hospitals	15,893,350	17,414,624	223,234	12,422,928	25,500,297	677,040	202,674,756	
HP.1.1.2.2	District Agrees Hospitals	6,878,939	11,189,741	181,476	10,099,094	3,854,109	478,768	164,762,387	
HP.3.1	Office of physicians (private clinics)*	6,982,331							
HP.3.3.1	Community health workers	2,302,366				204,483,235	4,110,703		142,909,466
HP.3.3.3	Other health practitioners								
HP.3.4.5.1	Public health centers	180,804,456	15,279,253	247,800	13,790,007	12,563,948	2,397,117	224,978,056	
HP.3.4.5.2	Government assisted not-for-profit health centers (Agrees)	111,297,661	13,738,118						
HP.3.4.5.3	NGO health centers	20,904,568		222,806	12,399,084	9,985,306	1,572,896	202,285,745	
HP.4.1	Dispensing chemists	22,527,922							
HP.5	Providers + admin of public health	176,506,718	480,290						
HP.6	General health administration and insurance	5,141,792							
HP.nsk	Providers not specified by any kind								
	<b>Column Total THE</b>	1,655,316,206	385,637,804	1,489,604	205,909,243	357,496,828	12,904,570	920,194,393	142,909,466
	<b>HF Totals From FS x HF Table</b>	1,655,316,206	385,637,804	1,489,604	205,909,243	357,496,828	12,904,570	920,194,393	142,909,466
HP.8.2	Education and training institutions								
	<b>Subtotal for health related</b>	-	-	-	-	-	-	-	-
	<b>Column Total: NHE</b>	1,655,316,206	385,637,804	1,489,604	205,909,243	357,496,828	12,904,570	920,194,393	142,909,466
	Providers of NONHEALTH RH programs								
	<b>Subtotal for nonhealth</b>	-	-	-	-	-	-	-	-
	<b>Column Total: RHE (health, health related and nonhealth)</b>	1,655,316,206	385,637,804	1,489,604	205,909,243	357,496,828	12,904,570	920,194,393	142,909,466

\*Many private clinics are headed by a nurse, not a physician



**FINANCING AGENT x PROVIDER (HFxP)****RH Subaccounts targeted and untargeted**

	Provider	HF B: Non Public Sector				HF.3 ROW	HF.nsk	Row Total
		HF.2.2	HF.2.3.	HF.2.4	HF.2.5.2	HF.3	HF.nsk	
		Private Insurance Enterprises (other than social insurance: COGEAR, SONARWA, etc)	Private household out of pocket payments	Non profit institutions (NGOs, SWAA, PROFEMME)	Private Non Parastatal Firms	Rest of World	Not specified by any kind	
HP.1.1.1.1	National Referral Gvt Hospital		303,597,085	928,456,771		1,742,779,746		4,235,792,072
HP.1.1.1.2	National Referral Private Hospital	3,654,839	79,656,074					644,048,171
HP.1.1.2.1	District Gvt. Hospitals	674,602	107,781,802	157,148,996	26,561			540,438,190
HP.1.1.2.2	District Agrees Hospitals	477,044	46,649,979	421,371,951	22,992			665,966,481
HP.3.1	Office of physicians (private clinics)*		191,954,634					198,936,965
HP.3.3.1	Community health workers	4,095,902		69,985,930	54,091,353			481,978,956
HP.3.3.3	Other health practitioners		3,170,884					3,170,884
HP.3.4.5.1	Public health centers	2,388,486	39,344,208	312,893,816				804,687,148
HP.3.4.5.2	Government assisted not-for-profit health centers (Agrees)	1,567,232	35,741,758	266,549,161				655,359,766
HP.3.4.5.3	NGO health centers		38,620,612	597,791,165				657,316,345
HP.4.1	Dispensing chemists		141,873,925	226,054,768				390,456,615
HP.5	Providers + admin of public health			809,496,598		291,548,970		1,278,032,575
HP.6	General health administration and insurance							5,141,792
HP.nsk	Providers not specified by any kind							-
	<b>Column Total THE</b>	12,858,106	988,390,962	3,789,749,155	54,140,906	2,034,328,716	-	<b>10,561,325,959</b>
	<b>HF Totals From FS x HF Table</b>	12,858,106	988,390,962	3,789,749,155	54,140,906	2,034,328,716	-	10,561,325,959
HP.8.2	Education and training institutions			171,590,514				171,590,514
	<b>Subtotal for health related</b>	-	-	171,590,514	-	-	-	171,590,514
	<b>Column Total: NHE</b>	12,858,106	988,390,962	#####	54,140,906	2,034,328,716	-	<b>10,732,916,474</b>
	Providers of NONHEALTH RH programs							-
	<b>Subtotal for nonhealth</b>	-	-	-	-	-	-	-
	<b>Column Total: RHE (health, health related and nonhealth)</b>	12,858,106	988,390,962	#####	54,140,906	2,034,328,716	-	<b>10,732,916,474</b>

\*Many private clinics are headed by a nurse, not a physician

**FINANCING AGENTS x FUNCTION (HF x HC)****RH Subaccounts targeted and untargeted****Financing Agent**

		<b>HF.A Public Sector</b>							
		HF.1.1.1.1 MoH (MiniSante)	HF.1.1.1.2 Other Ministries	HF.1.2 Social Security Fund (CSR)	HF.1.3 FARG	HF.2.1.1 Gvt Employees Insurance Programme (RAMA)	HF.2.1.2 Private Employees Insurance Programme	HF.2.1.3 Mutuelles (Private & Community based)	HF. 2.5.1 Parastatal companies
<b>Function</b>									
HC. 1.1.	IP curative care (deliveries)	983,617,620	355,816,760	1,087,464	181,825,413	123,501,754	7,754,587	587,520,205	-
HC.1.3.11	Antenatal care	74,981,832	29,340,754	402,140	24,083,830	233,995,074	5,149,984	332,674,188	142,909,466
HC.1.3.12	Postnatal care	-	-	-	-	-	-	-	-
HC1.3.13.1	FP consultation and issuance of	139,293,169	-	-	-	-	-	-	-
HC.1.3.13.2	FP consultation and issuance of	3,173,669	-	-	-	-	-	-	-
HC.1.3.13.4	FP consultation and issuance of	61,405,352	-	-	-	-	-	-	-
HC.1.3.13.5	FP consultation and issuance of	188,668,132	-	-	-	-	-	-	-
HC.1.3.13.7	FP consultations not disaggregated.	-	-	-	-	-	-	-	-
HC.5.1.1.1	ORAL CONTRACEPTIVES	12,663,015	-	-	-	-	-	-	-
HC.5.1.1.3	INJECATBLES purchased at private	3,914,277	-	-	-	-	-	-	-
HC.5.1.3.1	CONDOMS purchased at private	5,950,630	-	-	-	-	-	-	-
HC.6.1.1.1	Antenatal care programs	-	-	-	-	-	-	-	-
HC.6.1.1.2	Programs related to safe delivery	-	-	-	-	-	-	-	-
HC.6.1.1.4	Other Maternal health programs	-	-	-	-	-	-	-	-
HC.6.1.1.2.6	OTHER FP programs	-	-	-	-	-	-	-	-
HC.6.1.1.2.7	FP programs that could not be	-	-	-	-	-	-	-	-
HC.6.1.3	Adolescent reproductive health	-	185,113	-	-	-	-	-	-
HC.6.1.5	Other RH programs	-	295,177	-	-	-	-	-	-
HC.6.1.6	RH programs that could not be disaggregated	181,648,510	-	-	-	-	-	-	-
HCR.1	Capital formation for health care provider institutions	-	-	-	-	-	-	-	-
HC.nsk	Not specified by kind	-	-	-	-	-	-	-	-
	<b>Column Total THE</b>	1,655,316,206	385,637,804	1,489,604	205,909,243	357,496,828	12,904,570	920,194,393	142,909,466
HCR.2	Education & Training	-	-	-	-	-	-	-	-
	<b>Sub total column</b>	-	-	-	-	-	-	-	-
	<b>Column Total NHE</b>	1,655,316,206	385,637,804	1,489,604	205,909,243	357,496,828	12,904,570	920,194,393	142,909,466
AD.5	Prevention and treatment of victim	-	-	-	-	-	-	-	-
AD.6	Gender non-health programs (Wor	-	-	-	-	-	-	-	-
	<b>sub total column</b>	-	-	-	-	-	-	-	-
	<b>Column Total- RH health, health related, nonhealth</b>	1,655,316,206	385,637,804	1,489,604	205,909,243	357,496,828	12,904,570	920,194,393	142,909,466

**FINANCING AGENTS x FUNCTION (HF x HC)****RH Subaccounts targeted and untargeted**

Function		-				HF.3 ROW	HF.nsk	
		HF.2.2	HF.2.3.	HF.2.4	HF.2.5.2	HF.3	HF.nsk	-
		Private Insurance Enterprises (other than social insurance: COGEAR,	Private household out of pocket payments	Non profit institutions (NGOs, SWAA, PROFEMME)	Private Non Parastatal Firms	Rest of World	Not specified by any kind	Row Total
HC. 1.1.	IP curative care (deliveries)	7,726,665	112,919,822	1,265,045,861	49,554	1,718,626,082	-	5,345,491,787
HC.1.3.11	Antenatal care	5,131,440	620,492,914	636,333,330	54,091,353	24,153,664	-	2,183,739,969
HC.1.3.12	Postnatal care	-	-	-	-	-	-	-
HC1.3.13.1	FP consultation and issuance of ORAL	-	3,459,800	8,208,313	-	-	-	150,961,282
HC.1.3.13.2	FP consultation and issuance of	-	61,832	426,440	-	-	-	3,661,941
HC.1.3.13.4	FP consultation and issuance of	-	17,617,600	102,343,908	-	-	-	181,366,859
HC.1.3.13.5	FP consultation and issuance of	-	91,965,070	486,812,504	-	-	-	767,445,705
HC.1.3.13.7	FP consultations not disaggregated.	-	-	185,041,504	-	-	-	185,041,504
HC.5.1.1.1	ORAL CONTRACEPTIVES purchased	-	16,840,000	8,755,068	-	-	-	38,258,083
HC.5.1.1.3	INJECATBLES purchased at private	-	-	-	-	-	-	3,914,277
HC.5.1.3.1	CONDOMS purchased at private	-	125,033,925	217,299,700	-	-	-	348,284,255
HC.6.1.1.1	Antenatal care programs	-	-	42,828,792	-	-	-	42,828,792
HC.6.1.1.2	Programs related to safe delivery	-	-	64,967,157	-	-	-	64,967,157
HC.6.1.1.4	Other Maternal health programs	-	-	3,132,000	-	-	-	3,132,000
HC.6.1.1.2.6	OTHER FP programs	-	-	540,055,990	-	-	-	540,055,990
HC.6.1.1.2.7	FP programs that could not be	-	-	158,512,659	-	-	-	158,512,659
HC.6.1.3	Adolescent reproductive health	-	-	-	-	-	-	185,113
HC.6.1.5	Other RH programs	-	-	-	-	-	-	295,177
HC.6.1.6	RH programs that could not be disaggregated	-	-	-	-	291,548,970	-	473,197,479
HCR.1	Capital formation for health care provider institutions	-	-	69,985,930	-	-	-	69,985,930
HC.nsk	Not specified by kind	-	-	-	-	-	-	-
	<b>Column Total THE</b>	12,858,106	988,390,962	3,789,749,155	54,140,906	2,034,328,716	-	<b>10,561,325,959</b>
HCR.2	Education & Training	-	-	171,590,514	-	-	-	171,590,514
	<b>Sub total column</b>	-	-	171,590,514	-	-	-	171,590,514
	<b>Column Total NHE</b>	12,858,106	988,390,962	3,961,339,669	54,140,906	2,034,328,716	-	<b>10,732,916,474</b>
AD.5	Prevention and treatment of victims	-	-	-	-	-	-	-
AD.6	Gender non-health programs (Work)	-	-	-	-	-	-	-
	<b>sub total column</b>	-	-	-	-	-	-	-
	<b>Column Total- RH health, health related, nonhealth</b>	12,858,106	988,390,962	3,961,339,669	54,140,906	2,034,328,716	-	<b>10,732,916,474</b>

[illegible]



[illegible]



## **ANNEX B. NHA TABLES: HIV/AIDS, MALARIA, AND RH SUBACCOUNTS, TARGETED EXPENDITURES**



**FINANCING SOURCE x FINANCING AGENT (FSxHF)****HIV/AIDS Subaccounts (Targeted only)****Financing Source (FS)**

Code	Financing Agent (HF)	Financing Source (FS)						FS.3 Rest of the World (Donors)	FS.nsk Not specified by any kind	Row Total	FS.Addendum - Govt	FS.Addendum - Donors
		FS.1.1.1 Central Gov Revenue FS.1.1.1.4 could not be disaggregated	FS. 1.2 Other Public funds	FS.2.1.1 Parastatal Employers	FS.2.1.2 Private Employers	FS.2.2 Households	FS.2.4 Other private funds				Non-health spending	Non-health spending
HF.1.1.1.1	MoH (MiniSante)	527,735,246						1,053,332,213		1,581,067,459		
HF.1.1.1.2	Other Ministries (except CNLS)	147,738,109						5,344,394		153,082,503		
HF.1.1.1.3.1	CNLS	288,080,280	530,000					587,134,348	213,861,233	1,089,605,861		
HF.1.1.1.3.2.1	CNLS-UNDP							160,410,358		160,410,358		
HF.1.1.1.3.2.2	CNLS-BAD	13,584,348						251,801,927		265,386,274		
HF.1.1.1.3.2.3	CNLS-MAP							5,063,564,586		5,063,564,586		
HF.1.1.1.3.2.4	CNLS-GF							7,138,288,980		7,138,288,980		
HF.1.1.3	Local Municipal Gvt (Districts)							65,222,465		65,222,465		
HF.1.2	Social Security Fund (CSR)									0		
HF.1.3	FARG									0		
HF.2.1.1	Gvt Employees Insurance Programme (RAMA)									0		
HF.2.1.2	Private Employees Insurance Programme									0		
HF.2.1.3	Mutuelles (Employer-paid & Community based)									0		
HF. 2.5.1	Parastatal companies									0		
HF.2.2	Private Insurance Enterprises ( <i>other than social insurance: COGEAR, SONARWA, etc</i> )									0		
HF.2.3.	Private household out of pocket payments					863,188,381				863,188,381		
HF.2.4	Non profit institutions (NGOs, SWAA, PROFEMME)	13,289,793						21,009,199,003		21,022,488,796		
HF.2.5.2	Private Non Parastatal Firms									0		
HF.3	Rest of World							2,650,388,531		2,650,388,531		
HF.nsk	Not specified by any kind									0		
	<b>Column Total (THE)</b>	990,427,776	530,000	0	0	863,188,381	0	37,984,686,804	213,861,233	<b>40,052,694,195</b>		
HF. Health r	Financing Agents spending on Health Related Items							358,001,504		358,001,504		
	<b>Column Total (NHE)</b>	990,427,776	530,000	0	0	863,188,381	0	38,342,688,309	213,861,233	<b>40,410,695,699</b>		
Addendum	Financing agents spending on NONHEALTH										1,325,396,756	5,832,134,709
	<b>Column Total (THAE)</b>	990,427,776	530,000	0	0	863,188,381	0	38,342,688,309	213,861,233	<b>47,568,227,165</b>		

\*Includes only the portion of CSR going to health

**FINANCING AGENT x PROVIDER (HFxP)**  
**HIV/AIDS Subaccounts (Targeted only)**

		Financing Agent										
	Provider	HF.1.1.1.1	HF.1.1.1.2	HF.1.1.1.3.1	HF.1.1.1.3.2.1	HF.1.1.1.3.2.2	HF.A Public Sector					HF.2.1.1
		MoH (MiniSante)	Other Ministries (except CNLS)	CNLS	CNLS-UNDP	CNLS-BAD	CNLS-MAP	CNLS-GF	Local Municipal Gvt (Districts)	Social Security Fund (CSR)	FARG	Gvt Employees Insurance Programme (RAMA)
HP.1.1.1.1	National Referral Gvt Hospital						996,459,831	2,207,513,615				
HP.1.1.1.2	National Referral Private Hospital						513,327,792	1,039,263,335				
HP.1.1.1.3	National Referral Hospital (could not be disaggregated)											
HP.1.1.2.1	District Gvt. Hospitals						362,349,029	733,597,648				
HP.1.1.2.2	District Agrees Hospitals						150,978,762	305,665,687				
HP.1.1.2.3	District Hospitals (could not be disaggregated)											
HP.1.2	Mental health hospitals											
HP.3.1	Office of physicians (private clinics)*											
HP.3.3.1	Community health workers											
HP.3.3.2	Traditional healer											
HP.3.3.3	Other health practitioners											
HP.3.4.2	Outpatient mental health institutions (SCPS)											
HP.3.4.5.1	Public health centers	70,658,403					208,357,593	1,222,662,747				
HP.3.4.5.2	Government assisted not-for-profit health centers (Agrees)	14,753,213					135,432,435	794,730,785				
HP.3.4.5.3	NGO health centers											
HP.3.4.5.9	Mobile health centers											
HP.3.4.9	TRAC HIV/AIDS Center	113,114,054										
HP.3.9.1	Ambulance services											
HP.3.6	Providers of home health care services	47,961,153										
HP.3.9.2	Blood banks (CNTS transfusion)											
HP.4.1	Dispensing chemists											
HP.5	Providers + admin of public health programs	599,348,858	5,344,394	1,049,658,028	160,410,358	265,386,274	2,696,659,143	145,009,985				
HP.6	General health administration and insurance	735,231,779	147,738,109	39,947,833				682,313,955				
HP.8	Institutions providing health related services											
HP.9	Rest of the world							7,531,224				
HP.nsk	Providers not specified by any kind								65,222,465			
	<b>Column Total THE</b>	1,581,067,459	153,082,503	1,089,605,861	160,410,358	265,386,274	5,063,564,586	7,138,288,980	65,222,465	-	-	-
	<b>HF Totals From FS x HF Table</b>	1,581,067,459	153,082,503	1,089,605,861	160,410,358	265,386,274	5,063,564,586	7,138,288,980	65,222,465	-	-	-
HP.8.1	Research Institutions	117,683,834										
HP.8.2	Education and training institutions	33,203,875					5,517,400	36,690,576				
HP.8.3	Other health related institutions											
	<b>Subtotal for health related</b>	150,887,709	-	-	-	-	5,517,400	36,690,576	-	-	-	-
	<b>Column Total: NHE</b>	1,731,955,169	153,082,503	1,089,605,861	160,410,358	265,386,274	5,069,081,986	7,174,979,556	65,222,465	-	-	-
HP.Addendum	Providers of NONHEALTH programs						2,730,201,091					
	<b>subtotal for nonhealth</b>	-	-	-	-	-	2,730,201,091		-	-		1,325,396,756
	<b>Column total: THAE (health, health related, + nonhealth)</b>	1,731,955,169	153,082,503	1,089,605,861	160,410,358	265,386,274	7,799,283,077	7,174,979,556	65,222,465	-		1,325,396,756

\*=Many private clinics are headed by a nurse, not a physician

**FINANCING AGENT x PROVIDER (HFxP)**  
**HIV/AIDS Subaccounts (Targeted only)**

	Provider	HF.A Public Sector			HF B: Non Public Sector				HF.3 ROW	HF.nsk	Row Total	HF, Addendum
		HF.2.1.2 Private Employees Insurance Programme	HF.2.1.3 Mutuelles (Employer-paid & Community based)	HF. 2.5.1 Parastatal companies	HF.2.2 Private Insurance Enterprises (other than	HF.2.3. Private household out of pocket payments	HF.2.4 Non profit institutions (NGOs, SWAA, PROFEMME)	HF.2.5.2 Private Non Parastatal Firms	HF.3 Rest of World	HF.nsk Not specified by any kind		
HP.1.1.1.1	National Referral Gvt Hospital					114,409,397	1,153,449,813		671,941,645		5,143,774,300	
HP.1.1.1.2	National Referral Private Hospital					20,687,995			248,211,108		1,821,490,229	
HP.1.1.1.3	National Referral Hospital (could not be disaggregated)										-	
HP.1.1.2.1	District Gvt. Hospitals					84,143,557	419,436,296		175,207,841		1,774,734,371	
HP.1.1.2.2	District Agrees Hospitals					41,863,317	141,351,390		73,003,267		712,862,424	
HP.1.1.2.3	District Hospitals (could not be disaggregated)										-	
HP.1.2	Mental health hospitals										-	
HP.3.1	Office of physicians (private clinics)*					49,611,576					49,611,576	
HP.3.3.1	Community health workers											
HP.3.3.2	Traditional healer					194,438	572,880,180				573,074,618	
HP.3.3.3	Other health practitioners					94,023,410					94,023,410	
HP.3.4.2	Outpatient mental health institutions (SCPS)					4,673,784					4,673,784	
HP.3.4.5.1	Public health centers										-	
HP.3.4.5.2	Government assisted not-for-profit health centers (Agrees)					196,679,980	1,159,861,796		855,475,046		3,713,695,565	
HP.3.4.5.3	NGO health centers					25,898,452	753,910,168		556,058,780		2,280,783,833	
HP.3.4.5.9	Mobile health centers										-	
HP. 3.4.9	TRAC HIV/AIDS Center					16,670					16,670	
HP.3.9.1	Ambulance services										113,114,054	
HP.3.6	Providers of home health care services										-	
HP.3.9.2	Blood banks (CNTS transfusion)										47,961,153	
HP.4.1	Dispensing chemists										-	
HP.5	Providers + admin of public health programs					160,919,378					160,919,378	
HP.6	General health administration and insurance						8,002,935,487		54,037,045		12,978,789,572	
HP. 8	Institutions providing health related services						8,584,434,921		16,453,800		10,206,120,397	
HP.9	Rest of the world										-	
HP.nsk	Providers not specified by any kind					70,066,428	234,228,745				7,531,224	
	Column Total THE	-	-	-	-	863,188,381	21,022,488,796	-	2,650,388,531	-	40,052,694,195	
	HF Totals From FS x HF Table	-	-	-	-	863,188,381	21,022,488,796	-	2,650,388,531	-	40,052,694,195	
HP.8.1	Research Institutions						150,100,038				267,783,872	
HP.8.2	Education and training institutions						14,805,781				90,217,632	
HP.8.3	Other health related institutions										-	
	Subtotal for health related	-	-	-	-	-	164,905,819	-	-	-	358,001,504	
	Column Total: NHE	-	-	-	-	863,188,381	21,187,394,615	-	2,650,388,531	-	40,410,695,699	
HP.Addendum	Providers of NONHEALTH programs						1,940,314,689		1,161,618,929			
	subtotal for nonhealth	-	-	-	-	-	1,940,314,689	-	1,161,618,929	-		7,157,531,466
	Column total: THAE (health, health related, nonhealth)	-	-	-	-	863,188,381	23,127,709,304	-	3,812,007,460	-		47,568,227,165

\*=Many private clinics are headed by a nurse, not a physician

As a % of HH

**FINANCING AGENTS x FUNCTION (HF x HC)****HIV/AIDS Subaccounts (Targeted only)**

		Financing Agent							
		HF.A Public Sector							
		HF.1.1.1.1	HF.1.1.1.2	HF.1.1.1.3.1	HF.1.1.1.3.2.1	HF.1.1.1.3.2.2	HF.1.1.1.3.2.3	HF.1.1.1.3.2.4	HF.1.1.1.3
Function		MoH (MiniSante)	Other Ministries (except CNLS)	CNLS	CNLS-UNDP	CNLS-BAD	CNLS-MAP	CNLS-GF	Local Municipal Gvt (Districts)
HC. 1.1.1	IP ARV curative care	-	-	-	-	-	-	912,036,685	-
HC. 1.1.2	IP OI Treatment	-	-	-	-	-	-	-	-
HC.1.1.4	IP care that cannot be disaggregated	47,961,153	-	-	-	-	945,860,266	820,349,277	-
HC. 1.3.5	OP STI Management	-	-	-	-	-	-	-	-
HC. 1.3.6	OP opportunistic infection treatment and	-	-	-	-	-	-	-	-
HC.1.3.7	OP ARV treatment	-	-	-	-	-	-	3,741,211,708	-
HC1.3.8	OP Psychosocial support	-	-	-	-	-	-	-	-
HC 1.3.10	OP care that cannot be disaggregated	150,564,517	-	-	-	-	654,327,514	829,836,146	-
HC.1.3.11	VCT as part of OP care	-	-	-	-	-	-	-	-
HC.1.3.12	PMTCT service delivery	-	-	-	-	-	-	-	-
HC 5.1.1.3	Drugs that could not be disaggregated	-	-	-	-	-	-	-	-
HC.5.1.3.1	Condoms (donated/contributed for prev.	3,689,319	-	-	-	-	-	-	-
HC.6.1.1	PMTCT	47,961,153	-	-	-	-	-	-	-
HC. 6.3.1.1	VCT	307,574,200	147,738,109	-	-	-	-	-	-
HC. 6.3.1.2	Blood supply	-	-	-	-	-	-	-	-
HC.6.3.1.4	IEC programmes	10,050,091	-	-	-	-	-	-	-
HC.6.3.1.5	STI prevention programmes	-	-	-	-	-	-	-	-
HC.6.3.1.7	Condom distribution programmes	-	-	-	-	-	-	-	-
HC.6.3.1.8	ART programmes	-	-	-	-	-	-	-	-
HC.6.3.1.9	Surveillance	23,508,299	-	-	-	-	-	-	-
HC.6.3.1.11	Trainings for HIV/AIDS programmes	46,316,535	-	-	-	-	65,516,008	-	-
HC.6.3.1.12	Other public health programs (including	-	-	-	-	-	-	-	-
HC.6.3.1.13	public health pprogrammes not disaggregated	205,876,046	5,344,394	1,049,658,028	12,383,828	25,966,091	886,378,702	152,541,208	-
HC.7.2.2.1	Local consultancies	17,926,977	-	-	-	-	-	-	-
HC.7.2.2.3	Health administration and health insurance (not disaggregated)	675,219,721	-	39,947,833	148,026,530	239,420,183	1,744,764,434	682,313,955	-
HCR.1	Capital formation for health care provider institutions	44,419,448	-	-	-	-	766,717,662	-	-
HC.nsk	Not specified by kind	-	-	-	-	-	-	-	65,222,465
	<b>Column Total THE</b>	1,581,067,459	153,082,503	1,089,605,861	160,410,358	265,386,274	5,063,564,586	7,138,288,980	65,222,465
HCR.2	Education & Training	33,203,875	-	-	-	-	5,517,400	36,690,576	-
HCR.3	Research & Development	117,683,834	-	-	-	-	-	-	-
	<i>Sub total column</i>	150,887,709	-	-	-	-	5,517,400	36,690,576	-
	<b>Column Total NHE</b>	1,731,955,169	153,082,503	1,089,605,861	160,410,358	265,386,274	5,069,081,986	7,174,979,556	65,222,465
AD.1.1.2	Monetary benefits to PLWHA, widows, and families	-	-	-	-	-	-	-	-
AD.1.1.5	Social support to PLWHA, widows, and families not disaggregated.	-	-	-	-	-	-	-	-
AD.1.2.3	School fees to OVC	-	-	-	-	-	1,318,535,777	-	-
AD.1.2.5	Social support to OVCs not disaggregated	-	-	-	-	-	-	-	-
AD.1.3.1	Income-generating activities	-	-	-	-	-	1,411,665,314	-	-
AD.2	Policy advocacy	-	-	-	-	-	-	-	-
AD.3	Non-helath IEC- social stigma reductin	-	-	-	-	-	-	-	-
AD.4	Empowerment and organization (incl. Legal services)	-	-	-	-	-	-	-	-
-	subtotal column	-	-	-	-	-	2,730,201,091	-	-
-	<b>Column total -- THAE (health, health)</b>	1,731,955,169	153,082,503	1,089,605,861	160,410,358	265,386,274	7,799,283,077	-	65,222,465
	<b>HF as a % of THE</b>	4%	0%	3%	0%	1%	13%		0%



Annex B-3

**FINANCING AGENTS x FUNCTION (HF x HC)****HIV/AIDS Subaccounts (Targeted only)**

Function		-		HF.3 ROW	HF.nsk	Row Total
		HF.2.3.	HF.2.4	HF.3	HF.nsk	
		Private household out of pocket payments	Non profit institutions (NGOs, SWAA, PROFEMME)	Rest of World	Not specified by any kind	
HC.1.1.1	IP ARV curative care	-	-	-	-	912,036,685
HC.1.1.2	IP OI Treatment	-	126,441,201	-	-	126,441,201
HC.1.1.4	IP care that cannot be disaggregated	210,795,503	-	820,349,277	-	2,845,315,477
HC.1.3.5	OP STI Management	-	131,893,843	-	-	131,893,843
HC.1.3.6	OP opportunistic infection treatment	-	505,764,805	-	-	505,764,805
HC.1.3.7	OP ARV treatment	-	892,116,670	-	-	4,633,328,378
HC.1.3.8	OP Psychosocial support	-	516,147,976	-	-	516,147,976
HC.1.3.10	OP care that cannot be disaggregated	419,604,854	-	829,836,146	-	2,884,169,177
HC.1.3.11	VCT as part of OP care	-	876,795,887	-	-	876,795,887
HC.1.3.12	PMTCT service delivery	-	482,270,240	929,712,263	-	1,411,982,503
HC.5.1.1.3	Drugs that could not be disaggregated	160,919,378	-	-	-	160,919,378
HC.5.1.3.1	Condoms (donated/contributed for prev.	-	-	-	-	3,689,319
HC.6.1.1	PMTCT	-	1,104,440,127	-	-	1,152,401,280
HC.6.3.1.1	VCT	-	1,236,646,405	-	-	1,691,958,714
HC.6.3.1.2	Blood supply	-	445,982,651	-	-	445,982,651
HC.6.3.1.4	IEC programmes	-	2,138,497,958	-	-	2,148,548,049
HC.6.3.1.5	STI prevention programmes	-	1,680,803,596	-	-	1,680,803,596
HC.6.3.1.7	Condom distribution programmes	-	141,646,500	-	-	141,646,500
HC.6.3.1.8	ART programmes	-	1,122,316,065	-	-	1,122,316,065
HC.6.3.1.9	Surveillance	-	174,251,628	-	-	197,759,927
HC.6.3.1.11	Trainings for HIV/AIDS programmes	-	27,546,639	-	-	139,379,181
HC.6.3.1.12	Other public health programs (including	-	791,001,187	-	-	791,001,187
HC.6.3.1.13	public health programmes not disaggregated	-	120,600,278	70,490,845	-	2,529,239,421
HC.7.2.2.1	Local consultancies	-	-	-	-	17,926,977
HC.7.2.2.3	Health administration and health insurance (not disaggregated)	-	5,775,470,604	-	-	9,305,163,260
HCR.1	Capital formation for health care provider institutions	-	2,426,830,003	-	-	3,237,967,113
HC.nsk	Not specified by kind	71,868,647	305,024,535	-	-	442,115,647
	<b>Column Total THE</b>	863,188,381	21,022,488,796	2,650,388,531	-	<b>40,052,694,195</b>
HCR.2	Education & Training	-	14,805,781	-	-	90,217,632
HCR.3	Research & Development	-	150,100,038	-	-	267,783,872
	<i>Sub total column</i>	-	164,905,819	-	-	358,001,504
	<b>Column Total NHE</b>	863,188,381	21,187,394,615	2,650,388,531	-	<b>40,410,695,699</b>
AD.1.1.2	Monetary benefits to PLWHA, widows, and families	-	25,054,513	-	-	25,054,513
AD.1.1.5	Social support to PLWHA, widows, and families not disaggregated.	-	510,395,391	-	-	510,395,391
AD.1.2.3	School fees to OVC	-	-	-	-	2,643,932,534
AD.1.2.5	Social support to OVCs not disaggregated	-	1,236,971,795	-	-	1,236,971,795
AD.1.3.1	Income-generating activities	-	-	1,161,618,929	-	2,573,284,243
AD.2	Policy advocacy	-	7,228,213	-	-	7,228,213
AD.3	Non-helath IEC- social stigma reductin	-	59,719,881	-	-	59,719,881
AD.4	Empowerment and organization (incl. Legal services)	-	100,944,896	-	-	100,944,896
-	subtotal column	-	1,940,314,689	1,161,618,929	-	7,157,531,466
-	<b>Column total -- THAE (health, heal</b>	863,188,381	23,127,709,304	3,812,007,460	-	<b>47,568,227,165</b>
	<b>HF as a % of THE</b>	2%	52%	7%	0%	

[illegible]

Annex B-4

**PROVIDER x FUNCTION (HP x HC)****HIV/AIDS Subaccounts (Targeted only)**

		HP.3.4.5.2	HP.3.4.5.9	HP.3.4.5.9	HP.3.6	HP.4.1	HP.5	HP.6	HP.9
		Government assisted not-for-profit health centers (Agrees)	Mobile health centers	TRAC HIV/AIDS Center	Providers of home health care services	Dispensing chemists	Providers + admin of public health programs	General health administration and insurance	Rest of the world
	Function								
HC.1.1.1	IP ARV curative care	60,492,229	-	-	-	-	-	-	-
HC.1.1.2	IP OI Treatment	35,499,686	-	-	-	-	-	-	-
HC.1.1.4	IP care that cannot be disaggregated	90,905,946	16,670	-	47,961,153	-	-	-	-
HC.1.3.5	OP STI Management	13,350,289	-	-	-	-	-	-	-
HC.1.3.6	OP opportunistic infection treatment and	141,998,744	-	-	-	-	-	-	-
HC.1.3.7	OP ARV treatment	731,364,695	-	-	-	-	-	-	-
HC.1.3.8	OP Psychosocial support	66,058,497	-	-	-	-	966,012	-	-
HC.1.3.10	OP care that cannot be disaggregated	365,121,847	-	113,114,054	-	-	-	-	-
HC.1.3.11	VCT as part of OP care	132,435,195	-	-	-	-	2,241,714	-	-
HC.1.3.12	PMTCT service delivery	466,061,786	-	-	-	-	-	-	-
HC.5.1.1.3	Drugs that could not be disaggregated	-	-	-	-	160,919,378	-	-	-
HC.5.1.3.1	Condoms (donated/contributed for prev. of	-	-	-	-	-	3,689,319	-	-
HC.6.1.1	PMTCT	-	-	-	-	-	1,104,440,127	-	-
HC.6.3.1.1	VCT	688,385	-	-	-	-	1,542,473,165	147,738,109	-
HC.6.3.1.2	Blood supply	77,133,238	-	-	-	-	215,615,420	-	-
HC.6.3.1.4	IEC programmes	-	-	-	-	-	1,972,016,280	172,850,174	-
HC.6.3.1.5	STI prevention programmes	-	-	-	-	-	1,202,388,718	109,833,043	-
HC.6.3.1.7	Condom distribution programmes	-	-	-	-	-	131,988,114	9,658,386	-
HC.6.3.1.8	ART programmes	-	-	-	-	-	1,122,316,065	-	-
HC.6.3.1.9	Surveillance	-	-	-	-	-	110,356,454	87,403,473	-
HC.6.3.1.11	Trainings for HIV/AIDS programmes	-	-	-	-	-	66,336,316	73,040,865	-
HC.6.3.1.12	Other public health programs (including OI , psychosocial support)	-	-	-	-	-	791,001,187	-	-
HC.6.3.1.13	public health pprogrammes not disaggregated	-	-	-	-	-	2,505,254,397	16,453,800	7,531,224
HC.7.2.2.1	Local consultancies	-	-	-	-	-	-	17,926,977	-
HC.7.2.2.3	Health administration and health insurance (not disaggregated)	-	-	-	-	-	2,205,197,140	7,099,966,120	-
HCR.1	Capital formation for health care provider institutions	99,673,296	-	-	-	-	-	2,471,249,451	-
HC.nsk	Not specified by kind	-	-	-	-	-	2,507,143	-	-
	<b>Column Total-THE</b>	<b>2,280,783,833</b>	<b>16,670</b>	<b>113,114,054</b>	<b>47,961,153</b>	<b>160,919,378</b>	<b>12,978,789,572</b>	<b>10,206,120,397</b>	<b>7,531,224</b>
HCR.2	Education & Training								
HCR.3	Research & Development								
HCR.4	Food, hygiene and drinking water control								
HCR.5	Environmental health								
HCR.nsk	HCR expenditure not specified by kind								
	<b>Column Total-NHE</b>								
AD.1.1.2	Monetary benefits to PLWHA, widows, and families								
AD.1.1.5	Social support to PLWHA, widows, and families not disaggregated.								
AD.1.2.3	School fees to OVC								
AD.1.2.5	Social support to OVCs not disaggregated								
AD.1.3.1	Income-generating activities								
AD.2	Policy advocacy								
AD.3	Non-health IEC- social stigma reduction								
AD.4	Empowerment and organization (incl. Legal services)								
	<b>Column total -- THAE (health, health related, nonhealth)</b>								

Annex B-4

### PROVIDER x FUNCTION (HP x HC)

HIV/AIDS Subaccounts (Targeted only)

[illegible]

**FINANCING SOURCE x FINANCING AGENT (FSxHF)****Malaria Subaccounts targeted only**

Financing Source (FS)												
Code	Financing Agent (HF)				FS.2 Private Funds					FS.3	FS.nsk	Row Total
		FS.1.1.1 Central Gov Revenue	FS.1.1.2 District gov. revenue	FS. 1.2 Other Public funds	FS.2.1.1 Parastatal Employers	FS.2.1.2 Private Employers	FS.2.2 Households	FS .2.3 NPISH ( Local foundations)	FS.2.4 Other private funds	Rest of the World (Donors)	Not specified by any kind	
		FS.1.1.1.4 could not be disaggregated										
HF.1.1.1.1	MoH (MiniSante)	41,806,250								5,804,932,365		5,846,738,615
HF.1.1.1.2	Other Ministries											0
HF.1.1.3	Local Municipal Gvt (Districts)											0
HF.1.2	Social Security Fund (CSR)											0
HF.1.3	FARG											0
HF.2.1.1	Gvt Employees Insurance Programme (RAMA)											0
HF.2.1.2	Private Employees Insurance Programme											0
HF.2.1.3	Mutuelles (Private & Community based)											0
HF. 2.5.1	Parastatal companies											0
HF.2.2	Private Insurance Enterprises (other than social insurance: COGEAR, SONARWA, etc)											0
HF.2.3.	Private household out of pocket payments						9,568,284,436					9,568,284,436
HF.2.4	Non profit institutions (NGOs)									2,259,356,258		2,259,356,258
HF.2.5.2	Private Non Parastatal Firms											0
HF.3	Rest of World									260,326,957		260,326,957
HF.nsk	Not specified by any kind											0
	Column Total (THE)	41,806,250	0	0	0	0	9,568,284,436	0	0	8,324,615,580	0	17,934,706,266
HF.4	Financing Agents spending on Health Related Items									133,027,270		133,027,270
	Column Total (NHE)	41,806,250	0	0	0	0	9,568,284,436	0	0	8,457,642,850	0	18,067,733,536

**FINANCING AGENT x PROVIDER (HFxP)****Malaria Subaccounts targeted only****Financing Agent**

	Provider	HF.A Public Sector								
		HF.1.1.1.1	HF.1.1.1.2	HF.1.1.1.3	HF.1.2	HF.1.3	HF.2.1.1	HF.2.1.2	HF.2.1.3	HF. 2.5.1
		MoH (MiniSante)	Other Ministries	Local Municipal Gvt (Districts)	Social Security Fund (CSR)	FARG	Gvt Employees Insurance Programme (RAMA)	Private Employees Insurance Programme	Mutuelles (Private & Community based)	Parastatal companies
HP.1.1.1.1	National Referral Gvt Hospital									
HP.1.1.1.2	National Referral Private Hospital									
HP.1.1.1.3	National Referral Hospital (could not be disaggregated)									
HP.1.1.2.1	District Gvt. Hospitals	39,086,500								
HP.1.1.2.2	District Agrees Hospitals	16,646,582								
HP.1.1.2.3	District Hospitals (could not be disaggregated)									
HP.1.2	Mental health hospitals									
HP.3.1	Office of physicians (private clinics)*									
HP.3.3.1	Community health workers	4,485,321,000								
HP.3.3.2	Traditional healer									
HP.3.3.3	Other health practitioners	128,584,047								
HP.3.4.2	Outpatient mental health									
HP.3.4.5.1	Public health centers	305,608,214								
HP.3.4.5.2	Government assisted not-for-profit health centers (Agrees)	196,429,797								
HP.3.4.5.3	NGO health centers									
HP.3.5	Medical and diagnostic laboratories	2,000,000								
HP.3.9.1	Ambulance services									
HP.3.6	Providers of home health	6,208,098								
HP.3.9.2	Blood banks (CNTS transfusion)									
HP.4.1	Dispensing chemists									
HP.5	Providers + admin of public	602,670,461								
HP.nsk	Providers not specified by									
	<b>Column Total THE</b>	5,846,738,615	-	-	-	-	-	-	-	-
	<b>HF Totals From FS x HF T</b>	5,846,738,615	-	-	-	-	-	-	-	-
HP.8.1	Research Institutions	103,220,675								
HP.8.2	Education and training institutions									
HP.8.3	Other health related institutions									
	<b>Subtotal for health rela</b>	103,220,675	-	-	-	-	-	-	-	-
	<b>Column Total: NHE</b>	5,949,959,290	-	-	-	-	-	-	-	-

**FINANCING AGENT x PROVIDER (HFxP)****Malaria Subaccounts targeted only**

	Provider	HF B: Non Public Sector				HF.3 ROW	HF.nsk	Row Total
		HF.2.2 Private Insurance Enterprises (other than social insurance)	HF.2.3. Private household out of pocket payments	HF.2.4 Non profit institutions (NGOs)	HF.2.5.2 Private Non Parastatal Firms	HF.3 Rest of World	HF.nsk Not specified by any kind	
HP.1.1.1.1	National Referral Gvt Hospital		1,133,558,339	230,207,473				1,363,765,812
HP.1.1.1.2	National Referral Private Hospital		305,146,201					305,146,201
HP.1.1.1.3	National Referral Hospital (could not be disaggregated)							-
HP.1.1.2.1	District Gvt. Hospitals		421,585,082	89,994,334				550,665,917
HP.1.1.2.2	District Agrees Hospitals		157,365,218	26,925,564				200,937,364
HP.1.1.2.3	District Hospitals (could not be disaggregated)							-
HP.1.2	Mental health hospitals							-
HP.3.1	Office of physicians (private clinics)*		1,396,747,643					1,396,747,643
HP.3.3.1	Community health workers			294,186,724				4,779,507,724
HP.3.3.2	Traditional healer		83,780,058					83,780,058
HP.3.3.3	Other health practitioners		68,065,140					196,649,187
HP.3.4.2	Outpatient mental health							-
HP.3.4.5.1	Public health centers		2,404,950,486	107,922,624				2,818,481,324
HP.3.4.5.2	Government assisted not-for-profit health centers (Agrees)		507,518,673	69,554,537				773,503,007
HP.3.4.5.3	NGO health centers							-
HP.3.5	Medical and diagnostic laboratories							2,000,000
HP.3.9.1	Ambulance services							-
HP.3.6	Providers of home health							6,208,098
HP.3.9.2	Blood banks (CNTS transfusion)							-
HP.4.1	Dispensing chemists		3,089,567,595	698,695,027				3,788,262,622
HP.5	Providers + admin of public			288,129,742		185,704,394		1,076,504,598
HP.nsk	Providers not specified by			236,754,941				236,754,941
	<b>Column Total THE</b>	-	9,568,284,436	2,259,356,258	-	260,326,957	-	<b>17,934,706,266</b>
	<b>HF Totals From FS x HF</b>	-	9,568,284,436	2,259,356,258	-	260,326,957	-	<b>17,934,706,266</b>
HP.8.1	Research Institutions							103,220,675
HP.8.2	Education and training institutions							-
HP.8.3	Other health related institutions			29,806,595				29,806,595
	<b>Subtotal for health rela</b>	-	-	29,806,595	-	-	-	133,027,270
	<b>Column Total: NHE</b>	-	9,568,284,436	2,289,162,853	-	260,326,957	-	<b>18,067,733,536</b>

## Financing Agent

[illegible]



Annex B-7

**FINANCING AGENTS x FUNCTION (HF x HC)****Malaria Subaccounts targeted only**

Function		-				HF.3 ROW	HF.nsk	Row Total
		HF.2.2	HF.2.3.	HF.2.4	HF.2.5.2	HF.3	HF.nsk	
		Private Insurance Enterprises (other	Private household out of pocket payments	Non profit institutions (NGOs)	Private Non Parastatal Firms	Rest of World	Not specified by any kind	
HC.1.1	In patient curative care (incl. For severe malaria)	-	1,012,072,015	253,823,556	-	-	-	1,312,759,501
HC 1.3.9	Nets given as part of Outpatient care	-	41,381,600	236,754,941	-	-	-	5,450,364,403
HC 1.3.10	ACT as part of OP care	-	-	-	-	-	-	-
HC 1.3.11	Other OP care	-	-	66,208,800	-	-	-	66,208,800
HC 1.3.12	OP care that could not be disaggregated	-	5,425,263,226	204,572,177	-	-	-	5,630,658,047
HC.1.4	Services of curative home care (malaria)	-	-	-	-	-	-	6,208,098
HC.4.1	Clinical lab (BNC, biolab, biomed, etc)	-	-	-	-	-	-	-
HC.4.2	Diagnostic imaging	-	-	-	-	-	-	625,634
HC.5.1	Pharmaceuticals and other medical non	-	2,954,790,195	-	-	-	-	2,954,790,195
HC 5.1.3.2	Repellants for nets	-	-	-	-	-	-	-
HC.5.2.5.1	Insecticide treated nets (ITNs)	-	134,777,400	698,695,027	-	-	-	833,472,427
HC.6.1.2	IPTp	-	-	-	-	-	-	-
HC.6.3.2.1	Larviciding, elimination of standing water	-	-	2,587,600	-	-	-	2,587,600
HC.6.3.2.2	Training within public health programmes for malaria	-	-	281,320,369	-	-	-	389,492,587
HC. 6.3.2.3	IEC (malaria awareness)	-	-	171,752,507	-	-	-	223,533,036
HC. 6.3.2.4	Surveillance and monitoring	-	-	75,353,714	-	-	-	120,264,510
HC.6.3.2.5	OTHER miscellaneous public health programs	-	-	-	-	-	-	-
HC.6.3.2.6	malaria programs that could not be disaggregated	-	-	-	-	260,326,957	-	338,593,008
HC.7	Health administration and insurance	-	-	213,328,668	-	-	-	282,763,915
HCR.1	Capital formation for health care provider institutions	-	-	54,958,899	-	-	-	322,384,506
HC.nsk	Not specified by kind	-	-	-	-	-	-	-
Column Total THE		-	9,568,284,436	2,259,356,258	-	260,326,957	-	17,934,706,266
HCR.2	Education & Training	-	-	-	-	-	-	-
HCR.3	Research & Development	-	-	-	-	-	-	103,220,675
HCR.4	Food, hygiene and drinking water co	-	-	-	-	-	-	-
HCR.5	Environmental health	-	-	29,806,595	-	-	-	-
Sub total column		-	-	-	-	-	-	103,220,675
Column Total NHE		-	9,568,284,436	2,259,356,258	-	260,326,957	-	18,037,926,941

**PROVIDER x FUNCTION (HP x HC)****Malaria Subaccounts targeted only**

		Provider					
		HP.1.1.1.1	HP.1.1.1.2	HP.1.1.1.3	HP.1.1.2.1	HP.1.1.2.2	HP.1.1.2.3
	Function	National Referral Govt Hospital	National Referral Private Hospital	National Referral Hospital (could not be disaggregated)	District Govt. Hospitals	District Agrees Hospitals	District Hospitals (could not be disaggregated)
HC.1.1	In patient curative care (incl. For severe	627,513,893	223,230,857	-	228,506,328	101,556,677	-
HC 1.3.9	Nets given as part of Outpatient care	-	-	-	40,784,646	17,652,357	-
HC 1.3.10	ACT as part of OP care	-	-	-	-	-	-
HC 1.3.11	Other OP care	43,981,172	-	-	22,227,628	-	-
HC 1.3.12	OP care that could not be disaggregated	692,270,747	81,915,344	-	258,521,682	81,728,330	-
HC.1.4	Services of curative home care (malaria)	-	-	-	-	-	-
HC.4.1	Clinical lab (BNC, biolab, biomed, etc)	-	-	-	-	-	-
HC.4.2	Diagnostic imaging	-	-	-	625,634	-	-
HC.5.1	Pharmaceuticals and other medical non	-	-	-	-	-	-
HC 5.1.3.2	Repellants for nets	-	-	-	-	-	-
HC.5.2.5.1	Insecticide treated nets (ITNs)	-	-	-	-	-	-
HC.6.1.2	IPTp	-	-	-	-	-	-
HC.6.3.2.1	Larviciding, elimination of standing water areas	-	-	-	-	-	-
HC.6.3.2.2	Training within public health programmes for	-	-	-	-	-	-
HC. 6.3.2.3	IEC (malaria awareness)	-	-	-	-	-	-
HC. 6.3.2.4	Surveillance and monitoring	-	-	-	-	-	-
HC.6.3.2.5	OTHER miscellaneous public health programs	-	-	-	-	-	-
HC.6.3.2.6	malaria programs that could not be	-	-	-	-	-	-
HC.7	Health administration and insurance	-	-	-	-	-	-
HCR.1	Capital formation for health care provider institutions	-	-	-	-	-	-
HC.nsk	Not specified by kind	-	-	-	-	-	-
	<b>Column Total-THE</b>	<b>1,363,765,812</b>	<b>305,146,201</b>	<b>-</b>	<b>550,665,917</b>	<b>200,937,364</b>	<b>-</b>
HCR.2	Education & Training						
HCR.3	Research & Development						
HCR.4	Food, hygiene and drinking water control						
HCR.5	Environmental health						
HCR.nsk	HCR expenditure not specified by kind						
	<b>Column Total-NHE</b>						

**PROVIDER x FUNCTION (HP x HC)****Malaria Subaccounts targeted only**

		Provider					
		HP.1.2	HP.3.1	HP.3.3.1	HP.3.3.2	HP.3.3.3	HP.3.4.1
	Function	Mental health hospitals	Office of physicians (private clinics)*	Community health workers	Traditional healer	Other health practitioners	Family planning centers
HC.1.1	In patient curative care (incl. For severe	-	-	-	-	-	
HC 1.3.9	Nets given as part of Outpatient care	-	-	4,485,321,000	-	136,353,006	
HC 1.3.10	ACT as part of OP care	-	-	-	-	-	
HC 1.3.11	Other OP care	-	-	-	-	-	
HC 1.3.12	OP care that could not be disaggregated	-	1,396,747,643	-	83,780,058	60,296,180	
HC.1.4	Services of curative home care (malaria)	-	-	-	-	-	
HC.4.1	Clinical lab (BNC, biolab, biomed, etc)	-	-	-	-	-	
HC.4.2	Diagnostic imaging	-	-	-	-	-	
HC.5.1	Pharmaceuticals and other medical non	-	-	-	-	-	
HC 5.1.3.2	Repellants for nets	-	-	-	-	-	
HC.5.2.5.1	Insecticide treated nets (ITNs)	-	-	-	-	-	
HC.6.1.2	IPTp	-	-	-	-	-	
HC.6.3.2.1	Larviciding, elimination of standing water areas	-	-	-	-	-	
HC.6.3.2.2	Training within public health programmes for	-	-	220,628,969	-	-	
HC. 6.3.2.3	IEC (malaria awareness)	-	-	18,598,857	-	-	
HC. 6.3.2.4	Surveillance and monitoring	-	-	-	-	-	
HC.6.3.2.5	OTHER miscellaneous public health programs	-	-	-	-	-	
HC.6.3.2.6	malaria programs that could not be	-	-	-	-	-	
HC.7	Health administration and insurance	-	-	-	-	-	
HCR.1	Capital formation for health care provider institutions	-	-	54,958,899	-	-	
HC.nsk	Not specified by kind	-	-	-	-	-	
	<b>Column Total-THE</b>	-	<b>1,396,747,643</b>	<b>4,779,507,724</b>	<b>83,780,058</b>	<b>196,649,187</b>	-
HCR.2	Education & Training						
HCR.3	Research & Development						
HCR.4	Food, hygiene and drinking water control						
HCR.5	Environmental health						
HCR.nsk	HCR expenditure not specified by kind						
	<b>Column Total-NHE</b>						

**PROVIDER x FUNCTION (HP x HC)****Malaria Subaccounts targeted only**

		HP.3.4.2	HP.3.4.5.1	HP.3.4.5.2	HP.3.4.5.3	HP.3.6	HP.3.9.2
	<b>Function</b>	Outpatient mental health institutions (SCPS)	Public health centers	Government assisted not-for-profit health centers (Agrees)	NGO health centers	Providers of home health care services	Blood banks (CNTS transfusion)
HC.1.1	In patient curative care (incl. For severe	-	51,083,375	34,004,440	-	-	-
HC 1.3.9	Nets given as part of Outpatient care	-	323,200,503	208,297,949	-	-	-
HC 1.3.10	ACT as part of OP care	-	-	-	-	-	-
HC 1.3.11	Other OP care	-	-	-	-	-	-
HC 1.3.12	OP care that could not be disaggregated	-	2,444,197,445	531,200,617	-	-	-
HC.1.4	Services of curative home care (malaria)	-	-	-	-	6,208,098	-
HC.4.1	Clinical lab (BNC, biolab, biomed, etc)	-	-	-	-	-	-
HC.4.2	Diagnostic imaging	-	-	-	-	-	-
HC.5.1	Pharmaceuticals and other medical non	-	-	-	-	-	-
HC 5.1.3.2	Repellants for nets	-	-	-	-	-	-
HC.5.2.5.1	Insecticide treated nets (ITNs)	-	-	-	-	-	-
HC.6.1.2	IPTp	-	-	-	-	-	-
HC.6.3.2.1	Larviciding, elimination of standing water areas	-	-	-	-	-	-
HC.6.3.2.2	Training within public health programmes for	-	-	-	-	-	-
HC. 6.3.2.3	IEC (malaria awareness)	-	-	-	-	-	-
HC. 6.3.2.4	Surveillance and monitoring	-	-	-	-	-	-
HC.6.3.2.5	OTHER miscellaneous public health programs	-	-	-	-	-	-
HC.6.3.2.6	malaria programs that could not be	-	-	-	-	-	-
HC.7	Health administration and insurance	-	-	-	-	-	-
HCR.1	Capital formation for health care provider institutions	-	-	-	-	-	-
HC.nsk	Not specified by kind	-	-	-	-	-	-
	<b>Column Total-THE</b>	-	<b>2,818,481,324</b>	<b>773,503,007</b>	-	<b>6,208,098</b>	-
HCR.2	Education & Training						
HCR.3	Research & Development						
HCR.4	Food, hygiene and drinking water control						
HCR.5	Environmental health						
HCR.nsk	HCR expenditure not specified by kind						
	<b>Column Total-NHE</b>						

**PROVIDER x FUNCTION (HP x HC)****Malaria Subaccounts targeted only**

		HP.4.1	HP.5	HP.6	HP. 8	HP.9
	Function	Dispensing chemists	Providers + admin of public health programs	General health administration and insurance	Institutions providing health related services	Rest of the world
HC.1.1	In patient curative care (incl. For severe	-	46,863,930	-	-	-
HC 1.3.9	Nets given as part of Outpatient care	-	-	-	-	-
HC 1.3.10	ACT as part of OP care	-	-	-	-	-
HC 1.3.11	Other OP care	-	-	-	-	-
HC 1.3.12	OP care that could not be disaggregated	-	-	-	-	-
HC.1.4	Services of curative home care (malaria)	-	-	-	-	-
HC.4.1	Clinical lab (BNC, biolab, biomed, etc)	-	-	-	-	-
HC.4.2	Diagnostic imaging	-	-	-	-	-
HC.5.1	Pharmaceuticals and other medical non	2,954,790,195	-	-	-	-
HC 5.1.3.2	Repellants for nets	-	-	-	-	-
HC.5.2.5.1	Insecticide treated nets (ITNs)	833,472,427	-	-	-	-
HC.6.1.2	IPTp	-	-	-	-	-
HC.6.3.2.1	Larviciding, elimination of standing water areas	-	2,587,600	-	-	-
HC.6.3.2.2	Training within public health programmes for	-	157,828,818	11,034,800	-	-
HC. 6.3.2.3	IEC (malaria awareness)	-	204,934,179	-	-	-
HC. 6.3.2.4	Surveillance and monitoring	-	120,022,375	242,135	-	-
HC.6.3.2.5	OTHER miscellaneous public health programs	-	-	-	-	-
HC.6.3.2.6	malaria programs that could not be	-	263,970,445	74,622,563	-	-
HC.7	Health administration and insurance	-	12,871,644	269,892,271	-	-
HCR.1	Capital formation for health care provider institutions	-	267,425,607	-	-	-
HC.nsk	Not specified by kind	-	-	-	-	-
	<b>Column Total-THE</b>	<b>3,788,262,622</b>	<b>1,076,504,598</b>	<b>355,791,768</b>	<b>-</b>	<b>-</b>
HCR.2	Education & Training					
HCR.3	Research & Development					
HCR.4	Food, hygiene and drinking water control					
HCR.5	Environmental health					
HCR.nsk	HCR expenditure not specified by kind					
	<b>Column Total-NHE</b>					

## Annex B-8

**PROVIDER x FUNCTION (HP x HC)****Malaria Subaccounts targeted only**

		HP.nsk		HP.8.1	HP.8.2	HP.8.3	
	Function	Providers not specified by any kind	THE Row Total	Research Institutions	Education and training institutions	Other health related institutions	NHE Row Total
HC.1.1	In patient curative care (incl. For severe	-	1,312,759,501				
HC 1.3.9	Nets given as part of Outpatient care	236,754,941	5,450,364,403				
HC 1.3.10	ACT as part of OP care	-	-				
HC 1.3.11	Other OP care	-	66,208,800				
HC 1.3.12	OP care that could not be disaggregated	-	5,630,658,047				
HC.1.4	Services of curative home care (malaria)	-	6,208,098				
HC.4.1	Clinical lab (BNC, biolab, biomed, etc)	-	-				
HC.4.2	Diagnostic imaging	-	625,634				
HC.5.1	Pharmaceuticals and other medical non	-	2,954,790,195				
HC 5.1.3.2	Repellants for nets	-	-				
HC.5.2.5.1	Insecticide treated nets (ITNs)	-	833,472,427				
HC.6.1.2	IPTp	-	-				
HC.6.3.2.1	Larviciding, elimination of standing water areas	-	2,587,600				
HC.6.3.2.2	Training within public health programmes for	-	389,492,587				
HC. 6.3.2.3	IEC (malaria awareness)	-	223,533,036				
HC. 6.3.2.4	Surveillance and monitoring	-	120,264,510				
HC.6.3.2.5	OTHER miscellaneous public health programs	-	-				
HC.6.3.2.6	malaria programs that could not be	-	338,593,008				
HC.7	Health administration and insurance	-	282,763,915				
HCR.1	Capital formation for health care provider institutions	-	322,384,506				
HC.nsk	Not specified by kind	-	-				
	<b>Column Total-THE</b>	<b>236,754,941</b>	<b>17,934,706,266</b>				
HCR.2	Education & Training			0	0	0	-
HCR.3	Research & Development			103,220,675	0	0	103,220,675
HCR.4	Food, hygiene and drinking water control			0	0	0	-
HCR.5	Environmental health			0	0	29,806,595	29,806,595
HCR.nsk	HCR expenditure not specified by kind			0	0	0	-
	<b>Column Total-NHE</b>			103,220,675	-	29,806,595	<b>18,037,926,941</b>

**FINANCING SOURCE x FINANCING AGENT (FSxHF)**
**RH Subaccounts targeted only**

Code	Financing Agent (HF)	FS.1.1.1.4 could not be disaggregated	FS. 1.2 Other Public funds	FS.2 Private Funds					FS.3	FS.nsk	Row Total
				FS.2.1.1 Parastatal Employers	FS.2.1.2 Private Employers	FS.2.2 Households	FS .2.3 NPISH (Local foundations)	FS.2.4 Other private funds	Rest of the World (Donors)	Not specified by any kind	
HF.1.1.1.1	MoH (MiniSante)	5,141,792							625,740,044		630,881,836
HF.1.1.1.2	Other Ministries								480,290		480,290
HF.1.1.1.3	Local Municipal Gvt (Districts)										0
HF.1.2	Social Security Fund (CSR)										0
HF.1.3	FARG										0
HF.2.1.1	Gvt Employees Insurance Programme (RAMA)										0
HF.2.1.2	Private Employees Insurance Programme										0
HF.2.1.3	Mutuelles (Private & Community based)										0
HF. 2.5.1	Parastatal companies										0
HF.2.2	Private Insurance Enterprises (other than social insurance: COGEAR, SONARWA, etc)										0
HF.2.3.	Private household out of pocket payments					988,390,962					988,390,962
HF.2.4	Non profit institutions (NGOs, SWAA, PROFEMME)								2,280,718,735		2,280,718,735
HF.2.5.2	Private Non Parastatal Firms										0
HF.3	Rest of World								291,548,970		291,548,970
HF.nsk	Not specified by any kind										0
	<b>Column Total (THE)</b>	5,141,792	0	0	0	988,390,962	0	0	3,198,488,039	0	<b>4,192,020,793</b>
HF. Health re	Financing Agents spending on Health Related Items								171,590,514		171,590,514
	<b>Column Total (NHE)</b>	5,141,792	0	0	0	988,390,962	0	0	3,370,078,553	0	<b>4,363,611,307</b>
Addendum	Financing Agents spending on NONHEALTH										0
	<b>Column Total: RHE (health, health related and nonhealth)</b>	5,141,792	0	0	0	988,390,962	0	0	3,370,078,553	0	<b>4,363,611,307</b>

**FINANCING AGENT x PROVIDER (HFxP)****RH Subaccounts targeted only**

		Financing Agent						
	Provider	HF.A Public Sector						
		HF.1.1.1.1	HF.1.1.1.2	HF.1.1.1.3	HF.1.2	HF.1.3	HF.2.1.1	HF.2.1.2
		MoH (MiniSante)	Other Ministries	Local Municipal Gvt (Districts)	Social Security Fund (CSR)	FARG	Gvt Employees Insurance Programme (RAMA)	Private Employees Insurance Programme
HP.1.1.1.1	National Referral Gvt Hospital	78,933,073						
HP.1.1.1.2	National Referral Private Hospital	6,139,884						
HP.1.1.1.3	National Referral Hospital (could not be disaggregated)							
HP.1.1.2.1	District Gvt. Hospitals	15,893,350						
HP.1.1.2.2	District Agrees Hospitals	6,878,939						
HP.1.1.2.3	District Hospitals (could not be disaggregated)							
HP.1.2	Mental health hospitals							
HP.3.1	Office of physicians (private clinics)*	6,982,331						
HP.3.3.1	Community health workers	2,302,366						
HP.3.3.2	Traditional healer							
HP.3.3.3	Other health practitioners							
HP.3.4.2	Outpatient mental health institutions (SCPS)							
HP.3.4.5.1	Public health centers	177,668,296						
HP.3.4.5.2	Government assisted not-for-profit health centers (Agrees)	111,002,596						
HP.3.4.5.3	NGO health centers	20,904,568						
HP.3.6	Providers of home health care services							
HP.3.9.2	Blood banks (CNTS transfusion)							
HP.4.1	Dispensing chemists	22,527,922						
HP.5	Providers + admin of public health programs	176,506,718	480,290					
HP.6	General health administration and insurance	5,141,792						
HP.8	Institutions providing health related services							
HP.9	Rest of the world							
HP.nsk	Providers not specified by any kind							
	<b>Column Total THE</b>	630,881,836	480,290	-	-	-	-	-
	<b>HF Totals From FS x HF Table</b>	630,881,836	480,290	-	-	-	-	-
HP.8.1	Research Institutions							
HP.8.2	Education and training institutions							
HP.8.3	Other health related institutions							
	<b>Subtotal for health related</b>	-	-	-	-	-	-	-
	<b>Column Total: NHE</b>	630,881,836	480,290	-	-	-	-	-
	Providers of NONHEALTH RH programs							
	<b>Subtotal for nonhealth</b>	-	-	-	-	-	-	-
	<b>Column Total: RHE (health, health related and nonhealth)</b>	630,881,836	480,290	-	-	-	-	-



**FINANCING AGENT x PROVIDER (HFxP)****RH Subaccounts targeted only**

	Provider	HF.A Public Sector		HF B: Non Public Sector				HF.3 ROW	HF.nsk	Row Total
		HF.2.1.3	HF. 2.5.1	HF.2.2	HF.2.3	HF.2.4	HF.2.5.2	HF.3	HF.nsk	
		Mutuelles (Private & Community based)	Parastatal companies	Private Insurance Enterprises (other than social)	Private household out of pocket payments	Non profit institutions (NGOs, SWAA, PROFEMME)	Private Non Parastatal Firms	Rest of World	Not specified by any kind	
HP.1.1.1.1	National Referral Gvt Hospital				303,597,085	235,868,193				618,398,352
HP.1.1.1.2	National Referral Private Hospital				79,656,074					85,795,958
HP.1.1.1.3	National Referral Hospital (could not be disaggregated)									-
HP.1.1.2.1	District Gvt. Hospitals				107,781,802	85,770,252				209,445,404
HP.1.1.2.2	District Agrees Hospitals				46,649,979	19,883,637				73,412,554
HP.1.1.2.3	District Hospitals (could not be disaggregated)									-
HP.1.2	Mental health hospitals									-
HP.3.1	Office of physicians (private clinics)*				191,954,634					198,936,965
HP.3.3.1	Community health workers					69,985,930				72,288,296
HP.3.3.2	Traditional healer									-
HP.3.3.3	Other health practitioners				3,170,884					3,170,884
HP.3.4.2	Outpatient mental health institutions (SCPS)									-
HP.3.4.5.1	Public health centers				39,344,208	142,950,420				359,962,925
HP.3.4.5.2	Government assisted not-for-profit health centers (Agrees)				35,741,758	92,917,773				239,662,127
HP.3.4.5.3	NGO health centers				38,620,612	597,791,165				657,316,345
HP.3.6	Providers of home health care services									-
HP.3.9.2	Blood banks (CNTS transfusion)									-
HP.4.1	Dispensing chemists				141,873,925	226,054,768				390,456,615
HP.5	Providers + admin of public health programs					809,496,598		291,548,970		1,278,032,575
HP.6	General health administration and insurance									5,141,792
HP. 8	Institutions providing health related services									-
HP.9	Rest of the world									-
HP.nsk	Providers not specified by any kind									-
	<b>Column Total THE</b>	-	-	-	988,390,962	2,280,718,735	-	291,548,970	-	<b>4,192,020,793</b>
	<b>HF Totals From FS x HF Table</b>	-	-	-	988,390,962	2,280,718,735	-	291,548,970	-	<b>4,192,020,793</b>
HP.8.1	Research Institutions									-
HP.8.2	Education and training institutions					171,590,514				171,590,514
HP.8.3	Other health related institutions									-
	<b>Subtotal for health related</b>	-	-	-	-	171,590,514	-	-	-	171,590,514
	<b>Column Total: NHE</b>	-	-	-	988,390,962	#####	-	291,548,970	-	<b>4,363,611,307</b>
	Providers of NONHEALTH RH programs									-
	<b>Subtotal for nonhealth</b>	-	-	-	-	-	-	-	-	-
	<b>Column Total: RHE (health, health related and nonhealth)</b>	-	-	-	988,390,962	#####	-	291,548,970	-	<b>4,363,611,307</b>

**FINANCING AGENTS x FUNCTION (HF x HC)****RH Subaccounts targeted only**

		Financing Agent									
Function		HF.A Public Sector									
		HF.1.1.1.1 MoH (MiniSante)	HF.1.1.1.2 Other Ministries	#REF! #REF!	HF.1.1.3 Local Municipal Gvt (Districts)	HF.1.2 Social Security Fund (CSR)	HF.1.3 FARG	HF.2.1.1 Gvt Employees Insurance Programme	HF.2.1.2 Private Employees Insurance	HF.2.1.3 Mutuelles (Private & Community)	HF. 2.5.1 Parastatal companies
HC. 1.1.	IP curative care (deliveries)	-	-	-	-	-	-	-	-	-	-
HC.1.3.11	Antenatal care	34,165,083	-	-	-	-	-	-	-	-	-
HC.1.3.12	Postnatal care	-	-	-	-	-	-	-	-	-	-
HC1.3.13.1	FP consultation and issuance of ORAL	139,293,169	-	-	-	-	-	-	-	-	-
HC.1.3.13.2	FP consultation and issuance of	3,173,669	-	-	-	-	-	-	-	-	-
HC.1.3.13.3	FP consultation and issuance of IUD	-	-	-	-	-	-	-	-	-	-
HC.1.3.13.4	FP consultation and issuance of	61,405,352	-	-	-	-	-	-	-	-	-
HC.1.3.13.5	FP consultation and issuance of	188,668,132	-	-	-	-	-	-	-	-	-
HC.1.3.13.6	FP consultation and issuance of	-	-	-	-	-	-	-	-	-	-
HC.1.3.13.6	Other FP consultations	-	-	-	-	-	-	-	-	-	-
HC.1.3.13.7	FP consultations not disaggregated.	-	-	-	-	-	-	-	-	-	-
HC.1.3.14	General gynecological care	-	-	-	-	-	-	-	-	-	-
HC.5.1.1.1	ORAL CONTRACEPTIVES purchased at	12,663,015	-	-	-	-	-	-	-	-	-
HC.5.1.1.2	IMPLANTS purchased at private	-	-	-	-	-	-	-	-	-	-
HC.5.1.1.3	INJECTABLES purchased at private	3,914,277	-	-	-	-	-	-	-	-	-
HC.5.1.3.1	CONDOMS purchased at private	5,950,630	-	-	-	-	-	-	-	-	-
HC.5.1.3.2	IUDs purchased at private pharmacy/shop	-	-	-	-	-	-	-	-	-	-
HC.6.1.1.1	Antenatal care programs	-	-	-	-	-	-	-	-	-	-
HC.6.1.1.2	Programs related to safe delivery	-	-	-	-	-	-	-	-	-	-
HC.6.1.1.3	Emergency obstetric care programs	-	-	-	-	-	-	-	-	-	-
HC.6.1.1.4	Other Maternal health programs	-	-	-	-	-	-	-	-	-	-
HC.6.1.1.5	Maternal health programs that could not be disaggregated.	-	-	-	-	-	-	-	-	-	-
HC.6.1.1.2.1	ORAL CONTRACEPTIVES FP programmes	-	-	-	-	-	-	-	-	-	-
HC.6.1.1.2.2	CONDOM FP programmes	-	-	-	-	-	-	-	-	-	-
HC.6.1.1.2.3	IUD FP programmes	-	-	-	-	-	-	-	-	-	-
HC.6.1.1.2.4	IMPLANTS FP programmes	-	-	-	-	-	-	-	-	-	-
HC.6.1.1.2.5	INJECTABLES FP programmes	-	-	-	-	-	-	-	-	-	-
HC.6.1.1.2.6	OTHER FP programs	-	-	-	-	-	-	-	-	-	-
HC.6.1.1.2.7	FP programs that could not be	-	-	-	-	-	-	-	-	-	-
HC.6.1.3	Adolescent reproductive health	-	185,113	-	-	-	-	-	-	-	-
HC.6.1.4	Programs for general gynecological care	-	-	-	-	-	-	-	-	-	-
HC.6.1.5	Other RH programs	-	295,177	-	-	-	-	-	-	-	-
HC.6.1.6	RH programs that could not be disaggregated	181,648,510	-	-	-	-	-	-	-	-	-
HC.7	Health administration and health insurance	-	-	-	-	-	-	-	-	-	-
HCR.1	Capital formation for health care provider institutions	-	-	-	-	-	-	-	-	-	-
HC.nsk	Not specified by kind	-	-	-	-	-	-	-	-	-	-
	<b>Column Total THE</b>	630,881,836	480,290	-	-	-	-	-	-	-	-
HCR.2	Education & Training	-	-	-	-	-	-	-	-	-	-
HCR.3	Research & Development	-	-	-	-	-	-	-	-	-	-
HCR.4	Food, hygiene and drinking water contr	-	-	-	-	-	-	-	-	-	-
HCR.5	Environmental health	-	-	-	-	-	-	-	-	-	-
	<i>Sub total column</i>	-	-	-	-	-	-	-	-	-	-
	<b>Column Total NHE</b>	630,881,836	480,290	-	-	-	-	-	-	-	-
AD.5	Prevention and treatment of victims of s	-	-	-	-	-	-	-	-	-	-
AD.6	Gender non-health programs (Women's	-	-	-	-	-	-	-	-	-	-
	<b>sub total column</b>	-	-	-	-	-	-	-	-	-	-
	<b>Column Total- RH health, health related, nonhealth</b>	630,881,836	480,290	-	-	-	-	-	-	-	-

**FINANCING AGENTS x FUNCTION (HF x HC)****RH Subaccounts targeted only**

Function	HF 2.2 Private Insurance Enterprises	HF 2.3 Private household out of pocket payments	HF 2.4 Non profit institutions (NGOs, SWAA)	HF 2.5.2 Private Non Parastatal Firms			HF.3 ROW	HF.nsk	Row Total
							HF.3 Rest of World	HF.nsk Not specified by any kind	
HC.1.1.	IP curative care (deliveries)	-	112,919,822	198,049,995	-	-	-	-	310,969,817
HC.1.3.11	Antenatal care	-	620,492,914	194,298,776	-	-	-	-	848,956,772
HC.1.3.12	Postnatal care	-	-	-	-	-	-	-	-
HC.1.3.13.1	FP consultation and issuance of ORAL	-	3,459,800	8,208,313	-	-	-	-	150,961,282
HC.1.3.13.2	FP consultation and issuance of	-	61,832	426,440	-	-	-	-	3,661,941
HC.1.3.13.3	FP consultation and issuance of IUD	-	-	-	-	-	-	-	-
HC.1.3.13.4	FP consultation and issuance of	-	17,617,600	102,343,908	-	-	-	-	181,366,859
HC.1.3.13.5	FP consultation and issuance of	-	91,965,070	486,812,504	-	-	-	-	767,445,705
HC.1.3.13.6	FP consultation and issuance of	-	-	-	-	-	-	-	-
HC.1.3.13.6	Other FP consultations	-	-	-	-	-	-	-	-
HC.1.3.13.7	FP consultations not disaggregated.	-	-	185,041,504	-	-	-	-	185,041,504
HC.1.3.14	General gynecological care	-	-	-	-	-	-	-	-
HC.5.1.1.1	ORAL CONTRACEPTIVES purchased at	-	16,840,000	8,755,068	-	-	-	-	38,258,083
HC.5.1.1.2	IMPLANTS purchased at private	-	-	-	-	-	-	-	-
HC.5.1.1.3	INJECTABLES purchased at private	-	-	-	-	-	-	-	3,914,277
HC.5.1.3.1	CONDOMS purchased at private	-	125,033,925	217,299,700	-	-	-	-	348,284,255
HC.5.1.3.2	IUDs purchased at private pharmacy/shop	-	-	-	-	-	-	-	-
HC.6.1.1.1	Antenatal care programs	-	-	42,828,792	-	-	-	-	42,828,792
HC.6.1.1.2	Programs related to safe delivery	-	-	64,967,157	-	-	-	-	64,967,157
HC.6.1.1.3	Emergency obstetric care programs	-	-	-	-	-	-	-	-
HC.6.1.1.4	Other Maternal health programs	-	-	3,132,000	-	-	-	-	3,132,000
HC.6.1.1.5	Maternal health programs that could not be disaggregated.	-	-	-	-	-	-	-	-
HC.6.1.1.2.1	ORAL CONTRACEPTIVES FP programmes	-	-	-	-	-	-	-	-
HC.6.1.1.2.2	CONDOM FP programmes	-	-	-	-	-	-	-	-
HC.6.1.1.2.3	IUD FP programmes	-	-	-	-	-	-	-	-
HC.6.1.1.2.4	IMPLANTS FP programmes	-	-	-	-	-	-	-	-
HC.6.1.1.2.5	INJECTABLES FP programs	-	-	-	-	-	-	-	-
HC.6.1.1.2.6	OTHER FP programs	-	-	540,055,990	-	-	-	-	540,055,990
HC.6.1.1.2.7	FP programs that could not be	-	-	158,512,659	-	-	-	-	158,512,659
HC.6.1.3	Adolescent reproductive health	-	-	-	-	-	-	-	185,113
HC.6.1.4	Programs for general gynecological care	-	-	-	-	-	-	-	-
HC.6.1.5	Other RH programs	-	-	-	-	-	-	-	295,177
HC.6.1.6	RH programs that could not be disaggregated	-	-	-	-	-	291,548,970	-	473,197,479
HC.7	Health administration and health insurance	-	-	-	-	-	-	-	-
HCR.1	Capital formation for health care provider institutions	-	-	69,985,930	-	-	-	-	69,985,930
HC.nsk	Not specified by kind	-	-	-	-	-	-	-	-
	<b>Column Total THE</b>	-	988,390,962	2,280,718,735	-	-	291,548,970	-	<b>4,192,020,793</b>
HCR.2	Education & Training	-	-	171,590,514	-	-	-	-	171,590,514
HCR.3	Research & Development	-	-	-	-	-	-	-	-
HCR.4	Food, hygiene and drinking water cont	-	-	-	-	-	-	-	-
HCR.5	Environmental health	-	-	-	-	-	-	-	-
	<i>Sub total column</i>	-	-	171,590,514	-	-	-	-	171,590,514
	<b>Column Total NHE</b>	-	988,390,962	2,452,309,249	-	-	291,548,970	-	<b>4,363,611,307</b>
AD.5	Prevention and treatment of victims of	-	-	-	-	-	-	-	-
AD.6	Gender non-health programs (Women)	-	-	-	-	-	-	-	-
	<b>sub total column</b>	-	-	-	-	-	-	-	-
	<b>Column Total- RH health, health related, nonhealth</b>	-	988,390,962	2,452,309,249	-	-	291,548,970	-	<b>4,363,611,307</b>

Annex B-12

**PROVIDER x FUNCTION (HP x HC)****RH Subaccounts targeted only**

		Provider						
		HP.1.1.1.1	HP.1.1.1.2	HP.1.1.2.1	HP.1.1.2.2	HP.3.1	HP.3.3.1	HP.3.3.3
	Function	National Referral Gvt Hospital	National Referral Private Hospital	District Gvt. Hospitals	District Agrees Hospitals	Office of physicians (private clinics)*	Community health workers	Other health practitioners
HC.1.1.	IP curative care (deliveries)	81,552,769	51,440,565	29,655,445	5,320,189	43,719,159	-	3,170,884
HC.1.3.11	Antenatal care	408,137,162	20,390,400	133,437,379	55,723,268	141,267,300	-	-
HC.1.3.12	Postnatal care	-	-	-	-	-	-	-
HC.1.3.13.1	FP consultation and issuance of ORAL	7,630,433	1,866,888	2,708,925	1,172,474	1,586,662	2,302,366	-
HC.1.3.13.2	FP consultation and issuance of CONDOMS	262,952	107,225	93,352	40,405	289,484	-	-
HC.1.3.13.3	FP consultation and issuance of IUD	-	-	-	-	-	-	-
HC.1.3.13.4	FP consultation and issuance of IMPLANTS	27,699,573	5,993,273	9,833,790	4,256,248	5,093,662	-	-
HC.1.3.13.5	FP consultation and issuance of	16,664,545	5,997,608	5,916,179	2,560,633	6,980,699	-	-
HC.1.3.13.6	FP consultation and issuance of	-	-	-	-	-	-	-
HC.1.3.13.6	Other FP consultations	-	-	-	-	-	-	-
HC.1.3.13.7	FP consultations not disaggregated.	76,450,916	-	27,800,333	4,339,338	-	-	-
HC.1.3.14	General gynecological care	-	-	-	-	-	-	-
HC.5.1.1.1	ORAL CONTRACEPTIVES purchased at	-	-	-	-	-	-	-
HC.5.1.1.2	IMPLANTS purchased at private	-	-	-	-	-	-	-
HC.5.1.1.3	INJECTABLES purchased at private	-	-	-	-	-	-	-
HC.5.1.3.1	CONDOMS purchased at private	-	-	-	-	-	-	-
HC.5.1.3.2	IUDs purchased at private pharmacy/shop	-	-	-	-	-	-	-
HC.6.1.1.1	Antenatal care programs	-	-	-	-	-	-	-
HC.6.1.1.2	Programs related to safe delivery	-	-	-	-	-	-	-
HC.6.1.1.3	Emergency obstetric care programs	-	-	-	-	-	-	-
HC.6.1.1.4	Other Maternal health programs	-	-	-	-	-	-	-
HC.6.1.1.5	Maternal health programs that could not be	-	-	-	-	-	-	-
HC.6.1.1.2.1	ORAL CONTRACEPTIVES FP programmes	-	-	-	-	-	-	-
HC.6.1.1.2.2	CONDOM FP programmes	-	-	-	-	-	-	-
HC.6.1.1.2.3	IUD FP programmes	-	-	-	-	-	-	-
HC.6.1.1.2.4	IMPLANTS FP programmes	-	-	-	-	-	-	-
HC.6.1.1.2.5	INJECTABLES FP programs	-	-	-	-	-	-	-
HC.6.1.1.2.6	OTHER FP programs	-	-	-	-	-	-	-
HC.6.1.1.2.7	FP programs that could not be disaggregated	-	-	-	-	-	-	-
HC.6.1.3	Adolescent reproductive health	-	-	-	-	-	-	-
HC.6.1.4	Programs for general gynecological care	-	-	-	-	-	-	-
HC.6.1.5	Other RH programs	-	-	-	-	-	-	-
HC.6.1.6	RH programs that could not be disaggregated	-	-	-	-	-	-	-
HC.7	Health administration and health insurance	-	-	-	-	-	-	-
HCR.1	Capital formation for health care provider institutions	-	-	-	-	-	69,985,930	-
HC.nsk	Not specified by kind	-	-	-	-	-	-	-
	<b>Column Total-THE</b>	<b>618,398,352</b>	<b>85,795,958</b>	<b>209,445,404</b>	<b>73,412,554</b>	<b>198,936,965</b>	<b>72,288,296</b>	<b>3,170,884</b>
HCR.2	Education & Training							
HCR.3	Research & Development							
HCR.4	Food hygiene and drinking water control							
HCR.5	Environmental health							
HC.nsk	HCR expenditure not specified by kind							
	<b>Column Total-NHE</b>							
-	-							
AD.5	Prevention and treatment of victims of sexual violence							
AD.6	Gender non-health programs (Women's empowerment, equity)							
-	-							
	<b>Column Total- RH health, health related, nonhealth</b>							

### PROVIDER x FUNCTION (HP x HC)

		HP.3.4.5.1	HP.3.4.5.2	HP.3.4.5.3	HP.4.1	HP.5	HP.6		HP.8.1	HP.8.2	HP.8.3		
	Function	Public health centers	Government assisted not-for-profit health centers (Agrees)	NGO health centers	Dispensing chemists	Providers + admin of public health programs	General health administration and insurance	THE Row Total	Research Institutions	Education and training institutions	Other health related institutions	NHE Row Total	Providers of NONHEALTH RH programs
HC.1.1.	IP curative care (deliveries)	49,433,445	46,677,360	-	-	-	-	310,969,817					
HC.1.3.11	Antenatal care	47,198,143	30,678,793	12,124,327	-	-	-	848,956,772					
HC.1.3.12	Postnatal care	-	-	-	-	-	-	-					
HC.1.3.13.1	FP consultation and issuance of ORAL	71,604,989	44,664,516	17,424,029	-	-	-	150,961,282					
HC.1.3.13.2	FP consultation and issuance of CONDOMS	1,206,179	777,364	884,981	-	-	-	3,661,941					
HC.1.3.13.3	FP consultation and issuance of IUD	-	-	-	-	-	-	-					
HC.1.3.13.4	FP consultation and issuance of IMPLANTS	8,470,657	5,459,213	114,560,443	-	-	-	181,366,859					
HC.1.3.13.5	FP consultation and issuance of	135,715,624	81,287,853	512,322,565	-	-	-	767,445,705					
HC.1.3.13.6	FP consultation and issuance of	-	-	-	-	-	-	-					
HC.1.3.13.6	Other FP consultations	-	-	-	-	-	-	-					
HC.1.3.13.7	FP consultations not disaggregated.	46,333,889	30,117,028	-	-	-	-	185,041,504					
HC.1.3.14	General gynecological care	-	-	-	-	-	-	-					
HC.5.1.1.1	ORAL CONTRACEPTIVES purchased at	-	-	-	38,258,083	-	-	38,258,083					
HC.5.1.1.2	IMPLANTS purchased at private	-	-	-	-	-	-	-					
HC.5.1.1.3	INJECTABLES purchased at private	-	-	-	3,914,277	-	-	3,914,277					
HC.5.1.3.1	CONDOMS purchased at private	-	-	-	348,284,255	-	-	348,284,255					
HC.5.1.3.2	IUDs purchased at private pharmacy/shop	-	-	-	-	-	-	-					
HC.6.1.1.1	Antenatal care programs	-	-	-	-	42,828,792	-	42,828,792					
HC.6.1.1.2	Programs related to safe delivery	-	-	-	-	64,967,157	-	64,967,157					
HC.6.1.1.3	Emergency obstetric care programs	-	-	-	-	-	-	-					
HC.6.1.1.4	Other Maternal health programs	-	-	-	-	3,132,000	-	3,132,000					
HC.6.1.1.5	Maternal health programs that could not be	-	-	-	-	-	-	-					
HC.6.1.1.2.1	ORAL CONTRACEPTIVES FP programmes	-	-	-	-	-	-	-					
HC.6.1.1.2.2	CONDOM FP programmes	-	-	-	-	-	-	-					
HC.6.1.1.2.3	IUD FP programmes	-	-	-	-	-	-	-					
HC.6.1.1.2.4	IMPLANTS FP programmes	-	-	-	-	-	-	-					
HC.6.1.1.2.5	INJECTABLES FP programs	-	-	-	-	-	-	-					
HC.6.1.1.2.6	OTHER FP programs	-	-	-	-	540,055,990	-	540,055,990					
HC.6.1.1.2.7	FP programs that could not be disaggregated	-	-	-	-	158,512,659	-	158,512,659					
HC.6.1.3	Adolescent reproductive health	-	-	-	-	185,113	-	185,113					
HC.6.1.4	Programs for general gynecological care	-	-	-	-	-	-	-					
HC.6.1.5	Other RH programs	-	-	-	-	295,177	-	295,177					
HC.6.1.6	RH programs that could not be disaggregated	-	-	-	-	468,055,687	5,141,792	473,197,479					
HC.7	Health administration and health insurance	-	-	-	-	-	-	-					
HCR.1	Capital formation for health care provider institutions	-	-	-	-	-	-	69,985,930					
HC.nsk	Not specified by kind	-	-	-	-	-	-	-					
	Column Total-THE	359,962,925	239,662,127	657,316,345	390,456,615	1,278,032,575	5,141,792	4,192,020,793					
HCR.2	Education & Training								0	171,590,514</			



# ANNEX C. METHODOLOGY

## OVERVIEW OF APPROACH

The 2006 Rwanda National Health Accounts (NHA) and HIV/AIDS, malaria, and reproductive health (RH) subaccounts followed the methodology and estimation techniques presented in the *Guide to Producing National Health Accounts: with special applications for low- and middle-income countries*, (World Health Organization [WHO], World Bank, and USAID 2003), commonly referred to as ‘the Producers’ Guide’ and built upon previous NHA and subaccounts estimations in Rwanda. For this round of NHA, the team collected secondary and primary data for analysis. When secondary data did not capture health expenditures or could not be obtained to complete the estimation, the team engaged in primary data collection.

This chapter describes the methodology that the NHA team used to do the data collection and analysis. Some secondary datasets required specific methodologies that are documented in the section on data analysis, below.

This is the approach for the 2006 NHA. It builds upon the methodology followed by the previous rounds of NHA. In future rounds, this methodology will be improved as data are more routinely collected in the country. The purpose of this exercise was to capture expenditure information as much as possible. The NHA team tried to reduce the amount of “guesstimates” used in this estimation.

## DATA SOURCES

The NHA team collected primary and secondary data on general, HIV/AIDS, malaria, and RH spending. The complexity of the health system in Rwanda made it necessary for the NHA team to clean and analyze more than 30 different datasets. Tables I.0–I.3 list the ultimate data sources used to populate the NHA tables. However, it is important to note that these tables exclude some data sources which were used to cross-check and triangulate the selected data ultimately selected. For example, in some cases data from implementing sources were selected over donor data because implementers can frequently provide better data disaggregation and more accurate data on actual expenditures, not just disbursements or commitments.<sup>24</sup> In the case of the National AIDS Commission (CNLS), we cross-checked the CNLS records with donor and nongovernmental organization (NGO) surveys. For further specifics of each data source used, please consult the Microsoft Excel files of the NHA tables, which are kept at the Ministry of Health (MoH).

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<sup>24</sup> Expenditure is a measurement in monetary terms of the value of consumption of the goods and services of interest. It implies that a service or product has been rendered. A commitment happens at the point at which funding that is readily available to the funder is legally promised to the recipients. A disbursement happens when the funds are transferred from the funding mechanism to a recipient.

**ANNEX C TABLE I.0: GENERAL HEALTH DATA**

Data	Source	Primary/ Secondary
Household out-of-pocket (OOP) spending	OOP spending: <i>Enquête Intégrale sur les Conditions de Vie des Ménages</i> (Integrated Living Conditions Survey [EICV II]) (World Bank); Population Services International (PSI) records*	Secondary
	Ndera Mental Health Hospital records	Secondary
MoH and other ministries	Public funding: Ministry of Finance (MoF) executed budgets, <i>Centre National de Transfusion Sanguine</i> (National Center for Blood Transfusion) general ledger, CHUB, CHUK and King Fayçal Hospital records, cross-checked with NHA donor surveys	Secondary/ primary (for donor survey)
	Public funding: untargeted spending in MoF executed budgets (see section on untargeted spending)	Secondary
	Donor funding: MoH data from MoF,** NHA donor surveys	Secondary, Primary
	Donor funding (value of bednets bought by donors and given to MoH): PSI finance records	Secondary
CNLS (spending on CNLS as an organization)	CNLS annual report 2006	Secondary
CNLS projects (World Bank MAP, UNDP, etc)	CNLS annual report 2006, NHA donor surveys	Secondary, Primary
	CNLS projects expenditure records	Secondary
Health insurance	Victims of Genocide (FARG) annual report and expenditure records	Secondary
	NHA insurance surveys	Primary
	NHA employer surveys	Primary
	Mutuelle records***	Secondary
	Ndera Mental Health Hospital records	Secondary
Local governments	CNLS annual report 2006	Secondary
Parastatal and private employers	NHA employer surveys	Primary
Implementing agencies	CNLS projects expenditure records	Secondary
	NHA implementing organizations surveys	Primary
	PSI finance records	Secondary
	Ndera Mental Health Hospital records	Secondary
Rest of the world	Ndera Mental Health Hospital records	Secondary
	NHA implementing organizations surveys	Primary
Providers	Provider expenditure records (CHUB, CHUK, Roi Faisal, CNTS [blood bank], etc).	Secondary
	MoH and other ministries data from MoF	Secondary
	EICV II and PSI data	Secondary
	Treatment and Research AIDS Center (TRAC) expenditure records	Secondary
	CNLS annual reports	Secondary
	NHA insurance surveys	Primary
	Mutuelle records	Secondary
	NHA donor surveys	Primary
	NHA employer surveys	Primary

\* PSI records were used in this case to account for in-kind donations of bed-nets, which were not included in the EICV 2 household survey.

\*\* NHA data analysts decided to use the amount reported by MoH; while it was only 10 percent of what donors reported giving to the MoH, NHA estimates should reflect monies actually spent. In addition, we include the value of bednets donated to the MoH (obtained from PSI data summary), which are not in the MoH expenditure records.

\*\*\* See sections on data sources and methodology for calculating mutuelles numbers.



**ANNEX C TABLE I.1. MALARIA DATA**

<b>Data</b>	<b>Source</b>	<b>Primary/ Secondary</b>
Household OOP spending	Curative care: <i>Enquête Intégrale sur les Conditions de Vie des Ménages</i> (Integrated Living Conditions Survey, EICV II) (World Bank) Prevention: PSI records and informant interviews	Secondary
MoH	Public funding: MoF executed budgets	Secondary
	Public funding: untargeted spending MoF executed budgets (see section on untargeted spending)	Secondary
	Donor funding: MoH data from MoF*	Secondary
	Donor funding (value of bednets bought by donors and given to MoH): PSI finance records	Secondary
Other ministries	Untargeted spending (MoF executed budget)	Secondary
Insurance agencies (public, private, mutuelle)	Untargeted spending (MoF executed budget, NHA employer surveys, FARG report, mutuelle records)	Secondary
	Untargeted spending (NHA insurance surveys)	Primary
Private and parastatal firms	Untargeted spending (NHA employer surveys)	Primary
NGOs	Public funding: untargeted spending (MoF executed budget)	Secondary
	Private funding: untargeted spending (households, EICV II, implementing agencies, NHA surveys)	Secondary and primary
	Prevention: PSI records	Secondary
	Donor funding: NHA NGO surveys	Primary
Rest of the world	NHA donor surveys (target and untargeted), NHA NGO surveys	Primary
Malaria ratios	Health Information System (SIS), obtained from the National Institute of Statistics	Secondary
Providers	Same as in general NHA	

\* NHA data analysts decided to use the amount reported by MoH; while it was only 10 percent of what donors reported giving to the MoH, NHA estimates should reflect monies actually spent.

**ANNEX C TABLE I.2: HIV/AIDS DATA**

<b>Data</b>	<b>Source</b>	<b>Primary/ Secondary</b>
Household OOP spending	Performance-based financing (PBF) HIV survey, World Bank	Secondary
MoH and other ministries	Public funding: MoF executed budgets	Secondary
	Public funding: untargeted spending MoF executed budgets (see section on untargeted spending)	Secondary
	Donor funding: MoH data from MoF	Secondary
	Donor funding: TRAC expenditure records	Secondary
	Donor funding: NHA donor surveys for UNAIDS amount to MIFOTRA	Primary
CNLS proper	CNLS annual report 2006	Secondary
	NHA donor surveys (for UNAIDS technical assistance to CNLS)	Primary
CNLS projects	CNLS annual report 2006	Secondary
	CNLS project expenditure records	Secondary
	NHA donor surveys (for World Bank MAP)	Primary
Local governments	CNLS expenditure records	Secondary
Insurance agencies (public, private, mutuelle)	Untargeted spending (MoF executed budget, FARG report, mutuelles records, EICV II)	Secondary
	Untargeted spending (NHA insurance surveys, NHA employer surveys)	Primary
Parastatal and private firms	Untargeted spending (NHA employer surveys)	Primary
NGOs	Public funding: CNLS annual report 2006	Secondary

<b>Data</b>	<b>Source</b>	<b>Primary/ Secondary</b>
	Untargeted public spending (NHA NGO surveys and African Development Bank executed budget)	Secondary and primary
	Untargeted private spending (households, PBF HIV study)	Secondary and primary
	Donor funding: CNLS annual report 2006 and expenditure records	Secondary
	Donor funding: NHA NGO surveys	Primary
Rest of the World	NHA donor surveys, NHA NGO surveys	Primary
HIV/AIDS ratios	SIS	Secondary
Providers	Same as in general NHA	

**ANNEX C TABLE 1.3: RH DATA**

<b>Data</b>	<b>Source</b>	<b>Primary/ Secondary</b>
Household OOP spending	Demographic and Health Survey (DHS) 2005, records from USAID DELIVER, PSI	Secondary and Primary
MoH and other ministries	Public funding: MoF executed budgets	Secondary
	Public funding: untargeted spending MoF executed budgets (see section on untargeted spending)	Secondary
	Donor funding: NHA donor surveys, USAID DELIVER and PSI	Secondary and primary
	Donor funding: NHA donor surveys	Primary
	Donor funding: untargeted spending MoF executed budgets (see section on untargeted spending)	Secondary
Insurance agencies (public, private, mutuelle)	Untargeted spending (MoF executed budget, FARG report, mutuelle records, EICV2)	Secondary
	Untargeted spending (NHA insurance surveys, NHA employer surveys, NHA NGO surveys)	Primary
Parastatal and private firms	Untargeted spending (NHA employer surveys)	Primary
NGOs	Untargeted public spending (NHA NGO surveys and African Development Bank executed budget)	Secondary and Primary
	Untargeted private spending (EICV general health spending)	Secondary
	Donor funding: NHA NGO surveys	Primary
	Donor funding: RH OOP expenditures survey	Secondary
	NHA donor surveys, NHA NGO surveys	Primary
Rest of the World	NHA donor surveys, NHA NGO surveys	Primary
RH ratios	Derived from SIS	Secondary
Providers	Same as in general NHA	

Should further questions arise on the data sources, please direct questions to [info@moh.gov.rw](mailto:info@moh.gov.rw).

# PRIMARY DATA COLLECTION

## Survey instrument development

To triangulate secondary data, or capture expenditures where secondary data did not exist, the NHA team administered surveys to i) donors, ii) financing agents/NGOs, iii) employers, and iv) insurance entities. Surveys asked questions on overall health spending as well as targeted spending on HIV/AIDS, malaria, and RH.

Each survey instrument was pre-tested on two typical entities to ensure that survey questions i) were understandable and feasible for the respondent to answer, ii) were translated properly, and iii) estimated the time necessary for completion. Feedback was sought from those respondents and applied to the questionnaires before finalization.

## Survey administration

Survey administrators from the NHA technical team came from the MoH, the School of Public Health at the National University of Rwanda, and USAID projects Health Systems 20/20 and Twubakane. Survey administration for the 2006 NHA followed a similar process to the one used for Rwanda's 2003 NHA. Most survey questionnaires were delivered in person; after explaining the questionnaire to the respondent, the survey administrator left the questionnaire with the respondent for him/her to fill out. The administrators' instructions and explanations to the respondents facilitated and encouraged the complete reporting of expenditures. The survey administrator retrieved completed questionnaires in a personal visit, or via ground mail or email.

## Sampling and weighting approach

The objective of NHA is to capture all spending on health in the country in a given time period. However, the numbers of NGOs, donors, employers, insurance companies, etc. are increasing in Rwanda every year. In 2006, Rwanda's health system was considerably more complex than in previous years' estimations. This complexity made it necessary to sample the entities targeted by the NHA surveys for primary data collection. A census was created of the following types of entities that contributed to health in 2006: i) donors, ii) NGOs, iii) employers, and iv) insurance agencies. If the universe of targeted entities was not surveyed, the NHA team applied weights to the entities that were surveyed to account for the expenditures by those omitted.

The NHA team decided not to survey providers because expenditures at providers would be captured through other sources, including NGOs, employers, and household OOP spending.

### *Donors*

The NHA team attempted to solicit expenditure information from every donor that contributed to health in Rwanda in 2006. The NHA team compiled a census of all known donors that fit the profile. Data were obtained from all major donors. Some smaller donors emerged later in the process, and some did not return completed surveys. From the surveys that were returned, the NHA team calculated weights for all expenditures counted in data collection.

To apply weights, the NHA team placed each donor into a quartile, based on its percentage contribution to the total amount of funds contributed by donors, as noted in the census. The contribution of each donor was divided by the total contributions of all donors to obtain the percentage. The low percentage was 0.001 and the high percentage was 0.4. In Table C-I.4, N represents the number of donors from

the census that fell into each quartile, while n represents the number of donors from the surveyed donors. The NHA team surveyed 57 percent of all donors in quartile 1 (lowest contributors) and 100 percent of all donors in the other three quartiles. All expenditures by donors in quartile 1 were therefore weighted 157 percent in the data summaries.

**ANNEX C TABLE 1.4: DONORS CONTRIBUTING TO GENERAL HEALTH**

High %	Low %	Quartile range			
0.397	0.001	0.10			
Quartile	Low	High	N	n	Weighting factor
1	0.001	0.100	30	17	57%
2	0.100	0.199	1	1	100%
3	0.199	0.298	1	1	100%
4	0.298	0.397	1	1	100%

Based on team knowledge, surveys were distributed to and returned from 100 percent of donors who contributed to HIV/AIDS, malaria, and RH. Thus, no weights were applied to donor data summaries for the subaccounts.

#### NGOs

As with donors, it was necessary to apply weights to NGOs. Because there was a higher number of NGOs in the census and survey sample, the NHA team distributed NGOs into quintiles based on the percentage of total funds going to health in Rwanda in 2006 that each NGO managed. Eighty-four percent of NGOs in quintile 1 (contributing the least to health) were surveyed, and 86 percent of NGOs in quintile 2 were surveyed. The NHA team captured expenditure information from 100 percent of all NGOs in quintiles 3, 4, and 5.

**ANNEX C TABLE 1.5: NGOS CONTRIBUTING TO GENERAL HEALTH**

High %	Low %	Quintile range			
0.014	0.0001	0.0028			
Quintile	Low	High	N	n	Weighting factor
1	0.0001	0.0029	65	46	71%
2	0.0029	0.0057	8	7	88%
3	0.0057	0.0084	4	4	100%
4	0.0084	0.0112	3	3	100%
5	0.0112	0.0140	2	2	100%

Also as with donors, based on NHA team knowledge, all NGOs that contributed to malaria, and RH were included in the sample. No weights were applied to expenditures in these priority areas. However, the NHA team applied the following weights to NGOs with HIV/AIDS programs.

**ANNEX C TABLE I.6: NGOS CONTRIBUTING TO HIV/AIDS**

High %	Low %	Quintile range			
0.0153	0.0001	0.0030			
Quintile	Low	High	N	n	Weighting factor
1	0.0001	0.0031	37	31	84%
2	0.0031	0.0062	7	6	86%
3	0.0062	0.0092	4	4	100%
4	0.0092	0.0123	3	3	100%
5	0.0123	0.0153	2	2	100%

*Employers*

The NHA team created a sampling of the 78 companies located in Rwanda that contribute financially to health. The objective was to select a random sample of companies that would be representative of both type (industry) and size (measured by number of employees in the company). The number of employees varied from a low of 10 to a high of 8,000. In view of the importance of the contribution of large companies to characteristics of interest, it was decided to include very large companies in the sample with certainty. Therefore, all six companies with 1,000 or more employees were included in the sample with certainty. Table C-I.7 gives the distribution of the remaining 72 companies by type of industry and size.

**ANNEX C TABLE I.7: TYPE OF COMPANY BY SIZE**

Type of Company (Industry)	Number of Employees					
	<50	50-100	101-500	500+	Unknown	Total
Communication	8	0	1	0	0	9
Transport	0	1	2	0	1	4
Finance	0	3	9	1	0	13
Construction	1	1	4	0	1	7
Distribution	4	2	1	0	2	9
Education	0	0	3	1	0	4
Health	0	1	2	0	0	3
Business	0	6	12	4	1	23
Total	13	14	34	6	5	72

Resources in terms of cost and time did not permit a complete enumeration of all 78 companies; thus a sample selection was required. One method of determining the appropriate sample size is to look at the resulting margin of error that the estimates will have based on a certain sample size (see Table C-I.8).

**ANNEX C TABLE I.8: MARGIN OF ERROR ASSOCIATED WITH VARIOUS SAMPLE SIZES**

Margin of error at 95% confidence level	Required sample size from a population of 78 businesses
Plus or minus 5 percentage points	65
Plus or minus 6 percentage points	61
Plus or minus 7 percentage points	56
Plus or minus 8 percentage points	52
Plus or minus 9 percentage points	48
Plus or minus 10 percentage points	44
Plus or minus 11 percentage points	40
Plus or minus 12 percentage points	36

It was decided to survey a sample of 45 companies. A simple random sample of companies from a population of 78 would estimate population percentages with a margin of error of plus or minus 10 percentage points. The reliability of this survey may actually be higher, because it includes very large companies with certainty and selected the samples after stratification by size and type of industry. Since we had already selected six companies with certainty, we needed to select 39 companies from the remaining 72 in the population. The total sample of 39 was allocated to type of industry in proportion to the number in the population.

The number in each type was further allocated to each size group in proportion to the number in the population in the size group. Table C-I.9 shows the distribution of the non-certainty units in the sample.

**ANNEX C TABLE I.9: DISTRIBUTION OF THE SAMPLE BY STRATA**

Type of Company	Number of Employees					
	<50	50-100	101-500	500+	Unknown	Total
Communication	4	0	0	0	0	4
Transport	0	1	1	0	0	2
Finance	0	2	5	1	0	8
Construction	1	1	2	0	1	5
Distribution	2	1	1	0	1	5
Education	0	0	2	1	0	3
Health	0	1	1	0	0	2
Business	0	2	6	2	0	10
Total	7	8	18	4	2	39

### *Insurance*

Based on team knowledge, the NHA insurance surveys captured expenditure data from all insurance companies whose expenditure records were not obtained from secondary sources.

## DATA ENTRY AND ANALYSIS

Entry of primary data took place in October and November 2007 and a data analysis workshop was held November 4–27, 2007. While cleaning the dataset, the analysis team contacted survey respondents if it was necessary to clarify responses. If the team could not reach a respondent, relevant individuals were sought for triangulation of the ambiguous data. The team contacted these people by phone and usually held in-person interviews.

### Mutuelles calculations

Calculating the amount spent on and by mutuelles in Rwanda called for rigorous data collection from many sources by the NHA team. At the time of data analysis, there was no reliable and consistent data source for mutuelles in the country. This section details the specific methodology undertaken by the NHA team to calculate the contribution to health through mutuelles.

#### Data collection

The NHA team started with data from mutuelles that had been collected (for NHA purposes) by the government of Rwanda from 53 mutuelle sections across 15 districts. Completion of the questionnaire varied by section; questionnaire layout and sequencing, and lack of survey team members to answer questions throughout the response process may have influenced reporting.

Given these limitations, the NHA team supplemented and/or replaced the data with more robust data from the following sources<sup>25</sup>:

- “Mid-term evaluation of the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria (GF) 5th Round Project on Health Systems Strengthening: Assuring Access to Quality Care: The Missing Link to Combat AIDS, Tuberculosis and Malaria in Rwanda.” Draft. Vijay Kalavakonda, Natalie Groos, and Jean-Claude Karasi. December 2007.
- “Rwanda Poverty and Health Country Status Report.” Draft. World Bank. 2007.
- “Rapports mensuels venant des districts, Janvier-Decembre 2006” and other data provided by Dr. Hertilan Inyarbuga of the MoH Health Scheme Technical Support Unit (CTAMS).
- “Etude sur les articulations entre les systèmes légaux de sécurité sociale et les mécanismes de protection sociale à base communautaire.” International Labour Organization (ILO). Available at [www.ilo.org/gimi/resource.do?page=/wiki%20linkages/home/fr/rwanda2.pdf](http://www.ilo.org/gimi/resource.do?page=/wiki%20linkages/home/fr/rwanda2.pdf)
- Rwanda Central Government Budget Execution for Year 2006

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<sup>25</sup> These were the data of which the NHA team was aware of during data analysis in November 2007.

## Calculations

### *Central government spending (FS 1.1.1.4)*

This amount was calculated based on central government transfers to the national risk pool and the solidarity funds (FARG, PACFA, Gacaca, etc.) that subsidize mutuelle enrollment fees for indigents and persons living with HIV/AIDS. It also covers the amount that the central government spent on supportive activities for mutuelles (RWF 199 million).

### *Household spending (FS 2.2)*

Households are the largest contributor to mutuelles. Household expenditure on mutuelle premiums (collected from enrollees who are not subsidized) was extracted from data on mutuelle enrollment levels in each district, and totals more than RWF 5.5 billion. (Health centers must transfer 10 percent of collected premiums to the district level and is therefore included in the household expenditure figure for mutuelles.) According to the ILO report cited above, households also pay a co-payment of 10 percent when they seek services; CMS data estimate the total of these co-payments to be more than RWF 87 million, making total household expenditure an estimated RWF 5.6 billion.

### *Rest of the world (FS 3)*

Donors subsidize enrolment fees for people living with HIV (PLHIV) and indigents. The total of these subsidies is estimated to be RWF 1 billion, based on Global Fund contributions to government solidarity funds and CTAMS data, collected at the district level, on revenue sources of enrollment fees for indigents.

### *Private employers*

From data provided by CTAMS, we calculated that a relatively small share of mutuelle revenue, RWF 655 million, comes from private employers. These payments are considered charitable contributions; based on information that the mutuelles reported on revenue sources, the funds go to subsidize care for indigents and/or PLHIV. We assumed that mutuelle premiums that private employers paid on behalf of employees is captured in the private employer data collected (see above).

## Data limitations

The following limitations on data are noted:

- We do not have actual household-level data, only estimates based on number of enrolled and who are not otherwise subsidized. Thus the amount households actually pay versus what is estimated could differ.
- There is limited ability to cross-check calculations with other sources/studies so numbers should be interpreted with caution.
- The data sources listed in subsection 1.3.x.1 are still in draft form; to the best of our knowledge, the data have not been validated.
- Assumptions for the private employer data need to be clarified with CTAMS to ensure that funds are used for subsidizing indigent and/or PLHIV enrollment.



- There was some uncertainty about the classifications for the data provided to us by CTAMS on sources of revenue for the indigent and PLHIV, given that we were not able to identify all of the sources. Unidentified sources (probably 5–6) were assumed to be “Rest of world” (FS 3); the total amount was marginal and should not impact final tallies.

## Ratios between providers

If funding allocations reported by financing agents did not specify the provider(s) to which their funds went (identifying them only in a general sense, such as “hospitals”), it was necessary to apply ratios to disaggregate these expenditures among the six types of hospitals and health centers that the government wished to track. For example, if a financing agent gave funding to health centers, this expenditure was disaggregated among public and *agrée* health centers. Again, if facilities did not have sufficient breakdown between inpatient (IP) and outpatient (OP) care, then a ratio was used.

The NHA team used SIS health management information system (HMIS) data to calculate OP and IP ratios for government and *agrée* facilities. However, GESIS (HMIS software) has limitations as it is based on MS Access version 3.1 and needs to be updated to be compatible with more recent versions. This prevented our exporting some parts of GESIS into MS Excel for analysis; instead, we copied data out manually. For referral hospitals (CHUK, CHUB, King Fayçal Hospital, and Ndera Mental Health Hospital) we used their expenditure and income records. The dataset provided information such as OP volume, number of admissions, and income and expenditure by service type/departments. Health facilities were grouped by size. To fill gaps in the dataset, we used averages to impute missing data.

We then allocated all expenditure to OP or IP care. Health facilities were grouped by ownership (public, *agrée*, private) and category (referral hospital, district hospital, health center, clinic); districts hospitals and health centers also were grouped by size (big, medium, small), based on number of beds. These classifications helped us to impute data gaps by allowing for calculation of weighted average expenditures of health facilities in the same class:

$$A = \frac{\sum_{i=1}^n E_i U_i}{n}$$

Where A= Weighted average

E=Facility unit expenditure

U=Volume of services utilization

n=number of facilities in dataset

The completion rate was used to improve the quality of HMIS data by generalizing expenditures to the national level. Where the unit cost and service utilization were not available by OP and IP, in the last

resort we divided services that were clearly related to OP or IP, calculated an expenditure ratio based on their expenditures, and used the ratio to apportion remaining expenditure data.

The weighted totals are then used to compute ratios:

**ANNEX C TABLE I.10: INPATIENT AND OUTPATIENT RATIOS BY PROVIDER**

Provider type	IP/OP	%	Source
Govt referral hospitals	IP	0.74	Referral hospital expenditure records
	OP	0.26	Referral hospital expenditure records
Private referral	IP	0.38	Referral hospital expenditure records
	OP	0.62	Referral hospital expenditure records
Govt district	IP	0.66	SIS
	OP	0.34	SIS
Agrée district hospital	IP	0.51	SIS
	OP	0.49	SIS
Govt health center	IP	0.13	SIS
	OP	0.87	SIS
Agrée health center	IP	0.2	SIS
	OP	0.8	SIS

These apportioned expenditures were then mapped to predetermined NHA classifications (FS, HF, HP, and HC).

To assign expenditures by provider type, we apportioned total expenditures by the same percentage that each provider type was of all providers. For example, of the RWF 24.8 billion spent on all providers, RWF 8.2 billion was assigned to government referral hospitals, which represent 33 percent of all providers. For district hospitals and health centers, expenditures were gleaned from HMIS records and MoH salary records.

**ANNEX C TABLE I.11: PROVIDER RATIOS**

Provider type	%	Source	Total expenditure	Expenditure from SIS	Salaries from MoH
Govt referral hospitals	33%	Expenditure records	8,193,920,289		
Private referral hospitals	17%	Expenditure records	4,141,122,254		
Govt district hospitals	12%	SIS	2,908,972,247	339,217,675	2,569,754,571
Agrée district hospitals	5%	SIS	1,259,057,573	263,187,573	995,870,000
Govt health center	20%	SIS	5,046,534,797	3,798,353,495	1,248,181,302
Agrée health center	13%	SIS	3,252,417,121	2,399,132,541	853,284,580
Total	100%		24,802,024,281	6,799,891,284	5,667,090,454

## Untargeted spending

Untargeted spending is relevant to the three subaccounts (HIV/AIDS, malaria, and RH) carried out with the general NHA. Untargeted spending refers to general facility revenue (not targeted for HIV/AIDS, malaria, or RH) that is spent on the targeted diseases. For example, it includes the percentage of the salary of a general doctor (who treats multiple diseases) that is spent to treat malaria patients. Untargeted spending also comprises the amount that insurance funds may contribute to malaria, an amount not broken out in insurance company records.

To account for untargeted funds, the team applied ratios to each provider type, by IP and OP care. Based on SIS expenditure records, we assumed that the percentages in the tables below should be applied to general IP and OP revenue to determine untargeted spending at the various nonmarket provider types (where price charged to patients does not include all input costs) likely to offer malaria, HIV/AIDS, or RH care.

**ANNEX C TABLE I.12: RATIOS FOR MALARIA**

Provider Type	IP	OP
Govt referral hospitals	6.0%	3.0%
Private referral hospital	6.0%	3.0%
Govt district hospital	21.0%	19.0%
Agréé district hospital	32.0%	18.0%
Govt health center	29.0%	29.0%
Agréé health center	29.0%	29.0%

**ANNEX C TABLE I.13: RATIOS FOR HIV/AIDS**

Provider Type	IP	OP
Govt referral hospitals	0.1%	4.0%
Private referral hospital	0.1%	4.0%
Govt district hospital	1.0%	2.0%
Agréé district hospital	2.0%	3.0%
Govt health center	2.0%	1.0%
Agréé health center	3.0%	1.0%

**ANNEX C TABLE I.14: RATIOS FOR RH**

Provider Type	In patient	Outpatient
Govt referral hospitals	50.0%	2.0%
Private referral hospital	50.0%	2.0%
Govt district hospital	6.0%	19.0%
Agréé district hospital	12.0%	29.0%
Govt health center	40.0%	2.0%
Agréé health center	40.0%	2.0%

These ratios were derived by applying unit costs and utilization rates to the untargeted spending at providers. Each of the six providers listed in Tables 1.12 – 1.14 were analyzed individually to ensure accuracy of the ratios.

To track the funds from the financing agents that distributed untargeted monies to the providers in Tables 1.12-1.14, the team distributed the expenditures across the sources of the agents' funds.<sup>26</sup> While the agents executed programmatic control over funds, they were not always the source of the funds. For example, the MoH (acting as a financing agent) distributes funds to the providers, but these funds come from the MoF, other public funds, and donors. To account for this, untargeted monies that contribute to HIV/AIDS, malaria or RH were distributed across sources accordingly.

The subaccounts therefore involved the following steps:

- Looking at the percentage distribution of sources to each of the financing agents such as the MoH that received *untargeted* funds going to malaria care
- Distributing the untargeted spending for each function across the table of percentage distribution of sources
- Adding all targeted spending

### Household spending on curative care

The EICV II surveyed a stratified cluster sample of 34,785 people in 6,900 households. The data were collected from October 12, 2005 through September 20, 2006. Interviews were evenly distributed throughout the year to avoid seasonal effects. The households were drawn from 620 geographic locations randomly selected from 32 strata. The survey responses are weighted to reflect a total national population of 9.5 million people.

Estimates of spending were based on the following questions:

6	Primary health problem
11	Consulted a physician (health care worker) in the last two weeks
13	Person consulted
14	Place of consultation
15	Public or private establishment
16	Amount paid for the consultation
18	Undertake medical tests in the last two weeks
19	Amount paid for health exams
21	Hospitalized in the last two weeks
22	Amount paid for hospitalization
24	Purchased medication or other health related items
25	Amount paid for medication and supplies

Because the questions refer to the last two weeks, we multiplied the estimated number of visits by 26 to produce an estimate of the number of visits in 52 weeks. Only one visit in the two-week interval was recorded. Because some patients make two or more visits, this slightly underestimates the true number

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<sup>26</sup> No ratios were applied to household OOP spending; it was assumed that all household spending is targeted for a specific health activity.

of visits.<sup>27</sup> A total of 2,255 health care visits were recorded in the survey responses. When weighted to produce national totals, this implies that 6.5 percent of the population saw a health care provider during a two-week period, producing 613,000 visits. As this is based on a sample, this total has a range of uncertainty from 572,000 to 654,000 visits. In annual terms, this comes to 15.9 million visits, with a 95 percent confidence interval of 14.9 to 17.0 million visits.

To estimate outpatient costs, we combined the answers to questions 16 (amount paid for consultation) and 19 (amount paid for health exams). About a quarter of the OP visits involved no OOP costs. The remainder ranged from RWF 10 to RWF 45,000, with half the visits falling between RWF 100 and RWF 600. The average inpatient visit cost RWF 492 (including those with zero cost), with a 95 percent confidence interval of RWF 400 to RWF 575. Summing all the costs produces a national estimated total cost of RWF 7.8 billion, with a 95 percent confidence interval of RWF 6.5 to RWF 9.2 billion.

The survey does not include a question about where IP care took place. For those who listed a hospital as the place of consultation in question 14 we assumed their IP care took place in the same hospital. For all others, we allocated the costs according to the place of OP care; that is, those who used public facilities for OP care were assumed to be admitted to public hospitals, and so on. Total IP costs were RWF 4.1 billion, with a 95 percent confidence interval of RWF 1.8 to RWF 6.4 billion.

Approximately 9 percent of respondents reported purchasing medicine in the two weeks before the survey. Payments ranged from RWF 10 to RWF 74,000, with half the (non-zero) payments falling between RWF 200 and RWF 1,000. No question was asked about where patients bought medicine. For those who visited only a pharmacy, we assumed the purchase was made at that pharmacy. Some respondents who did not consult a medical provider also purchased medicine. We assumed these are also pharmacy purchases. We allocated the others to IP care if the respondent was admitted for an overnight stay. The remainder were allocated to OP care if the respondent mentioned an OP visit but no IP visit. Annualized, the total spending for medicine is RWF 19.2 billion, with a 95 percent confidence interval of RWF 17.3 to RWF 21.2 billion.

### **Household spending on care by PLHIV**

According to WHO<sup>28</sup> 41,000 adults needed antiretroviral therapy (ART) in September 2006 (estimates range from 27,000 to 47,000), and 27,550 adults received it. (For adults and children, 30,000 received ART.)

The MoH report says that by December 2006, 34,136 adults and children received ART, which is close to the WHO estimate. We accepted this as the number with ART. For those needing ART and not receiving it, we worked from the WHO numbers: WHO says 92 percent of those receiving ART are adults, so if we apply this to the MOH 34,136, we get 31,400 adults with ART, which leaves 9,600 needing ART but not receiving it.

The source for the number who are HIV-positive but do not need ART is UNAIDS.<sup>29</sup> For these people, we used average spending for the general population. We divided total spending in each category by 9.5 million (the population estimate we used in computing total spending) and multiplied by 119,000, which is the difference between the adult prevalence of 160,000 and the estimated 41,000 who need treatment.

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<sup>27</sup> We decided not to attempt a correction for this underestimate because the survey appeared to overestimate visits to public facilities, when compared with official estimates for these facilities.

<sup>28</sup> [http://www.who.int/hiv/mediacentre/universal\\_access\\_progress\\_report\\_en.pdf](http://www.who.int/hiv/mediacentre/universal_access_progress_report_en.pdf)

<sup>29</sup> [http://data.unaids.org/pub/GlobalReport/2006/2006\\_GR\\_ANNIR-T\\_en.pdf](http://data.unaids.org/pub/GlobalReport/2006/2006_GR_ANNIR-T_en.pdf)

Per capita spending is based on a survey of 7,557 adults in 1,956 households, from which 1,376 PLHIV were identified based on internal survey responses. (The survey intentionally includes households where no one was known to have AIDS; these were excluded from our analysis.) Of these, 787 were identified as receiving ART, and another 458 were receiving either Cotrimox (a treatment for *Pneumocystis carinii* pneumonia) or no identified medication. These two groups are analyzed as though they were samples from the 31,400 treated and 9,600 untreated PLHIV, respectively.

OP and IP questions refer to a six-month recall period. We doubled this to estimate annual spending. We are not confident that this period can be accurately recalled by all respondents.

The largest cost for PLHIV is associated with care for “other” illness, that is anything other than the AIDS treatment. In the survey, this is recorded as a single item, and cannot be disaggregated by type of provider. Unlike other expenses, the survey question refers to a four-week recall period. We multiply these estimates by 13 to produce annual estimates.

#### *Household spending on curative care for malaria*

Of the stratified cluster sample of 34,785 people in 6,900 households surveyed in the EIVC, 2,279 reported that they had suffered malaria during the two weeks preceding the survey. All of the calculations described in the section above on general household spending were repeated separately for this subgroup to produce the malaria subaccount.

### **Malaria prevention commodities**

The EICV did not ask questions on expenditures on malaria prevention commodities. All prevention commodities are handled by PSI, and the value of all commodities purchased in Rwanda in 2006 is therefore captured in PSI expenditure records. This includes both private and public sector spending.

In 2006, bednets were provided to users in Rwanda via i) the private sector, and ii) the public sector.

#### **Private sector**

The number of nets bought in the private sector in 2006 was 311,986. For practical purposes, the team assumed that all commodities were used that calendar year. Bednets were purchased by the Central Medical Store (CAMERWA) with Global Fund monies from rounds 3 and 5. The cost per net, as budgeted in the Global Fund round 5 proposal submitted February 2006, was US\$6.00 (RWF 3,310.20). Therefore, the total value of nets purchased at this level was US\$1.9 million (RWF 1.0 billion).

Some of these costs, however, were offset by revenue from bednet sales. Global Fund monies (via PSI) recovered RWF 600 per net for those sold to NGOs (87,357 nets), for a recovery of RWF 52.4 million. (The NGOs gave the nets to consumers for free.) Therefore, the net cost of bednets in this transaction was RWF 236.8 million.

FS 3 Rest of the world	HF 2.4 NGOs	HP nsk Provider not specified by kind	HC 1.3.9 Nets given as part of OP care	RWF 236,754,941
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Additionally, donor spending on bednets for the private sector also included RWF 698.7 million, which is the total cost of nets (224,629 nets) at US\$6.00 minus the amount recovered from selling the nets to wholesalers at RWF 200 per net.

FS 3 Rest of the world	HF 2.4 NGOs	HP 4.1 Provider not specified by kind	HC 5.2.5.1 Insecticide treated nets	RWF 698,695,026
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Households purchased those 224,629 nets at RWF 600 per net from retailers. The amount recovered by wholesalers in the transactions with retailers is not counted because the wholesalers act as pass-throughs and the NHA is concerned with the actual expenditures by end users. Household expenditure on malaria commodities was therefore RWF 134.8 million.

FS 2.2 Households	HF 2.3 OOP spending	HP 4.1 Dispensing chemists	HC 5.2.5.1 Insecticide treated nets	RWF 134,777,400
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#### Public sector

More than 1.5 million MAMANET-brand bednets were bought and distributed in the public sector in 2006.<sup>30</sup> These nets were purchased by CAMERWA with Global Fund monies at the international price for a total value of RWF 5.2 billion. Of that total number of bednets, nearly 1.4 million<sup>31</sup> were distributed for free during public campaigns to i) children under five with vaccinations, and ii) PLHIV. The financing agent in this case is Minisanté because CAMERWA and PNLP develop the distribution plan and PSI is a pass-through. The total donor expenditure for those nets that were distributed for free is RWF 4.5 billion.

FS 3 Rest of the world	HF 1.1.1.1 Minisanté	HP 3.3.1 Community health workers	HC 1.3.9 Nets given as part of OP care	RWF 4,485,321,000
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Finally, 206,908 bednets were bought with donor funds to sell to pregnant women through this campaign for a total of RWF 684.9 million (PNLP 2006). Pregnant women could buy these MAMANET bednets at RWF 200 per net for a total of RWF 41.4 million in OOP spending. Because OOP funds are retained at the facility level, there is no need to deduct the OOP amount from the donor contribution. The NHA team distributed the total value of nets bought for and spent by pregnant women across different providers according to ratios calculated from SIS data.

<sup>30</sup> Personal communication with Yves Cyaka of PSI

<sup>31</sup> Ibid.

<b>FS 3 Rest of the world</b>	<b>HF 1.1.1.1 Minisanté</b>	<b>HP 1.1.2.1 District government hospitals</b>	<b>6%</b>	<b>38,460,866.55</b>	<b>HC 1.3.9</b>
		HP 1.1.2.2 District <i>agrée</i> hospitals	2%	16,646,582.08	HC 1.3.9
		HP 3.4.5.1 Public health sectors	45%	304,785,569.44	HC 1.3.9
		HP 3.4.5.2 Govt assisted not for profit health centers ( <i>agrées</i> )	29%	196,429,796.71	HC 1.3.9
		HP 3.3.3 Other health practitioners	19%	128,584,046.81	HC 1.3.9

<b>FS 2.2 Households</b>	<b>HF 2.3 OOP spending</b>	<b>HP 1.1.2.1 District government hospitals</b>	<b>6%</b>	<b>2323779.02</b>	<b>HC 1.3.9</b>
		HP 1.1.2.2 District <i>agrée</i> hospitals	2%	1005775.003	HC 1.3.9
		HP 3.4.5.1 Public health sectors	45%	18414933.81	HC 1.3.9
		HP 3.4.5.2 Govt assisted not for profit health centers ( <i>agrées</i> )	29%	11868152.78	HC 1.3.9
		HP 3.3.3 Other health practitioners	19%	7768959.387	HC 1.3.9

## RH spending

### Commodities

#### Public Sector

To account for the amount spent on commodities in Rwanda in 2006, the NHA team started by holding interviews with key informants in the family planning sector to get a clear picture of the flow of funds. Interviewees included UNFPA, JSI/USAID, PSI, Dr. Ferdinand at the MoH, and the director of an ARBEF (*Association Rwandaise pour le Bien-Etre Familial*) clinic.

In 2006, USAID and UNFPA donated commodities to the MoH via CAMERWA for free. CAMERWA turned the commodities over to a district storage facility for free, which in turn distributed the commodities free to i) government and *agrée* health centers and hospitals, ii) private clinics, and iii) ARBEF clinics (NGO health centers). Government and *agrée* health centers and hospitals, as well as private clinics, distributed the commodities free to consumers, but the ARBEF clinics charged a fee for the medical act (i.e., inserting the implant, giving injection). ARBEF also received commodities from International Planned Parenthood Foundation (IPPF) and charged a fee for those commodities.

While USAID and UNFPA could provide the total number of contraceptives sent to the government in 2006, the intention is to have enough commodities plus a 20-month supply at one time. Therefore, the NHA team counted the number of commodities actually distributed to consumers in 2006, which was obtained from detailed UNFPA and USAID reports.



**ANNEX C TABLE I.15: NUMBER OF FAMILY PLANNING COMMODITIES BY TYPE**

Commodity type	Number consumed in 2006	Unit
Oral contraceptives	478606	one cycle
Injectables	390699	one dose and syringe
Implants	4122	one implant
Male condoms	833863	one condom

Source: Dr. Jovitt, USAID DELIVER project, November 2007

The NHA team then used data from the 2005 DHS to determine the providers of these commodities based on a percentage distribution of women using each provider.

**ANNEX C TABLE I.16: DISTRIBUTION OF WHERE WOMEN OBTAINED THEIR COMMODITIES**

	Public sector			Private medical sector						Other source	
	Govt./ agréé hosp	Govt./ agréé health center	Animateur de santé	Private hosp/ clinic	Pharmacy	Private doctor	ARBEF clinic	Infirmmary	Other private	Boutique /kiosque	Relative/ friend
Oral contraceptives	8%	75%	2%	2%	8%	0%	4%	2%	0%	1%	0%
Injectables	10%	80%	0%	1%	2%	0%	4%	2%	0%	0%	0%
Implants	60%	20%	0%	10%	0%	0%	10%	0%	0%	0%	0%
Condoms	4%	21%	0%	2%	21%	2%	4%	0%	0%	42%	4%

Source: DHS 2006

The NHA applied this percentage distribution of providers to the total number of each commodity consumed in 2006 to obtain the number of each commodity type per provider.

**ANNEX C TABLE I.17: NUMBER OF COMMODITIES DISTRIBUTED THROUGH DISTRICT STORAGE AT THE FOLLOWING FACILITIES**

	Public sector			Private medical sector						Other source	
	Govt./ agréé hosp	Govt./ agréé health center	Animateur de santé	Private hosp/ clinic	Pharmacy	Private doctor	ARBEF clinic	Infirmmary	Other private	Boutique /kiosque	Relative/ friend
Oral contraceptives	36,258	358,955	7,252	10,877	36,258	-	18,129	7,252	-	3,626	-
Injectables	38,117	314,465	-	3,176	7,941	1,588	17,470	6,353	1,588	-	-
Implants	2,473	824	-	412	-	-	412	-	-	-	-
Condoms	34,744	173,721	-	17,372	173,721	17,372	34,744	-	-	347,443	34,744

The NHA team obtained the prices of each commodity for USAID and UNFPA based on international prices and from discussions with Dr. Jovitt of USAID's DELIVER project. The unit costs were multiplied by the total commodities at each facility to produce the total amount spent. The NHA team repeated this using the prices charged to consumers to obtain each commodity. While commodities were supposed to be free to the consumer, there were sometimes OOP costs associated with the medical

act. The donor cost and the consumer cost are considered additive because the profit from consumer spending is retained at the facility level.

The NHA team then accounted for the fees charged by ARBEF clinics for commodities from IPPF.

**ANNEX C TABLE 1.18: UNIT PRICES OF FAMILY PLANNING COMMODITIES**

	Units	Unit value as purchased by donor	Unit price charged to patients
Injectables	18170		
Depo	3499	RWF 15,918	RWF 500
Noristerat	13542	RWF 31,835*	RWF 1,000
Norigynon	1129	RWF 386	RWF 200
Oral contraceptives	17299	RWF 474**	RWF 200
Male condoms	30916	RWF 14***	RWF 2
Implants	803	RWF 127,452	RWF 5,000

\*NHA did not have a price for this, so assumed that since it cost twice as much for patients the unit value is also twice as high

\*\*Used the base unit for Microgynon since that product is used by the majority

\*\*\*Taken from IPPF customs receipt

### *Private Sector*

The private sector information was provided by PSI key informants. The UK Department for International Development (DFID) buys condoms and oral contraceptives to be sold in the private sector. DFID provides funding to the German NGO KfW, who gives the funds to the MoH. The MoH then contracts to PSI. PSI uses the money to procure in-kind commodities from PSI Washington. The oral contraceptives are sold to pharmacies and then consumers. Condoms are sold to wholesalers, who sell to semi-wholesalers, who sell to retailers, who sell to consumers.

### *Oral contraceptives*

The NHA team determined that the total amount spent on contraceptives is the net value spent by PSI plus the OOP spending by the consumer. As previously mentioned, because the profit from consumer spending is retained at the facility level, it is necessary to add this amount to the net spending on commodities by the source (DFID).

PSI bought 8,420 boxes of oral contraceptives in 2006. Each box contains 20 cycles. The total spending by PSI was RWF 20.5 million. PSI then sold those boxes to pharmacies at RWF 1,400/box to recover RWF 11.8 million. The net spending by PSI was therefore RWF 8.8 million. Additionally, the amount spent at pharmacies by consumers (at RWF 2000/box) came to RWF 16.8 million.

## Condoms

PSI's MIS reported 10 million condoms (3,859 cartons), were bought in 2006. Based on PSI's total condom procurement figure, the NHA could deduct that the price per carton was therefore RWF 66,209 at that level. PSI then sold the cartons of condoms to wholesalers at RWF 9,900/carton, recovering some money and making the donor's net spending via PSI RWF 217.3 million.

Ultimately, the condoms were sold to consumers at RWF 32,400/carton, or RWF 50/box of four condoms. Total OOP spending, which is added to donor's net spending via PSI, was RWF 125.0 million.

## Maternal health and family planning

The 2006 RH subaccount also accounted for OOP spending on prenatal and postnatal visits and deliveries. To account for spending by government or donors on IP care, the NHA team relied on untargeted spending (see section on untargeted spending). As with the 2002 RH subaccount, sterilization numbers were too low to warrant estimation or costly data collection.

One limitation with the RH subaccount is that the NHA team was unable to estimate expenditure on birth attendants making house calls due to a lack of resources and data available at the time, as most of this is likely in-kind gifts. RH OOP spending is therefore likely to be an underestimate.

## Prenatal care

The DHS reported that 95 percent of births were preceded with prenatal consultations from either doctors or nurses, and of those the average number of prenatal consultations was 2.4. The total number of births in 2006 was 389,510 according to data from the Census and the Population Reference Bureau fact sheet. By multiplying the total number of births by the average consultations and 95 percent, the total number of prenatal visits was 889,117.

The NHA team conducted interviews and primary data collection at providers to estimate the average cost per provider per visit.

	Public sector			Private medical sector				
	Govt./ agrée hosp	Govt./ agrée health center	Other public	Private hospital/ clinic	Private doctor	ARBEF clinic	Infirmary	Other private medical
Avg amount paid per visit at given provider	2500	0	0	3500	3500	2250	2250	2250

According to key informants, prenatal care at health centers was free due to a new policy, started in 2006, that says if a woman attends three consultations the delivery is free. At ARBEF clinics the ultrasound cost RWF 3,000, the first visit RWF 1,000, and the second visit RWF 500, making the average cost estimate of all three visits RWF 2,250.

The DHS data supplied the percentage distribution of prenatal visits at various providers for their last visit, in the previous 12 months.

	Public sector			Private medical sector				
	Govt./ agrée hosp	Govt./ agrée health center	Other public	Private hospital/ clinic	Private doctor	ARBEF clinic	Infirmar y	Other private medical
Total	20.0	73.3	0.0	1.2	2.4	0.6	1.2	1.2

Source: DHS

These ratios were then applied to the total number of prenatal visits to find the total number of visits by provider, which were in turn multiplied by the average cost of the visit at each provider to reach the total amount spent at each provider on prenatal care.

	Public sector			Private medical sector				
	Govt./ agrée hosp	Govt./ agrée health center	Other public	Private hospital/ clinic	Private doctor	ARBEF clinic	Infirmar y	Other private medical
Total	444,558,673			37,720,130	75,440,260	12,124,328	24,248,655	24,248,655

The DHS providers were then mapped to NHA provider codes using provider breakdown ratios (see section x).

	Govt./ agréé hospital			Govt./ agréé health center + Infirmary		Private hospital/ clinic + other private medical (clinic)		ARBEF clinic
	HP.1.1.1.1 govt referral	HP.1.1.2.1 district govt	HP.1.1.2.2 agrée district	HP.3.4.5.1 govt health centers	HP.3.4.5.2 agrée health centers	HP.1.1.1.2 private referral	HP.3.1 private clinics	HP.3.4.5.3 NGO clinic
Total	294,668,584	104,612,042	45,278,047	0	0	20,390,400	141,267,300	12,124,327

#### Postnatal care

According to the DHS, 4.8 percent of births in Rwanda in 2006 were followed by a postnatal visit. Therefore, assuming one postnatal visit per birth, there were 18,696 postnatal visits that year.

The percent distribution of postnatal visits at providers was as follows:

	Domicile		Public sector				Private medical sector	
	Own home	Other domicile	Govt hospital	Govt health center	Dispensary	Other public	Private hosp/ clinic	Other private medical
Percent	62.2	7.1	4.6	21.6	4.5	0.0	0.0	0.0

Source: DHS

By applying the percentage distribution to the total number of postnatal visits, and then multiplying the average cost of visits across providers (based on interviews of key informants), the NHA team could estimate the total spending at the following providers.

	Domicile		Public sector				Private medical sector	
	Own home	Other domicile	Govt hospital	Govt health center	Dispensary	Other public	Private hosp/ clinic	Other private medical
Total	Unknown	Unknown	2,152,214	0	0	0	0	0

Source: Key informant interviews at providers

The total spending by providers was then mapped to NHA codes as with prenatal care.

	Govt hospital			Govt./ agréé health center + dispensary + other public		Private hospital/ clinic + other private medical (clinic)	
	HP.1.1.1.1 govt referral	HP.1.1.2. I district govt	HP.1.1.2. 2 agréé district	HP.3.4.5.1 govt health centers	HP.3.4.5.2 agréé health centers	HP.1.1.1.2 private referral	HP.3.1 private clinics
Total	1,426,560	506,452	219,202	0	0	0	0

### Deliveries

DHS reported that 32.8 percent of deliveries occurred at health facilities, making the total 127,775 in 2006. The percentage distribution at facilities is in the table below:

	Domicile		Public sector			Private medical sector		Other
	Own home	Other domicile	Govt hospital	Govt health center	Other public	Private hosp/ clinic	Other private medical	
Total	63.9	3.3	10.4	19.4	-	1.5	0.0	1.5

Source: DHS

The same methodology was applied to the deliveries as described in the sections on prenatal and postnatal care. Ultimately, total OOP spending at health facilities according to NHA codes can be summarized in the table below.

	Govt. hospital			Govt health center		Private hospital/clinic		Other private medical
	HP.1.1.1.1 I (govt referral)	HP.1.1.2. I district govt	HP.1.1.2.2 agréé district	HP.3.4.5.1 I govt health centers	HP.3.4.5.2 agréé health centers	HP.1.1.1.2 Private referral	HP.3.1 private clinics	HP.3.3.3. other health practioners
Total	12,428	4,412	1,910	15,056	14,555,407	51,440,565	43,719,159	3,170,884

Ordinarily, it is good to get prices of Caesarean sections because this procedure is more expensive than vaginal deliveries. These data were not available from secondary sources in the country for 2006. However, because the percentage of Caesarean sections performed in Rwanda is so small (2.9 percent, estimated by DHS), the difference would be almost negligible and would not justify additional resources to collect the data.

## **LIMITATIONS**

NHA primary data were collected via a self-administered questionnaire. As NHA is not an audit, there is no reason to believe that respondents are inclined to provide incorrect data. However, it may be difficult for respondents to provide accurate disaggregation of programs to report on administrative costs. According to the NHA classification system, administrative costs captured are those at central and program level and classified under prevention and public health programs administration. These are designated as HP.5/HC 6. The second category is Health Administration and Insurance and is denoted as HP 6/HC 7. This classification excludes administrative costs at health facilities and for personal care.

The NHA classification system may be different from the general accounting system that reports all administrative costs together. Thus, even if efforts are made to separate these expenditures, there is a potential for inaccuracy. Interpretation of administrative expenditure must therefore be treated with caution.

**ANNEX D. UNITED NATIONS  
GENERAL ASSEMBLY (UNGASS)  
SPECIAL SESSION ON HIV/AIDS (EXCERPT)**

## 3 NATIONAL RESPONSE TO THE AIDS EPIDEMIC

### 3.1 NATIONAL COMMITMENT

#### 3.1.1 HIV AND AIDS EXPENDITURE (*Ref, Indicator 1*)

##### ***Methodology used for data collection***

To track HIV-related expenditure for 2006, Rwanda used two different frameworks, the National AIDS Spending Assessment (NASA) and the National Health Accounts (NHA) with particular focus on the HIV and AIDS subaccount. Data from an existing household survey on out-of-pocket spending by people living with HIV (PLHIV)<sup>3</sup> commissioned by CNLS were also included.

The subaccounts and NASA matrix differ slightly to cater to different groups of stakeholders, but both report on HIV spending in a calendar year (as is the case in Rwanda). The subaccounts preserve the distinction between health and non-health expenditures to help meet the needs of health stakeholders. The NASA approach aims to inform a multisectoral AIDS perspective and can contribute to the HIV and AIDS resource gap estimation process.

The computation of NASA data was lead by CNLS in collaboration with the Joint United Nations Programme on HIV and AIDS (UNAIDS). Two national consultants collected secondary data (declared expenditure) from the state budget execution report of 2006 from the Ministry of Finance and Economic Planning (MINECOFIN), relevant line ministries (MOH, MOE, Ministry of Youth, Culture and Sports and Ministry of Local Government), annual transaction and audit reports from CNLS, TRAC, UN agencies, the Presidential Emergency Plan for AIDS Relief (PEPFAR), the GFATM and the African Development Bank (ADB) projects.

The NHA was lead by the MOH with support from the United States Agency for International Development (USAID)/Health Systems 2020. Fifteen data collectors tracked funding flows from the financing source to the provider for HIV health and non-health components. The data collection approach used for the NHA involved the following sequence of steps: 1) Where possible, access original expenditure records from institutions (e.g. executed budgets/reports from the MOH, referral hospitals, the Genocide Survivors Fund (FARG), and the National Blood Transfusion Centre (CNTS) as well as those listed above as collected by the NASA team), 2) Examine other secondary (already available) data, including the Health Information System, existing studies etc., 3) Use ongoing surveys (eg. PLHIV household survey as referenced above) and finally, 4) Develop and implement targeted NHA surveys for donors, NGOs, private and public employers/corporations and insurance companies. As per international NHA norms, the HIV and AIDS sub account reflects expenditures, which are monetary or in-kind transactions associated with the actual delivery of the service or product. Therefore, it differs from commitments and from disbursements, and captures in monetary terms the transactions for actual rendered services.

To ensure complimentary and harmonised findings, the two teams (CNLS and MOH) worked together during the data analysis stage. A mapping of coding was undertaken to match NHA spending categories with the NASA codes, which are more disaggregated. NHA values were selected because they capture actual expenditures by provider, while NASA numbers were based on spending declarations by donor (which in some cases may reflect the disbursements rather than expenditures depending on the records kept by the donor). When there was not information collected through NHA questionnaires, for instance for income generating activities, NASA values were exploited. Since NASA considers all expenditure on condoms under HIV, while NHA makes a distinction with family planning, data from the reproductive health subaccount of NHA were also included.

For trend analysis, spending data for 2005 collected according to NASA methodology were used, as reported in the UNGASS Report 2006.

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<sup>3</sup> Unpublished results (as of November 2007) from an HIV and AIDS household survey conducted as part of a baseline evaluation of performance-based contracting in Rwanda are reported here. The household survey was conducted in 2006 by CNLS with technical support from the World Bank and the Rwandan School of Public Health



## Recommendation for 2008

Conduct only one resource tracking effort for a given year, but produce two outputs, namely NHA tables and the NASA tables. Harmonisation efforts should inform the exercise from the beginning. This will help meet the needs of both health and HIV stakeholders, and will also avoid redundant and duplicative gathering of similar data. If NHA are used, ensure that non-health HIV items are also included with the NASA level of breakdown and maintain separation between donors (rather than only using an aggregate category of donors). Also, care must be taken to ensure that CNLS representatives are included in the MOH team as well as the NHA Steering Committee. Moreover, continued use should be made of existing data collection in the country, in particular the information on expenditure by stakeholders at the district level that is captured by the database CNLSnet.

## Findings and interpretation

### Part 1: Financing Sources

The financing of the HIV and AIDS response in Rwanda is through government ministries and other public institutions, the private sector which includes corporations, out-of-pocket household expenditures, and international partners such as UN agencies, the ADB, the World Bank's Multi-sector AIDS Project (MAP), the Global Fund, the United States Government (USG) through PEPFAR, and other bilateral donors.

The table below shows the sources of financing for HIV and AIDS in 2006<sup>5</sup>.

**TABLE 4: Source of Financing for HIV and AIDS in Rwanda, RwF**

Financing Sources	Amount spent 2006
Government	2,426,172,514
UN agencies	1,211,907,456
ADB	478,773,163
MAP	6,387,617,763
Global Fund	7,174,979,556
USG-PEPFAR	15,914,838,678
Other donors (bilateral donors, foundations)	13,429,287,334
Corporations	25,255,030
Out-of- pocket	1,953,813,665
All other private	216,302,449
<b>Total</b>	<b>48,340,589,281</b>

Exchange rate 2006: 1\$ = 551.74 RwF

Total HIV spending in 2006 is Rwandan Francs (RwF) 48.3 billion (United States Dollars (USD) 87.6 million). When comparing with previous years we note an increasing trend in expenditures. Declared expenditure in 2005 was USD 81.4 million, in 2004 USD 44.85 million and in 2003 USD 9.6 million. It should be borne in mind that data for 2005 and previous years refer to declared expenditure by donors while data for 2006 reflect actual expenditure by providers. Therefore, these figures may in fact underestimate the increase that happened in 2006.

Since the amounts reported track expenditure by implementing partners for a particular service/product, some funds disbursed by donors may not have been spent in their entirety in 2006 for a number of reasons; for example, the disbursement was made late in 2006 or the disbursement was intended for use over multiple years. Consequently, in these cases, actual spending is only a fraction of what donors report to have disbursed.

The total amount of spending for 2006 represents 3.3% of the GDP in Rwanda.

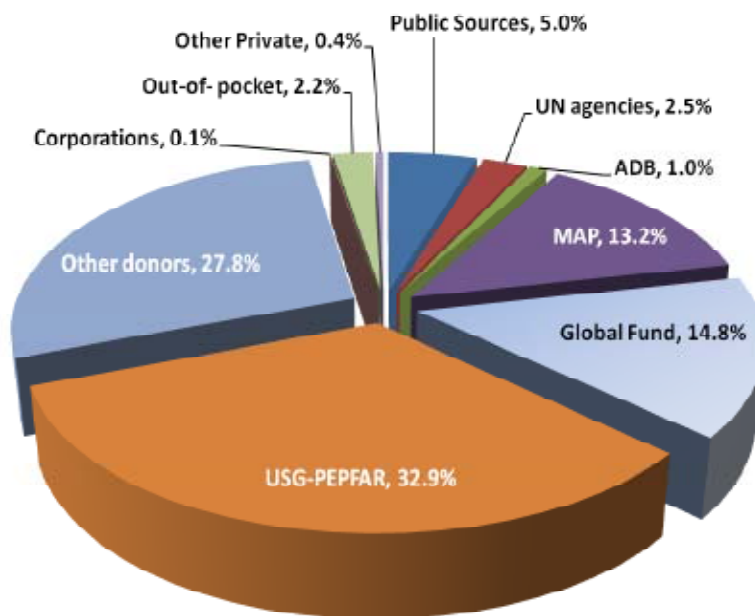
92% of the HIV and AIDS spending is incurred by donors. However, we note that Government contributions increased by about 767 million in real 2006 RwF (USD 1.4 m) since 2005 (UNGASS Report, 2006).

<sup>5</sup> Based on NHA/NASA findings as of January 28, 2008

Private AIDS expenditure is largely based on analysis of PLHIV out of pocket (OOP) spending on health care (note this amount does not include non-health OOP spending on HIV). OOP spending by PLHIV is 1.2 times more than the general population. This represents a decrease from 2.99 times more in 2002 (NHA records). Expenditure from private sources, including out-of pocket spending by PLHIV, represents only 2.7% of the total.

The figure below shows the percentage contribution to the total by each financing source.

**Figure 2: Expenditure per Financing Source, 2006**



## Part 2: Financing by HIV Programme Intervention

Table 5 presents a breakdown per AIDS spending category in 2005 and 2006. To facilitate comparison between years, all the 2005 estimates have been adjusted to 2006 real RwF, accounting for inflation.

**Table 5: Breakdown by spending category in 2005 and 2006**

Spending category	Indicative Expenditures 2005	Amount spent 2006
	Adjusted to constant 2006 RwF	
Prevention programmes	10,831,999,496	11,519,430,542
Treatment and care components	17,421,116,845	14,975,375,517
Programme management and administration strengthening	10,948,334,363	14,250,590,951
Incentives for human resources	Not available	229,596,813
Social protection and social services excluding OVC	2,532,628,274	3,108,734,148
Orphans and vulnerable children	3,129,429,767	3,880,904,328
Enabling environment and community development	3,812,717,238 (including FARG)	
HIV- and AIDS-related research (excluding operations research)	62,483,758	108,173,109
	2,562,567	267,783,872
	(Updated value: 1,137,763,548)	
<b>Total</b>	<b>44,928,555,072</b>	<b>48,340,589,281</b>

Exchange rate 2005: 1\$ = 550 RwF, Exchange rate 2006: 1\$ = 551.74 RwF

Adjustment of 2005 data to 2006 constant Rwandan francs was made using International Monetary Fund, World Economic Outlook Database, September 2005 Source for 2005: UNGASS report 2006, Expenditure records e.g. Ministry of Finance execution report, CEPEX, annual and audit reports from CNLS, TRAC, GF, PEPFAR, WB/MAP project and NHA data.

**HIV prevention programme expenditure increased from 10.8 to 11.5 RwF billions.** This is attributable to the commitment of Government and donors with regard to HIV prevention programmes as a means to reduce HIV infection rates. Government funds are spent mainly on programmes covering blood safety, community mobilisation, school HIV prevention programmes, and programmes for vulnerable populations. Of all USG-PEPFAR funds that could be disaggregated, 38% were used for prevention, mainly voluntary counselling and testing (VCT), mass media, management of STIs and prevention of mother-to-child transmission (PMTCT).

**There is a decline in spending for care and treatment programmes by RWF 2.5 billion.**

Although the number of patients increased by more than 12,000 from 2005 to 2006, we report a significant reduction in the prices for ARVs (by about 30% for the most-used drugs, such as *Efavirenz* and *Lamivudine*) and for some tests (by 30% for CD4 fascount and more than 60% for the Tri test CD3/CD4/CD45). This reduction in prices more than compensated the increase in quantities and balanced the overall increased costs for opportunistic infections (OIs) and other tests (including rapid HIV tests). Therefore, from 2005 to 2006 the overall cost of treatment remained almost stable in Rwanda (Central Purchasing of Essential Medicines in Rwanda (CAMERWA)). The decrease we observe in NHA/NASA values may be due to the change in methodology as already explained above (declared expenditure in 2005 versus real expenditure in 2006).

HIV health-related expenditure as a percentage of the total spending on HIV is 84.3%. Overall, HIV and AIDS health care spending accounts for 24% of all health care spending in 2006. This represents an increase from 15% in 2005, according to NHA records.

**Funding for orphans and other vulnerable children.** The government amounts include an estimated proportion (20%) of the Genocide Survivals Fund (FARG) to support education for OVC in the country. This proportion relates to the percentage of OVC infected or affected by HIV. Much of this amount goes for OVC education in terms of school fees. MAP, with 1.3 billion (2.4 million) was the second large contributor for OVC in 2006.

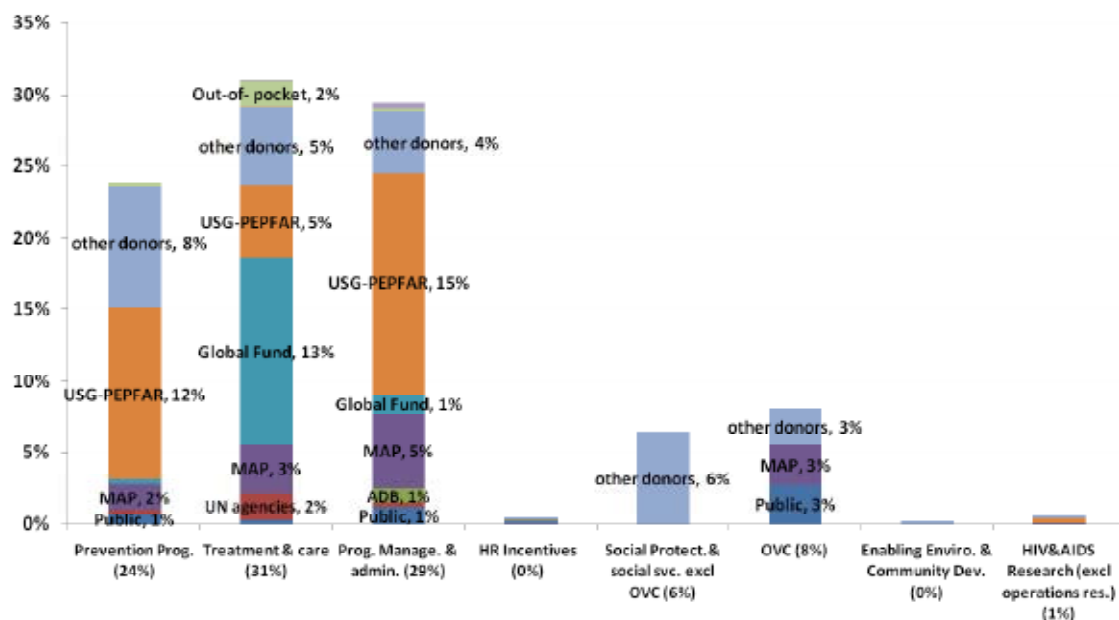
**Programme management and administration strengthening.** The management and administrative costs of HIV programmes have also increased by more than 40%. According to expenditure records, USG-PEPFAR, followed by MAP, spent more than any other donor in programme management and upgrading laboratory infrastructure.

**Social protection.** According to NASA-NHA data, there has been an increase in social protection interventions, excluding OVC, from RwF 2.5 billion (USD 4.6 million) in 2005 to RwF 3.1 billion (USD 5.7 million) in 2006. This is attributable to a large increase in funding for income-generating activities for PLHIV.

**HIV- and AIDS-Related Research (excluding operations research).** It is difficult to make a comparison with 2005 data as reported in the UNGASS 2006 Report, since the value did not take into account the spending for two big studies, the RDHS 2005 and the PLACE study. If we were to take into account an amount of about 2 million USD, the funds spend for research diminished in 2006.

The figure below plots expenditure by spending categories in 2006, highlighting the percentage contributions by financing source. GFATM finances the largest share of treatment and care while USG finances the largest share of prevention programmes.

**Figure 3: Expenditure per Category and Financing Source, 2006**



The table below presents how much was spent on rendered HIV services/products in the country in 2006 (RwF). These amounts are in some cases different from disbursed amounts by donors.

### Table 6: National AIDS Spending Assessment

Financing sources														
	Public sources				Private Sources									
	Public sub-Total	Central / National	All Other Public	International sub-Total	UN Agencies	Global Fund	MAP Project	ADB	PEPFAR	Other donors	Private Sub-Total	Corporations	Out-of-pocket	All other private
TOTAL 48,340,589,281 Rwf	2,426,172,614	2,425,022,015	1,141,499	44,897,403,950	1,211,907,456	7,174,979,556	6,387,617,763	478,773,163	15,914,838,678	13,429,287,334	1,328,127,588	25,255,030	1,953,813,665	216,302,449
AIDS Spending Categories														
1. Prevention (sub-total)	342,554,476	342,360,208	194,268	11,051,647,704	119,347,361	152,541,208	886,378,702	0	5,787,038,599	4,106,341,833	125,228,363	0	125,228,363	0
1.1 Mass media ***		3,370,300	3,395		17,006,672				1,283,490,922	904,396,641				
1.2 Community mobilization									104,423,547	468,456,634			194,438	
1.3 Voluntary counseling and testing		246,126,870	103,889		15,300,771				1,454,249,605	852,973,465				
1.12 Condom social marketing										217,299,700				
1.13 Public and commercial sector condom provision		1,237,214	1,246		4,043,149				81,318,814	58,735,396			125,033,925	
1.16 Improving management of STIs					6,058,498				1,024,846,871	781,792,071				
1.17 Prevention of mother-to-child transmission		16,083,783	16,200						907,824,353	228,476,944				
1.18 Blood safety									175,969,133	270,013,518				
1.99 Others / Not-elsewhere classified		75,542,041	69,538		76,938,271	152,541,208 **	886,378,702 **		754,915,354	324,197,465				
2. Care and treatment (sub-total)	135,673,136	135,579,581	93,555	13,933,647,807	929,712,263	6,303,433,816	1,600,187,781	0	2,470,811,661	2,629,502,286	906,054,574	25,255,030	878,358,328	2,441,216
2.1 Outpatient care		108,913,761	76,691		929,712,263	829,836,146 **	654,327,514 **		485,340,279	553,415,573		19,012,118	380,942,595	2,061,236
2.4 Antiretroviral therapy						1,482,044,977			1,387,599,411	626,833,323				
2.8 Psychological care									187,292,084	328,855,892				
2.9 Palliative care														
2.11 Additional/informal providers													94,023,410	
2.12 Hospital care		26,665,820	16,864			820,349,277	945,660,266			898,771,380		6,242,912	242,472,944	379,980
2.13 Opportunistic infection (OI) treatment									410,579,887	221,626,118				
2.99 Others / Not-elsewhere classified						3,171,203,416							160,919,378	
3. Orphans and other vulnerable children	1,325,396,756	1,325,396,756	0	2,565,507,572	0	0	1,318,535,777	0	0	1,236,971,795	0	0	0	0
3.1 Education		1,325,396,756					1,318,535,777							
3.4 Community support										1,236,971,795				
4. Program management and administration strengthening	556,349,050	555,561,983	787,067	13,408,512,022	159,998,262	682,313,955	2,511,482,095	478,773,163	7,476,695,603	2,099,247,945	285,729,880	0	71,868,647	213,861,233

Financing sources											
	Public sources			Private Sources							
	Public sub-Total	Central / National	All Other Public	International sub-Total	UN Agencies	Global Fund	MAP Project	ADB	PEPFAR	Other donors	Private Sub-Total
<b>TOTAL 48,340,589,281 RwF</b>	<b>2,426,172,514</b>	<b>2,425,022,015</b>	<b>1,141,469</b>	<b>44,597,403,950</b>	<b>1,211,907,456</b>	<b>7,174,979,556</b>	<b>6,387,617,763</b>	<b>478,773,163</b>	<b>15,914,838,678</b>	<b>13,429,287,334</b>	<b>1,328,127,598</b>
<b>AIDS Spending Categories</b>											
4.1 Program management		244,702,118	234,123		114,468,144	682,313,955	1,744,764,434	257,834,211	5,044,273,421	1,194,551,998	
4.2 Planning and coordination		288,080,280	530,000							587,134,348	
4.5 Sero-surveillance		7,883,513	7,940		645,856				156,830,411	32,392,207	
4.10 Upgrading laboratory infrastructure		14,896,072	15,003		1,211,700		766,717,662		2,275,592,771	179,533,906	
4.99 Others / Not-elsewhere classified					43,672,562			220,938,952		105,635,486	
<b>5. Incentives for human resources</b>	<b>26,694,046</b>	<b>26,667,187</b>	<b>26,859</b>	<b>202,902,767</b>	<b>0</b>	<b>36,690,576</b>	<b>71,033,408</b>	<b>0</b>	<b>27,804,706</b>	<b>67,374,077</b>	<b>0</b>
5.4 Formative education and build-up of an AIDS workforce		11,134,927	11,215			36,690,576	5,517,400			36,863,514	
5.5 Training		15,532,260	15,644				65,516,008		27,804,706	30,510,563	
<b>6. Social protection and social services excluding orphans and other vulnerable children (sub-total)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,108,734,148</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,108,734,148</b>	<b>0</b>
6.1 Monetary benefits										25,054,513	
6.3 Social services										510,395,391	
6.4 Income generation										2,573,284,243	
<b>7. Enabling environment and community development</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>108,173,109</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>108,173,109</b>	<b>0</b>
7.1 Advocacy and strategic communication										7,228,213	
7.2 Human rights										100,944,896	
<b>8. Research excluding operations research which is included under (sub-total)</b>	<b>39,505,050</b>	<b>39,465,300</b>	<b>39,750</b>	<b>228,278,822</b>	<b>2,849,570</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>152,487,110</b>	<b>72,942,142</b>	<b>0</b>

Calendar year 2006 (January- December)

Average exchange rate for 2006: 1\$=551.74 Rw

\*\* Amounts under "others" may relate to different categories under the same section; however, information was not available at the time of the report to further disaggregate the amounts. Also, portion of spending on antiretroviral (ARV) drugs may be embedded in a category for outpatient care if more specific/disaggregated information was not available from implementers.