Ministry of Health

Financing Health Services in Uganda 1998/1999 - 2000/2001:

National Health Accounts

FINAL REPORT

June 2004

Foreword:

The Ministry of Health recognises the importance of availability of quality data on Health Financing in order to inform development of good financing policies. The first National Health Accounts (NHA) for Uganda was compiled for the FY 1997/1998 and made available in 2000. It described in detail the flow of funds and allocation of funds within the health system. At the time of development of the ten year National Health Policy and the five-year Health Sector Strategic Plan (HSSP) 2000/01 – 2004/05, the need for a better understanding of the cost of delivery of the Uganda National Minimum Health Care Package (UNMHCP) and projected resource needs was identified given the various reforms in health management and financing. In 2002, the Health Financing Strategy for Uganda (HFS) was developed. Information from the 1997/1998 NHA study was very useful for this.

What the Health Financing Strategy has achieved is to make clear the level of resources that are currently available and which can be applied to the HSSP, and the amount of resources needed for the attainment of the HSSP goals and targets The HFS has been a useful advocacy document for mobilising additional resources for the health sector having highlighted the funding gap. The current funding of the HSSP is 30% of the requirement.

This report presents the second compiled National Health Accounts for Uganda covering the FY 1998/1999, 1999/2000 and 2000/2001. The report has gone a step further to relate expenditure data to health outputs in order to assess the efficiency of districts, hence adding value to NHA data. The country now has health expenditure data for 4 years collected using internationally recognised methodology. This data shall be useful in informing the debate on financing the HSSP II 2005/06 – 2009/10 currently in advanced stages of development.

Good health expenditure information cannot be attained without substantial effort. This should be maintained in future, to evaluate performance against current policies and in reviewing and developing new policies.

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Acronyms:

bn	billion
DANIDA	Danish International Development Association
DCI	Development Cooperation Ireland
DfID	Department for International Development
DHS	District Health Services
EDF	European Development Fund
EU	European Union
FA	Financing Agent
FB-PNFP	Facility based Private Not for Profit
GoU	Government of Uganda
HC	Health Centre
HDP	Health Development Partners
HFS	Health Financing Strategy
HH	Households
HIDMP	Health Infrastructure Development and Maintenance Plan
HIPC	Heavily Indebted Poor Countries
HRDP	Human Resource Development Plan
HSD	Health Sub-District
HSSP	Health Sector Strategic Plan
MDG	Millennium Development Goals
MoD	Ministry of Defence
MoES	Ministry of Education and Sports
MoFPED	Ministry of Finance, Planning and Economic Development
MoIA	Ministry of Internal Affairs
MoH	Ministry of Health
MoLG	Ministry of Local Government
MoU	Memorandum of Understanding
MTEF	Medium Term Expenditure Framework
NFB-PNFP	Non Facility Based
NGO	Non Governmental organisations
NHA	National Health Accounts
NHP	National Health Policy
NRH	National Referral Hospital
NURP	Northern Uganda Reconstruction Programme
OOP	Out Of Pocket
OPD	Outpatient Department
PAF	Poverty Action Fund
PEAP	Poverty Eradication Action Plan
PHC-CG	Primary Health Care Conditional Grant
PMA	Plan for Modernisation of Agriculture
RRH	Regional Referral Hospital
STI	Sexually Transmitted Infections
SWAp	Sector Wide Approach
THE	Total Health Expenditure
UCMB	Uganda Catholic Medical Bureau
UMHCP	Uganda Minimum Health Care Package
UMMB	Uganda Muslim Medical Bureau
UPMB	Uganda Protestant Medical Bureau
UPPAP	Uganda Participatory Poverty Assessment Project
USAID	United States Agency for International Development
Ugshs	Uganda Shillings

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Executive Summary:

National Health Accounts (NHA) is a methodology that describes a country's total expenditure on health goods and services, and provides an analysis of financing for the entire health sector from financing sources via financing agents to the health services providers where funds are converted into health outputs. This is the second NHA Report for Uganda. The first NHA Report covered the period 1997/98, and was made available in 2000. This second report covers the period 1998/99, 1999/00 and 2000/01.

Socio economic Profile:

At the time of the 2002 Census, Uganda had a population of 24.7 million persons with an average inter-censual population growth rate of 3.4% between the 1991 and 2002 censuses[1]. GDP per capita in current prices was US$249 in 1998/99, US$238 in 1999/00 and US$ 222 in 2000/01[2]. Private sector investment increased from 8.6% of GDP in 1992/93 to 14.6% of GDP in 2001/02. However the percentage of the population living below the poverty line, which had been on the decline from 52% in 1992/93 to 44% in 1997/98 and to 35% in 2000, has risen slightly to 38% in 2003[3]. Poverty continues to be a rural phenomenon, with 96% of the poor living in rural areas in 2000[4]. Regional disparities still exist with the north lagging behind most of the country followed by the Eastern region[5]. The health indicators are poor with the Infant Mortality Rate at 88 deaths per 1,000 live births, Under-five mortality rate at 152 deaths per 1,000 live births and the Maternal Mortality Ratio at 505 deaths per 100,000 live births[6].

Health System:

Uganda's health system is a combination of public and private financing and provision of health services. The major providers include the public, private not for profit, private health practitioners, traditional and Complementary medicine practitioners and the 'informal' sector. In the early 1990's the Ugandan government embraced Decentralisation as part of a crosscutting Public Sector Reform whereby the central government mandate remained policy formulation, standard setting and resource mobilisation, and local governments mandate was to implement the policies and mobilise additional resources at the local level. Public institutions were restructured and strengthened as part of wider Structural Adjustment Programmes.

Health Financing Policies:

A strategic turning point in the health sector was the elaboration of a 10 year National Health Policy (NHP) and the 5-year Health Sector Strategic Plan (HSSP) 2000/01 – 2004/05. The Poverty Eradication Action Plan (PEAP) recognises that provision of good health is necessary not just to improve the quality of life of an individual in terms of his/her general well being, but as an essential input for raising the ability of people to increase their incomes at a micro level, thereby contributing to poverty alleviation, and to facilitate a productive and growing economy at macro level. Today's Health Financing policies are derived from the broad government framework provided by the

[1] Uganda Bureau of Statistics 2002
[2] Macroeconomics Department MoFPED 2003
[3] Poverty Eradication Action Plan 2001-2003 and Uganda National Household Survey 2003.
[4] Poverty Status Report 2000
[5] Uganda National Household Surveys 1999/00 and 2002/03.
[6] Uganda Demographic and Health Survey 2000/01

Constitution, the PEAP and laid out explicitly in the NHP and HSSP. The key objectives of the Health Financing Component of the HSSP are:

- Ensure effectiveness, efficiency and equity on the allocation and utilisation of resources in the health sector consistent with the objectives of the PEAP;
- Eliminate factors of cost and affordability as barriers to access to essential care;
- Attain significant additional resources for the health sector and to focus their use on the most relevant and cost-effective priority health interventions;
- Ensure full accountability and transparency in the use of these resources through result-oriented management at all levels.

These objectives were the starting point for the study, and formed the policy questions that were answered by the study.

Methodology:

The NHA study methodology is based on the Producer's Guide[7]. This methodology was adapted to the Ugandan context by the Technical Committee. The NHA entities identified were:

- Government of Uganda, Development Partners, Parastatals, Private not for Profit, households, and private firms as financing sources
- Ministry of Health, other ministries and National Health services, District Health services, Parastatals, Insurance firms, private firms and households as Financing Agents and
- A combination of national, district and below district providers funded through public and/or private transfers

The main findings of the study are summarised below

Total Funding for Health:

The Total Health Expenditure (THE) on health services increased over the study period from US$402 million, US$411 million and US$423 million respectively and translates into US$19, US$18 and US$18 per capita for the respective years. The per capita expenditure falls below the required amount needed to fund the minimum health care package estimated at US$ 28 per capita (Health Financing Strategy, 2002[8]) and also well below the Commission for Macroeconomics and Health estimate of US$ 30-40 per capita. As a proportion of the Gross Domestic Product (GDP) this represents 6.2% in 1998/99, in 7.0% 1999/00 and 8.1% in 2000/01. The proportion of the government expenditure on health to the total government expenditure was 6.5% in 1998/99; 6.5% in 1999/00 and 7.4% in 2000/01.

Financing sources:

The major sources of financing are the households, donors and central government in that order which is maintained over the study period. The three sources of financing together account for 91% of THE in 1998/99, 90% in 1999/00 and 86% in 2000/01. The other sources of funding are much less significant. The bulk of public funding is from Central government and donor resources while parastatals and Local governments combined contribute less than 1% of the public sources sub-total. Central government funding for health activities showed a 46% growth over the study period.

[7] http://whqlibdoc.who.int/publications/2003/9241546077.pdf

[8] This estimate excludes provision of ARVs and pentavalent vaccine

	99/98		99/00		00/01	
Entity	**US$ per capita**	**Percentage**	**US$ per capita**	**Percentage**	**US$ per capita**	**Percentage**
Central government	3.15	16.90%	3.04	16.50%	3.28	17.90%
Local government	0.04	0.20%	0.03	0.20%	0.03	0.20%
Parastatals	0.02	0.10%	0.02	0.10%	0.03	0.10%
Donors	5.16	27.60%	5.22	28.30%	5.01	27.40%
Subtotal public	**8.37**	**45%**	**8.31**	**45%**	**8.35**	**46%**
Private firms	0.1	0.50%	0.07	0.40%	0.06	0.30%
Households	8.67	46.40%	8.27	44.90%	7.41	40.50%
Not for profit	1.54	8.30%	1.78	9.70%	2.5	13.60%
Sub total private	**10.31**	**55%**	**10.12**	**55%**	**9.97**	**54%**
Total	**18.68**	**100.00%**	**18.43**	**100.00%**	**18.31**	**100.00%**

Financing Agents:

Financing Agents are entities that channel funds from sources and use those funds to pay for, or purchase activities inside the health accounts boundary. The proportion of THE channelled through private FAs increased over the study period and is consistently more than the public FAs. Households out-of-pocket spending which accounts for the highest proportion of health expenditure shows a decrease over the study period. This is followed by Non-Facility Based PNFPs, which shows a steady growth in proportion and the Ministry of Health as the third largest FA, which shows no significant growth. The three major FAs combined make up 82% of all financial transfers in 1998/99, 84% in 1999/00 and 86% in 2000/01.

Financing Agent	1998/99	1999/00	2000/01
Ministry of Health	13%	12%	14%
Other ministries	7%	5%	4%
National Referral Hospitals	6%	4%	3%
Regional Referral Hospitals	2%	2%	2%
Health related Commissions	0.2%	0.2%	0.3%
District health services	7%	7%	8%
Parastatals	0.1%	0.1%	0.1%
Sub-total Public	30.57%	26.85%	27.33%
Private insurance enterprises	0.2%	0.1%	0.2%
Households	43%	41%	38%
Facility based PNFP	4%	4%	3%
Non facility based PNFP	22%	27%	31%
Private firms	0.4%	0.3%	0.2%
Sub-total Private	69.43%	73.15%	72.67%

Providers of care and Health care inputs

For all providers, the majority of the funds spent were from private rather than public FAs. The most significant providers were private for profit clinics and drug shops accounting for 46.6% of private transfers in 1998/99, 42.9% in 1999/00 and 38.8% in 2000/01. The majority of public transfers were made to the National Referral Hospital, District Hospitals, provision and administration of public health programmes and the central MoH, these together accounted for 66% of all public transfers in 1998/99, 69% in 1999/00 and 64% in 2000/01. At the input level the highest percentage of expenditure was on drugs and medical supplies.

	1998/99	1999/00	2000/01
Wages and allowances	14%	15%	15%
Drugs & medical supplies	59%	58%	54%
Other recurrent expenditure	13%	14%	18%
Capital expenditure	14%	13%	13%

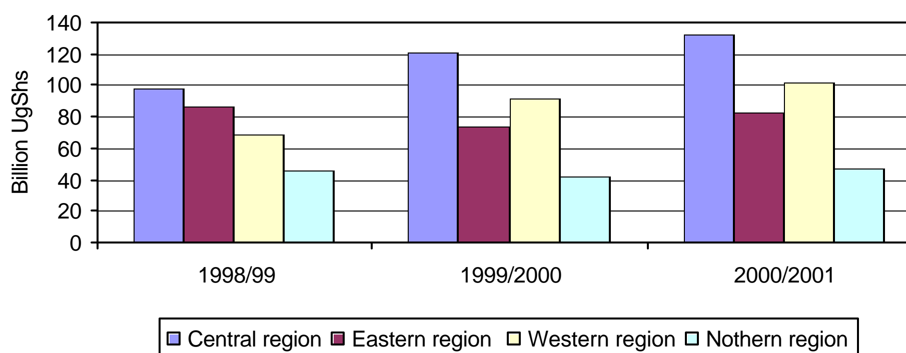
Expenditure by level of care:

The highest expenditure was at the MoH headquarters that shows an increasing trend through the survey period. The funds at the MoH headquarters are also used to fund centrally procured items such as drugs, medical supplies and equipment utilised at the district level. Expenditure at the National Referral hospital shows a reducing trend and this is a result of deliberate efforts by the MoH to allocate more funds to service delivery levels that is the district level.

	1998/99	1999/00	2000/01
Ministry of Health Headquarters	34%	38%	42%
National Referral Hospital	20%	15%	12%
Regional Referral Hospital	8%	9%	8%
DHS	37%	37%	38%

Expenditure by region:

Analysis was done using available data on health expenditure by region in the country. This analysis shows the highest spending in the central region, western region second highest, followed by eastern region and lastly northern region. Household expenditure contributed most in central region, and least in northern region.



Efficiency and equity in health spending:

Efficiency analysis was done at district level for the FY 2000/01 using Data Envelope analysis. The technical efficiency score estimates the extent to which outputs could be increased at the same level of funding to reach an efficient production frontier. Results showed that the average technical efficiency score for all the districts was 70% meaning that on average they could produce 30% more output without increasing inputs.

Using the available expenditure data, a comparison was made between the per capita allocation and the GDP index and also between the life expectancy index. The results show no significant favourable allocation to districts with low GDP index and life expectancy index.

Policy Issues:

Although the THE in absolute Uganda shillings grew over the 3-year study period, in US$ terms and taking into consideration the high population growth rate of 3.7%, health expenditure stagnated. Of the US$ 18 per capita spent on health in 2000/01 for example, only US$ 3.2 is from government (including donor budget support) and US$ 8.4 for all public sources including donor projects. The health expenditure by government is still very low, and since these are the funds that are really targeted at the Uganda National Minimum Health Care Package (UNMHCP), the gap between required and available funds is very big. The high contribution of the private sources especially the households is a concern given the poverty eradication focus of Uganda's policies.

It is of further concern that at the level of Financing Agents (FAs), private FAs control by far the bulk of the health expenditure- at least 70% in any one year over the 3-year period. A big proportion of the donor resources (64% in 2000/01) are passed on to private FAs especially NFB PNFPs. It is impossible to determine what proportion of these resources end up paying for priority activities and inputs given the fact that their biggest expenditure is on administration. Another example is the study done of spending by 5 donor projects, which showed only 30% spending on priority HSSP inputs[9]. Household out-of-pocket spending is the largest single FA for the 3-year period. These are funds, which are spent directly by the households to purchase health services with private practitioners including traditional healers. This kind of health spending leaves the poor vulnerable to catastrophic health expenditures given that current regulatory capacity is very weak and the health insurance industry is underdeveloped. The low expenditure through the District Health Services despite the growing responsibilities is another cause for concern.

Policy Recommendations:

There is need for increased public spending on health services in line with the Poverty Eradication Plan, and enabling the improvement of the equality of life of the poor, and their capacity for increased production. This should particularly be through the budget using government and donor resources. More donor project resources should flow through the government system to the various implementers, which should include FB and NFB PNFPs as appropriate given their area of expertise and strength.

Mechanisms to remove barriers to access of health services for the poor and vulnerable groups should be maintained and protection against unforeseen and catastrophic health expenditures through pooling mechanisms instituted.

Strategies for increased coordination of health sector stakeholders particularly donors and NFB PNFPs should be developed given the large proportion of health sector resources controlled by these entities. SWAp and Public Private Partnership principles should be reviewed and appropriately implemented.

The future for NHA in Uganda:

The availability of 4 years of comprehensive health spending data is a big resource for Uganda. There is need to continue building capacity for the generation and use of National Health Accounts in the country. The study to cover the FY 2001/02, 2002/03 and 2003/04 should commence soon to ensure up-to-date data for decision-making.

[9] Annual Health Sector Performance Report 2002/03

Map of Uganda[10]:

[10] Uganda enacted a new Constitution in 1995 and decentralised governance under guidance of the Local Government Act (1997). The country currently consists of 56 districts each forming an administrative unit. The 56 districts are subdivided into; 167 Counties, 930 Sub-counties, 4517 Parishes and 39,692 Villages. The village forms the smallest politico-administrative unit.
By the beginning of 2001, Uganda had 45 districts. 11 new districts have been demarcated since then.

Chapter 1 Country Profile and Context

Uganda emerged from a period of conflict that witnessed the National Resistance Movement (NRM) take control of the country in 1986. Uganda has since introduced various reforms and policies targeting improvement in economic performance, public sector performance in general and health sector performance through increase in the efficiency and effectiveness in the delivery of health services. This Chapter provides an understanding of where the country is economically, the health status of the population and the health services with particular reference to the delivery system and policies that affect health financing.

1.1 Socio-economic profile

At the time of the 2002 Census, Uganda had a population of 24.7 million persons with an average inter-censual population growth rate of 3.4% between the 1991 and 2002 censuses[11]. Uganda achieved marked economic growth averaging 7% per annum from 1992 to 1997 and inflation rate was maintained below 10% (approx 5.5%). The Gross Domestic Product (GDP) realised a modest percentage growth of 7.0% in 1998/99, 5.5% in 1999/00 and 6.0% in 2000/01[12]. GDP per capita in current prices was US$249 in 1998/99, US$238 in 1999/00 and US$ 222 in 2000/01[13]. Private sector investment increased from 8.6% of GDP in 1992/93 to 14.6% of GDP in 2001/02. The country has however been unable to sustain the economic growth at the target of 7% per annum and as a result the percentage of the population living below the poverty line, which had been on the decline from 52% in 1992/93 to 44% in 1997/98 and to 35% in 2000, has risen slightly to 38% in 2003[14]. Poverty continues to be a rural phenomenon, with 96% of the poor living in rural areas in 2000[15], however the recent rise in poverty levels revealed a proportionate rise in poverty actually higher in urban areas than in rural areas[16] (MoFPED, 2003). Regional disparities still exist with the north lagging behind most of the country followed by the Eastern region[17].

The Government of Uganda (GoU) elaborated the Poverty Eradication Action Plan (PEAP) in 1997 with updates/revision every three years - in 2000 and 2003. The PEAP is the overall country development framework which guides the formulation of government policies and particularly allocation of public resources. The goal of the PEAP is to reduce the percentage of the population living below the poverty line to less than 10% by the year 2017 and to improve the well being of all Ugandans (MoFPED, 2001). The PEAP has four complementary pillars, which are interlinked and seek to address all the dimensions of poverty. These are; rapid and sustainable economic growth and structural transformation, good governance and security, increased ability of the poor to raise their incomes and enhanced quality of life of the poor.

In 1998, GoU was granted debt relief under the Highly Indebted Poor Countries (HIPC) initiative. This prompted the creation of the Poverty Action Fund (PAF) in order to channel the additional government funds resulting from the HIPC Initiative and mobilize other donor resources towards

[11] Uganda Bureau of Statistics 2002
[12] Background to the Budget 2002/03
[13] Macroeconomics Department MoFPED 2003
[14] Poverty Eradication Action Plan 2001-2003 and Uganda National Household Survey 2003.
[15] Poverty Status Report 2000
[16] Poverty Eradication Action Plan 2001-2003
[17] Uganda National Household Surveys 1999/00 and 2002/03.

the key sectors identified in the PEAP[18]. The PAF budget line is protected from budget cuts within a given financial year and the PAF funds for service delivery are 'conditional' to ensure that they are used on the key programmes in the PEAP. The funding to the priority programmes under PAF has increased from 17% of the total government budget in 1997/98 to 30% in 2000/01 and to 33% in 2002/03[19].

1.2 Health Status and Epidemiological Profile

The health status indices of Uganda are still very poor, comparable with the average for Sub-Saharan Africa. In the recent past there has been a tendency for stagnation or outright worsening of some of these indicators. Table 1.1 illustrates this with findings from the last 3 Uganda Demographic and Health Surveys for Uganda – 1988, 1995 and 2000/01, compared with the average for Sub Saharan Africa (SSA) for the years 1995-2000.

Table 1.1: Health indices for Uganda

Indicator	Uganda			Average for SSA
	1988	1995	2000-2001	1995-2000
Life expectancy at birth (at birth)		52	47	51
Infant Mortality Rate (IMR) per 1,000 live births	122	81	88	92
Under 5 Mortality Rate per 1,000 live births	203	147	152	151
Maternal Mortality Ratio (MMR) per 100,000 live births	700	506	505	870*
Total Fertility Rate (TFR) children per women	7.1	6.9	6.9	5.6*
Contraceptive Prevalence Rate (CPR)	5%	15%	23%	
Access to safe water		48%	51.8%	62%**

Source: Uganda Demographic and Health Surveys 1988, 1995, 2000-2001, Commission on Macroeconomics and Health, December 2001, *Health, Nutrition and Population, World Bank 1995, **Global Water Supply Assessment 2000 Report – WHO, UNICEF and Water Supply and Sanitation Collaborative Council,

The leading causes of morbidity and mortality in Uganda are mainly communicable diseases. According to the Burden of Disease study done in Uganda over 75% of the life years lost due to premature deaths are due to ten preventable diseases[20]. Perinatal and maternal conditions (20.4%), malaria (15.4%), acute lower respiratory tract infections (10.5%), HIV/AIDS (9.1%) and diarrhoea (8.4%) together account for over 60% of the total disease burden. The common non-communicable diseases include hypertension, diabetes and cancer, mental illness, chronic and degenerative disorders and cardiovascular diseases.

[18] The non Poverty Action Fund (non-PAF) resources are constituted by Government's own resources.
[19] Poverty Eradication Action Plan 2001-2003
[20] National Health Policy 1999

1.3 The Health System in Uganda: 1986 to present day

1.3.1 The Health Sector 1986 to late 1990's

By 1986 the Health Sector was in a state of near collapse with dilapidated, dirty and ill-equipped public health facilities. Personnel were demoralised due to very low wages, which at times were not forthcoming. Public funding for the sector was low at 2.5% of the national budget in 1987/88[21], and this was very irregular. Health services were mostly sought from Private Not-for Profit facilities and the rapidly expanding Private Health Practitioners' sector. This was as a result of decades of neglect, looting and massive brain drain, which were reflections of the general decay in the country. This institutional breakdown was worsened by the re-emergence of diseases that had been previously controlled such as sleeping sickness, TB, guinea worm and measles and the emergence of new diseases most notably HIV/AIDS. The health indicators were among the worst in the region and the whole world. Due to the lack of confidence in the existing public institutions, the bulk of the donor funding was managed through projects and Non-Governmental Organisations (NGOs). Donors could determine which part of the country or/and which type of services to fund. The government tended to fund services at health facilities including salaries of health workers whereas the donor projects funded 'primary health care services' and some extension and rehabilitation of infrastructure.

From 1986, Uganda embarked on major reforms both in the health sector and wider public arena. In the health sector, the immediate emphasis was on rehabilitation of the existing facilities to restore functional capacity, and a shift of emphasis to Primary Health Care with a defined Package of cost-effective services. Bilateral and multilateral Development partners increased funding to the health sector. The sector was encouraged to explore alternative mechanisms for health financing and amongst these the development of Cost-Sharing schemes whereby the community would make some contribution for the use of health services. This was not unique to Uganda, as many multilateral and bilateral agencies were recommending alternative mechanisms of financing for health services in developing countries[22].

In the early 1990's the Ugandan government embraced Decentralisation as part of a crosscutting Public Sector Reform whereby the central government mandate remained policy formulation, standard setting and resource mobilisation, and local governments mandate was to implement the policies and mobilise additional resources at the local level. Public institutions were restructured and strengthened as part of wider Structural Adjustment Programmes.

During this period, the health, economic and other social indicators were all on the rise - improved access to safe water, improved pit-latrine coverage and better nutrition at the household level all contributed to improvement of health status.

1.3.2 The National Health Policy and Health Sector Strategic Plan

In 1995/96 the development of a new ten-year National Health Policy (NHP) and five-year Health Sector Strategic Plan (HSSP) was initiated. The NHP was launched in 1999/00 and the HSSP at the

[21] National Health Policy 1999
[22] Better Health in Africa, World Bank 1987

beginning of the Financial Year 2000/01. The NHP and HSSP sought to address some of the challenges indicated in the previous section through the following:

? A minimum package of services comprising the most cost-effective interventions that address the major causes of burden of disease was articulated. The package known as the **Uganda Minimum Health Care Package** (UMHCP) was intended to be the cardinal reference in determining the allocation of public funds and other essential inputs. The UMHCP includes the Control of Communicable Diseases like malaria, HIV/AIDS and Tuberculosis, the Integrated Management of Childhood Illnesses, Sexual and Reproductive Health and Rights, Public Health Interventions like Immunisation, School Health, Health Education and Promotion, Environmental Health to mention a few[23].

? The documents laid out plans for the Health Care Delivery System with improved alignment of structures and responsibilities with core functions (as laid out by decentralization and the Constitution) both at the central and district levels. This included the establishment of Health sub-Districts as the operational zone in a district to take services closer to the population. The appropriate Health Infrastructure has been drawn up in the Health Infrastructure Development and Maintenance Plan (HIDMP). A Human Resource Development Plan (HRDP) is available for addressing the major constraints of inadequate numbers and inappropriate distribution of trained health personnel. The different levels of care were expected to provide the UNMHCP in an **integrated** manner.

? The articulation of a sustainable broad-based national **Health Financing Strategy** (HFS) geared towards efficient, effective and equitable allocation and utilization of resources in the Health Sector consistent with the PEAP. Stronger Donor Co-ordination to be institutionalised through the **Sector Wide Approach** (SWAp) for health development. At all times the basic principles of equity, fair play and justice were expected to be at the forefront.

? **Empowering Communities** to take responsibility for their own health and participate actively in the management of their local health services.

? The recognition that the Private Sector has specific advantages in health care delivery which need to be recognized and harnessed – **Public Private Partnership for Health.**

? The NHP and HSSP have laid the basis for a framework for strategic Policy Review and Formulation, Planning, Budgeting, Monitoring and Evaluation

The drafting of the NHP and HSSP was over a period of 3-4 years (1996/97 to 2000/01). This was among other things due to the need to gain consensus among the majority of stakeholders, as the Policy and Plan were to be operationalised through SWAp. Implementation of some of the concepts was initiated in 1997/98, for example the creation of a Primary Health Care Conditional Grant (PHC CG) channelling funds for the implementation of the UNMHCP in public and Private-Not-For-Profit institutions, and the operationalisation of the Health sub-District concept was initiated in 1998/99[24].

[23] National Health Policy 1999 and Health Sector Strategic Plan 2000
[24] Ministry of Health: Health Sub-District Concept 1998

1.3.3 The components of the Health System

The Public Sector

The Public Health care system has undergone transformation as a result of proactive policies instituted by government. There has been extension of health infrastructure to achieve greater coverage, rehabilitation and upgrading of some existing infrastructure, continued staff training to improve clinical capabilities, extensive capacity development to improve system management and efficiency at both central and district level, and improved capability in the Ministry of Health for policy formulation, planning, budgeting and monitoring of the sector.

The government owns and operates a tiered structure of health units. The 2 National Referral Hospitals and 11 Regional Referral Hospitals are autonomous institutions. The rest of the health units fall under the District Health System. The key organisational reform for delivery of the HSSP is the Health Sub-District (HSD) as an integral part of the District Health System. Within a HSD, there are three levels of health care delivery each with a defined package of services to be delivered. The levels include the referral facility level (comprised of a hospital or Health Centre IV), Health Centre (HC) III and HC II as the lowest physical structure and point of entry into the formal Health system. The HC I level is the community level.

The leadership of the HSD is based at the referral facility, which is a Hospital or Health Centre IV (government or private) located within the HSD. This reorganisation has led to administrative and structural changes in the health care delivery system. It has radically changed the functions of the district headquarters, removing most of their responsibility for service delivery and focusing on providing direction, technical advice and support to the HSDs. The total number of HSD is 214 (*see Health Sector Pyramid Annex I*).

Table 1.2: Number of health facilities by level and ownership[25]

Level of facility	Government	PNFP	Total
Hospitals	55	44	99
HC IV	143	13	156
HC III	614	147	761
HC II	781	365	1,146
Total	**1,593**	**569**	**2,162**

Source: Health Facilities Inventory, MoH October 2002

The Private Health Sector:

The following categorization has been agreed upon following discussions with the various health stakeholders in Uganda.

Facility-based PNFP providers

The majority of the facility-based PNFP are religious-based health care providers existing under three umbrella organisations; the Uganda Catholic Medical Bureau (UCMB), the Uganda Protestant Medical Bureau (UPMB) and the Uganda Muslim Medical Bureau (UMMB). The Bureaux together represent 78% of the PNFP health units while the rest fall under other humanitarian organisations and Community-based Health Care Organisations.

[25] This table does not include information on Private Health Practitioners and informal practitioners

The facility-based PNFP have a large infrastructure base comprising of a network of Hospitals and Health Centres (Table1.2) with a considerable percentage of these units located in rural areas[26]. They provide health services and train health workers.

Non-facility based PNFP providers
The non facility-based PNFP comprise of local and international organisations working in the health sector commonly referred to as NGOs. Diversity within this category of providers exists by virtue of a large combination of characteristics including size, means of and access to finance, control, expertise and motivation. The non facility-based PNFP providers include for example; the Uganda Red Cross (indigenous) and CUAMM, OXFAM, Save the Children Fund, Action Aid (international).

Private Health Practitioners
Presently the sector encompasses all cadres of health professionals in the Clinical, Dental, Diagnostics, Medical, Midwifery, Nursing, Pharmacy and Public Health categories who provide private health services outside the PNFP establishment. The Medical and Dental Practitioners Statute (1996), the Nurses and Midwives Statute (1996), the Pharmacy and Drug Act (1970) and the Allied Health Professionals Statute (1996), all provide for licensing and regulating health professionals who wish to engage in private practice.

The Private health practitioners provide mainly primary level services and limited secondary level services. A few urban units offer tertiary and specialist care. Membership to professional associations is voluntary.

Traditional and Complementary Medicine Practitioners
The practitioners include all types of traditional healers: i.e. Herbalists, Spiritual healers, Bone Setters, Traditional Birth Attendants, Hydro therapists, Traditional Dentists, etc. It does not include people who engage in harmful practices, casting of spells and child sacrifice.[27] There are several associations with registered members at the sub-county and district levels, coordinated by Cultural Officers. Many though remain unaffiliated to any association.

Of late, a number of non-Ugandan Traditional Medicine Systems have been introduced into the country. These include the Chinese and Ayurvedic practiced from China and India respectively. Other systems like Reiki, Chiropractice, Homeopathy and Reflexology are among later practices introduced into the country.

'Informal' Sector
The 'informal' sector refers to those individuals without formal health training engaging in treatment of patients and selling of drugs illegally. See Glossary Annex II.

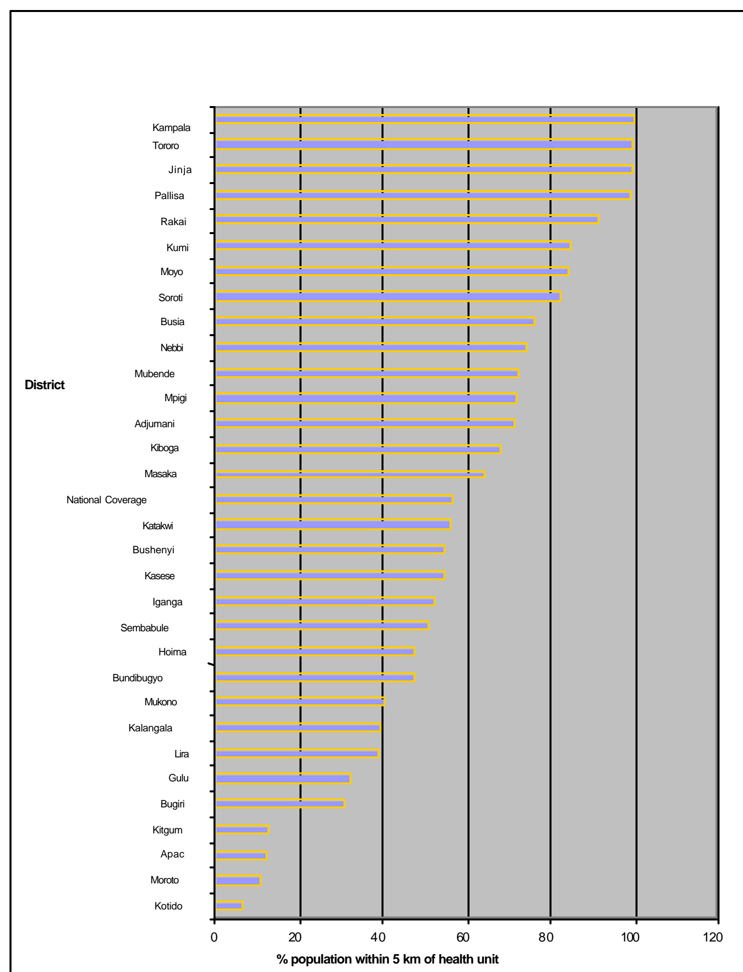
1.3.4 Geographical access to health services:

The national average for the percentage of people living within 5 km radius to a health facility was 57% as of 2000 when a mapping of all health facilities was done. However, there are variations with access ranging from as low as 7% of the population within 5 km of a health facility in Kotido to

[26] Public Private Partnership in Health, 2001
[27] More guidance shall be derived from the legislation on Traditional and Complementary Medicine in Uganda

100% in Jinja, Tororo and Kampala districts[28]. Figure 1.1 shows the access for the different districts mapped.

Figure 1.1: Geographical access to health services in Uganda



Source: Health Infrastructure Division MoH 2003

1.4 Organisation of the Report:

The report is here after organised into five sections. Sections 2 and 3 detail out the background and the methodology for the study respectively. Section 4 presents the NHA study findings detailing the health expenditure patterns as well as a review of the major financing entities in Uganda. Section 5 presents a discussion of the results and implications for health financing in Uganda. Section 6 is conclusion.

[28] Health Infrastructure Division, MoH 2000

Chapter 2 National Health Accounts and Health Financing in Uganda

2.1 What is National Health Accounts?

National Health Accounts (NHA) is a methodology that describes a country's total expenditure on health goods and services, and provides a detailed analysis of financing for the entire health sector from financing sources via financial agents to the providers where funds are converted into health outputs.

The NHA is an analytical framework providing comprehensive data for informed policy decisions, particularly to measure allocation of resources against stated priorities. NHA is based on the functional definition of health, which is based on the purpose of the activity and not its consequences. NHA does not distinguish between effective and ineffective health activities.

2.2 Health Financing Policies and Objectives in Uganda

The social and political turmoil of the 1970's and early 1980's had significant negative consequences on social services. This resulted in a constrained Government of Uganda budget; low per capita expenditure on health; a high contribution by donor financing; and Households contributing the largest share for health, mostly to the private sector. The uncoordinated donor inflows at the time resulted in fragmented health service delivery and non-sustainable gains.

A strategic turning point in the health sector was the elaboration of a 10 year NHP and the 5-year HSSP 2000/01 – 2004/05. And the recognition within the Poverty Eradication Action Plan (PEAP) that the provision of good health is necessary not just to improve the quality of life of an individual (Pillar 4) in terms of his/her general well being, but as an essential input for raising the ability of people to increase their incomes (Pillar 3) at a micro level, thereby contributing to poverty alleviation, and to facilitate a productive and growing economy at macro level. Today's Health Financing policies are derived from the broad government framework provided by the Constitution, the PEAP and laid out explicitly in the NHP and HSSP.

The Mission Statement of the Health Sector is ***"the attainment of a good standard of health by all people in Uganda, in order to promote a healthy and productive life"***. The sector is expected to address the current disease burden, rationalise health services, regulate the quality and cost of services, and improve equity in the delivery of health services in the face of a modestly growing economy. These challenges call for constant improvement in the efficiency of health expenditure. The key objectives of the Health Care Financing Component of the HSSP are:

- Ensure effectiveness, efficiency and equity on the allocation and utilisation of resources in the health sector consistent with the objectives of the PEAP;
- Eliminate factors of cost and affordability as barriers to access to essential care;
- Attain significant additional resources for the health sector and to focus their use on the most relevant and cost-effective priority health interventions;

- Ensure full accountability and transparency in the use of these resources through result-oriented management at all levels.

The first comprehensive National Health Accounts study in Uganda covered the Financial Year 1997/98 and was completed in 2000. This is the second NHA study and covers the period 1998/99 to 2000/01. Three financial years were selected for inclusion in the study in order to construct trends in health financing in Uganda. The period covering the first and second round of NHA (1997/98 to 2000/01) is a transitional period with significant changes such as:

- The creation of the Primary Health Care Conditional Grant (PHC CG) in 1997/98 to channel funds from the central government to local government for the implementation of UNMHCP in public and PNFP units. The grant was made conditional to ensure that it is directed towards the sector priorities, which was not the case when the grant was unconditional and local governments were barely allocating resources to PHC. The funds for the PHC CG are from the PAF.

- The stakeholders in the sector agreed to implementation of the HSSP through the sector-wide approach to health development (SWAp) whereby all the donors were encouraged to fund the HSSP through Central Budget Support – providing funds directly to the Government of Uganda Treasury. It was indicated that all partners were expected to move towards central budget support as they wound up pipeline projects[29].

- User Fees were abolished in government lower level units with effect from March 2001, and only maintained in the private wings in the hospitals. An explicit objective of the subsidy to PNFP units has been to improve financial access of the communities to these units, and improvements in quality. These policies were put in place following the increased realisation that the poor were facing barriers to health care[30]. Only four months of 'post abolition' of user fees are covered by the period of study i.e. March to June 2001.

2.3 NHA Policy Questions

This study therefore will put together information on Health Financing and use it to address a number of issues particularly following the progress of achievements against the Health Financing Objectives of the NHP and HSSP outlined earlier. In particular an attempt will be made to answer the following questions:

- What is the overall level of funding for the health sector? What is the trend over the 3 years of the study? How does the funding levels compare with those required for the delivery of the UNMHCP as laid down in the HFS? How do the levels compare in absolute terms and relative to the country GDP to other countries in the region?

- How are the different entities public (government, donors) and private (NGOs, Households, employers) contributing, channelling and utilising funds. Which are the most significant sources, Financing Agents and providers?

[29] HSSP Chapter 6, Page 94
[30] Uganda Participatory Poverty Assessment Project Report 2000

- How much do employers spend? This will feed into the debate on Social Health Insurance.
- How are resources allocated to the different inputs? Is technical efficiency being achieved at the District level?
- Are funds being spent at levels where the poor mainly access health services (at the district and lower levels)? How much is being spent at the different levels of care?

This study shall form a background paper for discussions on health financing policy including Macroeconomics and Health, and development of the second Health Sector Strategic Plan 2005/06-2009/10.

Chapter 3 NHA Study Methodology

The study undertook a compilation of all expenditures whose primary purpose is to improve health. These include expenditures on curative services, clinic-based preventive and promotive services, capital development for health care facilities and medical training, administration and research conducted by MoH and other organisations. Expenditure within the health sector on activities that are indirectly involved in health status and treatment, such as nutrition programs and water and sanitation programs are included in the analysis.

3.1 Time period

The estimates presented in this report cover the FY[31] 1998/99, 1999/00 and 2000/01.

3.2 Currencies

The estimates are given in current Uganda Shillings (Ugshs). Foreign currencies were converted into Uganda shillings using the exchange rate for the financial year as published by MoFPED.

3.3 National Health Accounts Entities

A: Financing sources

Definition: Institutions or entities that provide the funds used in the system by Financing Agents. Building on previous NHA work undertaken in Uganda, the following entities have been identified as the financing sources the health sector:

Table 3.1: Financing sources in Uganda

Public Sources	Private Sources
Government of Uganda	Private Not for Profit
Development Partners/Donors	Households
Parastatals	Private Firms

1. Government of Uganda:
The principal ways in which GoU finances the health sector is via the following three financing mechanisms:

a Central Government Ministry of Health Budget:
This budget finances MoH, National and Regional Referral Hospitals, other autonomous health care institutions and the District Health Services (includes District Hospitals and Health Centres II to IV). The GoU budget derives from two significant sources – tax revenues and donor budget support (some of which is specifically earmarked to the health sector). Disentangling the contributions from these primary sources is increasingly difficult as some donors finance the GoU budget without specifically earmarking for the health sector.

[31] A financial year starts from 1st July and ends on the 30th of June.

b Local Government (District) Contributions:
Apart from the central government health financial transfers (which are conditional for health service delivery), funds at the District level also comprise of allocations from block (unconditional) grants from central government and local government taxes of which some may then be allocated to District Health Services. Programmes/projects such as the Local Government Development Plan, Plan for Modernization of Agriculture (PMA), Northern Uganda Reconstruction Programme (NURP) transfer funds to the district level for implementation, part of which may be allocated to health activities.

c Parastatals:
Government owned enterprises provide some of its employees with health services in form of medical allowances (senior officials) or in-kind, by providing free or heavily subsidized services at company owned clinics. Some of the parastatal have enrolled their workers on insurance schemes and a few directly reimburse providers.

2. Donors (Development Partners):
These consist of multi-lateral donors such as the World Bank, WHO, EU and UNICEF and bi-lateral donors such as DfID, USAID and Development Cooperation Ireland (DCI). The donor funding may be channelled as central budget support,[32] district budget support and projects or through non-government entities such as PNFP institutions.

3. Non-Governmental Organizations (Private Not for Profit):
The Private Not for Profit (PNFP) sector can be divided into facility and non-facility based organizations *(see Glossary Annex II for detailed definitions)*. The PNFP often contribute their own resources towards health service costs in addition to other sources of finance such as GoU, donor and household out of pocket funds.

4. Households:
Households are a source of finance for health services and they transfer funds to Government and PNFP Health units and private for profit providers, which may be clinics, drug shops or traditional healers. During the study period, cost recovery mechanisms were still in effect in all public health facilities. Districts and PNFPs had considerable autonomy in setting their user charges rates. In March 2001, the GoU abolished the charging of user fees for health services in Government units except in hospital private wings. The PNFP and PFP providers, where the policy is not applicable, continue to charge user fees. A few non-facility based NGO's reflect fees as a source of funds for their activities which may be in the form of membership fees.

5. Private Firms
Firms are often a neglected source of health care financing, as the various health benefits they provide to their workers may not be visible outside the organization. For example, company based clinics exist particularly in the urban centres but at present are poorly documented. Employers may also contribute towards the public/PNFP health care system through reimbursing providers directly or purchase insurance for their employees.

These financing sources have been coded using the international classification codes but adapted to the Ugandan health system:

[32] This could be general budget support or earmarked specifically for health.

Table 3.2: Classification codes for Financing sources

ICHA Code	Description
FS.1	-Public Funds
FS.1.1.1	- Central Government
FS.1.1.2	- Local Government
FS 2.1.1	- Parastatals
FS.2	- Private Funds
FS.2.1.2	- Private Firms
FS.2.2	- Households
FS.2.3	- Not For Profit
F.S. 3***	Donors

***Part of the funding from Donors is captured under the Central Government as part of budget support.
Adapted from classification on Pg 38 of the Producer's Guide

B Financing Agents

Definition: Institutions or entities that channel the funds by financing sources and use those funds to pay for, or purchase, the activities inside the health accounts boundary. The following entities have been identified as financing agents for the health sector.

Table 3.3: Financing Agents in Uganda

Public Financing Agents	Private Financing Agents
Ministry of Health	Private Health Insurance Enterprises
Other Ministries, National and Regional Referral Hospitals	Households
District Health Services	Facility Based Private Not for Profit
Public Enterprises (Parastatals)	Non Facility based Private not for Profit
	Private Firms

1. Ministry of Health

The MoH is both a Financing Agent and Provider. The MoH channels funds to Regional Referral Hospitals, government lower health units, the Blood Transfusion service, research and health training institutions. As a provider, the MoH implements national programmes such as the Onchocerciasis and Trypanosomiasis control programmes and is also responsible for central procurement of drugs and medical equipment.

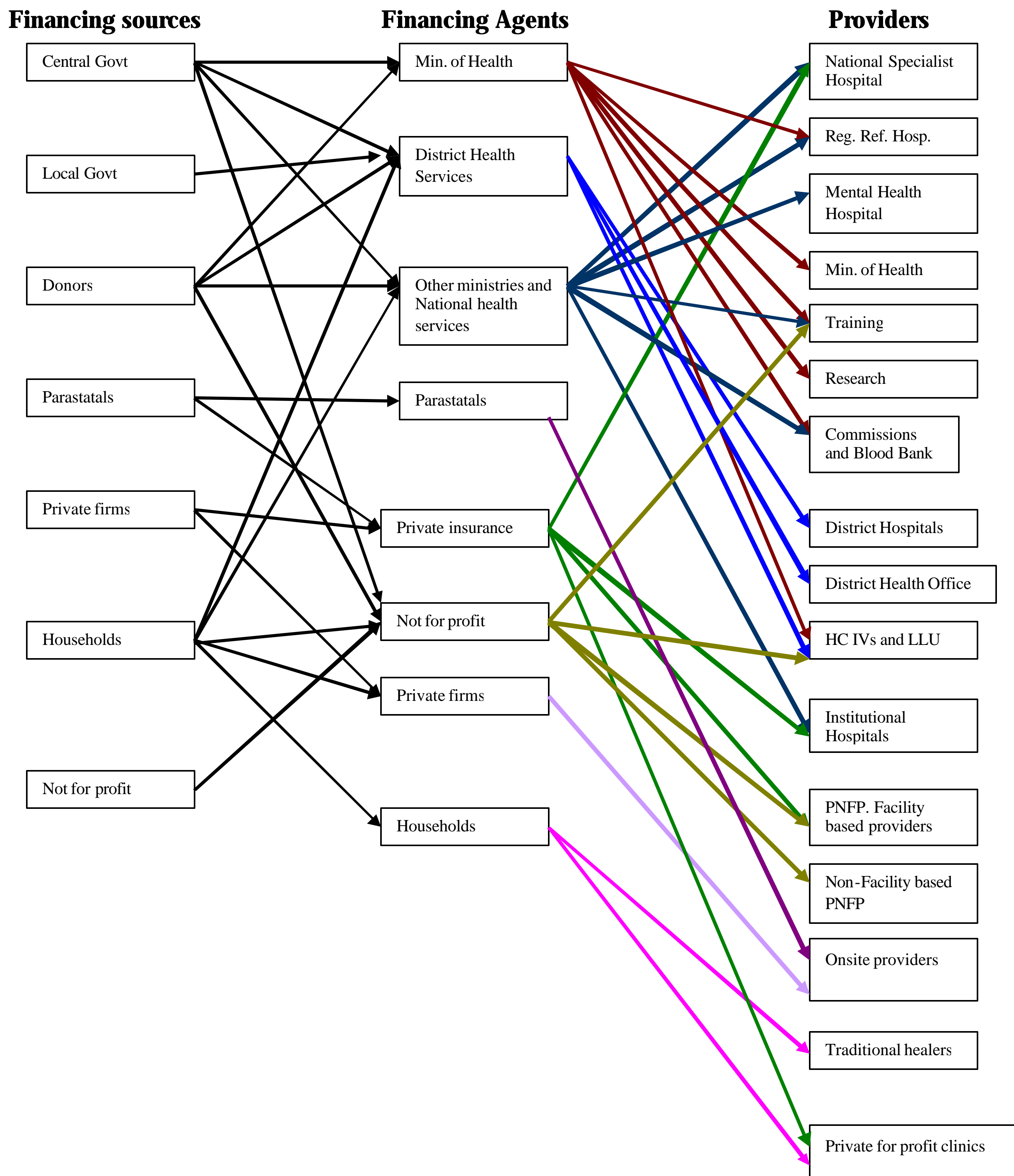
2. Other Ministries, National and Regional Referral Hospitals

Apart from the MoH, the Ministry of Education and Sports, Ministry of Defence, and the Ministry of Internal Affairs (Uganda Police and Prisons) are also financing agents. These ministries channel funds to institutional health facilities. National and Regional Referral hospitals have been classified as FAs for this study because they have been accorded more autonomy and therefore control over the funds for service provision and in the case of Uganda; it is relevant in terms of policy decision that they be classified as financing agents. Other nationally delivered services include the work of the Health Service Commission and Uganda AIDS Commission.

3. District Health Services

The District as a financing agent transfers funds to Government HC IV to III and II and; for community health programmes.

Figure 3.1: Flow of Funds



4. Public Enterprises (Parastatals)

The Parastatals as financing agents pay out funds to on-site health facilities for services for their employees and dependants. They also reimburse the providers directly.

4. Private Health Insurance enterprises

- **Private Health Insurance** companies receive funds from employers.
- **Community Based Prepayment Schemes**: By 2002, about twelve community-based health insurance initiatives were under implementation in Uganda covering approximately 30,000 members of the population. These remain a minor player in health financing in Uganda given the very low premiums raised and very low enrolment.

5. Households

The households are both sources and financing agents. They raise money and make decisions of how this money is spent on health services.

Table 3.4: Classification codes for Financing Agents

ICHA Code	Description
HF.A	Public sector
HF.1.1.1	- Central Government
HF.1.1.1.1	- Ministry of Health
HF 1.1.1.2	- Ministry of Defence
HF 1.1.1.3	- Ministry of Education
HF 1.1.1.4	- Uganda Prisons Services
HF 1.1.1.5	- Uganda Police Services
HF 1.1.1.6	- National Referral Hospitals
HF 1.1.1.7	- Regional referral hospitals
HF 1.1.1.8	- Other ministries
HF 1.1.1.9	- Health related Commission
HF.1.1.3	- District Health Services
HF 2.5.1	- Parastatals
HF.B	Non-public sector
HF.2.2	- Private Health Insurance
HF 2.3	- Households
HF 2.4	- Not for profit/NGO'S
HF 2.4.1	- Not For Profit Facility based
HF 2.4.2	- Not for profit Non Facility based
HF 2.5	- Private Firms

Adapted from classification on Pg 38 of the Producer's Guide

6. Private not for Profit

The facility based PNFP act as financing agents and providers of health services through their institutions. The non-facility based PNFP transfer some payments to the public health units for provision of services and are themselves providers.

7. Private firms:

As financing agents, some employers are prepared to pay, or subsidize, the expenditures incurred by their employees (or even their family members) in PNFPs or GoU private wings. Payments in form of medical allowances incorporated within salaries are not included in the analysis, as they may not necessarily be spent on health. Reimbursements are considered a cost to the firm. Employers also

pay for health services by contributing to premiums held by Private Insurance Companies and, some of them do run on-site health facilities.

These financing agents have been coded as shown in Table 3.4 using the international classification code but adapted to the Ugandan health system.

C Health Providers

Definition: Entities that receive money in exchange for or in anticipation of producing the activities inside the health accounts boundary. Table 3.5 summarises the major categories of health providers in Uganda. These providers have been adapted as shown in Table 3.6 in line with international classifications codes:

Table 3.5: Health Providers in Uganda

Public Providers	Private Providers
Ministry of Health (National Service Delivery)	PNFP Hospitals PNFP HC IV to II
Hospitals (+institutional hospitals) and HC IV, HC III to II	NFB-PNFP Community level activities
	Private for Profit Clinics and Drugs Shops
	Traditional and Complementary Medicine practitioners

Table 3.6: Classification codes for Providers of care

ICHA Code	Description
HP.1	-Hospitals
HP.1.1.1	- Government owned Hospitals
HP.1.1.1.1	- National Referral Hospital
HP.1.1.1.2	- Regional Referral Hospital
HP.1.1.1.3	- District Hospitals
HP.1.1.1.4	- Institutional Hospitals
HP.1.1.1.4	- Health Centre IVs
HP.1.1.4	-Not For Profit Hospitals
HP.1.2	- Mental Health Hospitals
HP.3.4.5	- Health Centre IVs
HP.3.4.9.1	-Government lower level units
HP.3.4.9.2	- Not for Profit Health lower levels of care
HP.3.4.9.3	- Private for profit Clinic and Drug shops
HP.3.4.9.	- All other OPD community and other integrated care centres
HP.3.9.3	- Traditional healers
HP.5	- Provision and administration of public health programmes
HP.5.2	- Blood services
HP.6.1	- Central MoH HQ
HP.7.3	-On-site facilities to providers
HP.8.1	- Research Institutions
HP.8.2	- Training Institutions
HP.8.3	-Institutions providing health related services
HP.nsk	

Adapted from classification on Pg 38 of the Producer's Guide

D Inputs:

These are inputs, which go into the production of health goods and services. The following line items have been identified in this study:

Personnel expenditure
- ? Remuneration and Other conditions of service

Goods and services
- ? Travel and subsistence expenses
- ? Material supplies, Transport, Utilities
- ? Maintenance Expenses and other services and expenses

Development expenditure
- ? Furniture and office equipment
- ? Vehicles, Operational equipment, machinery, infrastructure
- ? Feasibility studies

These line items have been adapted as below in line with international classifications codes:

Table 3.7: Classification codes for Health inputs

ICHA Code	Description
RC.1.1	-Wages and allowances
RC.1.1.2	-Medical goods and services
RC1..2.1	-Material supplies
RC.1.2.1.1	-Drugs and Pharmaceuticals
RC. I.2.1.2	-Other supplies
RC. 1.2.1.3	-Medical treatment abroad
RC. I.2.2	-Services
RC. 1.2.3	- Other goods and services
RC. 1.3	- Consumption of fixed capital
RC.1.2.4	-Other expenditure on inputs
RC.1.9	- Other recurrent expenditure
RC.1.9.1.1	-Utilities
RC.1.9.1.2	- Transport
RC.1.9.1.3	- Supplies
RC.1.9.1.4	- Consumables
RC.2	- Other capital expenditure
RC.2.1	- Buildings
RC.2.2.1	-Vehicles
RC.2.2	-Equipment
RC.2.2.3	-Training
RC.2.2.4	- Other fixed assets
RC.2.2.5	- Taxes
RC.2.2.6	-Arrears
RC.2.2.7	- Expenditure on aid
RC.2.2.8	- Research
RC.2.3	- Capital expenditure not disaggregated

Adapted from classification on Pg 38 of the Producer's Guide

3.4 Sampling and data collection methods:

Expenditure figures were used in this study.

Government of Uganda

Both the approved estimates and the total releases by programme and line item from the Ministry of Finance, Planning and Economic Development (MoFPED) to the Ministry of Health, Butabika Hospital, Mulago Hospital Complex, Health Service Commission, District and Regional Referral Hospitals Mbarara University, Uganda Prisons and the Ministry of Education and Sports for the FY 1998/99, 1999/00 and 2000/01 were examined. The Final accounts from all these institutions for the same FYs were collected as well and examined for data triangulation. Differences were reconciled with the different institutions before data entry.

Parastatals:

There were 27 parastatals in the period under study and they were all surveyed. Expenditure data on health was collected using a questionnaire. *(see Annex III- Employer Survey Questionnaire)*

Development Partners/Donors

Information on health expenditure by Development Partners for the years of study was obtained from MoFPED, Districts, MoH reports and final accounts. In addition a survey of all (22) donors[33] was undertaken to find out the amount of funds disbursed, to who and the details of their expenditure. The response rate was close to 50% and the information collected was used to triangulate data as much as possible. *(see Annex IV -Donor Survey questionnaire for the data collection instrument used).*

Facility based PNFP

These are organised under three Umbrella Organisations (UCMB, UPMB, UMMB) and being facility based the information was fairly easy to capture and they were all surveyed. In kind contributions (mainly drugs and equipment) were monetised as much as possible using drug price lists as provided by the National Medical Stores for drugs, prices on delivery documents and advise from the infrastructure division of the MoH for equipment. The sources of data used were:

- Data routinely available at the Medical Bureaux.
- Data from the Public Private Partnership in Health (PPPH) unit, MoH
- GoU financial publications[34]

The classification of income and expenditure items for health was based on that used in the PHC CG guidelines for planning and financial management[35]. This classification is universally utilised and all hospitals and lower level units submit reports in standardised formats. *(Data collection instrument used is Facility based NGO questionnaire Annex V)*

Non-Facility based PNFP (NGOs)

The non-facility based PNFPs are numerous in number and are neither well organised nor well coordinated. An inventory of NFB-PNFP operating in the health sector was obtained from the NGO Board published September 2001. The inventory included the following entries:

- Name of NGO

[33] 22 donors mentioned in the MoU between MoH and Development Partners signed by the parties in August 2000
[34] District Transfers for Health Services 1998/99, 1999/00 and 2000/01
[35] Guidelines on the use of Delegated Funds by the PNFP Hospitals 1998/99 and Guidelines on the use of Conditional Grants for the Lower Level NGO units from the PAF 1999.

- Country of Origin
- Postal address and telephone where possible

The number of NGOs registered as working in the health sector as of September 2001 totalled 640. The stratification was according to country of origin (international or indigenous). 11 NGOs whose country of origin was unlisted were excluded from the sample.

International NFB-PNFP

To determine the expenditure of health care we assumed that the NFB-PNFP originating outside of Uganda are larger, able to mobilise and spend more on health than the indigenous NFB-PNFP. There were 106 international NFB-PNFPs. Two of these had contact addresses located outside of Uganda and were therefore excluded from the sample. Fifty percent (50%) (=52) of the remaining NFB-PNFP were randomly sampled.

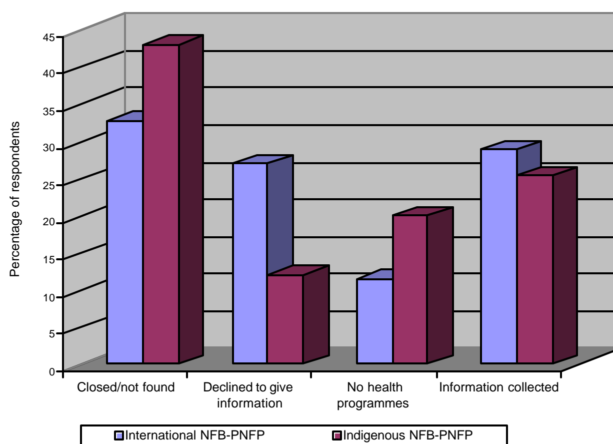
An attempt was made to obtain information from all 52 sampled organisations. Out of the 52 organisations, 17 (32%) had either closed down operations or could not be traced, 15 (29%) of the NFB-PNFP were willing to and provided information on health expenditures. 14 (27%) declined to give data while 6 (12%) indicated that they were not implementing any health programmes despite the fact that they were registered as health NGOs (Figure 3.2).

Indigenous NFB-PNFP:

The number of indigenous NFB-PNFPs totalled 523. A random sampling of 25% (=131) of the organisations was done. Out of the 131 organisations, 56 (43%) had either closed down operations or could not be traced, 16 (12%) declined to give information, 33 (25%) were willing to and provided information on health expenditures while 26 (20%) were not implementing any health programmes (see Figure 3.2). *(Data collection instrument used is Non facility based NGO questionnaire Annex VI)*

For both indigenous and international NFB-PNFP NGO's; the sample was adjusted for closed/not found NGOs and NGOs that were not implementing health programs, an average expenditure per NGO was computed and expenditure for the total sample computed. Inaccuracies were verified with the respective NGOs before data entry. This survey undertaken was more comprehensive than that of the NHA study covering the period 1997/98.

Figure 3.2: Non facility based Private not for Profit Survey results



Households:
The data from Uganda National Household surveys collected every two years by the Uganda Bureau of Statistics was used[36]. The Household Survey data is collected from about 10,000 households countrywide and the data available was for 1997/98 and 1999/2000. Linear interpolation was used to estimate household out of pocket expenditures for 1998/99 and 2000/01. This method assumes all is constant given the short time interval between the years in which the surveys were carried out.

The data reports total household (HH) expenditure on health and further disaggregates expenditure by regions,[37] rural and urban areas and expenditure in the traditional medicine sub-sector. Expenditures in the public facilities, PNFP facility based, and PNFP non-facility and drug shops and clinics was derived from the utilisation patterns reported in the Household surveys. In the case of public and PNFP facilities, the data derived from utilisation patterns was compared with the data from the financial reports of these entities for triangulation.

Private firms
To determine the expenditure on health care by private firms, we assumed that:

- Firms employing less than 50 employees spend minimal amounts of funds on health care
- The level of expenditure is not the same for different sizes of businesses
- The expenditure level for different types of businesses is not similar
- Large businesses spend more than relatively smaller businesses

Only business establishments employing more than 50 employers were taken as the overall sample size. A two-stage stratification was employed. In Stage I, the business establishments were stratified by number of employees; above 1000, 500-1000, 200-500, 100-200 and 50-100. In total there were 202 business establishments employing 50-1,000 and 12 employing over 1,000 people. In Stage II, the business establishments were stratified by nature of business or industrial grouping. The following groupings were identified; communication, construction, finance, hotels, manufacturing, personal services, trade, insurance, transport, utilities, mining, agriculture and education.

Using random sampling within each stratum, 40% (79) of those employing between 50-1,000 people and all 12 (100%) employing over 1,000 people were sampled. Seventy percent (55) of the former and 25% (3) of the latter responded to the questionnaire. Only 60% (33) and 67% (2) respectively of the responses were valid and eventually used in the analysis. The remaining 40% (22) and 33% (1) were either not offering any medical benefits or were giving a medical allowance consolidated within the salary (which could be spent on anything other than health care). A full sample was then built after adjusting for non-response and validity. Average expenditure per firm was derived within each strata and total expenditure was computed. *(see Annex VII for Parastatal questionnaire)*

Private Health Insurance
There are 22 insurance companies in Uganda and all were surveyed. However, only 6 were offering health insurance. These provided valid data on premiums received and reimbursements made. This was further disaggregated into how much is paid to the different provider. *(see Annex VI Health Insurance questionnaire)*

[36] Uganda National Household Survey 1997/98 and 1999/00
[37] There are 4 regions in the country namely, north, east, west and north.

3.5 Methodological Limitations.

The data collected for this study is considered accurate and reliable but if the future NHA studies are to become even more accurate, the following limitations need to be addressed.

Non facility based Private not for Profit

The inventory of the NGOs obtained from the NGO Board lacked information such as scale of operation, number of district level branches, number of employees, other sectors in which NGO is operating, etc. Furthermore, the contact information from the inventory was restrictive in that in most cases only the post office box number was available with at times no telephone, fax, email or physical address available.

Many of the organisations that were registered and operational in September 2001 had closed down operations less than 2 years later (see Figure 3.2). Many 'NGOs' are quick to register in response to a funding opportunity and then end up closing down as soon as those funds are expended. NGOs should be willing to discuss sustainability issues rather than present themselves as 'project' implementers.

Many NFB-PFNPs are registered as working within the health sector but in reality do not implement any health programmes (See Figure 3.2). Attempts should be made to qualify the activities of the NFB-PNFPs to ensure they can be classified as health activities if they are to register as health 'NGOs'.

International NFB-PNFPs were more unwilling to share information on health expenditures in compliance with the Ministry of Health request presented by the research assistants (27% compared to 12% for the indigenous NFB-PNFP). It should be made clear that information on NGOs' technical and financial operations should be made available to government and other researchers. A central database of all NGO Annual Reports should be created and made available to the public, so that information on health expenditures in extracted from reports located in the NGO Board Public Resource Centre.

Central government

The team identified expenditures at the Ministry of Health headquarters incurred on behalf of the districts and hospitals. It was not possible to disaggregate these expenditures and assign them to individual districts and were therefore all lumped as MoH expenditures. Data interpretation shall be made with this in mind.

Donors

In the absence of a complete donor database in the Ministry of Health, the team experienced difficulty in obtaining information from donors. Information on projects is for some donors organised according to programme/project's time span and expenditure to-date and is hence difficult to isolate for one financial year. Information on closed projects is archived and the delay and reluctance on behalf of the donors hampered the data collection exercise.

Parastatals

At the start of the study period, there were 27 registered parastatals. The majority have since been privatised and the collection of data in retrospect was a challenge with some institutions reluctant to release information or having no record of the expenditures incurred before privatisation.

Private Health Insurance

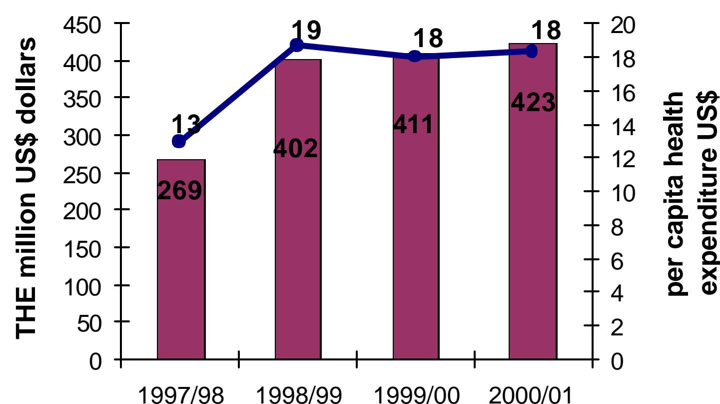
An attempt was not made to collect data from the Community Based Prepayment Schemes because;

- ? The schemes are subsidised by government and donors
- ? The premiums are paid to PNFP Hospitals and are reflected as User Fees income
- ? As of 2002, there were only 12 known schemes locally organised around few PNFP Hospitals. The schemes apply only for those hospitals and the funds are non transferable to another provider. The funds collected are believed to have limited impact on health financing at system level. In addition, their future as a major health financing mechanism has been undermined by the abolition of user fees.

Chapter 4 National Health Accounts Study Findings

The Total Health Expenditure (THE) on health services increased over the study period from Ugshs548 billion in 1998/99, to Ugshs 622 billion in 1999/00 and Ugshs 745 billion in 2000/01. This is equivalent to US $ 402 million, US$411 million and US$423 million respectively[38]. This translates into US$19 per capita for 1998/99, US$ 18 for 1999/00 and US$18 for 2000/01[39] (see Figure 4.1).

Figure 4.1: Uganda Total Health Expenditure 1998/99 to 2000/01



The per capita expenditure falls below the required amount needed to fund the minimum health care package estimated at US$ 28 per capita (Health Financing Strategy, 2002[40]) and also well below the Commission for Macroeconomics and Health estimate of US$ 30-40 per capita. As a proportion of the Gross Domestic Product (GDP) this represents 6.2% in 1998/99, in 7.0% 1999/00 and 8.1% in 2000/01. Figure 4.1 shows the trends in health financing for the study period while comparisons with other countries in the regions for the FY 2000/01 are given in Table 4.1.

Table 4.1: Comparison of key indicators FY 2000/01

Country	Total health expenditure per capita US$	Govt expenditure on health as a % of total Govt expenditure	Total health expenditure as a % of GDP
Uganda	18	7.4	8.1
Kenya	29	6.2	7.8
Ethiopia	3	4.9	3.6
Malawi	13	12.3	7.8
Rwanda	11	14.2	5.5
Botswana	190	7.6	6.6
Mozambique	11	18.9	5.9

Source: World Health Report 2003

[38] Exchange Rates as published by MoFPED: 1998/99 US$1: 1,362; 1999/00 US$1:1513; and 2000/01 US$1:1763
[39] The 2002 census figures and annual growth rate of 3.4% between 1991 and 2002 censuses was used in the calculations
[40] This estimate excludes provision of ARVs and pentavalent vaccine

Central government expenditure on health represented 6.5% of the total public expenditure in 1998/99, 6.5% in 1999/00 and 7.4% in 2000/01. Despite the increase in government spending over the study period, the percentage still falls below the Abuja Declaration made in 2000 for governments to spend at least 15% of total government expenditure on health.

Table 4.2 compares total health expenditure per capita with health outcomes for countries in the region. There is sufficient evidence to prove that health outcomes are not the responsibility of the health sector alone but contributes significantly to their improvement. We also note that the prevalence of HIV impacts negatively on health outcomes. The total health expenditure per capita for Uganda compares favourably with other countries although one could argue indicators could have been better when compared with Tanzania.

Table 4.2: Total health expenditure per capita and health outcomes.

Country	GDP per capita US$ PPP (2003)	Total health expenditure per capita US$ (2001)	Maternal mortality rate per 100,000 (2002)	Infant mortality rate (2002)	Life expectancy at birth (2002)
Uganda	1,260	18	505	88	47
Kenya	1,020	29	590	67.24	37.98
Ethiopia	750	3		98.63	41.24
Mozambique	1,000	11	1,100	138.55	30.98
Tanzania	630	12		77.85	44.56
Malawi	670	13	1,100	119.46	37.98

Sources: WHO 2002a; UNHDR; UNICEF; UN (United Nations) 2002; Uganda Demographic Health Survey 2000; Uganda Bureau of Statistics; The World Factbook. 2003

4.1 Financing sources

The financing sources are categorized as either public or private. The funding from donors is considered as being public because these are funds declared under bilateral and multilateral agreements to provide support to country level development programmes regardless of the eventual service provider. In the case of Uganda, under the Sector Wide Approach (SWAP) they are currently included in the MTEF and are supporting the Health Sector Strategic Plan.

The Private financing sources contribute a higher percentage than public sources. Increase in contributions is noted for both financing sources over the years and the increase on year-to-year is slightly higher for public sources than private sources (see Figure 4.2 and Table 4.3).

The analysis of the contribution of the different financing sources in US$ per capita and the percentage is presented in Table 4.3.

Figure 4.2: Contribution by the public and private sources (million US$).

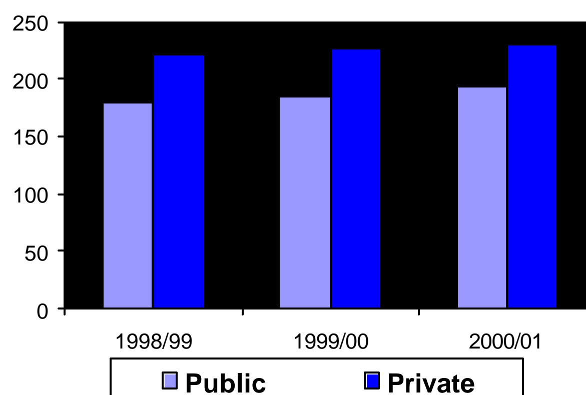


Table 4.3: Per capita expenditure by financing source

	99/98		99/00		00/01	
Entity	**US$ per capita**	**Percentage**	**US$ per capita**	**Percentage**	**US$ per capita**	**Percentage**
Central government	3.15	16.9%	3.04	16.5%	3.28	17.9%
Local government	0.04	0.2%	0.03	0.2%	0.03	0.2%
Parastatal	0.02	0.1%	0.02	0.1%	0.03	0.1%
Donors	5.16	27.6%	5.22	28.3%	5.01	27.4%
Subtotal public	***8.37***	***44.8%***	***8.31***	***45.1%***	***8.35***	***45.6%***
Private firms	0.10	0.5%	0.07	0.4%	0.06	0.3%
Households	8.67	46.4%	8.27	44.9%	7.41	40.5%
Not for profit	1.54	8.3%	1.78	9.7%	2.50	13.6%
Sub total private	***10.31***	***55.2%***	***10.12***	***54.9%***	***9.96***	***54.4%***
Total	**18.68**	**100.0%**	**18.43**	**100.0%**	**18.31**	**100.0%**

4.1.1 Public financing sources

Public financing sources for health services include: Government (central and local government), parastatals and Donor sources outside basket funding). Central government funding for the study period includes donor budget support. The contribution by Public sources to health sector funding rose from Ugshs246 bn in 1998/99 to Ugshs280 billion in 1999/00 to Ugshs 340billion in 2000/01. This is equivalent to US$180, 185, 193 million respectively.

The proportion of contribution from public sources to total health expenditure remained fairly constant over the period 45% in 98/99, 45% in 1999/00 and 46% in 2000/01 (see Figure 4.2). The bulk of public funding is from Central government and donor resources while parastatals and Local governments combined contribute less than 1% of the public sources sub-total. This is shown in Table 4.3. Donor funding was the most significant source of funding among public sources. In terms of proportions, donor funding as a proportion of all health sector funding was highest for the years 1998/99 and 1999/00 at 28%, and declining slightly to 27% in 2000/01 (see Table 4.3).

Table 4.4: Contribution from the public financing sources

	1998/99		1999/00		2000/01	
	bn. UgShs	Percentage	bn UgShs	Percentage	bn. UgShs	Percentage
Donors	151.42	61.66%	176.13	62.84%	203.83	59.99%
Central Govt	92.42	37.64%	102.46	36.55%	133.65	39.34%
Local Govt	1.17	0.48%	1.09	0.39%	1.24	0.37%
Parastatals	0.57	0.23%	0.62	0.22%	1.03	0.30%
Total	246		280		340	
Percentage change on the previous year						
Donors			16.32%		15.72%	
Central Govt			10.85%		30.44%	
Local Govt			-6.41%		14.00%	
Parastatals			9.59%		65.27%	
Total			14.14%		21.21%	

Central government funding for health activities showed a 46% growth over the study period between 1998/99 and 2000/01. As a proportion of Total Health Expenditure, central government funding over the period was 17% in 1998/99, 16% in 1999/00 and increased to 16% in 2000/01 (see Tables 4.7 – 4.9).

The Local governments' contribution for health services has continued to be very low and does not show significant changes over the study period. This accounted for 0.2% of total health expenditure over the years of the study period. The low contributions from Local governments may imply low prioritisation of health at that level.

The contribution of parastatals (government as an employer) to health services has also continued to be small and contribution to total health expenditure was 0.1% for all the years of the study period. These funds are channelled through private insurance or used directly by employers to finance health services they provide on site and directly reimburse providers.

4.1.2 Private financing sources

Private financing sources include: households, private firms and Private-Not-for-profit agencies both facility and non-facility based. The contribution from the different sources is shown in Table 4.5.

The total contribution from private sources remained high for the study period accounting for over 50% of total health expenditure; 55% in 1998/99, 55% in 1999/00 and 54% in 2000/01. The highest increase on the previous year is noted for the Not for profit sector while reductions are seen in expenditures by private firms and households.

Table 4.5: Contributions from private financing sources

	1998/99		1999/00		2000/01	
	bn. UgShs	Percentage	bn. UgShs	Percentage	bn. UgShs	Percentage
Private firms	2.82	0.93%	2.43	0.71%	2.33	0.58%
Households	254.47	84.09%	278.97	81.70%	301.54	74.37%
Not for profit	45.33	14.98%	60.06	17.59%	101.59	25.06%
Total	302.62	1	341.46	1	405.46	
Percentage change on the previous year						
Private firms			-13.91%		-3.89%	
Households			9.63%		8.09%	
Not for profit			32.50%		69.15%	
Overall			12.83%		18.74%	

The contribution of private firms to health spending remains very small, only accounted for 0.5% in 1998/99, 0.4% in 1999/00 and 0.3% in 2000/01 of total health spending.

The proportion of health sector funding contributed by households reduced form 46% in 1998/99, to 45% in 1999/00 and 40% in 2000/01. However, these account for the highest share among the private sources. The decreasing trend in household contribution is a positive finding given that government has been increasing investments in social sectors (health sector inclusive) under the Poverty Eradication Action Plan (PEAP). This was aimed at easing the financial burden on the poor.

Private-not-for-profit agencies include facility based (hospitals and health centres) and non-facility based private not-for profit (PNFP) agencies operating in the country, which may be international, national or even community-based. The proportion of PNFPs[41] contribution increased over the study period from 8%in 1998/99 to 10% in 1999/00 and 14% in 2000/01.

Comparison with other countries in the Region:

For the purpose of international comparisons, donor funds have been considered as separate from public sources (see Table 4.6). We note a significantly lower contribution from public sources in comparison with other countries much as this includes donor funds that go through budget support.

Table 4.6: Comparison of Financing sources with other countries

	Public			Donors			Private		
	98/99	99/00	00/01	98/99	99/00	00/01	98/99	99/00	00/01
Uganda	**17%**	**17%**	**18%**	**28%**	**28%**	**27%**	**55%**	**55%**	**54%**
Namibia	70%	71%	66%	3%	3%	4%	28%	27%	31%
Kenya	9%	14%	11%	10%	10%	10%	81%	76%	79%
Ethiopia	10%	5%	7%	28%	30%	34%	62%	66%	60%
Rwanda	27%	20%	31%	27%	33%	25%	46%	47%	45%
Mozambique	24%	29%	30%	40%	38%	37%	36%	33%	33%

Source: World Health Report 2003, Namibia NHA Report November 2003

[41] For PNFPs to be considered as a source see method sections.

Table 4.7: Financing sources for Health Care and Related Functions by Financing Agent 1998/1999 (Ugshs''000)

Table 4:	Financing Sources x Financing Agents (S X FA)								
		FS.1 Public Funds*			FS.2 Private Funds*			FS.3 Donors	
	Total	FS.1.1.1 Central Government Revenue	FS.1.1.2 Local Government	FS 2.1.1 Employer funds Parastatals	FS.2.1.2 Private Employer funds	FS.2.2 Household funds	FS.2.3 Not for profit	F.S. 3Donors	
	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	Percentages
HF A Public sector									
HF.1.1.1 Central government									
HF.1.1.1.1 Ministry of Health	71,886,254	23,180,085						48,706,169	**13.11%**
Other Ministries & National Health services									
HF 1.1.1.2 Ministry of Defence	581,103							581,103	**0.11%**
HF 1.1.1.3 Ministry of Education	3,802,884	1,757,126						2,045,758	**0.69%**
HF 1.1.1.4 Uganda Prisons	283,228	145,602						137,626	**0.05%**
HF 1.1.1.5 Uganda Police	1,652,729							1,652,729	**0.30%**
HF 1.1.1.6 National Referral Hospitals	33,759,380	22,552,432				1,500,453		9,706,495	**6.16%**
HF 1.1.1.7 Regional Referral Hospitals	13,544,819	10,543,913				3,000,906			**2.47%**
HF 1.1.1.8 Other Ministries	328,639	328,639							**0.06%**
HF 1.1.1.9 Health related Commissions	1,127,000	1,127,000							**0.21%**
HF.1.1.3 District Health Services	40,027,649	26,414,108	1,166,492			5,501,662		6,945,388	**7.30%**
HF. 1.2 Social security funds									
HF 2.5.1 Parastatals	566,159			566,159					**0.10%**
Sub-total Public	**167,559,844**	**86,048,904**	**1,166,492**	**566,159**	**0**	**10,003,021**	**0**	**69,775,268**	**30.57%**
HF. B Non-public sector									**0.00%**
HF.2.2 Private insurance enterprises	895,693			0	895,693				**0.16%**
HF 2.3 Households	234,264,448					234,264,448			**42.73%**
HF 2.4 Not for profit/NGO'S									
HF 2.4.1 Facility based	23,048,129	5,117,221				7,662,852	8,126,024	2,142,032	**4.20%**
HF 2.4.2 Non facility based	120,501,857	1,257,958				2,543,554	37,202,278	79,498,067	**21.98%**
HF 2.5 Private firms	1,924,957				1,924,957				**0.35%**
Equals: total funds provided****									
Sub-total Private	**380,635,083**	**6,375,179**	**0**	**0**	**2,820,649**	**244,470,855**	**45,328,302**	**81,640,099**	**69.43%**
Total	**548,194,928**	**92,424,083**	**1,166,492**	**566,159**	**2,820,649**	**254,473,876**	**45,328,302**	**151,415,367**	**100.00%**
As a percentage of total health expenditure		**16.86%**	**0.21%**	**0.10%**	**0.51%**	**46.42%**	**8.27%**	**27.62%**	

Table 4.8: Financing sources for Health Care and Related Functions by Financing Agent 1999/2000 (Ugshs''000)

Table 4:	Financing Sources x Financing Agents (S X FA)								
		FS.1 Public Funds*			FS.2 Private Funds*			FS.3 Donors	
	Total	FS.1.1.1 Central Government Revenue	FS.1.1.2 Local Government	FS 2.1.1 Employer funds Parastatals	FS.2.1.2 Private Employer funds	FS.2.2 Household funds	FS.2.3 Not for profit	F.S. 3Donors	
	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	Percentage
HF A Public sector									
HF.1.1.1 Central government									
HF.1.1.1.1 Ministry of Health	77,571,608	28,898,726						48,672,881	12.48%
Other Ministries & National Health services									
HF 1.1.1.2 Ministry of Defence	636,086							636,086	0.10%
HF 1.1.1.3 Ministry of Education	2,964,814	1,850,000						1,114,814	0.48%
HF 1.1.1.4 Uganda Prisons	418,395	221,000						197,395	0.07%
HF 1.1.1.5 Uganda Police	180,574							180,574	0.03%
HF 1.1.1.6 National Referral Hospitals	25,552,129	20,859,652				1,650,305		3,042,172	4.11%
HF 1.1.1.7 Regional Referral Hospitals	14,290,609	10,990,000				3,300,609			2.30%
HF 1.1.1.8 Other Ministries	284,203	284,203							0.05%
HF 1.1.1.9 Health related Commissions	1,424,665	1,424,665							0.23%
HF.1.1.3 District Health Services	42,976,481	29,056,162	1,091,769			6,051,117		6,777,434	6.91%
HF. 1.2 Social security funds									
HF 2.5.1 Parastatals	620,477			620,477					0.10%
Sub-total Public	**166,920,040**	**93,584,408**	**1,091,769**	**620,477**	**0**	**11,002,030**	**0**	**60,621,356**	**26.85%**
HF. B Non-public sector									
HF.2.2 Private insurance enterprises	571,899			0	571,899				0.09%
HF 2.3 Households	257,940,578					257,940,578			41.49%
HF 2.4 Not for profit/NGO'S									
HF 2.4.1 Facility based	23,524,159	7,473,052				7,860,427	5,617,817	2,572,863	3.78%
HF 2.4.2 Non facility based	170,942,618	1,398,602				2,167,275	54,440,291	112,936,450	27.49%
HF 2.5 Private firms	1,856,375				1,856,375				0.30%
Equals: total funds provided****									
Sub-total Private	**454,835,629**	**8,871,654**	**0**	**0**	**2,428,274**	**267,968,280**	**60,058,108**	**115,509,313**	**73.15%**
Total	**621,755,668**	**102,456,062**	**1,091,769**	**620,477**	**2,428,274**	**278,970,310**	**60,058,108**	**176,130,668**	**100.00%**
As a percentage of total health expenditure		**16.48%**	**0.18%**	**0.10%**	**0.39%**	**44.87%**	**9.66%**	**28.33%**	

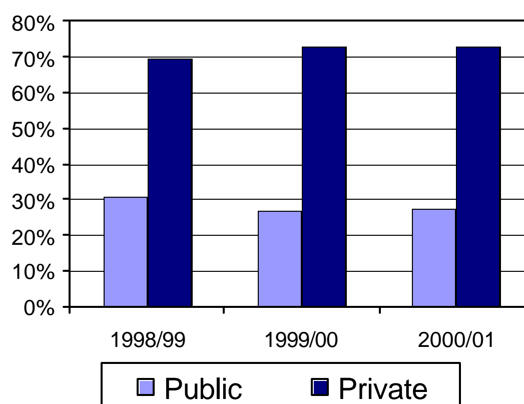
Table 4.9: Financing Sources for Health Care and Related Functions by Financing Agent 2000/2001 (Ugshs'000)

Table 4:	Financing Sources x Financing Agents (S X FA)								
		FS.1 Public Funds*			FS.2 Private Funds*			FS.3 Donors	
	Total	FS.1.1.1 Central Government Revenue	FS.1.1.2 Local Government	FS 2.1.1 Employer funds Parastatals	FS.2.1.2 Private Employer funds	FS.2.2 Household funds	FS.2.3 Not for profit	F.S. 3Donors	
	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	Percentage
HF A Public sector									
HF.1.1.1 Central government									
HF.1.1.1.1 Ministry of Health	102,472,185	40,243,147						62,229,039	13.75%
Other Ministries & National Health services									
HF 1.1.1.2 Ministry of Defence	161,489							161,489	0.02%
HF 1.1.1.3 Ministry of Education	3,305,270	1,759,705						1,545,565	0.44%
HF 1.1.1.4 Uganda Prisons	253,000	253,000						0	0.03%
HF 1.1.1.5 Uganda Police	0							0	0.00%
HF 1.1.1.6 National Referral Hospitals	23,875,026	21,140,026				1,353,000		1,381,999	3.20%
HF 1.1.1.7 Regional Referral Hospitals	13,830,231	11,124,230				2,706,001			1.86%
HF 1.1.1.8 Other Ministries	276,774	276,774							0.04%
HF 1.1.1.9 Health related Commissions	1,979,500	1,979,500							0.27%
HF.1.1.3 District Health Services	56,860,246	44,279,638	*1,244,632*			4,961,002		6,374,975	7.63%
HF. 1.2 Social security funds									
HF 2.5.1 Parastatals	645,983			645,983					0.09%
Sub-total Public	**203,659,704**	**121,056,020**	**1,244,632**	**645,983**	**0**	**9,020,003**	**0**	**71,693,067**	**27.33%**
HF. B Non-public sector									
HF.2.2 Private insurance enterprises	1,119,571			379,500	740,071				0.15%
HF 2.3 Households	280,547,053					280,547,053			37.65%
HF 2.4 Not for profit/NGO'S									
HF 2.4.1 Facility based	27,212,972	8,873,980				9,058,181	6,707,528	2,573,283	3.65%
HF 2.4.2 Non facility based	231,070,972	3,716,444				2,912,681	94,881,088	129,560,760	31.01%
HF 2.5 Private firms	1,593,804				1,593,804				0.21%
Equals: total funds provided****									
Sub-total Private	**541,544,371**	**12,590,423**	**0**	**379,500**	**2,333,875**	**292,517,915**	**101,588,615**	**132,134,043**	**72.67%**
Total	745,204,076	**133,646,443**	**1,244,632**	**1,025,483**	**2,333,875**	**301,537,918**	**101,588,615**	**203,827,110**	**100.00%**
As a percentage of total health expenditure		**17.93%**	**0.17%**	**0.14%**	**0.31%**	**40.46%**	**13.63%**	**27.35%**	

4.2 Financing Agents:

Private financing agents[42] remain the major players in the study period as shown in Figure 4.3 accounting for the bulk of health financial transfers (67 - 75% over the study period). The trends remained fairly constant for the study period for both public and private FAs.

Figure 4.3: Percentage transfers through public and private Financing Agents.



The bulk of health expenditure is channelled through a few FAs, namely MoH, households and PNFPs – the three of them combined make up for 82 % of all financial transfers in 1998/99, 84% in 1999/00 and 86% in 2000/01 (see Table 4.10).

Table 4.10: Transfer of funds through Financing Agents 1998/99 to 2000/01

Financing Agent	1998/99	1999/00	2000/01
Ministry of Health	13%	12%	14%
Other ministries	7%	5%	4%
National Referral Hospitals	6%	4%	3%
Regional Referral Hospitals	2%	2%	2%
Health related Commissions	0.2%	0.2%	0.3%
District health services	7%	7%	8%
Parastatals	0.1%	0.1%	0.1%
Sub-total Public	30.57%	26.85%	27.33%
Private insurance enterprises	0.2%	0.1%	0.2%
Households	43%	41%	38%
Facility based PNFP	4%	4%	3%
Non facility based PNFP	22%	27%	31%
Private firms	0.4%	0.3%	0.2%
Sub-total Private	69.43%	73.15%	72.67%

4.2.1 Public Financing Agents

The MoH was the most significant public FA accounting for a steady proportion of health expenditure. The bulk of the funds channelled through the MoH are used for capital expenditure, wages and allowances and medical goods. Spending on medical goods and

[42] See Table 3.3 for entities included under private FA)

capital investments at the MoH headquarter level is mostly on behalf of the hospitals and district health services. Transfers through parastatals remained minimal (see Table 4.10).

The District Health Services as an entity is important for health services delivery but as a FA accounts for only 7-8% of all health financing transfers during the study period. However, as a percentage of sub-total of public expenditure, the resources controlled by the districts have increased from 24% in 1998/99 to 26% in 1999/00 and to 28% in 2000/01.

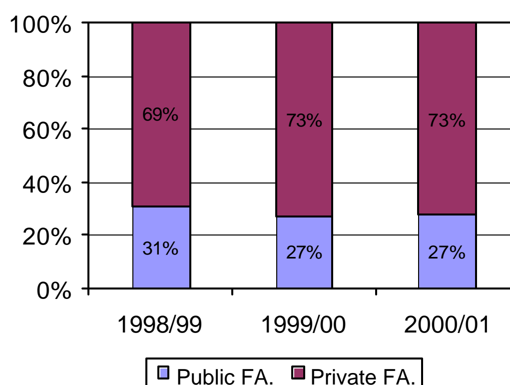
4.2.2 Private Financing Agents:

The households are the biggest FA over the study period although showing a slight decrease over the study period (see Table 4.10). On the other hand, the Non facility based PNFPs, the second largest FA has shown an increase from 22% in 1998/99, 27% in 1999/00 to 31% in 2000/01. It is evident that a large amount of transfers are through private FAs, which are poorly regulated.

4.3 Providers of care

For all providers, the majority of the funds spent were from private rather than public FAs (see Figure 4.4 and Table 4.12). The most significant providers were private for profit clinics and drug shops accounting for 46.6% of private transfers in 1998/99, 42.9% in 1999/00 and 38.8% in 2000/01. The majority of public transfers were made to the National Referral Hospital, District Hospitals, provision and administration of public health programmes and the central MoH, these together accounted for 66% of all public transfers in 1998/99, 69% in 1999/00 and 64% in 2000/01. The distribution of public and private transfers is shown in Table 4.11.

Figure 4.4: Sources of transfers by providers of care:



The large transfers through the private FAs raises concerns of quality, value for money and government capacity to regulate the services. Table 4.12 shows the percentage of the provider expenditures financed through public and/or private transfers. The majority of the transfers for provision and administration of Public Health Programmes and community capacity building are from private FAs. This has been increasing over the study period.

Table 4.11: Distribution of Public and Private transfers by providers

	1998/99		1999/00		2000/01	
	Public	Private	Public	Private	Public	Private
National Referral hospital	19.0%	0.1%	14.0%	-	10.8%	0.1%
Regional Referral hospitals	8.9%	-	9.2%	-	7.6%	-
District Hospitals	10.1%	-	12.1%	-	9.6%	-
Institutional Hospitals**	0.1%	-	0.1%	-	0.1%	-
Not for profit Hospitals	-	5.1%	-	4.2%	-	3.9%
Mental Health Hospital	1.2%	-	1.3%	-	1.0%	-
Health Centre IVs	2.3%	-	2.4%	-	6.7%	-
Govt Lower Level Units	3.6%	1.0%	3.2%	1.5%	3.9%	1.3%
Private not for profit lower levels of care	-	1.1%	-	1.3%	-	1.2%
Private for profit clinics and drug shops	-	46.6%	-	42.9%	-	38.8%
All other OPD community & integrated care centres	-	16.6%	-	17.6%	-	15.8%
Traditional healers	-	2.3%	-	2.2%	-	2.5%
Provision & Admin. of Public Health Programmes	19.4%	20.2%	18.2%	22.2%	17.2%	28.3%
Blood Services	1.4%	-	1.1%	-	0.9%	-
Central Ministry of Health HQ	17.7%	-	24.3%	-	26.3%	-
On-site facilities to providers	0.3%	0.5%	0.4%	0.4%	0.3%	0.3%
Research institutions	5.8%	-	4.5%	-	6.3%	-
Training institutions	8.0%	0.5%	6.8%	0.3%	7.4%	0.6%
Institutions providing health related services	0.9%	-	1.0%	-	1.1%	-
Community Capacity building	1.2%	6.0%	1.2%	7.4%	0.9%	7.4%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 4.12: Percentage of provider expenditures financed through public/private transfers

	1998/99		1999/00		2000/01	
	% Public	% Private	% Public	% Private	% Public	% Private
National Referral hospital	98.95%	1.05%	99.12%	0.88%	98.76%	1.24%
Regional Referral, Institutional & Mental Health Hosp.	100%	-	100%	-	100%	-
District Hospitals and Health Centre IV	100%	-	100%	-	100%	-
Not for profit Hospitals	-	100%	-	100%	-	100%
Govt Lower Level Units	62.06%	37.94%	44.07%	55.93%	52.66%	47.34%
Private not for profit lower levels of care	-	100%	-	100%	-	100%
Private for profit clinics and drug shops	-	100%	-	100%	-	100%
All other OPD community & integrated care centres	-	100%	-	100%	-	100%
Traditional healers	-	100%	-	100%		100%
Provision & Admin. of Public Health Programmes	**29.70%**	**70.30%**	**23.16%**	**76.84%**	**18.58%**	**81.42%**
Blood Services	100%	-	100%	-	100%	-
Central Ministry of Health HQ	100%	-	100%	-	100%	-
On-site facilities to providers	**22.73%**	**77.27%**	**25.05%**	**74.95%**	**28.84%**	**71.16%**
Research institutions	100%		100%	-	100%	-
Training institutions	87.13%	12.87%	89.16%	10.84%	82.76%	17.24%
Institutions providing health related services	100%	-	100%	-	100%	-
Community Capacity building	**8.37%**	**91.63%**	**5.71%**	**94.29%**	**4.58%**	**95.42%**
All providers	**30.57%**	**69.43%**	**26.85%**	**73.15%**	**27.33%**	**72.67%**

Table 4.13: Allocation to health care providers by payers/purchasers 1998/1999 (Ugshs"000)

Table 2:	Financing Agents X Providers (FA X P)										
		HF A Public sector				HF. B Non-public sector					
		HF.1.1 Central Government						HF. 2.4 Not for Profit			
	Total	HF.1.1.1.1 MoH	Other Ministries & National Health services* (HF 1.1.1.2 - 9)	HF.1.1.3 District Health Services	HF 2.5.1 Parastatals	HF.2.2 Private insurance enterprises	HF 2.3 Households	HF 2.4.1 Facility based	HF 2.4.2 Non facility based	HF 2.5 Private firms	
	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	%
HP.1 Hospitals											
HP 1.1.1Government owned hospitals	0										
HP 1.1.1.1 National referral hospital	32,131,985		31,794,664			337,321					5.86%
HP 1.1.1.2 Regional referral hospitals	14,962,479	1,417,660	13,544,819								2.73%
HP 1.1.1.3 District hospitals	16,996,312			16,996,312							3.10%
HP 1.1.1.4 Institutional hospitals**	145,602		145,602								0.03%
HP 1.1.4 Not for profit Hospitals	19,530,517					505,982		19,024,535			3.56%
HP 1.2 Mental Health hospital	1,964,716		1,964,716								0.36%
HP 3.4.5 Health Centre IVs	3,930,900			3,930,900							0.72%
HP. 3.4.9.1 Govt Lower Level Units	9,779,353	2,514,697		3,554,175					3,710,481		1.78%
HP. 3.4.9.2 Private not for profit lower levels of care	4,177,415							2,035,383	2,142,032		0.76%
HP 3.4.9.3 Private for profit clinics and drug shops	177,386,815					52,390	177,334,425				32.36%
HP 3.4.9 All other OPD community and other integrated care centres	63,025,227						48,183,303		14,841,924		11.50%
HP 3.9.3 Traditional healers	8,746,721						8,746,721				1.60%
HP 5 Provision and Administration of Public Health Programmes	109,543,122	16,702,763	2,371,458	13,462,646					77,006,255		19.98%
HP 5.2 Blood Services	2,286,405	2,286,405									0.42%
HP 6.1 Central Ministry of Health HQ	29,634,765	29,634,765									5.41%
HP 7.3 On-site facilities to providers	2,491,116				566,159					1,924,957	0.45%
HP 8.1 Research institutions	9,667,609	9,667,609									1.76%
HP 8.2 Training institutions	15,453,449	9,662,355	3,802,884					1,988,210			2.82%
HP 8.3 Institutions providing health related services	1,455,639		1,455,639								0.27%
HP.nsk	24,884,782			2,083,616					22,801,166		4.54%
Column totals	**548,194,928**	**71,886,254**	**55,079,782**	**40,027,649**	**566,159**	**895,693**	**234,264,448**	**23,048,129**	**120,501,857**	**1,924,957**	**100.00%**
Percentage		**13.1%**	**10.0%**	**7.3%**	**0.1%**	**0.2%**	**42.7%**	**4.2%**	**22.0%**	**0.4%**	

Table 4.14: Allocation to health care providers by payers/purchasers 1999/2000 (Ugshs"000)

Table 2:	Financing Agents X Providers (FA X P)										
		HF A Public sector				HF. B Non-public sector					
		HF.1.1 Central government						HF. 2.4 Not for Profit			
	Total	HF.1.1.1.1 MoH	Other Ministries & National Health services* (HF 1.1.1.2 - 9)	HF.1.1.3 District Health Services	HF 2.5.1 Parastatals	HF.2.2 Private insurance enterprises	HF 2.3 Households	HF 2.4.1 Facility based	HF 2.4.2 Non facility based	HF 2.5 Private firms	
	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	%
HP.1 Hospitals											
HP 1.1.1Government owned hospitals	0										
HP 1.1.1.1 National referral hospital	23,629,855		23,422,415			207,440					**3.80%**
HP 1.1.1.2 Regional referral hospitals	15,405,711	1,115,102	14,290,609								**2.48%**
HP 1.1.1.3 District hospitals	20,264,480			20,264,480							**3.26%**
HP 1.1.1.4 Institutional hospitals**	221,000		221,000								**0.04%**
HP 1.1.4 Not for profit Hospitals	19,257,515					311,159		18,946,356			**3.10%**
HP 1.2 Mental Health hospital	2,129,713		2,129,713								**0.34%**
HP 3.4.5 Health centre IVs	3,952,890			3,952,890							**0.64%**
HP. 3.4.9.1 Govt Lower Level Units	12,092,368	1,567,308		3,762,204					6,762,856		**1.94%**
HP. 3.4.9.2 Private not for profit lower levels of care	5,766,656							3,193,793	2,572,863		**0.93%**
HP 3.4.9.3 Private for profit clinics and drug shops	194,991,314					53,300	194,938,014				**31.36%**
HP 3.4.9 All other OPD community and other integrated care centres	80,017,775						52,966,351		27,051,423		**12.87%**
HP 3.9.3 Traditional healers	10,036,213						10,036,213				**1.61%**
HP 5 Provision and Administration of Public Health Programmes	131,409,647	16,458,643	1,014,054	12,963,677					100,973,273		**21.14%**
HP 5.2 Blood Services	1,809,795	1,809,795									**0.29%**
HP 6.1 Central Ministry of Health HQ	40,623,593	40,623,593									**6.53%**
HP 7.3 On-site facilities to providers	2,476,852				620,477					1,856,375	**0.40%**
HP 8.1 Research institutions	7,580,751	7,580,751									**1.22%**
HP 8.2 Training institutions	12,765,240	8,416,416	2,964,814					1,384,010			**2.05%**
HP 8.3 Institutions providing health related services	1,708,867		1,708,867								**0.27%**
HP.nsk	35,615,432			2,033,230					33,582,202		**5.73%**
Column totals	**621,755,668**	**77,571,609**	**45,751,473**	**42,976,481**	**620,477**	**571,899**	**257,940,578**	**23,524,159**	**170,942,618**	**1,856,375**	**100.00%**
Percentage		**12.48%**	**7.36%**	**6.91%**	**0.10%**	**0.09%**	**41.49%**	**3.78%**	**27.49%**	**0.30%**	

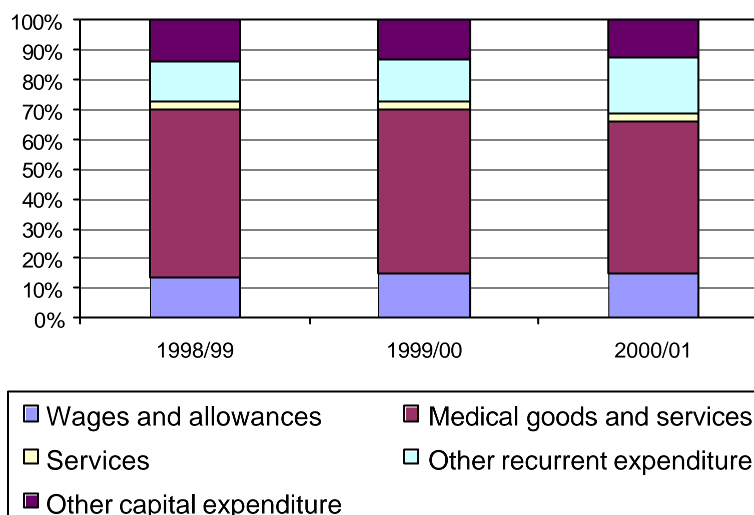
Table 4.15: Allocation to health care providers by payers/purchasers 2000/2001 (Ugshs"000)

Table 2:	Financing Agents X Providers (FA X P)										
		HF A Public sector				HF. B Non-public sector					
		HF.1.1 Central government						HF. 2.4 Not for Profit			
	Total	HF.1.1.1 MoH	Other Ministries & National Health services* (HF 1.1.1.2 - 9)	HF.1.1.3 District Health Services	HF 2.5.1 Parastatals	HF.2.2 Private insurance enterprises	HF 2.3 Households	HF 2.4.1 Facility based	HF 2.4.2 Non facility based	HF 2.5 Private firms	
	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	%
HP.1 Hospitals											
HP 1.1.1Government owned hospitals	0										
HP 1.1.1.1 National referral hospital	22,185,518		21,911,070			274,448					2.98%
HP 1.1.1.2 Regional referral hospitals	15,452,462	1,622,231	13,830,231								2.07%
HP 1.1.1.3 District hospitals	19,487,465			19,487,465							2.62%
HP 1.1.1.4 Institutional hospitals**	253,000		253,000								0.03%
HP 1.1.4 Not for profit Hospitals	21,117,103					791,173		20,325,930			2.83%
HP 1.2 Mental Health hospital	1,963,956		1,963,956								0.26%
HP 3.4.5 Health Centre IVs	13,581,226			13,581,226							1.82%
HP. 3.4.9.1 Govt Lower Level Units	15,014,044	877,455		7,029,349					7,107,240		2.01%
HP. 3.4.9.2 Private not for profit lower levels of care	6,330,152							3,756,869	2,573,283		0.85%
HP 3.4.9.3 Private for profit clinics and drug shops	210,164,090					53,950	210,110,140				28.20%
HP 3.4.9 All other OPD community and other integrated care centres	85,517,709						57,088,750		28,428,959		11.48%
HP 3.9.3 Traditional healers	13,348,163						13,348,163				1.79%
HP 5 Provision and Administration of Public Health Programmes	188,043,959	19,929,138	161,489	14,849,713					153,103,619		25.23%
HP 5.2 Blood Services	1,822,097	1,822,097									0.24%
HP 6.1 Central Ministry of Health HQ	53,625,671	53,625,671									7.20%
HP 7.3 On-site facilities to providers	2,239,786				645,983					1,593,804	0.30%
HP 8.1 Research institutions	12,871,304	12,871,304									1.73%
HP 8.2 Training institutions	18,159,733	11,724,289	3,305,270					3,130,174			2.44%
HP 8.3 Institutions providing health related services	2,256,275		2,256,275								0.30%
HP.nsk	41,770,364			1,912,492					39,857,871		5.61%
Totals	**745,204,076**	**102,472,184**	**43,681,291**	**56,860,246**	**645,983**	**1,119,571**	**280,547,053**	**27,212,972**	**231,070,972**	**1,593,804**	**100.00%**
Percentages		**13.75%**	**5.86%**	**7.63%**	**0.09%**	**0.15%**	**37.65%**	**3.65%**	**31.01%**	**0.21%**	

4.4 Expenditure by Inputs:

Figure 4.5 shows expenditure by inputs. The highest expenditure was on medical goods and services throughout the study period of which drugs accounted for 55% in 1998/99, 54% in 1999/00 and 50% in 2000/01. The expenditure on wages and allowances accounts for 14% in 1998/99, 15.1% in 1999/00 and 15.16% in 2000/01

Figure 4.5: Expenditure by Inputs:



There is a significant variation when Uganda's expenditure pattern is compared to that of Namibia for example. Namibia's highest expenditure is on wages and allowances. The low expenditure on human resource in Uganda is a cause for concern given the fact that the health sector is labour intensive.

Table 4.16: Comparison of health expenditure by inputs 1998/99 to 2000/01

Uganda	1998/99	1999/00	2000/01
Wages and allowances	14%	15%	15%
Drugs & medical supplies	59%	58%	54%
Other recurrent expenditure	13%	14%	18%
Capital expenditure	14%	13%	13%
Namibia	1998/99	1999/00	2000/01
Wages and allowances	59%	59%	51%
Drugs & medical supplies	8%	8%	9%
Other recurrent expenditure	22%	24%	28%
Capital expenditure	9%	9%	12%

Source: NHA Namibia, November 2003

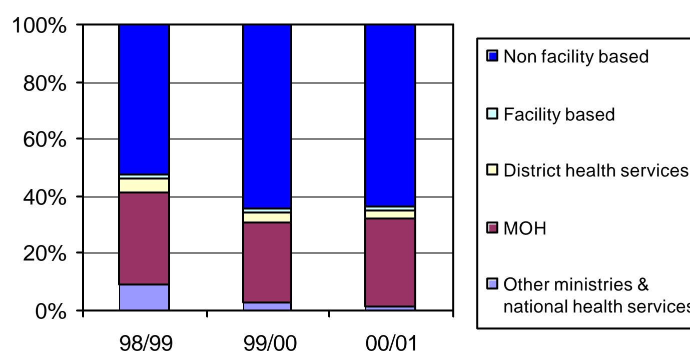
4.5 Review of the NHA entities

4.5.1 Public entities:

Central government:
The financing agents benefiting from this financing source are government ministries, (Ministry of Health (MoH); Ministry of Education and Sports (MoES); Ministry of Internal Affairs (MoIA); Ministry of Defence (MoD)); the National and Regional Referral Hospitals; Health related Commissions; District Health Services (DHS) and Private not for Profit (facility and non-facility based). The bulk of the funds are channelled to MoH, Referral hospitals, DHS and PNFP entities (see Tables 4.7 - 4.9).

Donors/Development Partners
The biggest percentage of donor funding is channelled through NFB PNFPs as FAs followed by MoH. Caution should be taken in interpreting these results given that a lot of donor funding goes through central budget support and end up being allocated to these entities.

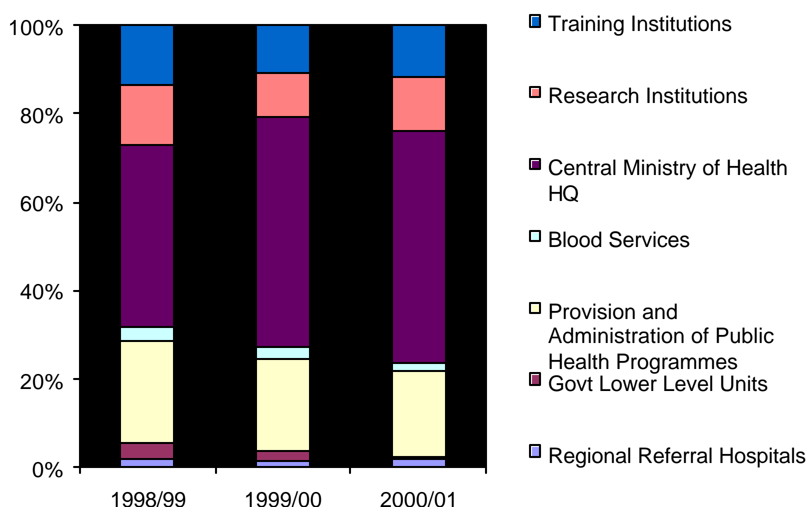
Figure 4.6: Donor expenditure to Financing Agents



Parastatals
The parastatals contribution both as a financing source and as a Financing agent is small. The funds are used to provide on-site facilities to the employees purchase drugs and other medical supplies and reimbursement to providers.

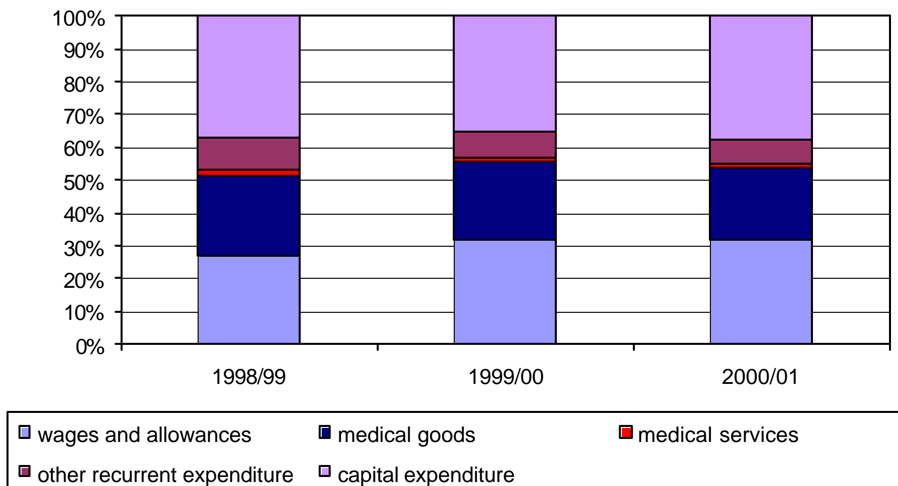
Ministry of Health:
Funds channelled through MoH grew from UgShs 72bn. in 1998/99 to UgShs 102bn. in 2000/01. The funds channelled through MoH are used to produce services at MoH, Research Institutions and the Blood Bank. Funds at the MoH are utilised for administration at the central MoH, running of public health programmes country wide, for centrally organised inputs/services for local governments for example bulk purchases of drugs, vehicles and management some infrastructure extension and rehabilitation (see Figure 4.7). Better organisation of accounts will in the future allow for spending at the MoH headquarters level on medical goods and capital expenditure to be disaggregated by beneficiary.

Figure 4.7: Ministry of Health spending by providers



Most of the funds spent by the Ministry of Health are on capital expenditure, wages and allowances and medical goods (Figure 4.8).

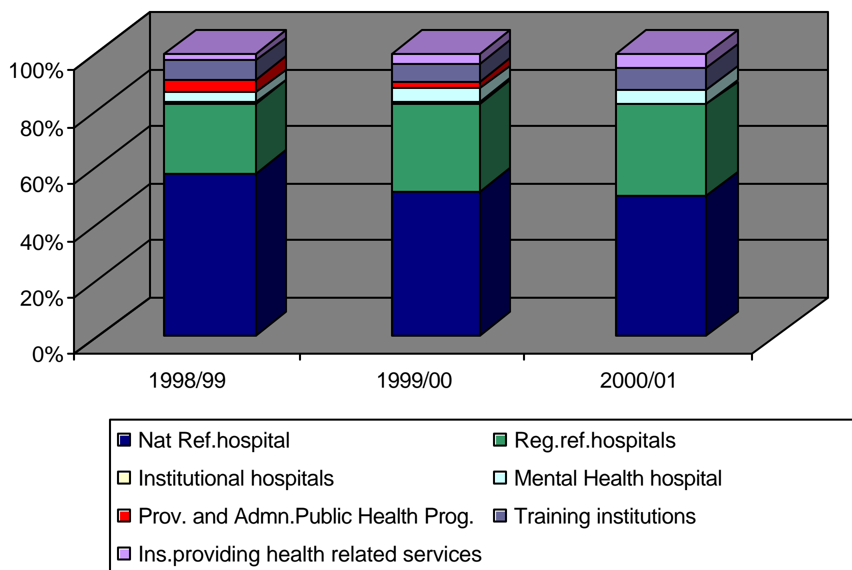
Figure 4.8: Ministry of Health Spending on inputs



Other Ministries and National Health Services

There was a reduction in amount of funds channelled to Mulago and Butabika National Referral Hospitals, Regional Referral Hospitals and health services in other ministries from UgShs 55bn in 1998/99 to UgShs 44bn in 2000/01. Figure 4.9 shows expenditure by providers. Over 80% of the funds were spent in National Referral and Regional Referral hospitals for the study period.

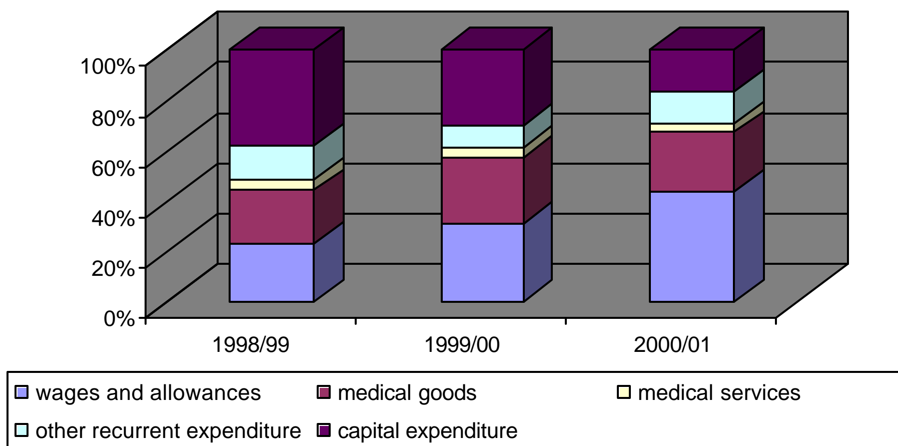
Figure 4.9: Other Ministries and National Health Services Expenditure by provider



The Ministry of Education runs the University Medical Schools and is also responsible for the health training schools. MoIA and MoD own hospitals for their employees classified under Institutional Hospitals. The Health Service Commission and the Uganda AIDS Commission are institutions providing health-related services.

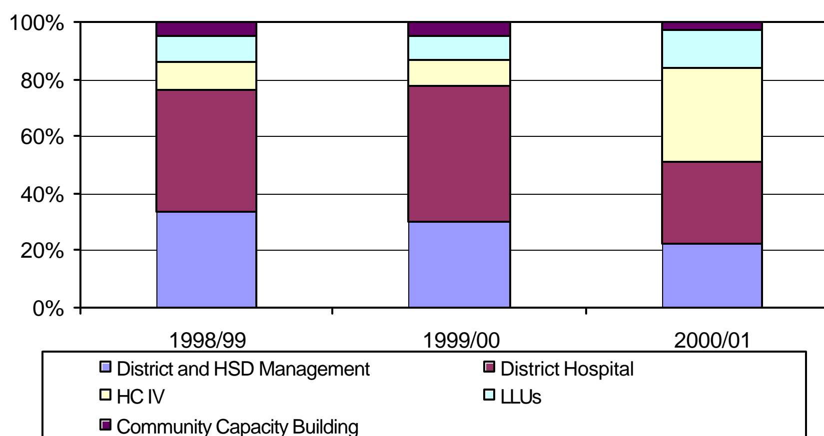
The expenditure by inputs is fairly evenly across wages and allowances, medical goods and services, other recurrent expenditure and capital expenditure (see Figure 4.10). Over the period 1998/99 to 2000/01 the proportion spent on human resource increased while capital expenditure over the same period of time decreased.

Figure 4.10: Other Ministries and National Health Services Expenditure on inputs



District Health Services:
Funds channelled through DHS grew from UgShs 40bn in 1998/99 to UgShs 57bn in 2000/01. The funds channelled through DHSs are used to provide services in the District Hospitals, the management levels (district and Health sub-district HSD), the Government Lower Level Units (LLUs) and some for Capacity Building in the communities. The bulk of the funds are used by the District Hospitals and the district and HSD offices, with the Health Centre IV and LLUs having increasing shares over the three-year period as shown in Figure 4.11.

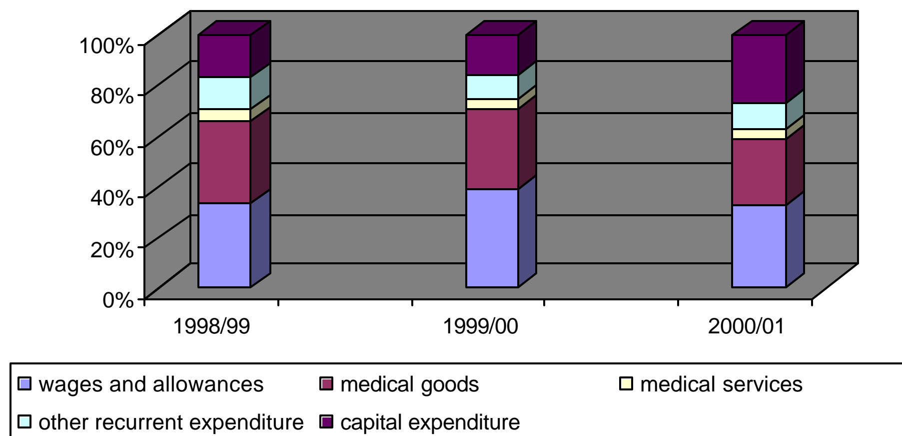
Figure 4.11: District Health Services Expenditure to Providers



The DHSs spent an increasing share (of an increasing budget) on capital expenditure, increasing from Ugshs 7billion (17%) in 1998/99 to Ugshs 15billion (27%) in 2000/01 (Figure 4.11). The expenditure on wages and allowances increased from Ugshs 13billion in 1998/99, Ugshs 17billion in 1999/00 and Ugshs 18 billion in 2000/01. As a proportion, the expenditure on personnel costs declined between 1999/00 and 2000/01 from 31% to 26%. The proportion spent on medical goods also showed decline from 33% in 1998/99 to 26% in 2000/01.

The information on personnel costs at the district level was adequately captured for the first time in this study. This was because in the FY 2000/01 a decision was made to have all health workers employed at the district level reflected on one centralised payroll instead of the confusion that used to exist in the past with district workers employed in other departments appearing under the health payroll. Since recruitment since 1998/99 was well documented it was possible to project the health workers payroll backwards.

Figure 4.12: District Health Services Expenditure on inputs



4.5.2 Private Entities:

Households

The households are the biggest FA accounting for between 38% and 42% of all transfers over the study period. The households spend these funds mostly for purchasing health services in clinics and drug shops, in other Outpatient community and integrated care centres and with traditional healers. Over 60% of the expenditure is at clinics and drug shops (see Figure 4.13).

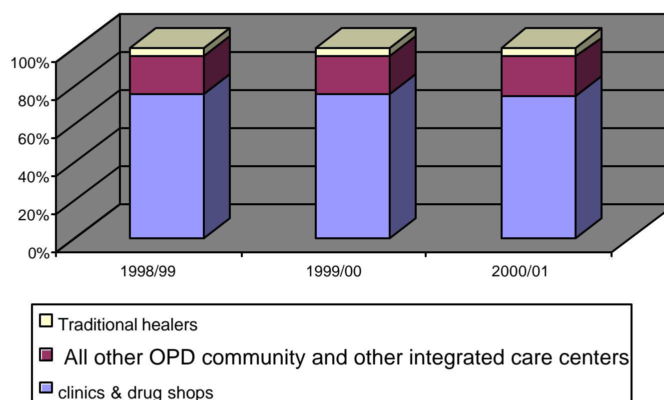
Table 4.17: Comparison of OOP expenditure with other countries FY 2000/01

Country	OOP as a % of total private expenditure
Uganda	74
Kenya	67.6
Ethiopia	84.7
Malawi	43.7
Rwanda	66.1
Botswana	35.3
Mozambique	39.3

Source: World Health Report 2003

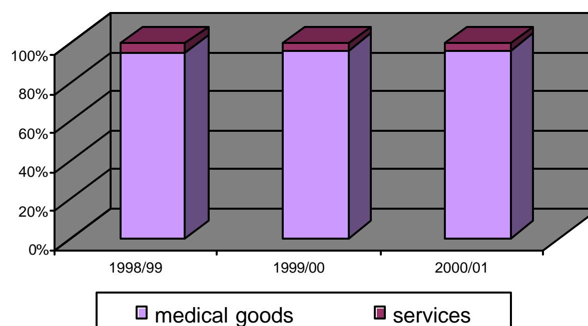
The OOP as a percentage of total private expenditure for Uganda for the FY 2000/01, when compared with other countries is high, second to Ethiopia at 84.7% (see Table 4.17)

Figure 4.13: Household Expenditure by Providers 1998/99 to 2000/01



The kind of services thus procured is in line with what these providers offer, and these are mainly drugs and other medical supplies (Figure 4.14).

Figure 4.14: Household Expenditure on inputs 1998/99 to 2000/01



PNFP Agencies

The second largest FAs are the PNFPs (both Facility and Non-Facility Based), accounting for between Ugshs 144 and 255billion or 24 – 32% of all transfers between 1998/99 and 2000/01. Of these the facility-based (FB) PNFP constitute 9 -16% only over the study period, with the Non-Facility Based (NFB) PNFP commanding an increasing proportion 84 – 90%.

Facility based PNFP.

These entities utilise the funds by purchasing health services from PNFP hospitals, LLUs and training institutions. Funds channelled through these entities increased minimally from UgShs 23bn in 1998/99 to UgShs 27bn in 2000/01.

The FB PNFPs use the bulk of the funds to provide services at the hospitals (75-83%) and the balance is shared evenly between the PNFP LLUs and the health worker training schools, which are usually attached to the hospitals as shown in Figure 4.15.

Figure 4.15: Facility-based PNFP spending on providers

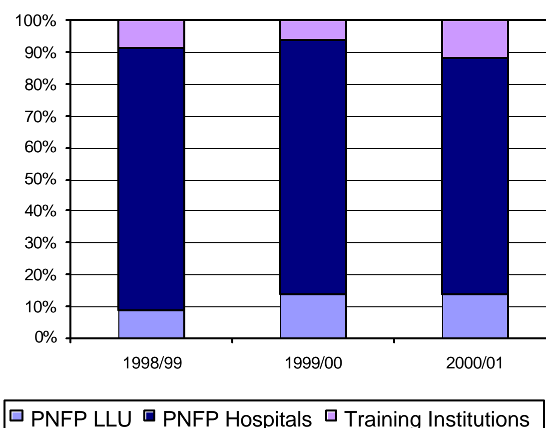
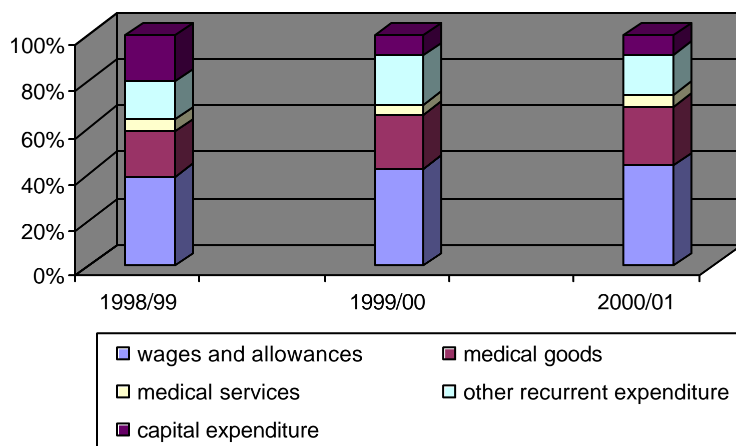


Figure 4.16 shows that at the input level, the proportion spent on wages and allowances followed by medical goods form the bulk of the expenditure. The expenditure on the two inputs rose over the study period. The capital expenditure declined from Ugshs 4.5billion (20%) in 1998/99 to Ugshs 2.2billion (8%) in 2000/01.

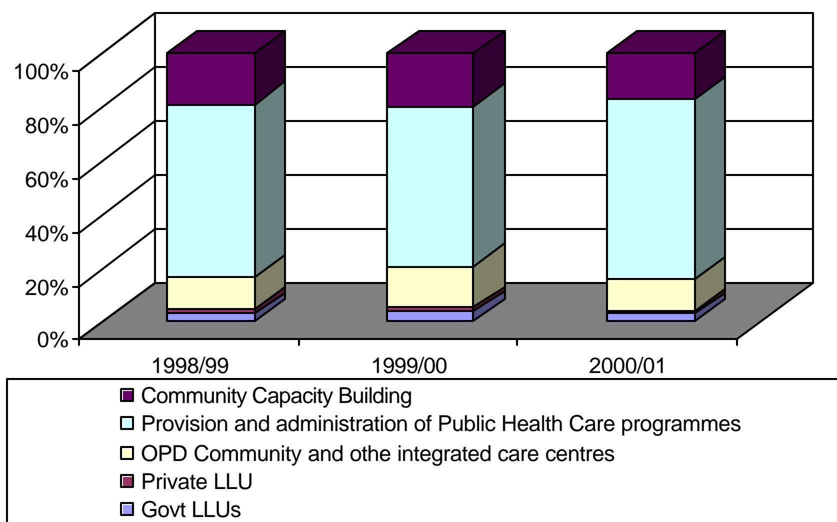
Figure 4.16: Facility-based PNFP agencies expenditure on inputs



Non-Facility Based PNFPs:

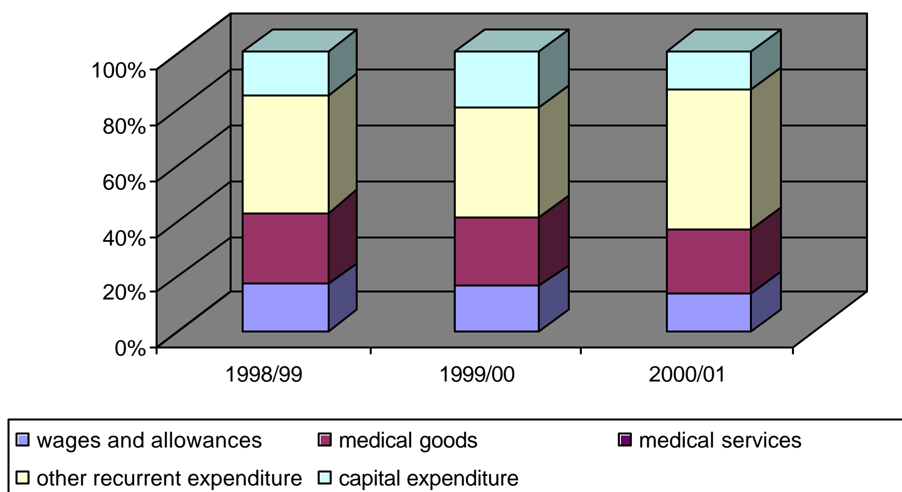
Funds channelled through these entities increased from UgShs 121bn to UgShs 231bn over the study period. These entities utilise the funds by purchasing health services from Government LLUs, Private (PNFP) LLUs, Community and integrated care centres, and also use the funds to run Public Health Care Programmes and Community Capacity Building Activities. The bulk of money is used to administer and run public health care programmes – 59% to 66% between 1998/99 and 2000/01.

Figure 4.17: Non Facility –based PNFP expenditure at providers



The NFB PNFPs and the providers they fund utilise a mixture of inputs for the provision of health services. These include wages and allowances, medical goods, other recurrent expenditure and capital expenditure as shown in the graph below.

Figure 4.18: Non Facility-based PNFP spending on Inputs



The bulk of the expenditure was to inputs classified as other recurrent expenditure constituting 42-53% of all NFB PNFP expenditure, in absolute terms. The proportion of expenditure on wages and allowances and medical goods on the other hand declined from a total of 43% in 1998/99 to 37% in 2000/01.

Private firms:

Employers spend all the funds at the on-site facilities, and use the funds to provide medical supplies (90%) and services (10%).

Private Insurance Enterprises
The insurance companies used most of the funds to purchase services from PNFP hospitals (57-71%), Mulago the National Referral Hospital (25-38%) and the remainder at clinics and drug shops (5-9%).

4.6 Expenditure by levels of care:

The highest expenditure was at the MoH headquarters that shows an increasing trend through the survey period. Expenditure at the National Referral hospital shows a reducing trend and this is a result of deliberate efforts by the MoH to allocate more funds to service delivery levels that is the district level. Much as expenditure at the district level remains low, a lot of progress has been made in this area and the expenditure at the district level accounted for 49% of the total health sector budget for the FY 2002/03[43].

Table 4.18: Expenditure by levels of care

	1998/99	1999/00	2000/01
Ministry of Health Headquarters	34%	38%	42%
National Referral Hospital	20%	15%	12%
Regional Referral Hospital	8%	9%	8%
DHS (PHC level)	37%	37%	38%

[43] Mid Term Review Report 2003

Table 4.19: Financial allocation to different types of inputs 1998/1999 (Ugshs"000)

Table 8:	Financing Agents x Inputs (FA x I)										
		HF.1 General Government				HF. B Non-public sector					
		HF.1.1 General government excluding social security funds						HF. 2.4 Not for Profit			
	Total	HF.1.1.1.1 MoH	Other Ministries & National Health services* (HF 1.1.1.2 - 9)	HF.1.1.3 District Health Services	HF 2.5.1 Parastatals	HF.2.2 Private insurance enterprises	HF 2.3 Households	HF 2.4.1 Facility based	HF 2.4.2 Non facility based	HF 2.5 Private firms	
	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	%
RC I.1.1 Wages and allowances	74,959,408	19,416,595	12,786,092	13,465,682	0		0	9,056,394	20,234,645	0	**14%**
RC. I.2.1 Medical goods and services	0										0%
RC.1.2.1.1 Drugs and pharmaceuticals	299,107,024	17,551,264	9,702,658	11,619,235	566,159	895,693	225,517,728	344,630	31,177,197	1,732,461	**55%**
RC. I.2.1.2 Other supplies	7,824,384	0	1,976,833	1,460,457				4,129,188	257,906		**1%**
RC. 1.2.1.3 Medical Treatment Abroad	46,214	0	46,214	0					0		**0%**
RC. 1.2.3 Other goods and Services	10,164,972	0	0	0			8,746,721	1,225,756	0	192,496	**2%**
RC. 1.3 Consumption of fixed capital	3,875,130	738,574	1,629,314	1,507,241					0		**1%**
RC.1.2.4 Other expenditure on inputs	1,810,017	490,689	926,427	392,901				0	0		**0%**
RC.1.9.1.1 Utilities	8,664,258	1,017,228	4,313,386	1,055,599				1,181,780	1,096,265		**2%**
RC.1.9.1.2 Transport	12,084,200	2,270,287	1,636,913	1,762,814				999,881	5,414,305		**2%**
RC.1.9.1.3 Supplies	41,917,114	1,851,993	799,225	1,392,462				847,155	37,026,280		**8%**
RC.1.9.1.4 Consumables	10,805,639	1,753,422	629,909	707,453				732,828	6,982,026		**2%**
RC.2 Other capital expenditure	76,936,567	26,796,202	20,632,810	6,663,805	0	0	0	4,530,517	18,313,232	0	**14%**
RC.2.1 Buildings	22,233,385	0	14,268,773	2,251,673					***5,712,939***		**4%**
RC.2.2 Equipment	11,146,630	10,715,357	11,830	28,666					390,776		**2%**
RC.2.2.1 Vehicles	0	0	0	0					0		**0%**
RC.2.2.3 Training	31,596,553	12,489,996	4,870,035	2,566,799					11,669,723		**6%**
RC.2.2.4 Other fixed assets	2,100,609	0	527,615	1,572,994					0		**0%**
RC.2.2.5 Taxes	4,255,926	3,590,848	125,284						539,794		**1%**
RC.2.2.6 Arrears	765,339	0	765,339	0					0		**0%**
RC.2.2.7 Expenditure on AID	0	0	0	0					0		**0%**
RC.2.2.8 Research	307,608	0	63,935	243,673					0		**0%**
RC.2.3 Capital expenditure not disaggregated	4,530,517			0				4,530,517			**1%**
Total expenditure*	**548,194,928**	**71,886,254**	**55,079,782**	**40,027,649**	**566,159**	**895,693**	**234,264,448**	**23,048,129**	**120,501,857**	**1,924,957**	**100%**
Percentage		**13.11%**	**10.05%**	**7.30%**	**0.10%**	**0.16%**	**42.73%**	**4.20%**	**21.98%**	**0.35%**	

Table 4.20: Financial allocation to different types of inputs 1999/2000 (Ugshs"000)

Table 8:	Financing Agents x Inputs (FA x I)										
		HF.1 General Government				HF. B Non-public sector					
		HF.1.1 General government e xcluding social security funds				HF. 2.4 Not for Profit					
	Total	HF.1.1.1.1 MOH	Other Ministries & National Health services* (HF 1.1.1.2 - 9)	HF.1.1.3 District health services	HF 2.5.1 Parastatals	HF.2.2 Private insurance enterprises	HF 2.3 Households	HF 2.4.1 Facility based	HF 2.4.2 Non facility based	HF 2.5 Private firms	
	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	1999/2000	%
RC I.1.1 Wages and allowances	94,043,300	24,596,532	14,450,500	17,089,755	0		0	10,073,088	27,833,424	0	15.13%
RC. I.2.1 Medical goods and services	0										0.00%
RC.1.2.1.1 Drugs and pharmaceuticals	334,502,951	18,491,850	9,811,746	12,142,162	620,477	571,899	247,904,365	872,172	42,417,543	1,670,737	53.80%
RC. I.2.1.2 Other supplies	8,558,542	0	2,142,582	1,262,225				4,611,142	542,593		1.38%
RC. 1.2.1.3 Medical Treatment Abroad	25,551	0	25,551	0					0		0.00%
RC. 1.2.3 Other goods and Services	11,222,058	0	0	0			10,036,213	1,000,208	0	185,637	1.80%
RC. 1.3 Consumption of fixed capital	3,116,944	632,506	1,111,504	1,372,933					0		0.50%
RC.1.2.4 Other expenditure on inputs	1,184,092	280,119	610,730	293,244				0	0		0.19%
RC.1.9.1.1 Utilities	6,873,590	1,123,484	1,574,057	1,273,394				1,476,783	1,425,872		1.11%
RC.1.9.1.2 Transport	10,533,770	1,995,731	1,040,817	1,151,654				1,290,563	5,055,004		1.69%
RC.1.9.1.3 Supplies	58,967,370	1,467,312	924,230	1,164,912				1,111,047	54,299,869		9.48%
RC.1.9.1.4 Consumables	9,867,435	1,752,224	298,211	535,569				1,073,472	6,207,959		1.59%
RC.2.1 Buildings	14,645,880	0	6,018,571	2,531,380					6,095,929		2.36%
RC.2.2 Equipment	25,313,355	10,708,034	197,667	692,080					13,715,574		4.07%
RC.2.2.1 Vehicles	0	0	0	0					0		0.00%
RC.2.2.3 Training	31,562,859	12,353,934	3,323,049	2,592,241					13,293,634		5.08%
RC.2.2.4 Other fixed assets	541,144	0	106,994	434,151					0		0.09%
RC.2.2.5 Taxes	6,912,503	4,169,881	2,687,406						55,216		1.11%
RC.2.2.6 Arrears	1,334,365	0	1,334,365	0					0		0.21%
RC.2.2.7 Expenditure on AID	0	0	0	0					0		0.00%
RC.2.2.8 Research	534,275	0	93,493	440,782					0		0.09%
RC.2.3 Capital expenditure not disaggregated	2,015,684			0				2,015,684			0.32%
Total expenditure*	**621,755,668**	**77,571,608**	**45,751,473**	**42,976,481**	**620,477**	**571,899**	**257,940,578**	**23,524,159**	**170,942,618**	**1,856,375**	**100.00%**
Percentage		**12.48%**	**7.36%**	**6.91%**	**0.10%**	**0.09%**	**41.49%**	**3.78%**	**27.49%**	**0.30%**	

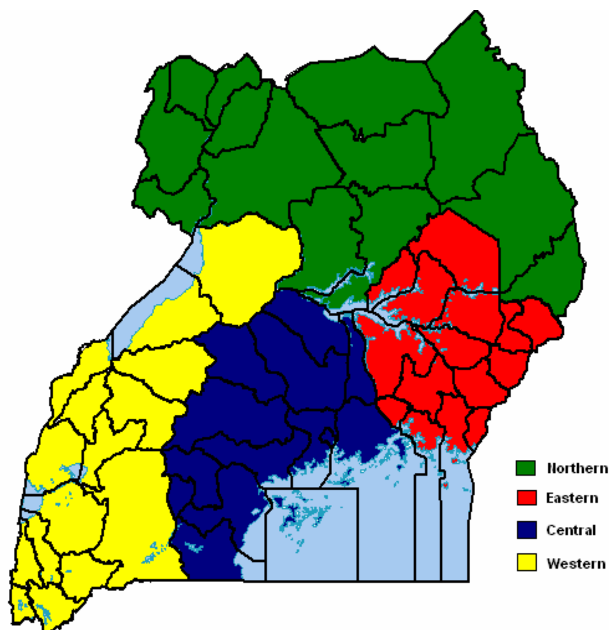
Table 4.21: Financial allocation to different types of inputs 2000/2001 (Ugshs"000)

Table 8:	Financing Agents x Inputs (FA x I)										
		HF.1 General Government				HF. B Non-public sector					
		HF.1.1 General government excluding social security funds				HF. 2.4 Not for Profit					
	Total	HF.1.1.1.1 MOH	Other Ministries & National Health services* (HF 1.1.1.2 - 9)	HF.1.1.3 District health services	HF 2.5.1 Parastatals	HF.2.2 Private insurance enterprises	HF 2.3 Households	HF 2.4.1 Facility based	HF 2.4.2 Non facility based	HF 2.5 Private firms	
	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	%
RC I.1.1 Wages and allowances	112,959,824	32,778,408	19,121,011	18,818,731	0		0	11,919,756	30,321,918	0	15.16%
RC. I.2.1 Medical goods and services	0										0.00%
RC.1.2.1.1 Drugs and pharmaceuticals	370,524,720	22,630,545	8,960,357	13,471,146	645,983	1,119,571	267,198,890	849,121	54,214,685	1,434,423	49.72%
RC. I.2.1.2 Other supplies	9,142,793	0	1,316,760	1,176,546				6,118,451	531,037		1.23%
RC. 1.2.1.3 Medical Treatment Abroad	31,413	0	31,413	0					0		0.00%
RC. 1.2.3 Other goods and Services	14,944,062	0	0	0			13,348,163	1,436,519	0	159,380	2.01%
RC. 1.3 Consumption of fixed capital	4,399,843	689,079	1,458,782	2,251,981					0		0.59%
RC.1.2.4 Other expenditure on inputs	765,571	305,173	236,048	224,350				0	0		0.10%
RC.1.9.1.1 Utilities	10,107,163	1,306,796	3,120,244	1,949,359				1,628,572	2,102,193		1.36%
RC.1.9.1.2 Transport	13,219,355	2,422,708	1,079,329	1,309,491				1,411,621	6,996,205		1.77%
RC.1.9.1.3 Supplies	100,192,386	1,764,201	646,093	1,621,206				757,924	95,402,961		13.44%
RC.1.9.1.4 Consumables	14,250,992	2,240,245	378,205	725,457				875,114	10,031,970		1.91%
RC.2.1 Buildings	22,169,155	0	2,879,686	11,447,288					7,842,181		2.97%
RC.2.2 Equipment	18,665,838	13,690,388	42,693	247,277					4,685,480		2.50%
RC.2.2.1 Vehicles	0	0	0	0					0		0.00%
RC.2.2.3 Training	40,537,991	15,759,584	3,532,838	2,709,417					18,536,152		5.44%
RC.2.2.4 Other fixed assets	718,680	0	231,638	487,042					0		0.10%
RC.2.2.5 Taxes	2,498,429	2,007,081	85,157	0					406,191		0.34%
RC.2.2.6 Arrears	5,046,079	4,565,083	480,996	0					0		0.68%
RC.2.2.7 Expenditure on AID	2,312,892	2,312,892	0	0					0		0.31%
RC.2.2.8 Research	500,995	0	80,040	420,956					0		0.07%
RC.2.3 Capital expenditure not disaggregated	2,215,894			0				2,215,894			0.30%
Total expenditure*	**745,204,076**	**102,472,185**	**43,681,290**	**56,860,246**	**645,983**	**1,119,571**	**280,547,053**	**27,212,972**	**231,070,972**	**1,593,804**	**100.00%**
Percent		**13.75%**	**5.86%**	**7.63%**	**0.09%**	**0.15%**	**37.65%**	**3.65%**	**31.01%**	**0.21%**	

4.7 Expenditure by Regions/Districts

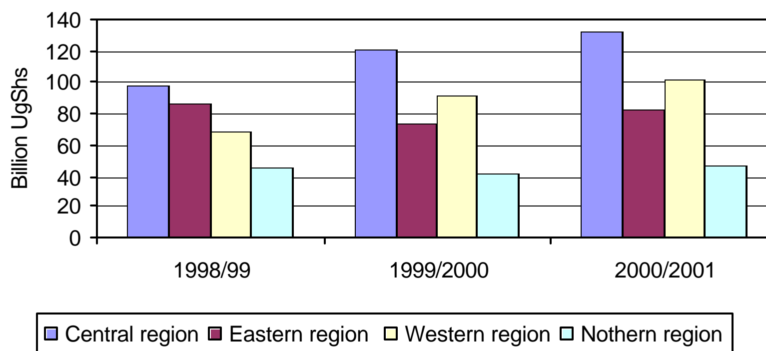
Uganda is a highly decentralised country, made up of 45 districts in the year 2000[44]. These districts are distributed amongst 4 regions on a geographical basis. The regional level has no government; however it is often used for certain analysis – for example the Uganda National Household Survey does socio-economic analysis by this level and not the district level.

Figure 4.19: Regions of Uganda



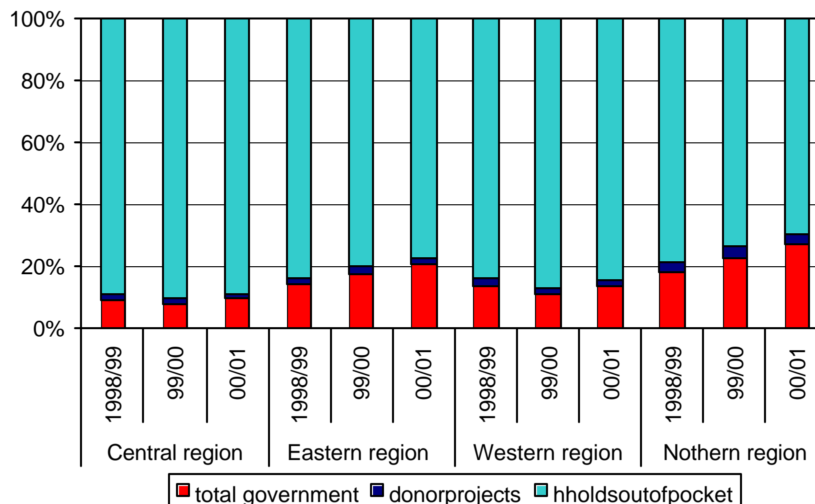
For this study information was available on central and local government, donor project spending by district, and for household spending by region. For the rest of the health expenditure it was not possible to break spending down into districts or region. Using this information health expenditure by region was computed. Figure 4.20 shows that the highest health spending was in the central region for all the 3 years and lowest in the Northern region. Health spending over the study period increased in the central and western regions.

Figure 4.20: Health Expenditure by Region 1998/99 to 2000/01



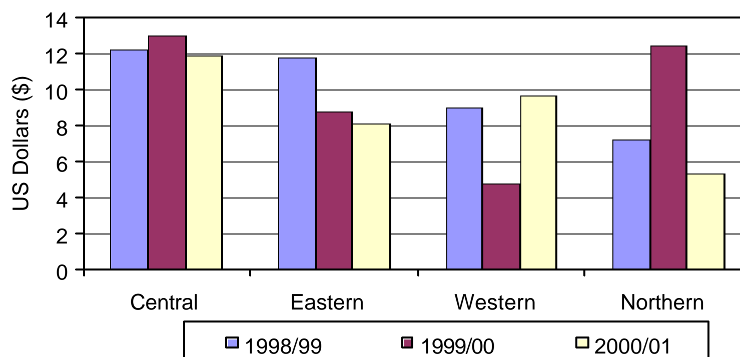
[44] Currently (2004) they are 56

Figure 4.21: Proportion of Health Expenditure by Source in the different Regions 1998/99 - 2000/01



When analysis was done to determine the source of this expenditure, household expenditure provided by far the bulk of these resources – at least 80% for each of the regions except northern Uganda where it accounted for 70% - 79%. There were regional variations, with the North showing the highest proportion for government and donor's funds followed by East, West and then central region.

Figure 4.22: Per Capita Health Expenditure by Region 1998/99 to 2000/01



When the population figures in these different parts of the country are considered, it is seen that the lowest per capita expenditure was in Northern region and highest in the Central region much as total government contribution and donor contribution were highest in the North. The main reason for this is the high household OOP, which is highest in the Central and lowest in the North.

4.8 District efficiency of health expenditure:

Efficiency in resource utilization is one of the objectives of the health policy. In a decentralized system, it is important to look at the level of efficiency of the decentralized unit (districts). A district is said to be technically efficient relative to another if it produces either the same level of output with fewer inputs or more outputs with the same or fewer inputs.

This section will look at technical efficiency that is the degree to which a district performs it's designated health functions with minimum consumption of resources. The analysis is done for only one financial year 2000/01 as this was the only year where all the data required was available for all districts. Issues on allocative efficiency, which look at the right mix of inputs, are dealt with in earlier sections.

A Data Envelope Analysis (DEA) model, which determines an efficiency score by comparing the performance of each district with a set of reference or benchmark districts (i.e. those that use a similar mix of inputs and outputs), has been used to derive district efficiency scores. Efficient districts receive an efficiency score of 1, while inefficient districts receive efficiency scores of less than 1. The lower the score the less efficient the district is relative to the most efficient. It is important to note that the scores are relative- that is, those districts given a score of 100 percent are efficient relative to the rest of the districts in the model, but might not be operating efficiently by some absolute standard. *(see Glossary Annex II for definitions).*

Inputs used

- Number of medical personnel (medical officers, dental surgeons and clinical officers)
- Number of nurses (enrolled midwife, registered midwife, enrolled nurse and registered nurse)
- Population per bed
- Total health Expenditures (PHC; recurrent wage, recurrent non-wage, development, delegated funds, donor releases to districts and local government contribution) *(see Annex VIII for details).*

Outputs used

- Per capita OPD utilization
- % Deliveries in Government and NGO health facilities.
- DPT3 coverage.

The efficiency results obtained for the different districts using Data Envelope Analysis are presented in Table 4.22. The technical efficiency score estimates the extent to which outputs could be increased at the same level of funding to reach an efficient production frontier[45]. For example, Iganga district has an efficiency score of 0.25 or 25 percent meaning that it could be able to achieve 75% more output at the same level of funding if it operated at the best practice. *(see Annex IX for details)*

The efficiency score ranges from 0.25 to 1, and 11 (29 %) of districts achieve efficiency scores of 100 percent. The average technical efficiency score for the 45 districts is 0.70, indicating an inefficiency rate of 30%. That is to say, districts can produce 30% more output at the same level of funding, if all of them were operating at the observed best practice.

[45] The technical efficiency score is based on the assumption that all district operate under constant returns to scale, that is there are no economies and diseconomies of scale.

Technical efficiency is affected by size of operation (scale efficiency) and by managerial or organization practices (non-scale technical efficiency). In order to determine the cause of the inefficiency a second DEA model is estimated under the assumption of variable returns to scale (increasing or decreasing returns). The efficiency score obtained in this case is called the pure efficiency score. It indicates that the average efficiency score is higher in the variable returns case- 80.2% compared with 70.8 % for Constant Returns to Scale.

There are now 17 districts with an efficiency score of 100 percent (i.e Gulu, Kabarole, Kampala and Kitgum become efficient under the assumption of variable returns to scale). Thus, inefficiencies in the additional 4 districts can be attributed to operating at an inappropriate scale of operation, that is, they are either too big or too small to operate efficiently[46].

Of the other 28 that do not operate at the optimal size comprise 26 that appear to be too small (operate under increasing returns to scale) that is operating at a small scale in comparison to the size of the population they are serving and 2 that seem too big that is operating at a big scale yet serving a smaller population (i.e. Adjumani and Hoima operate under decreasing returns to scale).

Overall the big divergence between the technical and pure efficiency scores suggests that scale inefficiency is a major cause of overall inefficiency for the districts. It appears that inefficient districts use the incorrect scale for operation either too many inputs or producing too few outputs.

[46] These results should be interpreted with caution since the analysis excludes a number of factors (such as number of hospitals in the districts) that may be important in determining the most economically efficient scale of operation.

Table 4.22: Overall performance of 45 District Healthcare functions by the CRTS and VRTS DEA Models (2001)

Districts	Technical Efficiency	Pure Efficiency	Scale efficiency	Type of Scale
Iganga	0.25	0.48	0.52	Increasing
Adjuman	0.83	0.90	0.92	Decreasing
Apac	0.30	0.62	0.49	Increasing
Arua	0.27	0.45	0.61	Increasing
Bugiri	0.29	0.55	0.53	Increasing
Bundibugyo	0.84	0.89	0.95	Increasing
Bushenyi	0.34	0.51	0.67	Increasing
Busia	1.00	1.00	1.00	Constant
Gulu	0.55	1.00	0.55	Decreasing
Hoima	0.87	0.87	1.00	Decreasing
Jinja	1.00	1.00	1.00	Increasing
Kabale	0.67	0.68	0.99	Constant
Kabarole	0.99	1.00	0.99	Increasing
Kalangala	1.00	1.00	1.00	Constant
Kampala	0.87	1.00	0.87	Increasing
Kamuli	0.89	0.91	0.98	Constant
Kapchorwa	0.57	0.74	0.77	Increasing
Kasese	0.65	0.67	0.97	Increasing
Katakwi	1.00	1.00	1.00	Constant
Kibaale	0.67	0.74	0.91	Increasing
Kiboga	0.63	0.73	0.86	Increasing
Kisoro	1.00	1.00	1.00	Constant
Kitgum	0.87	1.00	0.87	Increasing
Kotido	0.44	0.65	0.66	Increasing
Kumi	1.00	1.00	1.00	Increasing
Lira	0.35	0.56	0.63	Increasing
Luwero	0.75	0.82	0.92	Increasing
Masaka	0.66	0.87	0.76	Increasing
Masindi	0.40	0.49	0.82	Increasing
Mbale	0.52	0.69	0.75	Increasing
Mbarara	0.33	0.55	0.60	Increasing
Moroto	1.00	1.00	1.00	Constant
Moyo	0.85	0.98	0.87	Increasing
Mpigi	0.90	0.92	0.97	Increasing
Mubende	0.43	0.47	0.91	Increasing
Mukono	0.43	0.58	0.75	Increasing
Nakasongola	1.00	1.00	1.00	Constant
Nebbi	1.00	1.00	1.00	Constant
Ntungamo	1.00	1.00	1.00	Increasing
Pallisa	0.65	0.65	0.99	Increasing
Rakai	0.45	0.59	0.77	Increasing
Rukungiri	1.00	1.00	1.00	Constant
Sembabule	1.00	1.00	1.00	Constant
Soroti	1.00	1.00	1.00	Constant
Tororo	0.36	0.52	0.69	Increasing

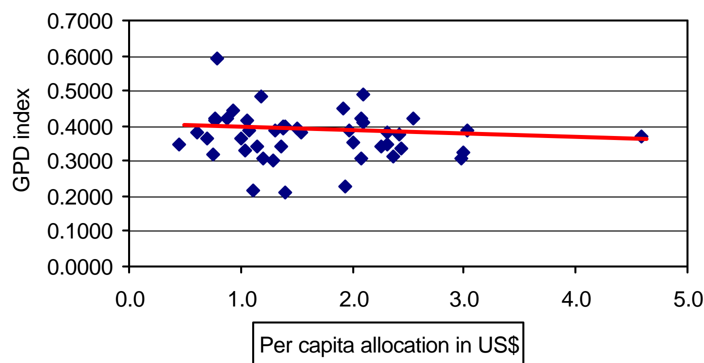
Benchmarking a case study of an inefficient district-Bugiri

Data Envelope Analysis has the advantage of providing benchmarks, target input and output levels for each inefficient operating unit in this case district. Benchmark districts are those which have been ranked as efficient by the model, and which an inefficient district may use as a guide for improving its performance. In calculating these targets, the actual level of input is compared with the target input level calculated by the model along with the percentage improvements needed to achieve the target. For example, the model suggested Kisoro, Kumi, Soroti, Moroto and Nakasongola as benchmarks for Iganga district, which is inefficient. Thus Iganga district can look at the input and output levels of these benchmarks districts to gain insights into how it can improve its performance. The lambda is a measure of relative importance of each reference district in the benchmark. Of the five-benchmark districts, using the lambda values Nakasongola appears less important compared to the other four *(see Annex IX for details).*

4.9 Per capita allocation vs GDP index; life expectancy index by districts:

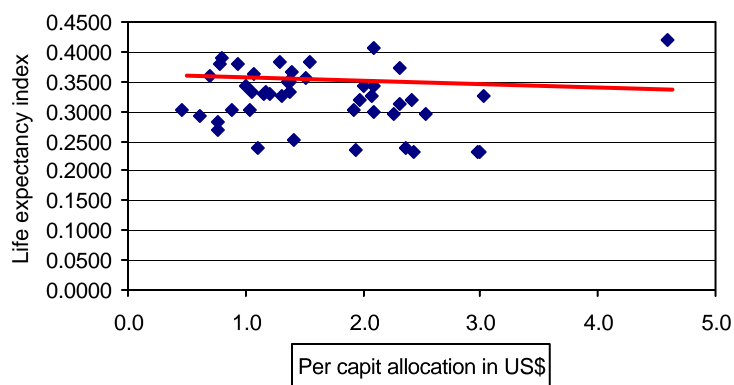
This analysis is done for PHC wage recurrent, non-wage recurrent, development, delegated funds, donor allocation to districts and Local government contributions and results are shown in Table 4.23. Results show increasing per capita allocation over the years for almost all districts. The per capita allocation is very low in all districts except Kalangala[47] and Kapchorwa districts. Kapchorwa district, which has the highest Life expectancy index, received the highest per capita allocation second to Kalangala district.

Figure 4.23: GDP index vs per capita allocation



Figures 4.23 and 4.24 show no significant favourable allocation to Districts with low GDP index and life expectancy index. Districts with a low life expectancy index are likely to have higher health needs and should be allocated more funds while districts with a low GDP index are poorer than those with a higher GDP index and should not spend a lot of a significant proportion of their income on purchasing health care thus the need to allocate them more resources. Efforts are being put in place by the MoH to address equity issues in resource allocation and among the variables included in the resource allocation formula are district poverty indices and health need.

Figure 4.24: Life expectancy index Vs per capita allocation



[47] Much as the cost of service delivery is high in Kalangala district, the difference in allocation is too big.

Table 4.23: Per capita allocation Vs GDP index; life expectancy index by districts.

	US$ per capita expenditure			GDP index	Life expectancy index
DISTRICT	**1998/1999**	**1999/2000**	**2000/2001**	**2000/2001**	**2000/2001**
Adjumani	2.0	2.4	3.0	0.3255	0.2333
Apac	0.8	1.0	1.3	0.3029	0.3819
Arua	0.6	0.6	0.8	0.3215	0.2829
Bugiri	1.3	1.4	2.0	0.3548	0.3432
Bundibugyo	1.5	1.5	2.4	0.3151	0.2392
Bushenyi	0.9	1.3	1.4	0.3928	0.3319
Busia	1.0	1.3	2.4	0.3753	0.3189
Gulu	0.8	1.3	2.4	0.3355	0.2318
Hoima	1.1	0.9	1.5	0.3811	0.3817
Iganga	0.7	0.9	1.0	0.3634	0.3432
Jinja	0.9	1.6	2.1	0.4912	0.4069
Kabale	0.8	1.2	1.5	0.3952	0.3554
Kabarole	0.4	0.7	0.6	0.3829	0.2918
Kalangala	**5.3**	**8.1**	**14.0**	**0.4901**	**0.3098**
Kampala	0.5	0.6	0.8	0.5892	0.3900
Kamuli	0.6	0.7	0.7	0.3655	0.3584
Kapchorwa	**2.6**	**3.1**	**4.6**	**0.3673**	**0.419**
Kasese	1.2	1.5	1.4	0.3972	0.3665
Katakwi	0.8	0.9	1.0	0.3276	0.3007
Kibaale	1.0	1.3	1.1	0.3412	0.3278
Kiboga	2.2	1.9	2.5	0.4228	0.2952
Kisoro	1.7	2.4	2.3	0.3789	0.3734
Kitgum	0.9	1.2	1.1	0.2186	0.2378
Kotido	1.0	1.2	1.4	0.2103	0.2528
Kumi	1.8	1.7	2.3	0.3406	0.2962
Lira	1.1	1.2	1.2	0.3059	0.3279
Luwero	1.3	1.7	2.1	0.42	0.326
Masaka	0.9	1.1	0.8	0.4137	0.3799
Masindi	1.6	2.1	2.3	0.3497	0.3126
Mbale	0.8	1.2	1.1	0.3867	0.3629
Mbarara	0.6	0.7	0.8	0.4193	0.2697
Moroto	1.1	1.6	1.9	0.2272	0.2363
Moyo	2.0	2.9	3.0	0.3076	0.2333
Mpigi	0.8	1.0	1.2	0.484	0.3319
Mubende	1.2	1.4	1.4	0.3956	0.3506
Mukono	0.8	0.9	0.9	0.4199	0.3015
Nakasongola	1.4	2.4	3.0	0.3849	0.326
Nebbi	1.4	2.4	2.1	0.3052	0.2979
Ntungamo	0.8	0.8	1.1	0.4142	0.3319
Pallisa	1.5	1.7	1.4	0.344	0.3493
Rakai	1.8	2.2	2.1	0.4079	0.3414
Rukungiri	1.3	1.2	1.3	0.3854	0.325
Sembabule	0.7	0.9	0.9	0.4423	0.3799
Soroti	0.7	0.3	0.5	0.3462	0.3007
Tororo	1.5	2.2	2.0	0.3843	0.3189
Average	**1.2**	**1.6**	**1.9**	**0.4**	**0.3033**

Chapter 5 Discussion and Recommendations for policy

The first National Health Accounts study done in Uganda covered the FY 1997/98. The current and second study covered the FYs 1998/99, 1999/00 and 2000/01. Fairly comparable data is therefore available on Health Expenditure for four years. This section discusses the policy questions asked at the beginning of the study and the implications of the findings of this report on the Ugandan health system.

5.1 Resource mobilisation

Total Health Expenditure (THE) grew by 72% over the first and second round of NHA study (1997/98 – 2000/01). The current study period and the period thereafter, have been characterised by a rapidly changing policy and resource management environment in Uganda. The current picture (FY 2003/04) may be quite different from what is reflected in the study figures. In particular the changes brought about by SWAp and increasing budget support and the abolition of User Fees would be apparent in the period FY 2001/02 to 2003/04, which was not covered by this study.

The major sources of expenditure over the current study period were households, donor funding followed by central government. Central government funding registered marked increase over the period 1997/98 to 2000/01. This is equivalent to 123% growth across the period or average annual growth rate of 41%. This is remarkable, as government sector budgets rarely grow that fast. This increase can be explained by a number of factors including:

- National level reforms with the development of the Poverty Eradication Action Plan (PEAP) in 1997 and the establishment of the Poverty Action Fund (PAF) in 1998/99 to direct and protect resources for the PEAP priority areas including the health sector. PAF funding for the health sector increased from 21 billion in 1998/99 to 61 billion in 2000/01. Before 1997/98 no such budget line existed[48].
- Reforms within the health sector especially the development of the ten year National Health Policy (NHP), 1999, and Health Sector Strategic Plan (HSSP) for the period 2000/01 to 20004/05. This enabled the stakeholders in the sector to better appreciate the requirements for adequate sector performance leading to efforts to increase sector resources.

The central government funding over the study period included PAF resources to which donors contribute at the level of MoFPED. The increasing donor budget support particularly unearmarked funds, makes future disaggregation of government health funding by source a challenge and caution should be exercised when interpreting levels of donor funding. In this study, the donor funding reflected is an underestimate considering that part of it is already captured under the government funding. Table 5.1 disaggregates the PAF funding to show the contribution of donors. The table shows an increasing proportion of government health sector budget contributed to by donors, equivalent to 18% in 2000/01.

[48] Note that the PHC CG preceded the PAF by one year – i.e the PHC CG was operational in 1997/98, whereas PAF was put in place in 1998/99.

Table 5.1: Donor Contribution to the Poverty Action Fund (Ugshs bn)

		1998/99	1999/00	2000/01
A	All PAF (National level)	97.66	167.29	328.11
B	Government funds including HIPC	64.51	72.91	187.05
C	Donor contribution to PAF (A-B)	33.15	94.38	141.06
D	PAF contribution to health sector	20.76	28.87	60.88
E	Donor contribution to health sector PAF (C/A)*D	7.05	16.29	26.17
F	Central government contribution to health expenditure – PAF & non-PAF	94.9	102.8	143.8
G	Proportion of govt health sector budget contributed by donors through budget support (E/F)*100	7%	16%	18%

Despite the increase in the total health expenditure, the low per capita health expenditure (US$ 18 per capita in 2000/01) raises concern. The picture is even bleaker when only government funding (including donor budget support) is considered (US$ 3.2 per capita in 2000/01) or when all public funding (including all donor support) is considered (US$ 8.4 per capita in 2000/01). The cost of providing the Uganda National Minimum Health Care Package (UNMHCP) has been estimated at US$ 28 per capita. This Health Financing Strategy estimate is more modest than the Commission for Macroeconomics and Health estimate of US$ 40. The 2000/01 level of public funding of US$ 8.4 per capita is less than 30% of the estimated requirement. This level of public investment in health three years ago may contribute to failure to attain the HSSP and PEAP targets.

The under funding for health is further compounded by the high population growth rate of 3.4%[49], whereby any growth in sector spending is not only overrun by inflation but also by rapid population increase. Inflation presents a particular problem when a large proportion of the health budget is spent on imports such as drugs and medical equipment. The performance of the economy, servicing the external debt and the efforts to increase health spending are all bound to put increasing pressure on the government budget, Unless there are significant gains in the country's economic performance, the health expenditure observed is likely to adversely affect the level and quality of services provided.

PNFP Agencies

The PNFP Agencies have continued to play a big role in health financing and provision of health services in the country, and the study was better able to capture the contribution of both the FB and the NFB PNFPs. The increase in funds channelled through the PNFPs over the study period is as a result of:

- Increasing central government channelling of funds through PNFPs especially FB PNFPs;
- Increased disbursement of donor funds a significant portion of which was through NFB PNFPs;

The National Health Policy (NHP) and Health Sector Strategic Plan (HSSP) indicate Public Private Partnership for Health (PPPH) as one of the main thrusts of delivery of the Uganda National Minimum Health Care Package. Over the period of the study efforts were made by

[49] Uganda Bureau of Statistics 2002

partners to explicitly strengthen this partnership with not only increasing funding of government to the PNFPs, but also involvement of PNFP stakeholders in policy formulation, implementation and monitoring. This was particularly so for the FB PNFPs. The partnership is built on a common vision for the sector and the increased funding is closely aligned with sector policies and priorities. This work is now being extended to partnership with the NFB PNFPs and to a less extent the Private Health Practitioners.

The PNFPs use these funds to provide services at hospitals, LLUs, training schools, for provision and administration of Public Health programmes and community capacity building. There is a difference between the FB PNFP and the NFBPNFP, with the former concentrating on funding health facilities and training schools, and the latter the Public Health Programmes and capacity building. As is expected from this dichotomy, the FB PNFPs mostly spend the resources on wages and medical goods, with notably a decreasing proportion on capital expenditure over the study period. The NFB PNFPs on the other hand spend more on other forms of recurrent expenditure such as utilities, transport administrative overheads than on medical goods. There is minimal government policy influence on this expenditure, especially for the NFB PNFPs.

The geographical distribution of PNFP (especially NFB PNFPs) is neither determined by any explicit policy decision nor is it equitable. Current monitoring mechanisms do not allow for the health sector to closely monitor whether these agencies are implementing government policies and priorities.

Donors/Development Partners

The Ugandan health sector is still dependent on donor funding – and this has implications on health sector policy and the sustainability of sector programmes. Although donor funds are analysed within public resources in this report, the management of these resources varies from project to project and in the majority of cases the application of these resources differs markedly from sector articulated policies and priorities leading to inefficiency and inequity and contributing to failure to attain the HSSP and PEAP targets. This is further elaborated below:

- An analysis of a number of project portfolios by the Ministry of Health in 2003 showed that on average only 30% of project funding is spent towards HSSP priority inputs[50]. The bigger share (70%) is spent on non-HSSP priorities such as expensive Technical Assistance and project administrative overheads.
- Donors often choose NFB PNFPs (NGOs) as implementing partners as seen in 2000/01 when 64% of all donor resources were channelled through NFB PNFPs. It is difficult to ascertain the appropriateness of NFB PNFPs as implementing partners. They are neither organised nor well coordinated and hence difficult to monitor. Given their expenditure pattern, it is not easy to establish whether there is value for money through partnership with NFB PNFPs.
- Donor project funding often concentrates on a single input, or a single programme without addressing the broader systems issues – for example extending infrastructure without availing additional staff may lead to under utilisation of the capital investment.

[50] The Mid-Term Review of the HSSP Report – 2003

- Donor project funding is also likely to be inequitable since projects by their very nature only cover small areas geographically – creating islands of excellence, amidst a greater need and these are usually not sustainable once the project ends.

5.2 Social protection and health financing

Households were not only the largest financing source, but were also the biggest Financing Agent over the study period. Household expenditure for health services is mainly used to buy services at clinics and drug shops (over 60%), other OPD community and integrated care centres, and at the traditional healers. The bulk of this expenditure thus funds medical goods (over 80%) and other medical services (consultation, diagnostic). Although still high, the percentage contribution of households to THE has shown a slight decrease over the study period hence a decreasing burden on the poor. With the abolition of cost sharing at government lower health units, the figure is likely to decrease even further.

The high level of household spending is a concern given Uganda's trend in poverty levels that have increased from 35% of the population living below the poverty line in 2000 to 38% in 2002[51]. Several studies have shown that the poor have difficulty in accessing health services because of the cost[52].

The significance of the private sector at FA and provider level challenges the current government regulatory systems in place. The government has limited influence both on how and where the households spend their funds and also the level of fees levied by the private for profit sector. The high proportion of health expenditure within the control of the private sector is likely to result in an inequitable and inefficient health system because:

- The high out-of-pocket (OOP) as opposed to insurance or other mechanisms makes individuals and households vulnerable. There is lack of safety nets leading to catastrophic health expenditures driving the poor into extreme poverty.
- The services offered in the clinics and drug shops are of varying quality and sometimes the client does not get good value for money. The National Household Survey of 2002/03 highlighted the inferior quality of the services offered by the private for profit sector. There are frequent drug stock-outs in the government health facilities resulting in purchase of drugs from the clinics and drug shops sold at higher prices.

The Uganda National Household Surveys (UNHS) and other studies have consistently shown that poverty is highest in the northern region, followed by eastern, then western and lastly central region[53]. This study has shown that OOP is correspondingly highest in the central, followed by western, then eastern and lowest in the northern region. When further analysis of the data is done, it is noted that the bulk of the expenditure (at least 80%) is from households, and this contribution is highest in central and western regions. The per capita health spending has showed minimum growth over the 3-year study period in central and western regions, while falling slightly in eastern and northern regions.

[51] Uganda National Household Survey 1999/00 and 2002
[52] Uganda National Household Survey 1999/00 and the UPPAP 1 of 2000, the Effects of Abolition of Cost sharing in Uganda 2002
[53] Uganda National Household Survey 20002/03 – Report on the Socio-economic Survey

A number of steps have already been taken to counter this and include:

- Increase of the central government allocation to health services;
- Increase of the proportion of the budget allocated to districts for management and service delivery at the district hospitals, HC IVs and LLUs;
- Abolition of User Fees in all public health units with the exception of private wings in hospitals;
- Increased funding to facilities owned/managed by FB PNFPs with the particular objective of encouraging reduction of user fees levied on the poor;
- Increased funding to DHS in poorer parts of the country for example for the FY 2004/05, it is projected that Pader district in northern Uganda will receive 50% more per capita funding than Kampala district in central Uganda[54].

All these efforts are geared towards increasing access to health services for the poor by decreasing/removing financial barriers to access. The alternative means of equitable health financing, insurance, where by the rich subsidise the poor and the healthy subsidise the sick is underdeveloped leaving the poor vulnerable to catastrophic expenditure and spiralling into a vicious cycle of poverty. As pointed out in the study, the contribution from employers (private and parastatals) and employees in the formal sector to health expenditure is still very low. The proportion of this that is channelled through formal insurance is even smaller. Close to 40% of the private firms were not offering any organised medical benefit for their employees. This and the very low proportion of Ugandans employed in the formal sector[55], makes the implementation of SHI challenging.

5.3 Financing decentralised health services

The government and stakeholders have an obligation not only of raising funds required to deliver health services but also allocating funds efficiently and equitably. The proportion of funds controlled in the public sector that can be used flexibly remains small. Hence the government has a responsibility as the steward to pool resources and/or influence the allocation of funds from other sources towards the sector priorities.

The MoH headquarters as a FA reflected increasing amounts of resources. This would seem to be in contradiction with articulated government policy. The NHP states that "in the medium term government spending at central level and on referral and tertiary hospitals will be held constant in real terms"[56]. However, a large percentage of the funds reflected against the MoH as a FA are converted into inputs and services directly for consumption at the district level. Since the study period captures only the first year of HSSP implementation i.e. 2000/01 for which the government commitment holds true, it would be interesting to follow up on this in subsequent NHA studies to see whether the percentage of government spending at the central, National and Regional referral hospitals remains constant. National Referral and Regional Referral Hospitals are funded from non-PAF resources. The relative percentage of the non-PAF budget line has been decreasing in favour of the PAF which at the district level

[54] Annual Health Sector Performance Report 2002/03

[55] The feasibility study on Social Health Insurance estimated that about 300,000 Ugandans (1.2% of the population) are in formal employment and could possibly be registered for SHI, with average earning power of <US$ 75 per month.

[56] National Health Policy 1999, Page 15

is used to fund delivery of health services at District and lower levels. This trend is expected to continue in the years following the study.

The NHP and HSSP clearly set strategies and priorities in line with providing the UNMHCP to all Ugandans, with particular effort to reach the vulnerable groups (the poor, women and children). Given decentralisation and the concerns for equity and efficiency outlined in the NHP and HSSP, it was expected that the local governments would manage increasingly more resources for the delivery of services. It was also expected that the distribution of these resources between and within districts would target the most vulnerable groups of the population. On the contrary, the DHS as FA continue to receive a small proportion of the THE. Funds at the FA level are mainly controlled by the households and PNFP, and these do not pass on any significant funds to the DHS. In addition, the low contribution from Local Governments of less than 1% indicates high dependence on the central level for funding of decentralised government health facilities and functions. The growth in magnitude of the DHS as a FA does not match the responsibility districts have in providing health services to their populations.

On the other hand, there has been an increase in funding to HC IVs and LLUs by the government over the study period, at the expense of district hospitals, district and HSD management. Since the majority of the population have contact with government health facilities at the district and lower levels, this increase is noteworthy. The increase is as a result of:

- Increase in the PHC-CG that has been used to fund management at the district and HSDs and service delivery at the HC IVs and LLUs, whereas the funds for hospitals did not show much increase[57];
- Explicit guidelines were put in place to assist districts in the allocation of funds for district and HSD management, and for service delivery at the HC IV and LLUs. The objective is to increase the proportion of and protect funds for service delivery.

5.4 Recommendations for policy

Given the above discussion the following recommendations are made in order to focus the country on track for the PEAP and MDG targets.

Level of Health Sector Funding

The funding levels for the health sector remain very low, particularly the portion of this to which government policy can be applied – in other words, the portion of health sector spending that can be applied to the HSSP and the UNMHCP. The levels of funding need to improve if any of the HSSP, PEAP and MDG targets are to be realised. This requires action from several fronts including:

- The Government of Uganda at the level of Cabinet and the Ministry for Finance and Planning – increase spending on the health sector;

[57] Funding to the district hospitals was non-PAF until the FY 2003/04 when they were transferred to the PAF budget line

- Development partners internationally and locally – increase spending on developing countries; Given that some of the funds are channelled through budget support, tracking of these resources will become increasingly challenging.
- The Ministry of Health – increased advocacy and sharing of information;

Channelling of Funds

Increase of funds alone will not be enough unless these funds are availed appropriately to the health service providers. The study has shown that the increasing funds channelled through government has been used to increase expenditure towards priority inputs at the MoH, National and Regional Referral Hospitals and other National Health Services, the DHS and the FB PNFPs. There is much less clarity on funds from donor projects particularly the large portion that is channelled through NFB PNFPs in terms of application to articulated priorities, with particular concerns for equity and efficiency. The recommendation of this report is that:

- More donor project resources should flow through the government system to the various implementers, which should include FB and NFB PNFPs as appropriate given their area of expertise and strength.
- The pace for agreeing PPPH policies and guidelines should increase, to enable more appreciation of what the NFB PNFPs do, and how best their activities can fit into the overall government and health sector policies and priorities and how to strengthen government monitoring mechanisms.

Household Expenditure

During the period covered by the study the proportion of THE contributed by households was found to be high. Some interventions have been put in place since then. For the future, this report recommends that:

- Government continues to monitor closely and ensure that the proportion of THE contributed by the households decreases from the current high levels;
- Public funds are channelled to the levels closest to the population and are used to fund the most key inputs – health workers' salaries/remuneration, medical goods and supplies, extension of services – which will lead to less need by the poor to look for services in the unaffordable private sector;
- Government continues to target the resources at the most vulnerable – the poor, children, and the hard-to-reach.
- Need to put into place risk pooling mechanisms to protect the poor. The MoH undertook a feasibility study on Social Health Insurance whose recommendation was to develop the SHI in the country gradually and cautiously over a 10-15 year period in order to enable the establishment of the institutional framework. Further work around this has started.
- Strengthening regulation of the private for profit sector in order to ensure that the poor get quality services for the right price

Chapter 6 Conclusion

With the completion of this second round of NHA, there is now available good quality health expenditure data for Uganda for the years 1997/98, 1998/99, 1999/00 and 2000/01. This information is very useful for policy formulation and review. It is timely at this stage in the policy formulation, whereby a new Health Sector Strategic Plan for the period 2005/06 to 2009/10 is being developed. In this concluding section, this report uses the study findings given the current circumstances and the stated government policy in various documents to make some specific recommendations.

Section 6.1 reviews recent policies and actions likely to affect the expenditure pattern in the period 2001/02 to date and hence the outcome of future NHA studies. Section 6.2 proposes future direction for NHA in Uganda.

6.1 Recent developments - 2001/02 to 2003/04

6.1.1 Funding for the HSSP, and the UNMHCP

At the time of development of the NHP and HSSP, the need for a better understanding of the cost of delivery of the UNMHCP and projected resource needs was identified given the various reforms in health management and financing. In 2002, the Health Financing Strategy for Uganda (HFS) was developed[58]. Information from the 1997/98 NHA study was very useful for this. What the HFS has achieved is to make clear that the resources that are currently available and which can be applied to the HSSP (mostly government including donor budget support, FB PNFP and a proportion of the donor project resources) are a very small fraction of what is required[59]. This report agrees with the estimates of the HFS.

The HFS has proved useful in raising the awareness of stakeholders to the funding gap in the health sector, and has led to efforts to close this gap like the increasing of the government budget to the health sector, and international efforts like the Global Fund for AIDS, TB and malaria. However the funding gap is still very large, with the currently estimated US$ 9 per capita being available for the HSSP out of a requirement of US$ 28 per capita.

6.1.2 Channelling of Health Funding

A major component of the health reforms that have taken place in the Ugandan health sector over the last five years are the Sector-Wide Approach to health development (SWAp) and the associated budget support. This has led to a number of donors closing/reducing their numerous projects and channelling most of the money through the central budget at the level of Ministry of Finance, Planning and Economic Development (MoFPED). These donors include: Belgium, Denmark, European Union, Ireland, Norway, Sweden, the Netherlands, United Kingdom and the World Bank[60]. This has contributed to the growth of the central

[58] In 2 volumes – Volume I: The Case for a Bigger Health Budget and Volume II: Health Financing Strategy for Uganda

[59] The Health Financing Strategy 2002

[60] However the mode of support by the different donors at MoFPED may vary with some providing general budget support and others earmarked budget support and this may change over time.

government budget, as noted in this study, which in turn has led to more focused channelling of resources to the MoH, DHS and PNFP agencies (particularly FB PNFPs). Over the period of the study the donor project funding was still rising. However projections from project agreements between the government and donors, show that donor project funding is expected to progressively decrease, with government budget funding (including donor budget support) exceeding donor budget funding for the first time in 2002/03. However this remains to be seen in subsequent studies covering the accounts of 2001/02, 2002/03 and 2003/04. Often there is time lag between the signing of the agreements, and the actual closure and opening of projects.

This channelling of donor project funds and other funds from Global Initiatives through the government system will go a long way in improving both efficiency and equity as the resources can be applied to the articulated policies and priorities, including tackling of system issues, and targeting vulnerable groups.

6.2 The Future of NHA in Uganda – Institutionalisation of National Health Accounts

Good health expenditure information cannot be attained without substantial effort. The country now has health expenditure data for 4 years collected using internationally recognised methodology. This should be maintained in future, to evaluate performance against current policies and in reviewing and developing new policies. The NHA methodology can be applied at the District level and used to inform resource allocation decisions given the recent implementation of the Fiscal Decentralisation Strategy that gives flexibility to Local Governments to reallocate within and between sectors.

6.2.1 Capacity for National Health Accounts in the country

Some capacity has been built in the country through training and experience in working with National Health Accounts. This has happened specifically at the Ministry of Health (Health Planning Department, Policy Analysis Unit and Finance Section), Institute of Public Health Makerere, Martyrs University Nkozi, the Uganda Catholic, Moslem and Protestant Bureaus, Ministry of Finance Planning and Economic Development (Health Desk and Uganda Bureau of Statistics) and the World Health Organisation Country Office. However there is still need for wider understanding of the methodology and its practical applications to a wider group of stakeholders at the levels of senior and middle level managers, and implementers including the private sector. The capacity built at the Universities will be particularly crucial in spreading the knowledge to future implementers and policy makers.

6.2.2 Making Health Financing Data routinely available

The most challenging aspects of the NHA to put together are:

- Spending by the donor projects;
- Spending at the district level; and
- Spending by NFB PNFPs.
- Spending by households

It is recommended that these entities submit expenditure reports annually to be included in the Annual Health Sector Performance Report. This would improve on the accountability of health sector resources and make the compilation of National Health Accounts easier. Simple reporting formats should be prepared and made part of the Health Management Information System.

6.2.3 Application of NHA information

The information derived from the first National Health Accounts Report was very useful in the development of the Health Financing Strategy. The current report is available in time for the drafting of the HSSP II. It is important that information from the reports is made known to a wide group of stakeholders to ensure appropriate use of the data. In turn NHA studies should be set up with relevant policy questions to facilitate policy formulation and review. The policy response is strengthened when the NHA results are combined with efficiency analyses.

6.2.4 The next phase FY 2001/02, 2002/03 and 2003/04

The current study covered the FYs 1998/99, 1999/00 and 2000/01. The FY 2003/04 is more than half –way through. It is the recommendation of this report that:

- Work on the NHA for the next 3-year period begins so that by the time the initial preparations are done the final accounts for FY 2003/04 would be available;
- That appropriate policy questions for the next study period be determined based on the current report's findings and current policy issues.

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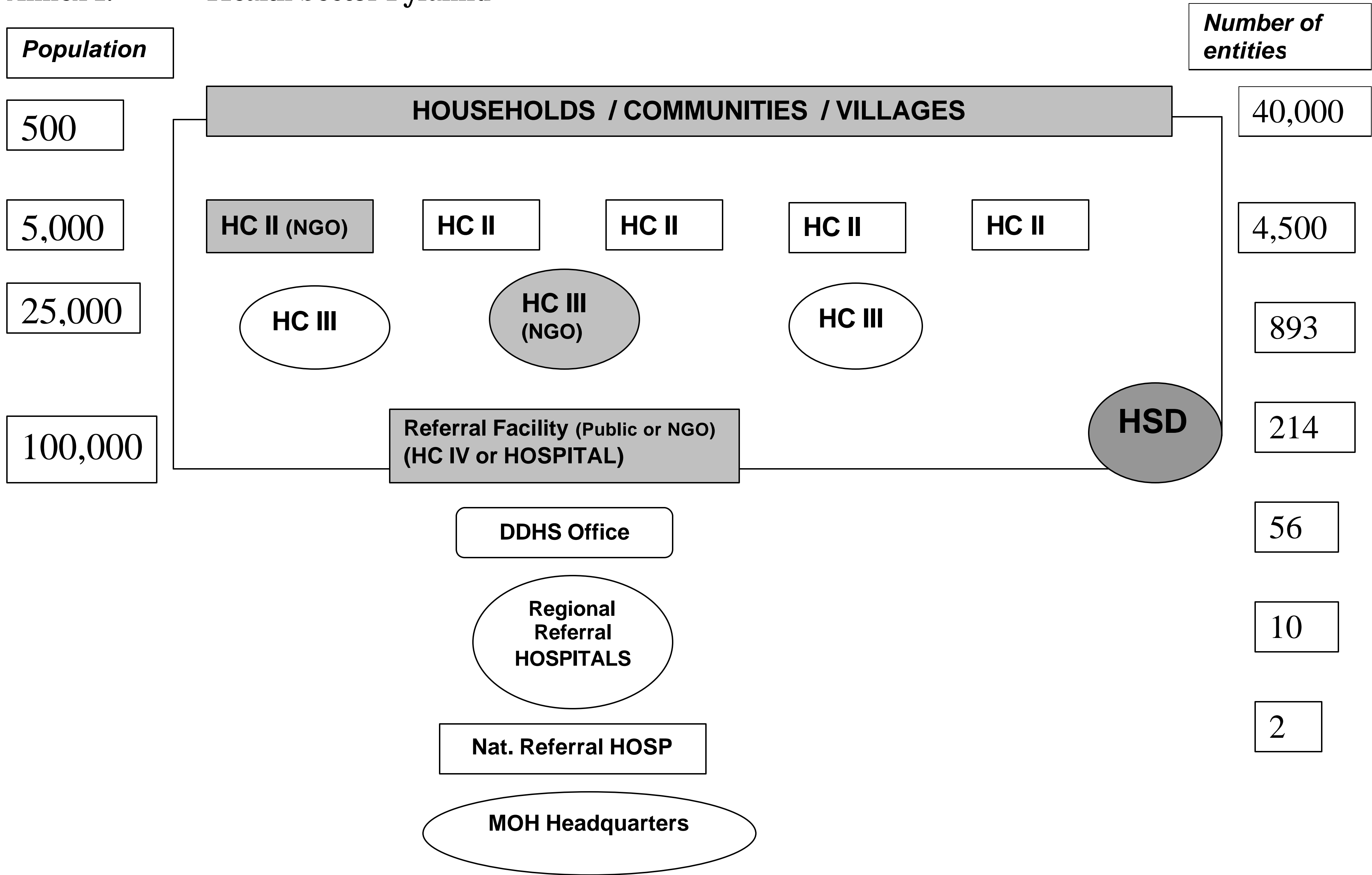
Annex I: Health Sector Pyramid



Annex II: Glossary

Constant Returns to scale:
Constant returns to scale occur if a proportionate increase in inputs leads to a proportionate increase in outputs. A district that operates under constant returns to scale is considered efficient, its operations are optimum: it is neither too big nor too small.

Decreasing returns to scale:
Here a proportionate increase in inputs leads to a less than proportionate increase in outputs. In such a case, a district operating under decreasing returns to scale is too big for its optimal size.

Efficiency:
The degree to which a district performs its designated health care functions with minimum consumption of resources (in this case health workers, hospital beds and funds).

Facility based PNFP
Facility based Private Not For Profit health care providers (FB-PNFP) are organisations/institutions providing healthcare and having the following characteristics:

? Are private organisations operating under the guidance of a written charter
? Do not distribute surplus to their owners or directors.
? Are self governing organisations equipped with structures to control their own activities?
? Have substantial capital/infrastructural investment in static health units ("facility")
? Have paid staff
? Have some meaningful voluntary component such as voluntary labour, management and income, provisions for subsidy of fees.

Health Expenditure:
Health Expenditure referred to in this report includes all expenditures for activities whose primary purpose is to improve health. These include all activities implemented by the Ministry of Health, curative services, clinic-based preventive and promotive services, capital development for health care facilities and medical training and research conducted by other organisations. Expenditure of sanitation and nutrition directly implemented by MoH is also included.

Health Centre IV
A Health Centre IV is a health facility providing preventive, promotive, outpatient curative, maternity, inpatient services, and emergency surgery, blood transfusion and laboratory services.

Health Centre III
A Health Centre III is a health facility providing outpatient services and inpatient services (admission beds) without a theatre. It serves as an intermediate referral level.

Health Centre II
A Health Centre II is a health facility providing outpatient services, preventive and promotive services. It neither has inpatient beds nor an operating theatre. It is the point of entry into the formal health system and serves as the interface with the community.

Health Sub-District
"The Health Sub-District is a functional health zone of the district created to facilitate the reorganization of health services to enhance the effectiveness and efficiency in planning, provision and monitoring of health services in the district. It is not a substantive new administrative unit and does not contravene the Local Government Act of 1997 which defines the administrative structures of the districts. It is named health sub-district to emphasize the fact that it remains an integral part of the district health system". Health Sub-Districts in Uganda: Concept Paper, 1999

Hospitals
Hospitals are facilities providing preventive, promotive, outpatient curative, maternity, inpatient services, and emergency surgery, blood transfusion and laboratory services

Level of care	Services to be provided
General hospital	In addition to the above services, a general hospital will also provide in-service training, consultation and research to community based health care programmes
Regional Referral hospital	In addition to the services offered above, specialist services will be offered such as psychiatry, Ear Nose and Throat (ENT), ophthalmology, dentistry, intensive care, radiology, pathology, higher level surgical and medical services
National Referral hospital	These provide comprehensive specialist services. In addition, they are involved in teaching and research

Increasing Returns to scale:
In this case a proportionate increase in inputs leads to a more than proportionate increase in outputs. A district operating under increasing returns to scale is considered too small for its optimal size.

Non-Facility based PNFP
The non facility-based PNFP comprise the majority of local and international organisations working in the health sector commonly referred to as NGOs. They work with counterparts such as government, facility-based PNFP providers, private practitioners and communities. Their contribution is in areas ranging from social awareness and advocacy to more specific aspects of service delivery. The area of emphasis tends to conform to agency expertise such as special disease programmes, technical assistance, training, capacity building, emergency and relief services and mainstream service delivery.

Private Not for Profit (formerly NGOs)
This category of providers is motivated by concern for the welfare of the population. The Private Not for Profit (PNFP) comprise of agencies that provide health services from an established static health unit/facility to the population and those that work with communities and other counterparts to provide non facility-based health services.

Pure Efficiency:
This is the proportion of technical efficiency, which cannot be attributed to divergence from optimal scale (non-scale technical efficiency).

Sector-Wide Approach (SWAp)
This term refers to a sustained partnership involving Government and Development Partners and other stakeholders in health sharing a common goal of achieving improvements in people's health and contributing to national development objectives. The partners implement a common programme of work with established structures and processes for negotiating strategic and management issues and reviewing sectoral performance against agreed milestones and targets.

Technical Efficiency:
A district is said to be technically efficient relative to another if it produces either the same level of output with fewer inputs or more outputs with the same of fewer inputs.

Annex III: Employer Interview Form

Form ID#:_________

Firm Name:____________________________ Date:______________
Name of Person Interviewed: ____
Telephone contact: ____

Type of Firm (circle one)

1 = State-Owned / Para-statal 2 = Private Sector, for-profit

1. Provide a brief description of your firm's activities

2. How many employees in your organisation?______________________

3. Has the government or any other organisation made a contribution to health care benefits provided by your firm in the following financial years?
   ? If YES, specify amount and source in the table below.
   ? If NO go to question 4.

Source	**1998/99**	**1999/00**	**2000/01**

**** Specify financial years applicable to this firm

4. What types of health benefits do you offer your employees? (Circle all that apply)
   a. Insurance coverage (answer number 5)
   b. Medical allowances (Stop interview)
   c. Reimbursements (answer number 6)
   d. On-site health care (answer number 7)
   e. None (stop interview)

5. Please respond to the following questions regarding health insurance benefits provided to your employees in the fiscal years (FY) 1998/99, 1999/00, 2000/01:
   a. Name your firm's insurance company.

	1998/99	**1999/00**	**2000/01**
Name of insurance firm			

**** Specify financial years applicable to this firm

   b. How much did your firm pay in premiums?

	1998/99	**1999/00**	**2000/01**
Amount in UG shs			

   c. Do your employees contribute to private health insurance?

If NO; go to question go to **d**.
If YES, how much?

	1998/99	**1999/00**	**2000/01**
Amount in UG shs			

d. Which types of health care services are covered? What exclusions are there?

	1998/99	**1999/00**	**2000/01**
Health care services provided			
Exclusions			

e. Are all employees included in the insurance scheme? How many are not included and what health benefits do they receive?

Number included________________
Number excluded________________

f. What were the reimbursements to health care providers through insurance?

Reimbursements (to providers of health services); amount in UG shs

	1998/99	**1999/2000**	**2000/01**
Public health facilities			
Private health facilities			
Other specify			
Total			

6. Please respond to the following questions regarding direct reimbursements made to your employees for health care for FYs 1998/99, 99/00, 00/01:

a. How much did your firm provide to employees in direct reimbursements?

	1998/99	**1999/2000**	**2000/01**
Reimbursements to employees			

b. Which types of health care services does your firm reimburse? Circle all that apply:
1 = Inpatient 2 = outpatient 3 = drugs

c. Does your firm keep records on the amount spent to reimburse for services purchased at private and public health care facilities?
- If yes I'd like to know how much was spent at these facilities; fill in the table below.
- If no continue to question 7

Reimbursements (to providers of health services) amount in UG shs

	1998/99	1999/2000	2000/01
Public health facilities			
Private health facilities			
Other specify			
Total			

7. Please respond to the following questions regarding on-site health care for your employees:

   a. How many health care facilities does your company own?
   b. Where are they located?
   c. What types of health services are available in these facilities? (Circle all that apply)
      a. Inpatient   b. outpatient   c. drug dispensary

   d. How much did your company spend in FY 1998/99, 1999/00, and 2000/01 to provide on-site health care services?

	1998/99	1999/00	2000/01
Amount spent in UG Shs			

   e. Has the government or any other non-governmental organisation made contributions, which support your health facilities? If YES, how much?

	1998/99	1999/00	2000/01
Amount contributed In UG Shs.			

   f. Do employees pay for services and/or medication offered in these facilities?

   If NO (stop here)

   If YES, what are the prices?
   How is the revenue used?

   How much revenue from fees was earned in 1998/99, 1999/00, 2000/01?

	1998/99	1999/00	2000/01
Revenue earned			

Comments:

Details on the financial year;
Starts ______________________
Ends________________________

Annex IV: Survey of Donor Contributions to Health

Donor Name: ____

Respondent Name:____

Date:____

Phone Number: _____________ Fax Number:___________

Instructions: The Ministry of Health is conducting a study to estimate the total amount health financing in Uganda and how health funds flow from sources to users. In the space below, please indicate the projects that your organization supports, the amount you contributed in 1998/99,99/00, 00/01 and the name(s) of the institutions that benefited from your contributions. We are particularly interested in knowing who used your contributions, so please be specific. For example, if contributions were made to the GoU please indicate whether the beneficiary institution was the MoH, MoES, etc. If District Health Teams were the beneficiaries, please list which ones. Similarly, please list the NGOs that received support. Thank you.

	1998/99	**1999/00**	**2000/01**
Project Title			
Recipient 1			
Administration			
Personnel			
Medical Goods and Services			
Capital Development			
Recipient 2			
Administration			
Personnel			
Medical Goods and Services			
Capital Development			

(Add another sheet for more projects)

Please indicate the amount that your organization spent in 1998/99, 99/00, 00/01 to support your activities (i.e. administration, program support) in Uganda as well as the amount spent on technical assistance not included in the amounts above.

Annex V: Facility based PNFP data collection tool

	1998/99	1999/00	2000/01
Income			
UF			
DF/GoU			
Donations			
Nurses School			
Other			
TOTAL			
Expenditure			
Employment cost			
Hospital board costs			
Administration and support services			
Property cost			
Transport and Plant costs			
Supplies and services			
Medical goods and services			
Primary health care			
Capital development			
Other			
TOTAL			

Annex VI: NGO/NFB PNFP Questionnaire

Form ID No.___/___

The information provided will be treated with strict confidentiality

1. Preliminaries

Name of NGO: …………………………………

Name of respondent: ………………………………

Telephone contact…………………………………

Position of respondent: …………………………….

Date of interview: ………………………………….

Location: ..……………………………………

1. Areas the NGO is involved in e.g. education, health community development e.t.c:

Area	**Percentage of time spent on each activity.**	**Percentage of funds towards each activity.**

2. Indicate in the table below the amount of revenue obtained by your organisation in FYs 1998/99, 99/00, and 00/01 according to source.

Source of Revenue	**Amount in UG Shillings**		
	1998/99	**1999/00**	**2000/01**
Cost-Sharing Schemes			
Grants from Government of Uganda in:			
? Cash			
? In kind (estimates)			
Foreign Assistance in form of:			
? Loans			
? Grants / donations			
? In kind (estimates)			
Others (specify):			
Total			

**** Specify financial years applicable to this firm

3. Indicate in the table below the amount your organisation expended on the following activities in FY 1998/99, 1999/00, and 2000/01.

Activity	**Amount in UG shillings (for the different financial year)**		
	1998/99	**1999/00**	**2000/01**
Employment costs (salary and allowances)			
Expenditure in health facilities (hospitals, clinics and drug shops)			
Administration (includes stationery)			
Utilities (electricity, water, phone bills etc)			
Transport costs (fuel and maintenance of vehicles)			
Medical sundries (e.g. cotton wool, detergents, needles &syringes e.t.c)			
Pharmaceuticals (Drugs)			
Medical equipment			
Capital development (infrastructure) and maintenance of buildings			
Training			
Other (specify):			
Total*: ***(this should correspond to the total in table above)***			

Comments:

___

___

___

Details on the financial year;
Starts ____________________
Ends_________________________

Annex VII: Health Insurance Questionnaire

Form ID No.___/___

The information provided will be treated with strict confidentiality.

1. Preliminaries

Name of insurance company: ……………………………………
Type of insurance company (circle one):
1. State-owned / Parastatal
2. Private for-profit
3. Private not-for-profit

Name of respondent: ………………………………
Position of respondent: …………………………….
Name of interviewer: ………………………………
Date of interview: ………………………………….

In the table below please indicate the number of subscribers (for health insurance only) to your organisation in fiscal year (FY) 1998/99, 1999/00, 2000/01.

Table 2.

Fiscal Year	**Number of subscribers under:**		
	Group / Company	**Individual/Family**	**Others (specify)**
1998/99			
1999/00			
2000/01			

** Specify financial year applicable to this insurance firm

2. In the table provided below, indicate your organisation's total revenues and Reimbursements/pay outs made for FY 1998/99, 99/00, 00/01.

Table 3.

Fiscal Year	**Revenue Raised (in UG shs)**	**Reimbursements/Pay-outs (in UG Shs)**
1998/1999		
1999/2000		
2000/2001		

4. Indicate in the table below the amount of revenue obtained by your organisation in FY 1998/99, 99/00, and 00/01 according to source.

Table 4.

Source of Revenue	**Amount in UG Shillings**		
	1998/99	**1999/2000**	**2000/01**
Group/Company Premiums			
Individual/Family Premiums			
Grants from Government of Uganda in:			
? Cash			

? In kind (estimates)			
Foreign Assistance in form of:			
? Loans			
? Grants / donations			
? In kind (estimates)			
Others (specify):			
Total			

**** Specify financial years applicable to this firm

* **Total should match amounts in Column 2 of Table 3.**

5. Indicate in the table below the amount your organisation paid in reimbursements/pay-outs to the following institutions in FY 1998/99, 99/00, and 00/01.

Table 5.

Recipient of Reimbursement /Pay-out	**Amount in UG Shs**		
	1998/1999	1999/2000	2000/2001
GoU Hospitals			
Other Government Facilities			
Private-for-profit Hospitals			
Other Private-for-profit Facilities (e.g. clinics and drug shops)			
Private Not-profit Hospitals			
Other Private Not-profit facilities			
Others Facilities (specify):			
Do Not Know, Reimbursement Made Directly to Premium Holder			
Total*			

* **Total should match amounts in Column 3 of Table 3.**

Annex VIII: Expenditure by District

	Total expenditure	PHC Recurrent	Donors	Local government	Devt. PHC	PHC wage	District Hospital	Regional hospital	
DISTRICT	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	1998/1999	Percentage
ADJUMAN	570,689,873	27,081,000	167,000,000	4,000,000		222,608,873	150,000,000		1.65%
APAC	784,224,506	113,552,000	166,360,500	3,412,737		350,899,269	150,000,000		2.27%
ARUA	915,422,921	198,257,000	298,069,017	34,798,653		234,298,251	150,000,000	1,122,275,214	2.65%
BUGIRI	808,429,173	167,158,000	142,299,410	67,272,947		281,698,817	150,000,000		2.34%
BUNDIBUGYO	460,919,371	112,885,000	55,710,653	1,421,323		134,902,395	156,000,000		1.33%
BUSHENYI	953,654,527	198,410,910	52,449,777	155,711,816		397,082,024	150,000,000		2.76%
BUSIA	336,716,453	141,101,000	50,000,000	23,361,816		122,253,637	0		0.98%
GULU	559,383,890	164,199,000	5,800,000	11,051,560		228,333,330	150,000,000	1,116,800,701	1.62%
HOIMA	527,603,891	120,050,000	175,381,750	6,408,211		225,763,930	0	629,569,023	1.53%
IGANGA	1,051,385,640	164,646,000	185,857,393	79,176,611		449,205,636	172,500,000		3.05%
JINJA	545,849,324	55,677,464	137,088,940	5,453,131		347,629,790	0	1,916,079,634	1.58%
KABALE	502,505,249	100,306,000	167,190,160	36,333,015		198,676,074	0	821,176,986	1.46%
KABAROLE	599,673,969	337,599,000	66,166,720	43,229,275		152,678,974	0	1,094,902,648	1.74%
KALANGALA	277,793,110	146,155,000	47,630,992	2,438,832		81,568,286	0		0.80%
KAMPALA	788,947,240	130,064,834	140,288,986	51,330,629		467,262,792	0		2.29%
KAMULI	589,582,316	98,520,000	240,342,052	6,871,600		243,848,664	0		1.71%
KAPCHORWA	718,902,711	252,058,000	105,897,070	4,569,711		206,377,929	150,000,000		2.08%
KASESE	882,511,769	101,264,000	76,910,970	45,471,000		508,865,799	150,000,000		2.56%
KATAKWI	348,644,649	50,819,000	75,000,000	93,621,318		129,204,331	0		1.01%
KIBAALE	597,496,483	129,326,000	106,810,110	4,833,440		206,526,933	150,000,000		1.73%
KIBOGA	734,793,649	110,157,000	231,390,125	1,784,921		241,461,603	150,000,000		2.13%
KISORO	535,396,104	45,307,000	131,399,563	3,822,305		191,367,236	163,500,000		1.55%
KITGUM	741,099,880	127,071,000	102,000,000	4,253,400		230,275,480	277,500,000		2.15%
KOTIDO	814,928,768	100,289,000	80,200,000	1,605,000		332,834,768	300,000,000		2.36%
KUMI	978,679,243	316,146,000	114,710,730	9,383,038		388,439,475	150,000,000		2.83%
LIRA	1,167,310,767	154,125,000	218,700,000	6,590,042		406,895,724	381,000,000		3.38%
LUWERO	897,660,592	45,307,000	178,024,827	4,920,000		519,408,765	150,000,000		2.60%
MASAKA	991,775,900	137,697,363	400,057,045	119,199,383		334,822,109	0	1,163,334,063	2.87%
MASINDI	1,034,140,476	87,667,591	137,939,766	1,080,000		477,453,119	330,000,000		3.00%
MBALE	824,458,271	60,730,000	224,104,597	17,369,086		372,254,588	150,000,000	1,324,832,204	2.39%
MBARARA	979,953,115	316,146,000	140,517,481	43,857,500		329,432,134	150,000,000	328,470,794	2.84%
MOROTO	500,442,497	79,903,000	89,000,000	4,884,000		191,655,497	135,000,000		1.45%
MOYO	572,903,898	43,761,000	112,300,000	4,180,000		262,662,898	150,000,000		1.66%
MPIGI	1,577,306,452	451,212,559	277,689,531	113,637,796		364,266,566	370,500,000		4.57%
MUBENDE	1,169,261,713	160,288,000	197,044,002	13,958,354		497,971,358	300,000,000		3.39%
MUKONO	1,238,393,033	56,736,000	337,622,970	500,000		543,534,063	300,000,000		3.59%
NAKASONGOLA	247,835,604	66,194,000	27,294,734	33,950,353		120,396,517	0		0.72%
NEBBI	891,419,622	75,759,000	195,000,000	2,070,157		468,590,465	150,000,000		2.58%
NTUNGAMO	454,041,984	187,768,000	88,752,769	36,352,380		141,168,835	0		1.32%
PALLISA	1,080,002,507	187,768,000	342,738,988	2,342,856		397,152,662	150,000,000		3.13%
RAKAI	1,234,135,263	338,604,000	179,680,693	26,304,717		494,545,852	195,000,000		3.57%
RUKUNGIRI	931,752,048	274,125,000	294,171,230	23,925,299		189,530,519	150,000,000		2.70%
SEMBABULE	293,664,816	32,716,931	112,825,005	6,380,548		141,742,332	0		0.85%
SOROTI	659,348,615	332,871,014	237,720,800	2,783,483		85,973,318	0	1,026,471,232	1.91%
TORORO	1,154,946,058	94,447,000	32,248,566	589,946		552,160,546	475,500,000		3.35%
TOTAL	**34,525,987,939**	**6,691,925,666**	**6,945,387,922**	**1,166,492,188**	**0**	**13,465,682,164**	**6,256,500,000**	**10,543,912,500**	**100.00%**
Percentage		**19.38%**	**20.12%**	**3.38%**	**0.00%**	**39.00%**	**18.12%**	**30.54%**	

Annex VIII: cont'd

	Total expenditure	PHC Recurrent	Donors	Local government	Devt. PHC	PHC wage	District Hospital	Regional hospital	
DISTRICT	**1999/2000**	**1999/2000**	**1999/2000**	**1999/2000**	**1999/2000**	**1999/2000**	**1999/2000**	**1999/2000**	**Percentage**
ADJUMAN	583,625,103	9,576,325	132,000,000	4,000,000		282,677,934	155,370,844		**1.58%**
APAC	846,577,508	113,281,000	128,000,000	4,339,291		445,586,373	155,370,844		**2.29%**
ARUA	786,955,115	147,564,000	144,557,482	41,941,200		297,521,589	155,370,844	1,169,754,667	**2.13%**
BUGIRI	715,817,124	83,657,739	110,896,766	8,178,992		357,712,783	155,370,844		**1.94%**
BUNDIBUGYO	394,106,047	24,960,144	34,895,596	1,360,000		171,304,629	161,585,678		**1.07%**
BUSHENYI	1,163,953,134	194,786,327	174,281,522	135,283,300		504,231,141	155,370,844		**3.15%**
BUSIA	352,605,694	88,793,594	108,079,387	490,000		155,242,713	0		**0.95%**
GULU	735,658,929	109,067,000	148,000,000	33,274,000		289,947,085	155,370,844	1,164,050,333	**1.99%**
HOIMA	404,185,968	74,329,960	38,675,100	4,496,552		286,684,356	0	656,204,912	**1.09%**
IGANGA	1,139,718,969	189,239,562	108,452,786	92,930,295		570,419,855	178,676,471		**3.09%**
JINJA	812,047,488	118,133,051	247,317,502	5,162,281		441,434,654	0	1,997,141,912	**2.20%**
KABALE	676,580,905	177,345,823	197,318,850	49,629,154		252,287,078	0	855,919,930	**1.83%**
KABAROLE	875,446,976	200,175,379	459,793,535	21,600,000		193,878,062	0	1,141,224,737	**2.37%**
KALANGALA	363,409,554	202,248,873	45,700,006	11,881,899		103,578,776	0		**0.98%**
KAMPALA	935,142,356	91,530,493	198,562,286	51,700,000		593,349,577	0		**2.53%**
KAMULI	574,469,501	142,945,276	116,369,128	5,506,000		309,649,097	0		**1.56%**
KAPCHORWA	730,309,507	203,567,505	101,603,946	7,700,000		262,067,212	155,370,844		**1.98%**
KASESE	988,261,408	99,547,214	55,583,076	31,581,482		646,178,792	155,370,844		**2.68%**
KATAKWI	321,184,001	101,221,259	39,393,750	16,500,000		164,068,992	0		**0.87%**
KIBAALE	635,188,319	100,107,648	102,479,971	14,973,433		262,256,423	155,370,844		**1.72%**
KIBOGA	545,049,823	25,449,966	55,591,105	2,020,000		306,617,909	155,370,844		**1.48%**
KISORO	637,372,121	81,856,842	126,072,553	17,082,491		243,006,014	169,354,220		**1.73%**
KITGUM	886,788,369	110,839,000	191,000,000	5,100,000		292,413,308	287,436,061		**2.40%**
KOTIDO	877,471,012	34,582,000	108,000,000	1,500,000		422,647,324	310,741,688		**2.38%**
KUMI	827,385,784	46,648,161	124,221,356	7,888,947		493,256,476	155,370,844		**2.24%**
LIRA	1,144,767,958	128,872,000	107,000,000	7,084,840		507,169,174	394,641,944		**3.10%**
LUWERO	1,014,888,035	81,856,842	111,838,664	6,255,000		659,566,685	155,370,844		**2.75%**
MASAKA	1,040,094,205	159,694,979	377,202,294	78,026,000		425,170,932	0	1,212,552,316	**2.82%**
MASINDI	1,221,027,705	101,982,965	167,159,207	3,780,000		606,289,675	341,815,857		**3.31%**
MBALE	1,034,253,640	204,108,926	198,358,071	3,711,560		472,704,239	155,370,844	1,380,883,860	**2.80%**
MBARARA	942,884,459	210,008,289	125,614,112	33,564,695		418,326,520	155,370,844	342,367,421	**2.55%**
MOROTO	651,435,819	98,830,000	165,000,000	4,400,000		243,372,059	139,833,760		**1.76%**
MOYO	710,172,032	24,261,000	186,000,000	11,000,000		333,540,188	155,370,844		**1.92%**
MPIGI	1,650,089,748	386,396,220	262,615,644	154,751,180		462,560,719	383,765,985		**4.47%**
MUBENDE	1,189,045,224	34,052,759	189,055,732	22,850,464		632,344,581	310,741,688		**3.22%**
MUKONO	1,254,522,057	91,194,219	160,984,165	1,400,000		690,201,985	310,741,688		**3.40%**
NAKASONGOLA	376,068,331	167,487,854	26,188,190	29,507,820		152,884,467	0		**1.02%**
NEBBI	1,282,298,355	301,952,000	227,000,000	2,940,000		595,035,511	155,370,844		**3.47%**
NTUNGAMO	391,967,364	108,658,932	73,752,769	30,293,650		179,262,013	0		**1.06%**
PALLISA	1,067,773,665	100,848,476	306,016,954	1,216,550		504,320,841	155,370,844		**2.89%**
RAKAI	1,248,750,870	200,175,379	172,396,341	46,202,320		627,994,733	201,982,097		**3.38%**
RUKUNGIRI	734,583,314	78,821,850	237,480,946	22,236,000		240,673,675	155,370,844		**1.99%**
SEMBABULE	306,778,994	6,894,466	78,266,865	41,627,400		179,990,263	0		**0.83%**
SOROTI	367,973,037	132,206,795	112,893,774	13,700,000		109,172,468	0	1,069,899,912	**1.00%**
TORORO	1,486,679,386	96,648,318	195,764,646	1,102,500		701,156,249	492,007,673		**4.03%**
TOTAL	**36,925,364,912**	**5,486,406,410**	**6,777,434,076**	**1,091,769,295**	**0**	**17,089,755,129**	**6,480,000,002**	**10,990,000,000**	**100.00%**
Percentage		**14.86%**	**18.35%**	**2.96%**	**0.00%**	**46.28%**	**17.55%**	**29.76%**	

Annex VIII: cont'd

	Total expenditure	PHC Recurrent	Donors	Local government	Devt. PHC	PHC wage	District Hospital	Regional hospital	
DISTRICT	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	2000/2001	Percentage
ADJUMAN	927,252,129	18,442,000	171,000,000	3,000,000	272,296,000	310,945,727	151,568,402		1.79%
APAC	1,334,495,468	200,198,000	82,000,000	5,034,055	405,550,000	490,145,011	151,568,402		2.57%
ARUA	1,295,256,680	303,281,000	191,000,000	26,990,531	295,143,000	327,273,748	151,568,402	1,063,203,634	2.50%
BUGIRI	1,318,090,447	128,274,741	101,484,714	6,193,528	537,085,000	393,484,061	151,568,402		2.54%
BUNDIBUGYO	773,591,886	93,809,000	35,090,596	3,800,000	294,780,000	188,435,092	157,677,198		1.49%
BUSHENYI	1,522,218,809	279,761,442	185,792,710	155,600,000	194,842,000	554,654,255	151,568,402		2.93%
BUSIA	845,125,265	105,512,900	101,274,194	422,186	467,149,000	170,766,985	0		1.63%
GULU	1,752,132,048	505,907,000	175,000,000	10,817,852	589,897,000	318,941,794	151,568,402	1,058,017,488	3.38%
HOIMA	824,788,628	89,274,616	33,213,220	15,000,000	371,948,000	315,352,792	0	596,429,938	1.59%
IGANGA	1,616,882,267	266,631,308	58,368,000	51,492,785	438,575,000	627,461,840	174,353,334		3.12%
JINJA	1,331,799,399	203,566,854	148,003,447	2,722,979	491,928,000	485,578,119	0	1,815,225,655	2.57%
KABALE	1,095,064,256	256,350,544	144,817,747	71,112,179	345,268,000	277,515,786	0	777,952,758	2.11%
KABAROLE	960,524,181	205,610,922	370,459,617	13,214,773	157,973,000	213,265,868	0	1,037,270,344	1.85%
KALANGALA	786,138,073	373,174,592	43,769,020	4,567,807	250,690,000	113,936,654	0		1.51%
KAMPALA	1,467,377,636	246,305,500	94,186,456	48,182,146	426,019,000	652,684,535	0		2.83%
KAMULI	768,046,545	214,246,757	102,493,238	4,539,543	106,153,000	340,614,007	0		1.48%
KAPCHORWA	1,361,802,345	311,528,414	97,310,822	5,389,775	507,731,000	288,273,933	151,568,402		2.62%
KASESE	1,146,214,935	138,198,232	76,772,700	45,529,930	23,349,000	710,796,671	151,568,402		2.21%
KATAKWI	491,514,685	99,259,961	47,025,000	30,676,832	134,077,000	180,475,892	0		0.95%
KIBAALE	728,476,017	131,714,000	98,149,831	19,343,719	39,218,000	288,482,066	151,568,402		1.40%
KIBOGA	902,520,175	93,963,733	17,894,952	17,575,388	284,238,000	337,279,700	151,568,402		1.74%
KISORO	778,288,096	108,754,000	120,745,544	9,455,000	106,819,000	267,306,616	165,207,936		1.50%
KITGUM	989,326,501	131,175,012	160,000,000	3,100,000	92,996,000	321,654,638	280,400,851		1.91%
KOTIDO	1,285,725,532	-11,366,418	121,000,000	900,000	407,144,000	464,912,057	303,135,894		2.48%
KUMI	1,347,230,307	422,964,816	111,830,966	4,961,000	113,323,000	542,582,123	151,568,402		2.60%
LIRA	1,395,558,116	291,692,000	75,000,000	11,198,470	54,799,000	577,886,091	384,982,555		2.69%
LUWERO	1,510,772,574	108,754,000	107,113,087	46,874,732	370,939,000	725,523,354	151,568,402		2.91%
MASAKA	912,543,701	89,274,616	149,269,495	78,150,565	128,161,000	467,688,026	0	1,102,101,017	1.76%
MASINDI	1,672,481,181	240,323,000	160,096,142	129,300,386	142,394,000	666,918,643	333,449,011		3.22%
MBALE	1,187,389,456	303,056,727	134,079,664	470,000	78,240,000	519,974,663	151,568,402	1,255,098,749	2.29%
MBARARA	1,286,717,422	393,946,755	110,710,742	71,548,351	98,784,000	460,159,172	151,568,402	1,446,488,312	2.48%
MOROTO	960,906,700	240,323,000	166,000,000	2,700,000	147,764,000	267,709,265	136,410,435		1.85%
MOYO	914,781,609	94,590,000	148,000,000	6,000,000	147,729,000	366,894,207	151,568,402		1.76%
MPIGI	2,479,146,695	414,588,184	852,839,281	80,707,098	247,823,000	508,816,791	374,372,341		4.78%
MUBENDE	1,486,814,582	120,977,755	181,067,461	25,193,433	160,861,000	695,579,039	303,135,894		2.86%
MUKONO	1,487,333,132	105,512,900	186,175,155	2,630,000	130,657,000	759,222,183	303,135,894		2.87%
NAKASONGOLA	582,978,695	255,222,927	25,081,647	76,058,208	58,443,000	168,172,913	0		1.12%
NEBBI	1,388,380,838	232,551,000	264,000,000	1,046,373	84,676,000	654,539,063	151,568,402		2.68%
NTUNGAMO	630,804,265	146,231,596	70,636,455	28,300,000	188,448,000	197,188,214	0		1.22%
PALLISA	1,084,371,323	203,171,103	141,736,893	1,310,000	31,832,000	554,752,925	151,568,402		2.09%
RAKAI	1,519,783,819	205,610,922	165,111,988	69,097,125	192,131,000	690,794,207	197,038,577		2.93%
RUKUNGIRI	1,034,774,431	291,691,642	242,223,723	15,627,622	68,922,000	264,741,042	151,568,402		1.99%
SEMBABULE	416,320,786	21,360,053	42,017,393	30,162,051	124,792,000	197,989,289	0		0.80%
SOROTI	602,584,965	247,742,308	132,433,474	5,414,469	96,905,000	120,089,714	0	972,442,225	1.16%
TORORO	1,694,918,165	205,848,693	132,699,592	3,221,250	101,911,000	771,271,874	479,965,756		3.27%
TOTAL	**51,899,244,767**	**9,129,008,107**	**6,374,974,966**	**1,244,632,141**	**10,010,402,000**	**18,818,730,642**	**6,321,496,912**	**11,124,230,119**	**100.00%**
Percentage		**17.59%**	**12.28%**	**2.40%**	**19.29%**	**36.26%**	**12.18%**	**21.43%**	

Annex IX: District Efficiency with Bench marks

District Name	Input-Oriented CRS Efficiency	Input-Oriented VRS Efficiency	Scale Efficiency	RTS	Optimal Lambdas with Benchmarks											
IGANGA	0.25	0.48	0.52	Too small	0.096	KISORO	0.107	KUMI	0.092	MOROTO	0.004	NAKASONGOLA	0.156	SOROTI		
ADJUMAN	0.83	0.90	0.92	Too big	0.424	KALANGALA	0.063	KATAKWI	0.431	KISORO	0.172	SEMBABULE				
APAC	0.30	0.62	0.49	Too small	0.006	BUSIA	0.082	KALANGALA	0.103	KISORO	0.080	KUMI	0.140	MOROTO	0.009	NEBB
ARUA	0.27	0.45	0.61	Too small	0.026	KATAKWI	0.226	KISORO	0.277	SOROTI						
BUGIRI	0.29	0.55	0.53	Too small	0.213	KISORO	0.028	KUMI	0.069	MOROTO	0.175	NAKASONGOLA	0.018	SOROTI		
BUNDIBUGYO	0.84	0.89	0.95	Too small	0.308	KALANGALA	0.128	KATAKWI	0.440	KISORO	0.010	SOROTI				
BUSHENYI	0.34	0.51	0.67	Too small	0.050	BUSIA	0.363	KISORO	0.003	KUMI	0.137	MOROTO	0.098	NAKASONGOLA		
BUSIA	1.00	1.00	1.00	--	1.000	BUSIA										
GULU	0.55	1.00	0.55	Too big	0.967	KISORO	0.197	RUKUNGIRI								
HOIMA	0.87	0.87	1.00	Too big	0.019	KATAKWI	0.540	KISORO	0.365	NAKASONGOLA	0.124	SOROTI				
JINJA	1.00	1.00	1.00	--	1.000	JINJA										
KABALE	0.67	0.68	0.99	Too small	0.023	KATAKWI	0.891	KISORO	0.059	SEMBABULE						
KABAROLE	0.99	1.00	0.99	Too small	0.243	JINJA	0.087	KISORO	0.304	MOROTO	0.260	RUKUNGIRI				
KALANGALA	1.00	1.00	1.00	--	1.000	KALANGALA										
KAMPALA	0.87	1.00	0.87	Too small	0.615	JINJA										
KAMULI	0.89	0.91	0.98	Too small	0.649	KISORO	0.295	SOROTI								
KAPCHORWA	0.57	0.74	0.77	Too small	0.442	KALANGALA	0.183	KISORO	0.011	MOROTO	0.053	NEBBI				
KASESE	0.65	0.67	0.97	Too small	0.370	KUMI	0.073	MOROTO	0.181	NAKASONGOLA	0.125	SOROTI				
KATAKWI	1.00	1.00	1.00	--	1.000	KATAKWI										
KIBAALE	0.67	0.74	0.91	Too small	0.309	KATAKWI	0.081	KISORO	0.044	MOROTO	0.369	NAKASONGOLA	0.028	SOROTI		
KIBOGA	0.63	0.73	0.86	Too small	0.275	KISORO	0.546	NAKASONGOLA	0.024	NEBBI						
KISORO	1.00	1.00	1.00	--	1.000	KISORO										
KITGUM	0.87	1.00	0.87	Too small	0.021	JINJA	0.018	KUMI	0.253	MOROTO	0.382	RUKUNGIRI				
KOTIDO	0.44	0.65	0.66	Too small	0.307	KALANGALA	0.262	MOROTO	0.022	NEBBI						
KUMI	1.00	1.00	1.00	--	1.000	KUMI										
LIRA	0.35	0.56	0.63	Too small	0.184	KISORO	0.013	KUMI	0.248	MOROTO	0.053	NAKASONGOLA	0.106	SOROTI		
LUWERO	0.75	0.82	0.92	Too small	0.119	JINJA	0.683	KUMI								
MASAKA	0.66	0.87	0.76	Too small	0.697	KISORO	0.058	RUKUNGIRI								
MASINDI	0.40	0.49	0.82	Too small	0.138	KALANGALA	0.227	KISORO	0.116	KUMI	0.217	MOROTO	0.010	NEBBI		
MBALE	0.52	0.69	0.75	Too small	0.002	KUMI	0.476	MOROTO	0.267	SOROTI						
MBARARA	0.33	0.55	0.60	Too small	0.260	KISORO	0.042	KUMI	0.013	MOROTO	0.034	NAKASONGOLA	0.227	SOROTI		
MOROTO	1.00	1.00	1.00	--	1.000	MOROTO										
MOYO	0.85	0.98	0.87	Too small	0.583	BUSIA	0.078	KALANGALA	0.115	KISORO	0.021	MOROTO	0.030	NEBBI		
MPIGI	0.90	0.92	0.97	Too small	0.067	JINJA	0.027	MOROTO	0.842	RUKUNGIRI						
MUBENDE	0.43	0.47	0.91	Too small	0.037	KATAKWI	0.735	KISORO	0.111	SEMBABULE						
MUKONO	0.43	0.58	0.75	Too small	0.006	JINJA	0.311	KISORO	0.122	KUMI	0.238	MOROTO				
NAKASONGOLA	1.00	1.00	1.00	--	1.000	NAKASONGOLA										
NEBBI	1.00	1.00	1.00	--	1.000	NEBBI										
NTUNGAMO	1.00	1.00	1.00	--	1.000	NTUNGAMO										
PALLISA	0.65	0.65	0.99	Too small	0.127	KATAKWI	0.743	KISORO	0.102	SOROTI						
RAKAI	0.45	0.59	0.77	Too small	0.151	BUSIA	0.447	KISORO	0.068	KUMI						
RUKUNGIRI	1.00	1.00	1.00	--	1.000	RUKUNGIRI										
SEMBABULE	1.00	1.00	1.00	--	1.000	SEMBABULE										
SOROTI	1.00	1.00	1.00	--	1.000	SOROTI										
TORORO	0.36	0.52	0.69	Too small	0.198	KISORO	0.180	KUMI	0.131	MOROTO	0.072	RUKUNGIRI				