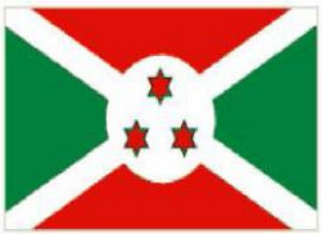

REPUBLIC OF BURUNDI

MINISTRY OF PUBLIC HEALTH AND FIGHTING AIDS

NATIONAL HEALTH DEVELOPMENT PLAN

2011 – 2015

Final Version

Other health expenditures

The Ministry of Public Health and Fighting AIDS is pleased to have a 2011-2015 second national health development plan. This second National Health Development Plan (NHDP) therefore follows in the continuum of the NHDP 2006-2010, benefiting from the lessons learned from the former.

The NHDP I, which has just ended, had a specific focus on the following objectives: Reduction of the maternal mortality rate and the neonatal mortality rate; reduction of infant-juvenile mortality; controlling morbidity linked to communicable and non-communicable diseases and strengthening the performance of the health system. As the prior NHDP, it includes Burundi's subscription to International Acts and Declarations in regards to health, in particular: The Alma-Ata Declaration regarding Primary Health Care, the Millennium Development Objectives (MDOs), the Health Strategy of the New Partnership for African Development (NEPAD) and the Abuja Summit on Malaria. In addition it will contribute to attaining the 2025 vision of the Government of Burundi in favor of sustainable development in step with the Strategic Framework for Poverty Reduction (CSLP II).

The preparation of the NHDP II adopted a participatory approach with the involvement of all participants in the sector: Health professionals, sectors related to health, civilian society, the private sector, and sponsors with the support of national and international consultants.

Through the NHDP II, Burundi has reaffirmed the commitment of its Government via the Ministry of Public Health and Fighting AIDS to improve the health of its population. In order to do this, the Ministry of Public Health and Fighting AIDS has established the sectorial objective of improving access to and availability of quality health services and care. Based on the major orientations of the National Health Policy, the priority areas were identified for the next five years, i.e.: i) Improving the health of mothers and children; ii) Fighting communicable and non-communicable diseases; iii) Strengthening the fight against HIV/AIDS using a multi-sector approach; iv) Strengthening actions to fight malnutrition; v) Increasing demand for health care; vi) Strengthening the health system; vii) Strengthening and ensuring the continuation of performance-based financing related to free care; vii) Controlling demographic growth.

This 2011 – 2015 National Health Development Plan, on which I am pleased to affix my signature to this introduction, is a reference framework for all health development activities in the country. It is only through efforts contributed by various participants, from the central level to the operational level, that the performance of the health system and the reforms in progress can be effectively implemented.

THE MINISTER OF PUBLIC HEALTH AND
FIGHTING AIDS

Hon. Dr. Sabine Ntakarutimana

ACKNOWLEDGEMENTS

The Ministry of Health and Fighting AIDS has adopted a National Health Development Plan for 2011-2015. Its preparation required the participation of many partners.

In this context, we would like to reiterate our thanks to the WHO, IHP+. UNICEF, UNFPA, UNDP, EUROPEAN UNION, World Bank, Belgian Embassy, CTB, USAID, PATHFINDER, Swiss Cooperation for their technical and financial support.

We greatly appreciate the assistance of the international consultations, whose support has allowed the quality of the 2011-2015 NHDP document to be improved.

Our gratitude goes out to the team of experts supporting the Ministry of Public Health and Fighting AIDS for their constant collaboration, in particular Mr. Sylvestre Nkizwanayo and Ms. Bhuwanee Karishmah.

We are grateful to the departments, programs and projects and the offices of the Ministry of Public Health and Fighting AIDS, to other government ministries and institutions, civilian society (private and non-profit sectors) and the international health partners who have actively participated in the process of preparing the NHDP in spite of their workload. We hope that this plan can strengthen their services and improve their working conditions.

The preparation of the NHDP would not have been possible without the dedicated work of the permanent technical team, comprised of:

- Dr. Hilaire Ninteretse
- Dr. Nina Ndabihore
- Dr. Longin Gashubije
- Ms. Carmen Muhorane
- Mr. Sublime Nkindiyabarimakurinda
- Mr. Joseph Nzambimana

These thanks would not be complete without a special mention of the Steering Committee which has bet on us being able to fully execute this plan. We hope that we have shown ourselves to be worthy of their confidence and that of our partners.

To all who have contributed in any way to the completion of this project, this NHDP is for you.

Our wish is that the implementation of this National Health Development Plan will contribute to improving the health of the entire Burundese population in general, and those who are most at risk, in particular.

CONTENTS

ACRONYMS AND ABBREVIATIONS

ABUBEF: Association Burundaise pour le Bien-etre Familial (Burundi Family Welfare Association)

ACT: Artemisinin Combination Therapy

ENA: Essential Nutrition Actions

ARNP: National Pharmacy Regulatory Authority

ARV: Antiretrovirals

AS + AQ: Artesunate +Amodiquine

NPO: Non-profit Organization

CHW: Community Health Worker

TM: Traditional Midwives

PHO Provincial Health Office

CAMEBU: Centrale d'Achat des Médicaments Essentiels du Burundi (Burundi Essential Medicines Procurement Agency)

KAPB: Knowledge, Attitudes, Practices and Behavior

CD: Screening Center

HC: Health Centre

CDT: Tuberculosis Screening and Treatment Center

CEFORMI: Centre de Formation et de Recherche en Médecine et Maladies Infectieuses (Medicine and Infectious Diseases Training and Research Center)

CHUK: Kamenge University Hospital

CNPS: NHDP Implementation Follow-up and Steering Committee

NBTC: Management Committee

COGES: Management Committee

HC: Comité de Santé (Health Committee)

CPN: Prenatal Consultation

PNC: Post-natal Consultation

CPPS: Provincial Health Promotion Coordinator

RBTC: Regional Blood Transfusion Center

TC: Treatment Center

TC – PBF: Technical Cell / Performance-based Financing

CBD: Community-based Distribution

DNA: Data Not Available

DOTS: Directly Observed Treatment Short Course

DPML: Office of Pharmacies, Medications and Laboratories

DPSHA: Office for the Promotion of Health, Hygiene and Decontamination

DTP: Diphtheria-Tetanus-Pertussis

DTS: Total Health Expenditures

EDSB: Demographic and Health Census of Burundi

EPC: Management Team

EPISTAT: Epidemiology and Statistics

EPS: Health Education
WCBA: Woman of child-bearing age
PBF: Performance-based Financing
FBU: Burundese Francs
GAVI: Global Alliance for Vaccines and Immunization
GLIA: Great Lakes Initiative on AIDS (Regional Initiative to Fight AIDS)
GSIS: Management of the Health Information System
HCR: United Nations High Commission for Refugees
HBP: High Blood Pressure
HDI: Human Development Index
YFV: Information Education Communication
INH: Isoniazide
INSP: Institut National de Santé Publique [National Institute for Public Health]
STI: Sexually Transmitted Infection
ISTEEBU: Institut des Statistiques et des Etudes Economiques du Burundi
JANS: Joint Assessment National Strategy
ME: Essential Medications
ITN: Insecticide Treated Net
LLITN: Long Lasting Insecticide Treated Net
DWB: Doctors without Borders
MSPLS: Ministry of Public Health and Fighting AIDS
NEPAD: New Economic Partnership in Africa for Development
GRO: Grassroots Organization
OBR: Burundi Department of Revenue
MDO: Millennium Development Objectives
WHO: World Health Organisation (WHO)
ONAPHA: National Pharmaceutical Office
NGO: Nongovernmental Organization
ORL: Otorhynolaryngology
WFP: World Food Program
IMCI: Integrated Management of Childhood Illnesses
PDPN: National Pharmaceutical Master Plan
PEC: Prise en Charge (Healthcare Management)
PETS: Public Expenditure Track Survey
EVP: Expanded Vaccination Program
AFP: Acute Flaccid Paralysis
GDP: Gross Domestic Product
MAP: Minimum Activity Package
NHDP: National Health Development Plan
NIMCP: National Integrated Malaria Control Program
PNLT: National Program to Fight Leprosy and Tuberculosis
NHP: National Health Policy

NRHP: National Reproductive Health Program
UNDP: United Nations Development Program
AOP: Annual Operating Plan
NPP: National Pharmaceutical Policy
PPP: Purchasing Power Parties
PSI: Population Service International
PMTCT: Prevention of Mother to Child Transmission of HIV
PLWHIV: People Living with HIV
RGPH: General Population and Housing Census
PES/NCFA: Permanent Executive Secretariat of the National Council to Fight AIDS
SETEMU: Municipal Technical Services
SFE: Government Midwife:
SIGEFI: Finance Management System
SIPHAR: Société Industrielle Pharmaceutique
SNIS: National Health Information System
SPT: Complaint Treatment Strategy
BEmONC: Basic Emergency Obstetric and Neonatal Care
CEmONC: Complete Emergency Obstetric and Neonatal Care
SWAp: Sector-wide Approach
TB: Tuberculosis
ITCD: Ivermectin Treatment under Community Directive
HPT: Health Promotion Technician
UNPF: United Nations Population Fund
UNICEF: United Nations Children's Fund
UP: Delivery Unit
TTV: Anti-tetanus Vaccine
VSAT: Very Small Aperture Terminal

EXECUTIVE SUMMARY

Inspired by the 2025 Vision of the Government, the National Health Sector since 2005 has undertaken a long process to implement its National Health Policy (2005-2015 NHP). This policy, based on Primary Health Care, was implemented through a National Health Development Plan and Strategic Plans for sub-sectors, in coherence with the Strategic Framework to Fight Poverty (SFFP) and the Millennium Development Objectives (MDOs). It is also consistent with all international, regional and sub-regional commitments to which the country has more specifically subscribed in the context of the International Partnership for Health and related initiatives (IHP+).

The preparation of the NHDP II was the subject of a participatory process that involved all participants in the health sector, technical and financial partners, and civil society. With the support of national and international consultants, the various documents produced by the Permanent Technical Team for preparation of the NHDP in collaboration with subject-specific groups were regularly validated by a NHDP Steering Committee and by the Health Partners Collaboration Framework. These instances for coordination, planning and monitoring the process are comprised of staff from health and related government sectors, technical and financial partners (TFPs), NGOs/Associations in the private sector.

Evaluation of the First NHDP (2006-2010) and the analysis of the situation of the sector revealed a significant improvement in certain indicators, in particular in regards to a reduction in infant-juvenile mortality, the fight against disease, the availability and use of maternal and infant health services. Certain results confirmed by the 2010 Demographic and Health Census show the relevance of certain reforms undertaken during the previous period, in particular those related to district health policy, free care for pregnant women and children less than 5 years of age supported by performance-based financing. In addition, the merger of two ministries (Health and AIDS) and the implementation of a health partners collaborative framework for the sector represent a relevant initiative for revitalizing the health system through an effective partnership for health development.

However many challenges remain, in particular in regards to reducing maternal mortality (866 per 100,000 live births), infant mortality (59 per 1,000) and infant-juvenile mortality (96 per 1,000 live births) and in relation to a reduction of morbidity and mortality related to communicable and non-communicable diseases.

During the next 5 years, the Ministry of Public Health and Fighting AIDS is committed to increasing its leadership and directing the sector based on decentralization, results-oriented management, multi-sector collaboration and a partnership based on the Paris Declaration to improve the quality of life in Burundi. Considering the still significant shortfalls in regards to human and material resources and the mobilization capabilities of Government Funds, foreign aid and the contribution capacity of the

private sector and households, the priorities targeted for implementation of the NHDP 2011 – 2015 are:

- Improvement of mother and child health;
- Fighting communicable and non-communicable diseases;
- Strengthening the fight against HIV/AIDS through a multi-sector approach;
- Strengthening actions to fight malnutrition;
- Increasing demand for health care;
- Strengthening the health system through strategic orientations plotted around the 6 pillars (services, human resources, health products and medication, financing, health information, follow-up / evaluation, leadership and governance);
- Strengthening and perpetuating performance-based financing related to free care;
- Contribution to controlling demographic growth.

By the 2015 horizon, this NHDP will be in phase with the vision of National Health Policy and pursues the same goal, i.e. "to contribute to improving the health condition of the population, not only because it is a human right, but also to allow the recovery of the economy and a decrease in poverty, maintaining human capital in good health."

In order to achieve this goal, the sector of Health and Fighting AIDS will contribute to pursuing the following three (3) overall objectives:

Overall Objective 1: To contribute to reducing morbidity-mortality related to communicable and non-communicable diseases through 2015;
Overall Objective 2: To contribute to reducing maternal and neonatal mortality through 2015;
Overall Objective 3: To contribute to reducing mortality of children less than 5 years of age through 2015.

The sector objective for 2015 is to ensure the population's accessibility to quality health care and services for better use through 9 strategic axes and distributed into 3 groups:

1) The first group ensures supply, creates and reinforces demand for care (the 1st group ensures the quality of care offered). This constitutes Axis 1: Strengthening of quality health services and care (preventive, curative, promotional and rehabilitation) at all levels of the health system;
2) The purpose of the second group is to improve the capability of offering care; it includes the following foci: ii.1): Increased management of available human resources

ii.2) Improvement in the production of human resources with the required qualifications; iii) The availability of and accessibility to medications and other quality health products by the population; iv.1) Improvement of coverage of Health Facilities and Equipment; iv.2) Increase in financing of the health sector and improvement of its use; iv.3) Strengthening and perpetuation of Performance-based Financing related to free care;
3) and the third group covering steering of the sector is represented by the following foci:
v) Strengthening Governance and leadership in the health sector;
and vi) Strengthening the Health Information, Planning and Monitoring and Evaluation System.

A logical framework matrix (in Appendix 2) describes the hierarchy of objectives, results and actions that will be implemented during the period of 2011-2015. The conditions for success, risks, framework for implementation and monitoring-evaluation of the NHDP II are described in that document.

The macroeconomic framing and the Budget of the NHDP (in Appendix 1) show an evaluation of the costs of requirements of the NHDP 2011-2015, in the amount of 1,656 billion FBU. The distribution of the budget allocation by type of expense is 51% for operation, 12% for personnel, 11% for investment and 26% for medication. The distribution by financing source is 36% from the Government, 43% from Technical and Financial Partners and 20% from private sources including households. The allocation of resources for the benefit of the peripheral level is 87%, 4% for the intermediate level and 9% for the central level. A sliding Medium-term Sector Expenses Framework for 2011-2013 is the tool for implementing the 2011-2015 NHDP and it is attached to this document.

I. INTRODUCTION

The National Health Development Plan of Burundi ensures the implementation of the National Health Policy of Burundi (2005-2015) which itself is inspired by the Government's 2025 Vision. It is consistent with the National Strategic Framework to Fight Poverty (CSLP) that is currently being reviewed, and with the Millennium Development Objectives (MDOs).

The preparation of the NHDP II was the subject of a participatory process that involved all participants in the health sector, technical and financial partners, and civil society. It has included several states: i) the establishment of the Permanent Technical Team and the Subject-specific Groups; ii) the establishment of the NHDP II Steering Committee; iii) the evaluation of the NHDP I; analysis of situation; preparation of the Logical Framework; iv) drafting of the NHDP II 2011-2015 and Budgeting for the same; v) preparation of the Medium-term Health Sector Expenses Framework for 2011-2013.

This Document includes eight (8) major sections, and two related attachments

- Description of the national context;
- Sector diagnosis;
- Summary of major challenges and priorities;
- Vision, Goal, overall objectives, sector objective and strategic foci;
- Chain of results, logical framework;
- Framework for implementation
- Framework for monitoring and evaluation
- Programmatic and budget framework

Appendix 1: Logical framework matrix and table for estimating financing needs; Appendix 2:

Medium-term Sector Expense Framework (CDSMT-Health) 2011-2013.

II. NATIONAL CONTEXT

2.1. Geographic Situation of the Country

Burundi is a country located astride Eastern Africa and Central Africa. It is bounded to the north by Rwanda, to the south and east by Tanzania and to the west by the Democratic Republic of the Congo (RDC). It has 27,834 km^2 of surface area, including the surface of its territorial waters. It is located at 3°22' 34" South latitude and at 29°21'36" East longitude.

Its relief profile is dominated by high plateaus in the center and the rest of its territory consists of the plain of Imbo in the West, the Kumoso depression in the East, as well as the lakes, the largest of which is Lake Tanganyika.

Its climate is tropical with four seasons, a short rainy season (from October to December), a short dry season (January to February), a long rainy season (March to May) and a long dry season (from June to September).

2.2. Demographic situation

The population of Burundi was estimated at 8.05 million inhabitants in 2008, with 50.8% women and 49.2% men, and annual demographic growth of 2.4%[1].
If this pace is maintained for the next several decades, Burundi may have 10.2 million inhabitants in 2018, and 11.5 million in 2023. With a demographic density of 310 inhabitants per km^2 at the national level, Burundi ranks among the most densely populated African countries. This population primarily lives in rural environments, i.e. 9 inhabitants out of 10. The population is mostly young, with 56.1% less than 20 years of age, of which 44.1% are less than 15 years of age.

The synthetic fertility index of Burundi is 6.4 children [2] on average per woman, which is very high. Women of child-bearing age represent nearly one-half of the total female population, i.e. 46%, with the consequential rapid growth of the population and the elevated maternal and infantile morbidity and mortality level.
The current demographic situation in Burundi is a challenge for a country with limited resources and with considerable socio-sanitary needs in terms of usage of and demand for health services.

2.3. Socio-economic Situation

The disastrous impact of the work has resulted in a significant slowing of performance of the national economy, and generalized impoverishment of the population, with a poverty rate estimated at 67% in 2006[3], which rate was maintained in

[1] This datum refers to the RGPH 2008

[2] Provisional EDSB report, 2010

[3] Evaluation of performance and impact, CSLP1 2007-2009, 2010

2009; the GDP per resident that continued to fall from 2007 through 2011, from $119/res./year to $102/res./year. This poverty affects nearly 69% of households in rural areas and 34% in urban areas[4]. It is estimated that approximately eight Burundese out of 10 live below the poverty threshold (less than $1 per day). With extremely high inflation rates in 2007 (14.5%) and in 2008 (25.7%), rates decreased significantly in 2009, falling to 4.6% at the end of the year. This situation has had significant repercussions on social sectors.

Approximately 17% of the sick do not have access to care; 81.5% of patients have to go into debt or sell assets in order to pay their health expenses. Poverty is, in effect, considerably worsened with the crisis and the number of indigents increasing daily. We still find the vicious circle of "poor health condition – harmful effects on the economy - pauperization – worsening of health condition."

2.4. Education[5]

The past several years, gross primary school enrollment rates have continued to rise, reaching 130.4% in 2009 due to primary education being free. Net rates increased from 59.8% in 2005 to 72.4% in 2006 and to 89.7% in 2009. Parity between boys and girls improved even further (0.97 in 2009). However, the challenge is still improvement of completion rates, which are 48% and the rate for repeating primary school which remains high (35% as well as the dropout rate (7.4%) and school retention (44%).

Regarding adult literacy, rates continue to increase in spite of resistance to this type of teaching. This rate is estimated at 55.3% for the entire population, breaking down to 42.8% for men and 65.1% for women. The parity index in regards to literacy was 0.84 in 2009.

Maintaining these efforts in the medium- and long-term will have a positive impact on health indicators.

2.5. Equity and Gender[6]

Women have an important place in the economic and social life of Burundi, in particular since they play a major role in the family economy and in production of the agricultural sector, which represents more than 90% of the GDP. However Burundese women do not have equitable access to the family income with very little economic autonomy.

According to the 2008 census, women represent 50.8% of the population and 3 women out of 5 are illiterate, with disparities between provinces. Women abandon school earlier (school completion rate of 17% compared to 23.9% for boys in primary school) and to

[4] WHO Burundi Evaluation Report, 2010

[5] Strategic Framework for Poverty Reduction (CSLP I, 2007-2009); Evaluation of Performance and Impact

[6] Strategic Framework for Poverty Reduction (CSLP I, 2007-2009); Evaluation of Performance and Impact 2010

an average level (completion rate of 9.1% compared to 17.1% for boys), which explains the low level of training and competitiveness on the labor market. The most commonly cited causes by participants are related to early pregnancies and to poverty that push girls earlier and earlier into the informal work sector.

In addition to the low school retention rates for girls, several other legal, economic and cultural constraints limit the capacity of women for entrepreneurism and economic autonomy.

In a study conducted in the Municipality of Bujumbura with the support of UNIFEM[7], 42% of women surveyed stated that they were victims of violence in their own home. Being struck and wounded ranked first. Armed conflict and the massive presence of men bearing arms in the hills are the basis for a considerable increase in the number of rapes: approximately 300 cases of victims reporting rapes are occur each month. Clinical and psycho-social care is arranged in the provinces where the problem is more acute.

Nevertheless, progress has been seen in the various sectors of the life of the country. Burundese women are represented at a rate of more than 30% in the governing bodies of the country. Women's associations have developed since the 1990s and have created several micro-lending associations which have facilitated women's access to small loans under acceptable conditions, thus compensating for the lack of access to formal financial systems. The 2007-2008 global report on human development considered that the income ratio of women to that of men was 0.77 for Burundi.

2.6. Food and Nutrition

According to the joint evaluation report[8] on harvests, Burundi's production for the 2010 season barely allows food needs for three months to be covered. A gross food deficit of 412,000 grain equivalent tons, i.e. 32.3% of domestic needs, were released by this report, although the deficit is primarily felt by the most at-risk households.

The impact of this drop in vegetable production has been felt at the level of quality and the balance of food, which is becoming less and less diversified, which opens the door to malnutrition. Thus, we have seen very high rates of chronic malnutrition.

The spike in prices of foodstuffs in the country, causes primarily by low local production and other socio-economic factors, constitutes a serious limitation on equitable access to food in terms of quantity as well as quality, in particular for the poorest households with low buying power.

[7] Iteka, UNIFEM: ***Violence against women and girls in households in the Municipality of Bujumbura,*** Bujumbura, 1999

[8] Ministry of Agriculture, FAO, PAM, OCHA, UNICEF: January 2011

Burundi has one of the lowest caloric consumption levels per capita per day, with approximately 1600 kcal/pers./day, which is below the standard value (2300 kcal/pers./day)[9].

2.7. Information and Communication[10]

The media landscape in Burundi is very dynamic, with five television networks, 15 local radio stations, 7 local press agencies and 28 newspapers and periodicals providing information and making the public aware of health matters.

In regards to information and communication technologies, computers are becoming increasingly accessible to all, in particular to youth in cybercafés in urban areas. The upcoming arrival of fiber optics will undoubtedly allow the level of health communication to improve. There are currently six (6) mobile telephone providers in Burundi, only two of which cover the entire country, although their signal is weak or non-existent in certain locations in the country (CPAP 2010-2014). All these new technologies present opportunities to be capitalized on in relation to health-related information and communication.

In spite of the success of certain theater groups, other channels of cultural communication such as songs, dance and fine arts are still under-exploited in the mobilization and strengthening of the skills of the population. Furthermore, Mobile Cinema is among the proximal communication tools used to strengthen dialog in the community.

2.8. Water and Energy

The production of electricity is extremely low, and only reaches 3% of the population. Fifty-two percent of Health Centers and 19% of Health Districts in the country do not have continuous electricity service[11]. The proportion of households using solid fuels (wood, coal, harvest scraps or animal waste) as a primary source of energy for cooking is estimated at 98.2%[12].

Rates of access to an improved water source increased from 64.3% in 2005 to 77% in 2009[13]. It is important, however, to note that only 2.5% of the urban and rural population (40,513 households) are directly connected to the REGIDESO and DGHER networks (rural water service). The vast majority of Burundese get water from public taps or from streams and rivers.

[9] Eastern and Southern Africa Nutrition Overview, UNICEF 2010

[10] Plan of action of the cooperation program between the government of the Republic of Burundi and the United Nations Children's Fund (UNICEF), CPAP 2010-2014.

[11] Health Districts Evaluation Report, 2010

[12] The basic household survey for monitoring and evaluation of the impact of support on the system for reimbursing the minimum health service package (PMS 2009)

[13] Evaluation of performance and impact of the CSLP I, 2010

For the country as a whole, the percentage of residents using treated water is 3.3%. Furthermore, those who have access to potable water generally do not receive it in sufficient quantity. Lastly, there are significant regional disparities. The networks in the regions of Bugesera, Kumoso and Imbo (less supplied) are particularly deficient. 45% of Health Centers and 19% of HD do not have running water[14], which significantly affects the quality of care[15].

2.9. Hygiene and Cleanliness

Hygiene and cleaning are one of the primary determining factors of health.

Access to hygienic latrines is still a major problem for a large proportion of households. As is demonstrated by the results of the 2009 household survey, 53.1% of households use a traditional latrine and 31.1% a pit or open hole latrine. Improved latrines[16] and flush toilets represent only insignificant proportions, 6.3% or each type.

There is currently a resurgence of interest in waste management. The private sector and various associations are involved in waste management, in particular in the city of Bujumbura and in certain cities in the interior. Nevertheless, hygienic management of household waste and healthiness of the residential environment are still insufficient.

2.10. Leadership and Governance

Since 2005, Burundi has enjoyed socio-political stability, with democratically elected institutions. The Government prepared and implemented a Strategic Framework to Reduce Poverty (CSLP) and a Strategic Framework to Consolidate Peace (CSCP). These strategic documents are tools for stabilization creating political and security conditions for attaining the MDOs.

On the administrative level, Burundi is organized into 3 levels. the central level, the intermediate level represented by 17 provinces and the peripheral level, consisting of 129 towns. In the context of administrative reform, the government in 2008 adopted a national decentralization policy framework document and a three-year plan for its implementation. Efforts were implemented to provide several resources to the town councils. Currently, all the towns have communal plans for community development.

The problems of governance are reflected in the increase in corruption, the sub-optimal allocation and ineffective management of scarce resources, as well as an inappropriate profile for public expenditures, following the inability to cut corners on certain unavoidable expenses and the scarcity of resources.

[14] Health Districts Evaluation Report, 2010

[15] Health Districts Evaluation Report, 2010

[16] An improved latrine is a self-aerating latrine, i.e. with a pit and a route for evacuation, generally a pipe, other than the hole itself.

Real political will is demonstrated in the clean-up of public revenue and the fight against corruption. So, the government of Burundi has established institutions and agencies to fight corruption by strengthening the financial court and the government inspector general's office. A special anti-corruption task force was started in 2007 and has redoubled its efforts. These advances are demonstrated by the investiture speech of the President of the Republic, reaffirming his commitment to "zero tolerance" of corruption cases. As a direct result of this speech, a national strategy for good governance was adopted by the government in 2011.

The reform of public finance management is progressing quickly. Procedures and systems were modernized (Organic Law, Contracts Code, Customs Code, Burundi Revenue Department (OBR), finance management system) and they extended to nearly all financial activity, in terms of the treasury and commitments to better control budget implementation. Lastly, and in particular the portion of priority sectors in expenditures made (excluding common charges) increased from 40.9% in 2005 to 54.4% in 2009. In particular for the health sector, where the health budget increased from 5.6% in 2006 to 7.7% in 2010.[17]

In terms of regulation and standardization of the sector, a step has been taken through the adoption of several texts regulating the sector and the existence of procedure manuals, protocols, standards for human resources and infrastructures, the international health regulation. Oversight and control of the application of this institutional framework is guaranteed by the Inspectorate General for Health. The creation of a Public Contracts unit within the ministry has also presented a good opportunity to ensure the transparency and correct management of public contracts.

In the context of the promotion of human rights and ethics, national associations of physicians, pharmacists and the national ethics committee exist, but they are not as visible and are relatively dormant. Other health-related bodies are preparing their governing texts.

[17] Source: TOFFE 2007,2008, Ministry of Finance, Ministry allocation 2009, 2010, 2011.

III. SECTOR DIAGNOSTICS

3.1. Health Condition of the Population

The life expectancy at birth in Burundi is estimated at 49 years (51.8 years for women and 46 years for men)[18]. The gross mortality rate is estimated at 16.5 per 1000 with a maternal mortality rate of 866 per 100,000 live births[19], an infant mortality rate of 59 per 1000 and an infant-juvenile mortality rate of 96 per 1000 live births[20]. The following table shows the status of certain indicators.

Table 1: Summary of Health Indicators

N°	Indicators	Amounts	Sources:	Baseline year
1	Total population of the country	8.05 million	RGPH 2008	2008
2	Life expectancy at birth	49 years	GPHS	2008
3	Overall mortality rate	16.5 0/00	GPHS	2008
4	Infant mortality rate	59 0/00	ESDB 2010	2010
5	Infant-juvenile mortality rate	96 0/00	EDSB 2010	2010
6	Neonatal mortality rate	7,2 0/00	EDSB 2010	2010
7	Maternal mortality rate	866 per 100,000 live births	GPHS	2008
8	HIV/AIDS Prevalence Rate (15 – 49 years)	3,58%	ESP/HIV	2007
9	HIV screening rate	18,00%	CNLS 2010	2010
10	PMTCT coverage rate	19,4%	CNLS Report	2010
11	Incidence of malaria in infants (0-5 years)	24,6%	EPISTAT	2010
12	Mortality rate due to malaria	34,07%	EPISTAT	2009
13	LLITA coverage rate	52,50%	EDSB 2010	2010
14	LLITN usage rate	44,00%	EDSB 2010	2010
15	Vaccine coverage rate (fully immunized)	83,00%	EDSB 2010	2010
16	PENTA 3 Coverage Rate	95,40%	EDSB 2010	2010
17	Percentage of children that sleep under an ITN	45,00%	EDSB 2010	2010
18	Overall malnutrition rate	59,00%	EDSB 2010	2010
19	Chronic malnutrition rate among infants (0-5 years)	58,00%	EDSB 2010	2010
20	Rate of weight insufficiency among infants (0-5 years)	29,00%	EDSB 2010	2010
21	Prenatal consultation coverage rate (at least one visit)	99,00%	EDSB 2010	2010
22	Rate of births assisted by qualified health personnel	60,00%	EDSB 2010	2010
23	Contraception coverage rate	18,60%	EDSB 2010	2010
24	ARV coverage rate	45%	PSR - HIV	2009
25	ARV coverage rate for children	15%	PES/NCFA Report	2010
26	Notification rate of contagious cases (TPM+)	54 per 100,000	NPFT Report	2010
27	Notification rate of all forms of tuberculosis	91 per 100,000	NPFT Report	2010
28	TB – HIV coinfection rate	26,00%	ENP-TB-HIV	2007

* National seroprevalence survey

** National Survey on the prevalence of HIV among tuberculosis patients

[18] General Population and Housing Census, 2008

[19] General Population and Housing Census, 2008

[20] EDSB, 2010

3.2. Epidemiological Profile and Evolution of Health-related policies

In Burundi, the health situation is worrisome. It is characterize by the predominance of many communicable and non-communicable diseases. According to annual statistics for 2009, the diseases that are the primary causes of morbidity and mortality are malaria, acute respiratory infections, diarrheic diseases, malnutrition, HIV/AIDS and tuberculosis.

Many risk factors related to living conditions, more specifically related to hygiene, cleanliness, food and the environment contribute to increases of morbidity among the population. At-risk groups such as pregnant women, children and orphans are particularly affected. This situation is made worse by the low level of social protection of the population vis-à-vis the risk of disease.

3.2.1. Primary causes of Morbidity and Mortality

3.2.1.1. Malaria

This remains the primary cause of morbidity and mortality in the general population. In 2009, the rate of malaria among all diseases was estimated at 74% and the number of cases has continued to grow over the past five years. The rate of morbidity fell from 36.23% in 2005 to 34.07 in 2010, with a mortality rate in hospitals of 39.55% in 2005, falling to 34.07% in 2010.[21]

The percentage of households that permanently have an insecticide treated net is 52.5%[22] with a rate of use, for children less than 5 years of age of 44.1%[23]. The preliminary results of the EDS 2010 show an increase in the rate of usage of ITNs of 45% among children less than 5 years of age and 50% among pregnant women[24].

In spite of these efforts, gaps have been observed in relation to interruptions in inventories of first-line medication, the improper use of quinine, the persistence of single-drug therapies the increased cost of spray products, low usage of ITNs and low levels of community involvement.

3.2.1.2. Diarrheic diseases:

These are the third-leading cause of morbidity among children less than 5 years of age, with a rate of 9% according to 2009 annual statistics. Twenty-five percent of children less than five years of age had diarrhea during the 2 weeks preceding the 2010 EDS.

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[21] NIMCP Report, 2010

[22] Household census, 2009

[23] *Op. Cit.* Page 14

[24] EDSB, 2010

These diseases to a large extent consist of helminthiases, typhoid fever, amibiases, and food poisoning commonly referred to as "dirty hand diseases.

The lack of cleanliness and hygiene, increased shortages of potable water, the deficiency of the system for removing sewerage to a large extent account for the high prevalence of diarrheic diseases.

3.2.1.3. Vaccine-preventable diseases

The fight against vaccine-preventable diseases is a priority in the health system With the support of partners, the Government has expanded the list of vaccine-preventable diseases by introducing, since 2004, the vaccines against Haemophilus influenza Type B and Viral Hepatitis B. We have also noted that the process is underway to introduce the to fight pneumococcus, Rota virus and the second dose of the Measles vaccine.

Thanks to routine immunization activities, vaccine coverage has remained high, exceeding 90% for the primary antigens according to the 2010 EIP annual report. The national 2009 PMS showed that vaccine coverage rates exceeded 80% for the primary antigens[25] (Polio 3: 87.3%, DTC3 or penta 3: 95.4% and VAR: 94.3%). The 2010 EDS also showed that routine immunization results exceed 85% for most antigens. Fully immunized infants reached a rate of 83% according to the same survey. This good national coverage conceals disparities among the health districts. Ten or so health districts have not achieve 80% vaccine coverage for VAR and DTC3.

The program enjoys the support of partners such as UNICEF, the WHO and GAVI, which participate through technical assistance, the purchase of vaccines and immunization equipment at a level in excess of 80%. This dependence on external sources is a threat to immunization activities. In spite of this situation, efforts have been made to preserve ground that has been gained. Burundi is one of the African countries that has successfully interrupted the transmission of wild polio virus, however the threat of importing poliovirus continues to weigh on the country. This is the reason that the monitoring of acute flaccid paralysis (PFA) is ongoing.

Burundi has also been ranked among the countries that have eliminated neonatal tetanus since 2009 however, as with poliomyelitis, monitoring is ongoing and activities intended to maintain a high level of immunization are regularly carried out.

3.2.1.4. Acute respiratory infections

These infections represent the second–leading cause of morbidity and mortality among infants less than 5 years of age[26] and include a miscellaneous group of viral, bacterial and parasitic diseases. The most frequent infection is **pneumonia,** which caused 22.4% morbidity among all children less than 5 years of age in 2009.

[25] EDSB, 2010

[26] NHDP 2006-2010 Evaluation Report, June 2010

Hospital mortality related to pneumonia is 7% Of 178 deaths recorded in 2009 following pneumonia, 80 cases, i.e. 45%, were children less than one year old. These deaths represent 17.6% of all children who died before reaching 1 year of age. These data are corroborated by the 2010 EDS, according to which 17% of children less than five years of age suffered from a cough with shortness of breath and rapid breathing (symptoms of Acute Respiratory Infection) at least during the two week period preceding the survey.

3.2.2. Malnutrition

Chronic malnutrition is still a rather serious problem in Burundi. According to the 2010 EDS, 58% of children less than 5 years of age suffered from chronic malnutrition, 29% in its severe form. In contrast, acute malnutrition was below the alarm threshold defined by the WHO (serious malnutrition > 10%) in Burundi[27] and the 2010 EDS reports a rate of 6%. Weight insufficiency in the surveyed provinces was still high (greater than 30%[28]) and according to the 2010 EDS it is 29%. In the 6 provinces surveyed, the prevalence rates were in excess of 55%, including two that were beyond 65% (Kirundo and Muyinga) and according to the 2010 EDS, the chronic malnutrition rate was 58%.

Figure 1: Evolution of malnutrition rates in Burundi (2000-2010)

Source: Demographic Health Study (EDS) 2010 (z-score, WHO standards)

This situation is due to a set of factors, including the mother's educational level, recurring nutrition deficits, micronutrient deficiencies, inappropriate feeding practices for young children, with a maternal breastfeeding initiation rate within the first 24 hours of only 74% and an exclusive breastfeeding rate estimated at **69%.**

The current intervention strategy is integrated treatment for malnutrition at Health Facilities and at the community level.

[27] National Nutrition Survey, 2005 (LMTC – UNICEF)

[28] National Nutrition Survey, 2005 (LMTC – UNICEF)

3.2.3. Chronic Communicable and Non-communicable Diseases

- Tuberculosis and leprosy

Tuberculosis remains a public health problem in Burundi. It is the fifth-leading cause of morbidity in Burundi[29]. The age range most affected is 15-54 years (86.6%) with a predominance among males (64.4%)[30]. Notification rates for contagious cases (TPM+) and all forms of tuberculosis (TTF) are 54 and 91 cases per 100,000 residents in 2010, respectively, compared to 47 and 87 cases per 100,000 residents in 2009. The number of new TPM+ cases reported and treated increased from 2004 to 2010 from 3087 to 4590 TPM+NC. Tuberculosis is rampant throughout national territory but with disparities by region and population density.

Rates of HIV seroprevalence among tuberculosis patients is 26%[31]. The availability of resources, strengthening of skills of personnel, messages used to promote awareness among the population and the support of authorities and partners are at the root of the improvement in indicators. However efforts remain to be made to provide for the early detection of cases, geographic coverage of Treatment Centers and Screening and Treatment Centers, monitoring of multi-drug resistant tuberculosis.

Leprosy continues to hit the populace of Burundi hard. It is the source of significant mutilations that compromise social integration and the future of patients. During 2010, 534 new cases of leprosy were reported, of which 484 were multibacillary (468 adults and 16 children) and 50 were paucibacillary (39 adults and 11 children). The significant number of children detected shows that transmission of the infection is still active in the community. The degree of infirmity is estimated at 18% among the 772 patients being treated at the end of 2010. This figure is clearly higher than the global estimated average of 5%. In all provinces it has been observed that 94$ of leprosy patients completed treatment, while 5% abandoned treatment in 2008. In spite of the efforts made for research and treatment of patients, much remains to be done in regards to detection and treatment of cases.

- HIV/AIDS

In Burundi the epidemiological profile of HIV is generalized with an average of 2.97% national seroprevalence and 3.6% in the population between 15-49 years of age. Women are more affected, with a rate of 2.91% compared to 2.81%. From 2002 through 2007, HIV infection continued to increase in rural areas (2.5% to 2.8%) while it trended in the opposite direction in urban areas (0.4% to 4.6%)[32].

[29] EPISTAT annual statistical report, 2009

[30] NPFT Report, 2010

[31] National HIV Prevalence Survey among tuberculosis patients, conducted in 2007

[32] Evaluation of performance and impact of the Strategic Framework to Reduce Poverty (CSLP) I, 2010

Infection with HIV [and] AIDS is the fourth-leading cause of death in Burundi, and it significantly increases the work load of treatment services. HIV/AIDS has a significant negative impact on the determining factors of the economic and social development of the country, whether on the level of health, education, social service and demographics. The number of HIV+ persons and AIDS orphans continues to increase. In order to confront this situation, a national response strategy to fight HIV-AIDS in 2007-2011 was prepared. Its implementation allowed a screening rate of 18%[33] to be achieved in the general population, PMTCT coverage of 19.4%[34], an ARV access rate of 30%[35], pediatric HIV treatment of 3.7%[36] with an active complement of 17,500 people in 2009 who received ARV combination therapy (Target: 60,000). In spite of the efforts made by the Government of Burundi in cooperation with the partners for more adequate treatment, the acquisition of sufficient quantities of ARV treatment, including pediatric forms, remains a challenge.

Significant efforts were made in the fight against HIV, in particular strengthening the integration of the HIV/AIDS component in the health sector, strengthening leadership, upscaling, in progress, of prevention and treatment interventions.

The government has made universal coverage the foundation of its policy in regards to fighting HIV/AIDS and has joined all the international and regional initiatives: UNGASS 2001, universal access to prevention, care, treatment and socio-economic support. In order to mount an appropriate response to the HIV epidemic, an effective response is based on a multi-sector approach, the involvement of civil society, the private sector and the community.

However several difficulties were observed, such as interruptions in inventories of medications and reagents, a lack of equipment for testing CD4 levels, biological monitoring of patients, upscaling PMTCT, increasing geographic ARV and Voluntary Testing Center coverage and the integration of services at Health Facilities (including HIV/PF and HIV/mothers' health).

3.2.4. Untreated Tropical Diseases

This group includes diseases such as onchocerciasis, geo-helminthiases, schistosomiasis, trachomas, rabies and cysticercosis.

Onchocerciasis is known to be meso- or hyper-endemic in 10 out of the 45 health districts in the country. Mass treatment using the strategy of Ivermectine Treatment under Community Directives (TIDC)" was implemented in 2005 at Cibitoke – Bubanza and in Gururi and Rutana in 2006. The treatment coverage rate varied from 68% to 76% in 2009.

[33] NCFA Report, 2010

[34] NCFA Report, 2010

[35] NHDP 2006-2010 Evaluation Report, June 2010

[36] NCFA Report, 2010

The Ministry of Public Health and Fighting AIDS, in cooperation with its partners, is currently implementing a strategy for eliminating the transmission of onchocerciasis.

Geo-helminthiases are a public health problem throughout national territory. Surveys conducted in 2007, 2008 and 2009 have shown prevalence values that mostly exceed 20%, which is the maximum acceptable threshold of the WHO.

Urinary schistosomiasis has not yet been discovered in Burundi, while intestinal schistosomiasis is meso-/hyper-endemic in 9 provinces (> 10%). These provinces are Cibitoke, Bubanza, Bujumbura, Bujumbura Mairie, Bururi, Makamba, Kirundo, Rutana and Ruyigi. Since 2007, the fight against schistosomiasis has primarily been directed at mass treatment through national campaigns and case-by-case treatment in basic health facilities in Praziquantel.

For a very long time, trachoma has been a relatively foreign disease to Burundi. It was not until 2007 that a survey conducted in 43 towns showed a prevalence of 30.33%. Of 1473 adults at least 15 years of age examined, only 3 showed signs of trachomatous trichiasis (TT) in at least one eye, i.e. a prevalence of 0.20% (Min. Public Health, 2008).

Cysticercosis, a major risk factor for epilepsy in Burundi[37], is found in certain regions where pig farming is conducted under poor hygiene conditions. It seems to be very frequent in Burundi, since 4 pockets have already been identified (Kayanza, Ngozi, Bururi, Cibikoke). In Kiremba – Ngozil the seroprevalence rate is 31.5%[38].

Blindness[39]: The fight against blindness started in 2005 with the first workshop to consider this public health problem. The country was broken down into 7 ophthalmic regions. The West region is the most active, because it contains the majority of human resources, equipment and infrastructure. The North region conducted a blindness prevalence survey that showed that 62.5% of causes of blindness are avoidable, of which 57.5% are curable and 5% could be prevented. The primary cause of blindness is cataracts at a rate of 55%, followed by the total anomalies of the back of the eye segment, with 22.5%. Glaucoma is at the top of the list of diseases of the back of the eye, with a rate of 15%. A plan to develop human resources by a sub-committee of the GTNC to deploy intermediate-level personnel throughout the country is the next step.

3.2.5. Non-communicable Disease and Trauma

[37] Nsengiyumva G et al., Cysticercosis as a major risk factor of epilepsy in Burundi, East Africa, 2003, Epilepsia, 44(7):950-955,

[38] Nsengiyumva G. Epilepsy in Burundi: A misunderstood public health problem. *Editions universitaires europeennes*, Nov. 2010

[39] ARCE Survey, October 2010, Burundi North Ophthalmic Region. ARCE = Rapid Evaluation of Avoidable Blindness

These include diseases such as diabetes, high blood pressure, cancers, Chronic Obstructive Pulmonary Disorder They are treated in the context of the newly created program within the Ministry of Public Health and Fighting AIDS. They are poorly documented, because routine epidemiological data does not include them, and there are no reliable surveys in this area. Diabetes and High Blood Pressure are associated with 30% of cases according to a CHUK study and they cause degenerative complications in 73.17% of cases according to the same study. The treatment of these diseases remains a major problem, due to the fact that the medications are very expensive and must be taken daily. Cancer is considered to be a fatal disease in Burundi due to its very slow evolution, the absence of diagnostic resources and treatment.

Although there is no reliable information regarding non-communicable diseases and trauma on public roads, available data show the significant scope of these diseases. They constitute a public health problem. More in-depth studies are worth being conducted, in order to obtain reliable information and to organize multi-sector intervention in order to confront them.

3.2.6. Mental Health Problems

The crisis has considerably worsened insecurity and caused a significant deterioration of mental health in the population. In 1998-1999, a national survey carried out on a sample of 1100 persons living in "normal" conditions in their homes[40] showed that many Burundese people suffer, to varying degrees, from mental health problems. Approximately 59.33% of people surveyed stated that the crisis significantly affected their live, while 56.34% of people said they were sad and discouraged, of which 20.29% stated they were often sad. Furthermore, 55.61% acknowledged having difficulty sleeping and having nightmares. Sexual violence against women caused various psycho-affective traumas that affected their mental health[41].

The quality of treatment of psychiatric disorders and psychological issues is low, primarily due to the fact of the insufficiency of qualified human resources, specialized infrastructures and products.

3.2.7. Epidemics, Catastrophes and Health Emergencies

In regards to fighting epidemics, an integrated strategy for monitoring diseases and for responding to them was adapted to the situation of Burundi, but it requires updating. The Strategy for Integrated Surveillance of Diseases and Response (SIMR) has allowed the implementation of a minimum package of interventions intended to control diseases with epidemiological potential and to protect populations. Diseases with epidemic potential under epidemiological surveillance include but are not limited to measles, cholera, meningococcal meningitis, malaria, acute flaccid paralysis (AFP),

[40] ISTEBU, World Bank ***National Survey of Living Conditions of the Population,*** Bujumbura 1999

[41] WHO, Mental Health System Evaluation Report, 2008

bacillary dysentery, shigellosis, exanthematic typhus and hemorrhagic fever. A system for monitoring diseases covering all levels of the health pyramid is functional through the rapid intervention team and EPISTAT. In the context of the confirmation of diagnoses, CHUK and INSP reference laboratories participate in the biological diagnosis of suspected cases and suspected epidemics. Nevertheless, it is also helpful to stigmatize the notorious insufficiency of laboratory activities at the intermediate and peripheral level and the absence of a rapid response team.

In the context of the implementation of the International Health Regulation (IHR 2005), there is a contingency plan for fighting pandemics and health emergencies.

3.2.8. Mother and Child Health

- Health of infants

The health of infants is at the core of the concerns of the Ministry of Public Health and Fighting AIDS. In order to attain the MDOs, the Government adopted a certain number of measures targeting improvement in the situation and the reduction of mortality rates, in particular by adopting free care for children less than five years of age, strengthening routine immunization, integrated treatment of children's diseases, strengthening of treatment activities for cases of malnutrition and treatment of indigent persons.

The Demographic Health Survey conducted in 2010 reported an infant mortality rate of 59 per thousand and an infant-juvenile mortality rate of 96 per thousand.

- Mother's and Newborn's health

This is part of the major concerns of the government and the Ministry of Public Health and Fighting AIDS in particular. According to the RGPH of 2008, the maternal mortality rate was estimate at 866 deaths per 100,000 live births. The neonatal mortality rate decreased from 8.4/1000 to 7.2/1000[42] live births during the same period.

Perinatal mortality was estimated at 37/1000 live births in 2008 (WHO Report, Burundi, 2008). It seems to be close to that observed in health facilities which decreased from 37.6% to 28.7% between 2006 and 2009 but it is also difficult to estimate due to a relatively high level of births at home and the los reporting of cases of death at home.

The rate of use of Prenatal Consultation services was 99%[43] (at least one visit). However 72%[44] of pregnant women made at least 4 visits with a rate of births assisted by trained personnel of 60%[45].

[42] EDSB 2010

[43] EDSB 2010

[46] NCFA Report, 2010

[45] EDSB 2010

The Demographic Health Survey reported a rate of contraception usage by the modern method of 18.6%. This situation is subtended by the efforts on the part of the government and its partners related to the availability of supplies and free care for pregnant women until they give birth, the availability of services at health facilities, the mobilization of the population regarding family planning as well as the good availability of contraceptives at health facilities[46]. In spite of the improvement in prenatal consultations, efforts remain to be implemented, in particular in regards to family planning and births assisted by a trained person.

The evaluation of needs in terms of obstetric and emergency neonatal care conducted in 2010 showed that Burundi only has 5 health centers like BEmONC health facilities out of all the health centers in the country, and 17 hospitals like SEmONC structures, and the latter are poorly distributed throughout the provinces.

- Reproductive Health of Adolescents and Youth

The early onset of sexual relations is the most visible facet among the health problems among adolescents in Burundi. According to a study conducted in 2002 among adolescents, 16% of those surveyed reported having their 1st sexual relations at 10 years of age, 17% between 10 and 14 years and 38% between 15 and 20 years[47]. From 1980 to 1990, pregnancy was the major cause for dismissal of 34.5% of girls from secondary education. The fertility rate of adolescents was 32 per 1000[48]. Access to reproductive health services for youth is very low. During the national adolescents forum held in December 1998, adolescents noted the "lack of information related to sexuality and reproduction" as being a crucial problem. Since then, a series of “Youth Centers” managed by the *Association Burundaise pour le bien-etre Familial (ABUBEF)* were created to attempt to bridge this void.

3.2.9. Evolution of Health-related Policies

The health situation in Burundi was seriously affected by the socio-political crisis triggered in 1993 that lasted more than a decade. During this period, the Ministry of Public Health implemented a series of 2-year urgent humanitarian plans of action supported by the agencies of the United Nations and NGOs. The execution of the Arusha peace agreement in 2000 led to a gradual restoration of peace and stability. The Country thus emerged from the humanitarian emergency situation through health development actions with the implementation of multi-year action plans. Burundi subscribed to the Millennium Development Objectives (MDOs) and all international, regional (Member of the EAC) and sub-regional commitments.

[46] WHO Report, 2010

[47] NRHP, CEFORMI Study regarding reproductive health of youth and adolescents in the municipality of Bujumbura, Bujumbura, 2002

[48] RGPH, 2008

(Great Lakes countries) in regards to Health. Burundi [is among the] first pilot countries of the International Partnership for Health (IHP+). The 2025 Government Vision was adopted in 2004.

By agreeing to the fundamental law, the Government of Burundi agreed to assume all its responsibilities to offer every Burundi citizen quality basic health services as summarized in Category No. 3 of the Strategic Framework to Fight Poverty I (CSLP I) (2006-2010).

Inspired by this political will, the health sector undertook a long process to adopt a National Health Policy (PNS 2005-2015). This policy, based on Primary Health Care, was implemented through the National Health Development Plan (PNDS 2006-2010) and the Strategic Sub-sector Plans.

Several reforms were initiated by the Government, in particular: (i) decentralization through the implementation of health districts; (ii) the presidential order for free care for children less than 5 years of age and pregnant women; (iii) the performance-based financing approach; (iv) the merger of the Ministry of Public Health and the Ministry to Fight AIDS; (v) institutional reforms of the Ministry of Public Health and Fighting AIDS; (vi) the implementation of a framework for Cooperation with Partners for Health and Development (CPSD).

3.3. Organization and Management of the National Health System:

The Burundi health system is organized as a pyramid structure, with three levels: the central level, the intermediate level and the peripheral level. However the private sector is not well integrated into the national health system, like traditional medicine and community participation. These levels are connected to each other by hierarchical functioning relationships.

3.3.1. Organizational and Institutional Framework

- Central level

The central level includes the Office of the Minister, a General Heath Inspectorate, two General Directorates, the specific institutions, 6 departments, 9 health programs and the related services.

Due to the merger of the two ministries (Public Health and the Ministry to Fight AIDS) and the results of the institutional audit conducted in 2009, a new organizational chart was put into effect in order to integrate the fight against AIDS into the sector, and to incorporate the recommendations that resulted from the audit. The two reforms provide for the creation of a Permanent Secretariat, a general directorate of planning and of monitoring-evaluation, and a national integrated program to fight HIV/AIDS.

The central level is charged primarily with formulating sector policy, strategic planning, coordination, mobilization and allocation of resources as well as oversight-evaluation. This level fulfills the regulation and standardization function. However is suffers from a lack of human and financial resources to ensure planning, coordination and regulation.

- Intermediate level

The intermediate level is comprised of 17 provincial health bureaus. The provincial health bureaus are charged with coordinating all health activities of the province, supporting the health districts and ensuring proper collaboration between sectors.

The duties initially entrusted to the provincial health bureaus are currently shared with the district health bureaus. This creates an inefficiency in the allocation of resources, frustration on the part of personnel and a lack of supervision. The goals is to realign the health provinces into health regions for reasons of efficiency.

- Peripheral level

The peripheral level is comprised of 45 health districts, including 63 hospitals and 735 health centers[49] distributed throughout the 129 cities in the country. One district covers 2 to 3 cities, with between 100,000 and 150,000 residents. Its regulatory framework has not yet been determined.
The health district is the operational unit of the health care system. It includes the community level, health centers, and the district hospital which is the hospital of first reference.

The communities are involved in the health care system through the management of health centers, by implementing health committees and health center management. They are also represented by the community liaisons who provide the interface between the health center and the community through awareness messages, treatment, monitoring and support for patients.

- Organization of the care network

The operation of the care network is based on three levels: the basic level, the first reference level and the national reference level.

A minimum package of activities is defined for each level covering treatment, prevention, promotion and rehabilitation.

The health center is the point of entry into the health care system. There are 735 health centers, 423 of which are public, 105 are approved religious facilities and 207 are private facilities. Each Health Center must offer a minimum package of activities, including treatment and prevention consultation services, laboratory, pharmacy, health promotion and health education services as well as in-patient observation.

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[49] EPISTAT annual statistical report, 2010

Technical actions that may be involved are births, minor surgery and nursing care Nevertheless, the minimum package of activities is not provided in certain health centers. 45% of health centers only offer a partial minimum package of activities, either due to a lack of personnel, facilities, equipment or medications.

- First reference

According to health standards, each District Hospital (HDS) offers outpatient consultation, emergency services, hospitalization, specialized techniques, diagnosis and support services. Outpatient Consultation services at the district hospital only receive new cases that were referred by the health center.

There are 63 public hospitals, 41 are public, 8 are authorized and 14 are private. In the field, this patient loop is not respected. So the District Hospitals offer both the minimum package of activities and the supplemental package, which is often incomplete. This causes a high level of use of hospital services and under-utilization of health center services. In spite of this subdivision that is intended to bring care to the population, 9 districts out of 45 do not have hospitals. Even in those that do have them, the PCA is not provided in full. Certain hospitals are not sufficiently equipped to serve as reference hospitals.

- Second reference

There are currently three (3) second-reference hospitals located in Ngozi, Bururi and Gitega. They supplement the package of activities by offering certain specialized care. This level lacks the legal framework for operation and even their package of care is not well defined. Their status will be defined and they will be strengthened to play their true role as reference facilities.

- Third reference level

The national reference level is comprised of specialize hospitals that offer care that is not provided at other levels, such as specialized exams and treatment. This level specifically comprises the University Hospital of Kamenge (CHUK), Prince Regent Charles Hospital (HPRC), the Kamenge Military Hospital (HMK), the Prince Louis Rwagasore Clinic (CPLR), plus the specialized hospitals, such as the Kamenge Neuro-Psychiatric Center (CNPK), the National Multi-drug Resistant Tuberculosis Center (the former Kibumbu Sanatorium), and the National Brace and Rehabilitation Center (CNAR) at Gitega.

The patient loop is not well structured, because all the hospitals provide all packages, without differentiation. The districts of the Municipality of Bujumbura do not have 1st reference hospitals. So, patients have a tendency to go directly to the National Hospitals, requiring them to offer the minimum package of activities, which nevertheless is available from the Health Centers (CDS).

3.3.2. Geographic access to health care services

The Ministry of Public Health and Fighting AIDS has initiated certain structural reforms to improve access to care from the geographic point of view, by implementing health districts. Geographic accessibility is satisfactory since the population in general (80%)[50] can access a health center less than 5 km away, although there are geographical disparities, primarily in favor of urban centers.

Connections are also provided over roads. Most of the health facilities (in excess of 90%) are accessible by road, even if they are sometimes defective. This means of connection plays an important role in the reference and counter-reference system.

Regarding financial accessibility, the majority of Burundese households have access to direct payment to finance their health expenses. With low buying power, this method of payment limits access to care by the population.

In order to offset this problem, the government in 1984 implemented a health insurance card (CAM). However this card is only accepted at certain public and approved health facilities because the corresponding receivables are difficult to get reimbursed and take a long time[51].

For Government employees, a public civil service fund covers their care, up to 80%, with the balance being paid directly by the beneficiaries and by the Ministry of Public Health and Fighting AIDS for its own personnel.

Private insurance, community funds as well as initiatives by people living with HIV/AIDS exist, but they do not cover the entire country.

In order to increase access to care for certain categories of at-risk persons, the Burundese Government in May 2006 decided to implement a policy of free care for children less than 5 years of age and for care related to pregnancy and birth at public and similar health institutions. . In April 2010, the expansion of Performance-based Financing allowed the Government to subsidize free care. The Government also initiated free first-line anti-malaria medication in 2010.

However certain cultural barriers block use of health services and prevent early treatment of patients, in particular for certain at-risk groups such as the Batwa.

[50] PETS Survey, 2008

[51] PETS Survey, 2008

Although recourse to traditional medicine is not documented, certain patients prefer to use traditional healers or prayer groups.

3.3.3. Supply of health services

In general, public health facilities seem to better observe good practices relative to the on-going supply of health care. Care is generally offered 24 hours a day, every day, with care services organized as needed, at 71.1% of public health centers and 81.4% of public, approved and private hospitals[52]. However a shortage of equipment and lodging handicap the ongoing supply, with disparities among the provinces.

3.4. Health Resources

3.4.1. Availability of human resources

3.4.1.1. Production of human resources

The total personnel numbering 15,941 agents break down into 5,957 nurses, 418 physicians and interns, 16 midwives, 827 other skilled paramedical personnel and 8,739 other personnel. [53]

In regards to physicians, the overall ratio for the entire country is 1 physician per 19,231 residents, while the WHO standard specifies a ratio of 1 physician per 10,000 residents [this] is very far from this reality.

The ratio of nurses per resident is satisfactory, with one nurse per 1,349 residents (the WHO standards is one nurse per 3,000 residents).

Burundi is also confronted with a shocking lack of government midwives (1 per 124,312 Women of Child-bearing Age). We would also note that more than 50.5% of physicians and 21%[54] of nurses work in Bujumbura.

The training of physicians is provided by the Faculty of Medicine of the University of Burundi, University of Ngozi and Université Espoir d'Afrique. There are institutes of higher learning that train A1 paramedics, such as the Institut National de Santé Publique (INSP), the University of Mwaro and University of Ngozi. Other public and private institutions provide training for A2 Paramedics.

The qualitative insufficiency is explained in part by the absence or insufficiency of oversight at the level of the public and private instruction institutions, non-selective recruitment of candidates at the private schools, curricula not being customized to reflect the needs of employment and insufficiency of planning for personnel needs.

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[52] Health Facilities Survey, 2010

[53] DRH Survey, Nov. 2010

[54] PETS Survey, 2008

Measures are necessary to establish quality training in the medium- and long-term, in particular for midwives.

3.4.1.2. Human Resources Management

The management of human resources is marked by excessive centralization of management activities for personnel at the level of the central administration, which leads to situations that often handicap the correct operation of health facilities in the field.

The lack of job descriptions and career plans for agents and the absence of benefits management are determining factors that contribute to the poor management of human resources.

The Government has implemented motivational measures, including subsidizing the health care of personnel and generalizing the performance-based financing approach in health care facilities.

3.4.2. Material Resources and Infrastructure

The Ministry of Public Health and Fighting AIDS in 2010 had 17 bureaus in the health provinces, 45 health district bureaus, certain of which did not have physical premises, 735 health centers and 63 hospitals. The properties for certain of these structures were not delimited and did not have property registration documents; water and electricity were also limitations on improving the supply of quality care.

In spite of the standards defined in 2004, several facilities are yet to be equipped with biomedical equipment in accordance with the package of services offered.

In relation to facilities and equipment, they lack a policy and a maintenance plan at the national level, which should guide all interventions.

In addition, the Ministry of Public Health and Fighting AIDS does not have a plan to extend coverage or an investment plan. Given this situation, it is necessary to conduct an inventory and prepare an investment plan in order to guide decision-making related to capital expenditures and rehabilitation.

3.4.3. Financial Resources

3.4.3.1. Sources of financing

According to the National Heath Accounts for 2007, the sources of financing for the health sector are: 17% public (Ministries, including the IPPTE funds and government entities), 43%[55] private

[55] National Health Accounts, Burundi, 2007, August 2009

(of which 40% are for households and the rest by associations, religious and non-religious NGOs,

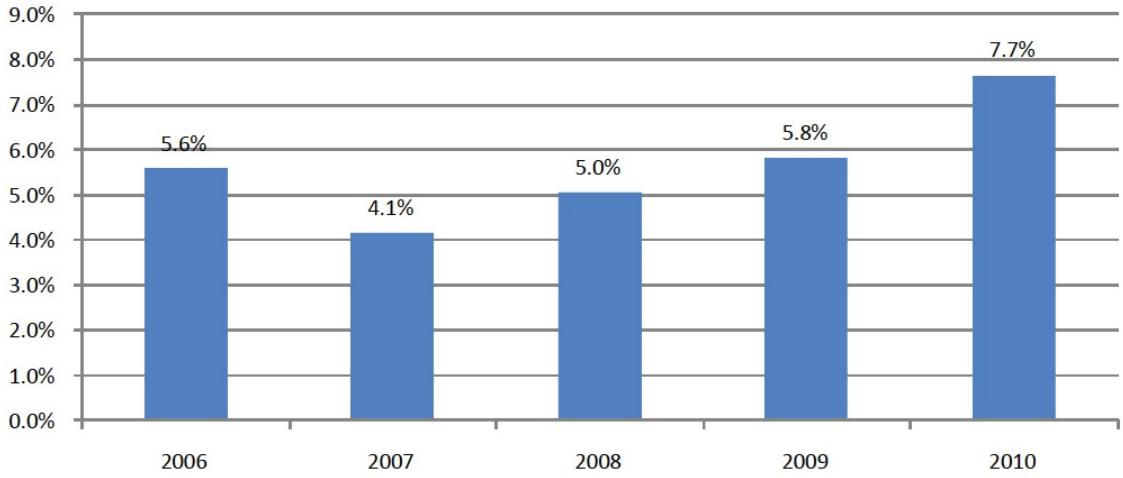
companies) and 40% from foreign aid (bilateral cooperation, multilateral cooperation and NGOs, international programs and foundations).

3.4.3.2. Public Financing

- Government Financing

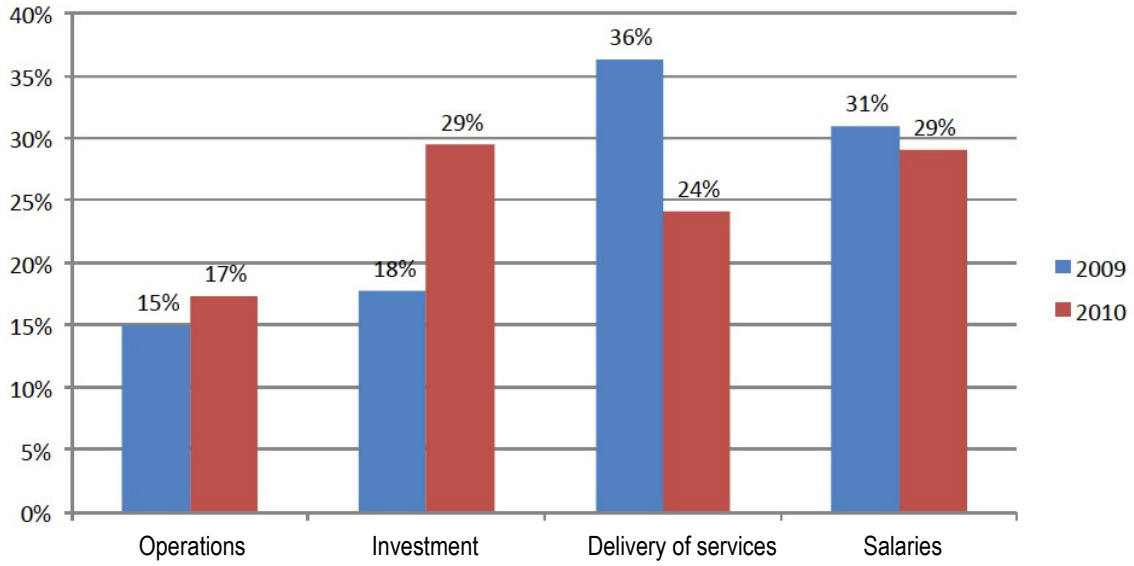
Since 2007 a significant commitment has been made by the State, with an increase in its budget allocation for the health sector.

Figure 2: Proportion of the national budget allocated to the Ministry of Public Health and Fighting AIDS



The budget allocated to health has increased from 5.6% to 7.7% of the national budget from 2006 to 2010.

Figure 3: Distribution of the budget of the Ministry of Public Health and Fighting AIDS



The breakdown of the budget among salaries, investment, operation and delivery of services varies from one year to the next, as is shown by the graphic presented above. From 2009 to 2010, investments increased from 18% to 29% of the ministry's budget. The investment budget completion rate was 65% in 2009 and 57% in 2010).

The budget completion rate by the ministry exceeds 90%[56] thanks to a rate of commitment and payment of funds allocated to the Ministry of Public Health (100% of salary, medication and delivery of services expenses).

In addition to the Ministry of Public Health and Fighting AIDS, other ministries (Ministry of Civil Service, Ministry of National Defense, Ministry of Public Safety, Ministry of Solidarity and Ministry of Higher Education and Research, etc.) contribute to financing health by 4%.

- Mutual health insurance companies

The Civil Service Mutual Insurance Fund (MFP) covers Government employees and their dependents, i.e. 10%[57] of the Burundese population. It covers 80% of all costs of services and pharmaceutical products. Collective premiums through the MFP only represent 15% of public expenditures and 6% of Total Health Expenditures (DTS).

- Health Insurance

[56] Budget disbursement of the Ministry of Public Health, 2010

[57] National Health Accounts, Burundi, 2007, August 2009

The Medical Assistance Card (CAM) was initiated by the Government of Burundi in 1984, for the benefit of certain low-income populations (farmers, artisans and small business persons). This card allows coverage of 80% of the cost of lab tests, consultations and hospitalizations; it does not cover medication and the beneficiary must pay for medications and the remaining 20% balance. The primary difficulties lie in the lack of reimbursement to certain providers causing a reticence to offer care to persons holding the CAM, which in the long-term discredits this means of payment and is a disincentive for the population. However the CAM contributes 0.4% of total health expenses [58]. It would be wise to evaluate the use of the CAM and to seek out measures to correct these strategies in order for it to be a sustainable and credible alternative for access to care and financing health services.

3.4.3.3. Private financing

- Household financing

The financing of households through direct payment for health care represents 40% of total health care expenditures[59]. This situation limits access to care for households, particularly the poorest ones that use several strategies to cover these payments for care, and which further destabilizes them (sale of land or livestock).

- Insurance and Private Health Insurance Funds

Insurance initiatives and private insurance funds are beginning to take shape, although they represented only 0.1% of health expenditures[60] in 2007. They are rather undeveloped, and they only offer certain coverage services for the risk of illness. The revenue from these insurances basically come from private enterprise, non-governmental organizations and households.

Certain organizations have set up community mutual health funds for the benefit of certain categories of persons (coffee growers, rice growers and religious groups) and for certain locations. However these initiatives are not documented in order to analyze their contribution.

3.4.3.4. External aid

This form of financing represents 40% of total health expenditures[61]. This form of financing shows the high level of dependence on foreign aid. A large portion of the financial support is disbursed through projects and NGOs. An effort must be made regarding forecasting expenses, standardization of management procedures, the availability of required information and alignment with the priorities of the government.

[58] National Health Accounts, Burundi, 2007, August 2009
[59] National Health Accounts, Burundi, 2007, August 2009
[60] National Health Accounts, Burundi, 2007, August 2009
[61] National Health Accounts, Burundi, 2007, August 2009

In the context of results-oriented management (GAR), the government is in the process of implementing tools to improve the management of public finances and the tracking of funds. In the context of the International Health Partnership (IHP+) initiative, the Ministry of Public Health and Fighting AIDS has signed the global compact and a memorandum of understanding with 15 technical and financial partners for health and the other key ministries. Discussions are underway for the preparation of a compact and the implementation of a common Health fund.

3.4.3.5. Performance-based financing (output)

The strategy of financing health based on performance adopted by Burundi is intended to achieve the following objectives: (i) improving the use and the quality of health services offered to the population; (ii) improving mechanisms for verification and reimbursement of services in the free package of care for pregnant women and children less than five years of age; (iii) encouraging and stabilizing health care personnel; (iv) encouraging health care personnel to work in peripheral health care facilities; (v) strengthening the management, autonomy and organization of health care facilities; (vi) considering the point of view of beneficiaries in the management and resolution of health problems.

Burundi also in 2006 adopted a policy of free care targeting children less than 5 years of age and pregnant women. The implementation of this policy had several constraints related in particular to the Government's delay reimbursing health facilities due to the lack of a system for verifying declared services, health care personnel being overloaded due to the increased use of services, lack of motivation of health personnel, the increased administrative burden due to the significant number of forms to be filled out by health facilities to request reimbursement.

Due to these dysfunctions, the Ministry of Public Health and Fighting AIDS and the Technical and Financial Partners decided to integrate Performance-based Financing and free care. The early results show that performance-based financing is contributing to correcting the dysfunctions observed when free care was implemented. The reimbursement of the free care package through performance-based financing mechanisms has allowed a reduction in the time required to reimburse health facilities from 84 to 45 business days, reducing overbilling by implementing an effective verification and counter-verifications system; reporting reliable data to the health information system; reducing the administrative burden of health facilities through reducing documents to be filled out from 2,500 pages per month to 2 pages per month, and by giving financial incentives to care providers.

3.4.4. Drugs, vaccines and consumables

3.4.4.1. Description of the national pharmaceutical domain

The national pharmaceutical domain is governed by Decree No. 100/150 dated September 30, 1980 regarding the organization of pharmacy activities in Burundi. A draft of a pharmaceutical framework law is currently being finalized.

Within the Ministry of Public Health and Fighting AIDS there is a structure for internal auditing, called the "Inspectorate General of Public Health." It has an office for the accreditation and inspection of pharmaceutical facilities and laboratories, a Directorate of Pharmacies, Medication and Laboratories (DPML) as well as a quality control laboratory of the National Institute for Public Health (INSP).

As a member of the East African Community (EAC), Burundi must standardize pharmaceutical regulation systems with other partners by transforming the Directorate of Pharmacies, Medications and Laboratories (DPML) into a National Pharmaceutical Governing Authority (ANRP).

In regards to the procurement and distribution of mediations and other health products the pharmaceutical domain in Burundi is divided into 3 sectors: the public sector, the state-related sector and the private pharmaceutical sector.

The public sector replicates the organization of the national health system The central level includes the Essential Medications Procurement Exchange of Burundi (CAMEBU), which is a state-related institution under the Ministry of Public Health and Fighting AIDS. It is financially and administratively autonomous. Its primary mission consists of providing pharmaceutical logistics, including import, storage and distribution of products, first and foremost to health district pharmacies and to independently managed hospitals. The intermediate level is comprised of pharmacies of the health districts that are primarily supplied by CAMEBU. They distribute medications to the pharmacies of district hospitals and to the related public health centers.

The peripheral level includes pharmaceutical departments at the district hospitals and the health centers. They are supplied by the health district pharmacies.

The state-related sector is comprised of pharmacies at the national hospitals, autonomous hospitals and those of the Civil Service Mutual Insurance Fund (MFP). These structures are related, respectively, to the Ministry of Public Health and Fighting AIDS, the Ministry of National Defense and Veterans for the Kamenge Military Hospital (HMK), the Ministry of Higher Education for CHUK and the Ministry of Civil Service, Labor and Social Security for the MFP.

The private sector includes for-profit and non-profit facilities. The private, non-profit sector is comprised of pharmaceutical units related to the care centers that belong to religious organizations. They are supplied through CAMEBU or other private suppliers. Just as in the public sector, health care centers belonging to religious organizations also receive grants of medications and medical supplies.

The private, for-profit sector is comprised of a private manufacturing unit (SIPHAR), wholesale pharmacies (13, 10 of which are located in the capital to be updated) and 380 retail pharmacies, including all categories[62]. The majority of pharmaceutical dispensaries are concentrated in the capital. There is significant demand for opening pharmacies in rural areas.

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[62] Source: DPML 2011

3.4.4.2. Supply loop

The supply loop for medications and other health products that is currently in force in the public sector is defined by ministerial order No. 630/1359/2009 of June 2009 regarding the standards to be respected for management of the medication system. The health districts and autonomous hospitals are supplied by CAMEBU. In the event of interruptions of inventory at CAMEBU, these care facilities may use private pharmaceutical wholesalers in special cases, with the authorization of the DPML. Pharmaceutical products imported by health programs and other partners are stored and distributed by CAMEBU. An audit of CAMEBU was conducted in 2009; it revealed difficulties ensuring the supply and availability of medications and other health products at health care facilities. The implementation of the recommendations of the audit and the change in status of CAMEBU into a non-profit organization could improve the situation.
Local pharmaceutical production is provided by a single medication production organization: Société Industrielle Pharmaceutique (SIPHAR) which produces a narrow range of generic medications.

3.4.4.3. Quality control of medications and other health products

A quality control laboratory was set up under INSP on 28 February 2009. The quality analysis of medications is now in effect.

3.4.4.4. Rational use of medications

The therapeutic outlines and existing protocols are not strictly respected at health care facilities. Standardization of treatment (SPT) at the level of peripheral health facilities is currently being prepared.

There is also the phenomenon of self-medication and irrational prescription of medications, in particular anti-infectives (antibiotics and antiparasitics). A National Commission charged "with fighting the illegal distribution of medications and the illegal practice of healing" was appointed in 2008 by ministerial order No. 630/804 dated 05 August 2008.

3.4.4.5. Medical Biology

This domain suffers from many shortcomings, most notably: i) a lack of regulatory texts; ii) insufficient logistic resources and adequate equipment; iii) insufficient and/or lack of skilled human resources; iv) absence of a system for maintaining biomedical analysis equipment; v) frequent interruptions of reagents and other consumables.

3.4.4.6. Optometry and Optics

There are many points of sale for glasses, the establishment and operation of which are not regulated.
The profession of optometrists, opticians and ophthalmological technicians is regulated by ministerial order No. 30/857 dated 3 June 2010, the enabling legislation for which is not yet available.

3.5. Community Participation:

With a health system that for a long time has been focused on curative care, Burundi has experienced a delay in the adoption of community-focused approaches and those intended to encourage people to choose healthy behaviors and lifestyles and to motivate them to become better custodians of their own health. In the 2000s, pilot projects involving community participation were launched throughout the country, with elected health committees and community assemblies.

This form of community representation presents limits, due to: i) care-giver personnel being resistant to cooperate with members of the Health Committees; ii) decision-making authority for these committees is limited; iii) the gap between the elected committees and the grass-roots populations due to the insufficient oversight and strengthening of their skills; iv) the risk of a loss of interest on the part of the populace; v) the lack of legal status of the Health Committees (COSA) and the Management Committees (COGES).

The lack of strategic direction in the health community in Burundi gives way to various approaches to community involvement initiated by NGOs or other participants, in particular with the HIV/AIDS pandemic, the implementation of the TIDC strategy to control onchocerciasis, etc. These approaches involve community health agents (ASCs), community coordinators, local associations to fight HIV/AIDS, interest groups such as persons living with HIV/AIDS. The use of these groups of community participants is a reality in the prevention of various disease and the promotion of health. They are often used by vertical programs of the Ministry of Public Health and Fighting AIDS or NGOs active at the peripheral level, through incentives that vary from one employer to the next. Strategic directions and a procedures manual for community health are currently being prepared.

3.6. Inter-sector Collaboration

Collaboration with other sectors has materialized in the implementation of the coordination instances in which they are active. At the national level, a Strategic Framework for Poverty Reduction (CSLP) is the reference framework for strategic planning and a Partners Coordination Group (GCP) coordinates the sector-based coordination instances, including the CPSD (Cooperation Framework for Development Partners).

Other coordination instances that are national in scope have been established, i.e.: the Country Coordinating Mechanism (CCM) for projects financed by the Global Fund, as well as the National Committee to Fight AIDS (CNLS).

At the provincial level, a Provincial Health Committee (COPROSA) which is charged with coordinating all health-related interventions in the province, and a Provincial Committee to Fight AIDS (CPLS) specific to the fight against AIDS. Alongside these instances, a Provincial Verification and Validation Committee (CPVV) specific to performance-based financing was established in 2010 in all the provinces. In this regard, we would like to note that all these committees are comprised of members from multiple sectors.

At the district level, District Steering Committees (COPIDI) were set up to ensure the coordination of intervention, however they are not yet operational.

At all levels of coordination, the multi-sectorial vision has only developed a few initiatives conducted by the National Committee to Fight AIDS at the national and provincial levels, through the sector-based units established to fight AIDS.

3.7. National Health Information System – Planning – Follow-up/Evaluation and Information and Communications Technology

3.7.1. Health Information System

3.7.1.1. Gathering Process

To date, the type of tools for gathering data, the frequency with which it is gathered, the transmission and reporting circuit have not yet been standardized and made uniform for all participants. The Ministry of Public Health and Fighting AIDS has just updated its framework for routine data collection within health facilities. In spite of the fact that the latter was prepared on a participatory basis, by attempting to integrate vertical program indicators as much as possible, certain of these indicators continue to use parallel data collection tools.

Furthermore, irregularities of surveys, thus affecting the availability of updated data, which participants in the health sector (EDS, RGPH, PMS, MICS) often need, has been noted. This is due to the responsible services not being aware of sources of information, overlaps and double-usage noted when performing surveys among the population. The recording of births and deaths and their causes is insufficient for those events that occur outside of the health care structure and at the community level (births, deaths, cases of epidemics and health coverage). This is also the case for data coming from the private sector and from hospitals. The gathering from human resources and infrastructure is not integrated into the data base.

Performance-based financing has implemented tools for collecting data with a reduced number of indicators, which may be an integrated model of information system management in the context of supervision of system performance.

3.7.1.2. Analysis, reporting and dissemination of data

Data on diseases with epidemic potential are transmitted weekly by electronic means while morbidity and mortality due to diseases being monitored are transmitted monthly.

There is a mapping of health facilities from 2009, of routine data bases integrated at all health system levels (GESIS) and of standard and harmonized tools for data collection for Health Centers, allowing a thorough analysis of data.

The use of graphics to present information at all levels must be encouraged, as well as positive incentives for production, the dissemination and publication of a quarterly health information bulleting and annual publication of statistics. The use of health information (health condition of the population, performance and coverage of the health system) is effective in the planning and monitoring-evaluation at all levels.

The monthly epidemiological bulletin has not been published for a period of time. However, an epidemiological bulletin is periodically published by USLS/Health [Sector Health/Anti-AIDS Units], regarding HIV/AIDS. The management of data in hospitals has faced difficulties related to the incompatibility of internal media, insufficient completion of data collection tools. There is also a lack of archival systems for data and feedback at the various levels.

Furthermore, there is no metadata dictionary that provides information regarding the definition of variables or their use in indicators. A national consensus must be reached, in particular regarding their number, calculation method, source and level of production. The EPISTAT service suffers from a lack of equipment, financial and human resources (epidemiologists, demographers, statistician engineers, computer specialists/maintenance persons, etc.) to fulfill its mission of gathering, processing, analyzing and disseminating health information at all levels of the health pyramid. This is why a strategic plan for the National Health Information System is currently being developed.

3.7.2. Planning System

3.7.2.1. Strategic planning

The National Health Policy (PNS 2005-2015) was implemented through the National Health Development Plans that cover a period of 5 years, plus programs and projects which if implemented should allow the priority problems to be resolved in the short-, medium- and long-term. The evaluation of the NHDP I showed that it was insufficiently implemented due to the operational plans of action at the various levels of the health pyramid not being correctly aligned. This situation could be corrected by the operational implementation of the NHDP II through plans of action and strategic plans for all structures, services and programs (central, intermediate and peripheral) in accordance with the guidelines of the NHDP II.

3.7.2.2. Operational Planning

Since 2009, the Ministry of Public Health and Fighting AIDS has undertaken the preparation of its Annual Operational Plan (POA). This activity provides a budgeted plan of action focused on the priorities of the NHDP and ensures better follow-up of activities, in particular through annual reviews. According to the recommendations of the institutional audit of the Ministry of Public Health and Fighting AIDS, the creation of the General Directorate of Planning is an opportunity for the sector to define an operational framework for planning and monitoring-evaluation.

3.7.3. Monitoring - evaluation

3.7.3.1. Monitoring-evaluation of the National Health Plan and the NHDP I

It is helpful to point out that there was no plan for monitoring and evaluation of the National Health Plan 2005-2015 or the NHDP 2006-2010.

In the absence of a framework for monitoring and evaluation, it was difficult in practical terms to monitor the evolution of indicators in order to provide the corrective measures that were required[63]. The Executive Office that was established in 2007 contributed to defining the standards of the Ministry of Public Health for implementation of the NHDP 2006-2010.

In the absence of a framework for monitoring and evaluation, the Cooperation Framework for Development Partners initiated joint annual reviews, which were preceded each time by subject-specific work in groups in order to evaluate the implementation of the NHDP 2006-2010.

3.7.4. Use of Information and Communications Technology

Computer tools, the Internet, radio telephony, landline and mobile telephony are available in nearly all the services of the Ministry of Public Health and Fighting AIDS, whether at the central, intermediate or peripheral level. An electronic database of performance-based financing is in place and 14 out of the 17 provinces as well as the Technical Cell-Performance-based Financing are already equipped with VSAT antennas.

In spite of the existence of these various communication tools, maintenance problems and the availability of an intranet are acute.

The use of Information and Communications Technology in the health sector also suffers from the low level of skills of personnel in terms of computer use, the internet, certain specific software, GSIS and the use of e-health for alerts and responses to epidemics.

3.7.5. Research

The *Institut National de la Santé Publique* is mandated by the Ministry of Public Health and Fighting AIDS to conduct research activities intended to support the Ministry in generating knowledge that can direct decision-making informed by scientific evidence. During the past five years, much research work was performed by the Institute, certain elements of which were sponsored by the Ministry of Public Health and Fighting AIDS, its vertical programs, and others by the Technical and Financial Partners. Research at the INSP, as elsewhere, is faced with a number of constraints, the most significant of which are (i) the insufficiency of skilled human resources; (ii) the ongoing lack of funds to feed the research; and (iii) the lack of coordination of health-related research at the national level.

In addition to the INSP, other research structures exist, which carry out research work related to health. These in particular include the National Reference Center for HIV/AIDS (CNR), the *Institut des Statistiques et des Etudes Economiques du Burundi (ISTEEBU)* and the School of Medicine of the University of Burundi which, in addition to fundamental research, also performs operational research.

Overall, research related to health in Burundi still requires reinforcement, in particular in regards to the coordination of research activities, the allocation of research funds from the national budget, the dissemination of research results and the development of research into effective health systems that can accompany current and future reforms.

[63] NHDP I 2010 evaluation report

3.7.6. Communication with the Ministry of Public Health and Fighting AIDS

3.7.6.1. Strategic Communication

At the central level, strategic communication takes place through meetings of the council which meets twice per month. This meeting includes the Cabinet, the general directors, the Permanent Executive Secretariat of the National Committee to Fight AIDS, Department Directors and Unit Heads.

The physicians that are health project and program directors are invited to meetings of the expanded cabinet. The reports from these meetings are shared electronically among participants at the meeting only.

We should also note the role played by the ministry's spokesperson at the central level in regards to institutional communication. The IEC Unit is requested by the central level during event-related and random communication such as reporting, holding African days, global and international days, in collaboration with the public and private media.

Regarding the information path between the central, intermediate and peripheral levels, we must mention correspondence through the administrative period from the top-down and from the bottom-up. Any difficulties in communication are related to the following facts: i) Certain health projects give the impression of depending much more on the sponsors than the Ministry of Public Health and Fighting AIDS; ii) The existence of many participants in relation to health communication. Most of the units organize these health-related communication activities without referring to the instructions of the Ministry of Public Health and Fighting AIDS, the IEC Unit is only requested to participate in meetings to validate tools designed by others; iii) Certain NGOs also generate messages that sometimes are contrary to the policies of the Ministry of Public Health and Fighting AIDS.

3.7.6.2. Information-Education-Communication for behavior change (IEC/CCC)

In regards to IEC/CCC, activities at the central level are carried out via the IEC service which prepares and disseminates magazines in Kirunidi twice a week via the services agreement signed by the Ministry of Public Health and Fighting AIDS and National Radio and Television of Burundi.

At the intermediate and peripheral levels, Provincial Health Promotion Coordinators coordinate health promotion and communication activities. The communications unit of the Permanent Executive Secretariat / National Committee to Fight AIDS plays an important role via the internet site and other communication tools developed based on consulting work related to fighting HIV/AIDS.

The IEC Unit tests technical difficulties in order to confront multiple stresses. The IEC personnel require strengthening of their skills in the digital domain, communications for changing behavior.

The IEC does not have the technical skills necessary to conduct its missions. The equipment are not properly suited, and the production of communication tools is accomplished using outdated software. In addition, the communication structures that exist in terms of programs pose coordination problems in relation to IEC/CCC.

IV. Major Challenges and Priorities of the NHDP II

Based on the analysis of the situation and the evaluation of the NHDP I and in accordance with the instructions of the Government in relation to health, the major challenges that the Ministry of Public Health and Fighting AIDS will face in the next 5 years are:

1. Strengthening the skills of the health system via rational management of resources and the development of an efficient national health information system;
2. The integrated supply of care and quality preventive, treatment, promotional and rehabilitative service;
3. Universal access to care and services by promoting community mutual insurance funds;
4. An improvement in demand for care by the population by strengthening and perpetuating performance-based financing related to targeted free care;
5. Strengthening of leadership and governance of the sector, allowing the creation of an environment that will encourage the coordination, partnership including the community and the private sector, the multi-sectorial nature as well as the implementation of reforms;
6. Improvement of mothers' and children's health to contribute to reducing maternal and infant mortality, the reduction of malnutrition and other deficiency-related diseases and the control of demographic growth;
7. The fight against disease by strengthening the surveillance system of communicable and non-communicable diseases and better treatment of cases;
8. The creation of an environment that is favorable to health, including safety in academic and work environments;
9. The strengthening of national capabilities to confront epidemics and the management of urgent and catastrophic events.

Priorities selected for the period of 2011-2015 are:

1. Improvement of mother and child health;
2. Fighting communicable and non-communicable diseases;

3. Strengthening the fight against HIV/AIDS through a multi-sector approach;
4. Strengthening actions to fight malnutrition;
5. Increasing demand for health care;
6. Reinforcement of the vaccination system
7. Strengthening and perpetuating performance-based financing related to free care.

V. VISION, GOAL, OBJECTIVES AND STRATEGIC AXES OF THE NHDP II

The vision of the National Health Policy (200—2015) is inspired from `the 2nd and 5th pillars of Burundi's 2025 vision[64]. In its capacity as an implementation tool, the NHDP II will pursue the implementation of the NHDP I through the vision, goal and objectives of the 2005-2015 National Health Policy.

5.1. Vision

"Looking towards 2015, Burundi will have lasting peace and socio-political stability with economic growth permitting every citizen to have access to basic health care through individual and community participation mechanisms and with the strengthened leadership of the Ministry of Public Health and Fighting AIDS. "The various participants, partners and the population, in step with the government, will have reduced diseases related to poverty, exclusion and ignorance within a context of good governance and of sustainable development of a proactive and effective health system for an economically, socially and humanly acceptable.

"This achieved vision will allow the residents of this country to live with greater dignity and longer, in a better environment. They will be more aware of their responsibilities for promoting their health and that of the communities to which they belong. The various at-risk groups will no longer die in massive numbers from avoidable diseases[65].

In accordance with the 2005-2015 national health policy, the attainment of this vision is focused on the following values:

- the right to health for everyone;
- primary health care (SSP);
- the acceptability, efficacy, efficiency and quality of health care;

[64] Vision 2025: 2nd pillar "To provide a better quality of life to the educated population, further enjoying good health.

5th pillar "To implement an aggressive demographic policy in order to limit the rate of demographic growth to 2%."

[65] Ministry of Public Health, National Health Policy 2005-2015, September 2004

- management focused on results and effectiveness;
- decentralization;
- good governance and the reactivity of the health system;
- coordination, collaboration between sectors, partnership, sustainability;
- ethics in the field of health and human rights;
- Equity, solidarity, participation, cultural identity, points of view that take gender into consideration.

5.2. Goal

"To improve the health condition of the population, not only because it is a human right, but also to allow the recovery of the economy and a decrease in poverty while maintaining the human population in good health."[66]

The improvement of the health of the population will occur by attaining three (3) general objectives (GO) and one sectorial objective (OS).

5.3. General Objectives

In order to attain this goal, three general objectives related to MDO 4, 5 and 6 are being pursued:

- Overall Objective OG1: To contribute to reducing morbidity-mortality related to communicable and non-communicable diseases through 2015;
- Overall Objective OG2: To contribute to reducing maternal and neonatal mortality through 2015;
- Overall Objective OG3: To contribute to reducing mortality of children less than 5 years of age through 2015.

5.4. Sectorial Objective

To attain the Goal and General Objectives, the Ministry of Public Health and Fighting AIDS targets "ensuring accessibility of the population to quality health care and services for better use" by 2015.

This sectorial objective will be achieved via 9 strategic axes related to the 6 pillars for Strengthening the Health System (RSS) and distributed into 3 groups.

The first group ensures supply, creates and strengthens demand for care. This constitutes Axis 1: strengthening the provision of health care and services.
The purpose of the second group is to improve the capability of offering care; it includes the following foci: ii.1): Strengthening of the management of available human resources; ii.2) Improvement of the production of human resources having the required qualifications; iii) Availability and accessibility of the population to medications and other quality heath products;

[65] Ministry of Public Health, National Health Policy 2005-2015, September 2004

iv.1) Improvement of coverage of Health Infrastructures and Equipment; iv.2) Increase in financing of the health sector and improvement of its use; iv.3) Strengthening and perpetuation of performance-based financing related to free care.

The third group ensuring improvement of the direction of the sector is represented by the v) Strengthening of Governance and leadership in the health sector and vi) Strengthening of Health Information Systems, Planning and Monitoring and Evaluation.

5.5. Strategic axes

Strategic Focus 1: Strengthening of quality health services and care (preventive, curative, promotional and rehabilitation) at all levels of the health system: Strategic plans for health programs and services will be updated in order to align them with the strategic directions of the NHDP II. An integrated care package will be defined for each level of the health pyramid. It will include high-impact interventions and the implementation of a quality assurance system at all levels of the health pyramid in order to ensure the following priority interventions:

1. Improvement of mother and child health which will occur through:

- the availability, accessibility and use of services intended to control demographic growth through: the strengthening of technical and institutional capacities in the health system to offer family planning services; the increase in demand for family planning services focuses on community participation and the man; strengthening lobbying in favor of the control of demographic growth;
- the reinforcement of the offer of youth- and adolescent-friendly services;
- the strengthening of technical capabilities of care structures in BEmONC and CEmONC (training providers, equipment);
- community care in pregnancy (Screening for danger and reference signs);
- promotion of the integrated prenatal care approach by increasing the early prenatal care coverage rate, and by supplementing the minimum package of activities for pregnant women;
- strengthening of infant disease prevention services and follow-up of the health condition of children, through: scaling up PMTCT and pediatric HIV care, strengthening prevention activities through immunization including the introduction of new vaccines; implementation of high-impact, large-scale interventions for the monitoring and development of children.

2. Fighting communicable and non-communicable diseases through:

- the development/revision of strategic documents for programs for prevention and fighting diseases (malaria, tuberculosis and leprosy, HIV/AIDS, neglected tropical diseases and blindness, chronic diseases, mental diseases, malnutrition, functional rehabilitation, reproductive health, immunization, PMTCT, IMCI, etc.) in accordance with the NHDP II;
- the development of an integrated package of care/services by level of care;
- the harmonization of structures and compliance with health standards;
- the strengthening of screening and treatment services for medical-surgical and obstetric emergencies at all levels of care;
- the strengthening of prevention and care for trauma on public roads;
- the development and updating of an integrated plan to fight epidemics;
- the definition of the path of patients between levels of care (referral and counter-referral);
- the use of directives, technical sheets and a strategy-complaints-treatment algorithm (SPT) in order to standardize treatment;
- strengthening prevention interventions;
- strengthening the biomedical waste management system;
- treatment of health emergencies and catastrophes;
- promotion of health and preservation of the treatment environment.

3. Strengthening the fight against HIV/AIDS using a multi-sector approach through;

- integration of services in the fight against HIV in the minimum package of activities at health facilities at all levels of health structures;
- review of the institutional framework to consolidate gains in multiple sectors at all levels.

4. Strengthening actions to fight malnutrition:

An intervention package of the essential nutrition actions will be provided and community intervention intended for the adoption of best health practices and nutrition will be implemented in a coordinated manner through the following priority interventions:

- strengthening of integration, prevention and global treatment for malnutrition in the minimum package of activities and PCA;
- strengthening of technical skills of health providers in health and nutrition promotional activities;
- preparation of strategic and operational guiding documents related to prevention and care for malnutrition;
- strengthening the framework for multi-sectorial cooperation to fight chronic malnutrition;
- strengthening capabilities of community participants.

In time, these interventions will contribute to the reduction of maternal and infant-juvenile mortality, controlling demographic growth, reducing morbidity and mortality due to communicable and non-communicable diseases in the context of a multi-sectorial approach, effective involvement of the private sector, related sectors and communities.

Strategic Focus 2: Strengthening the management of available human resources

Improvement of the performance of the Health System is achieved through availability and strengthening of skills of health personnel at all levels of the system (central, intermediate and peripheral). The following actions will be carried out:

- preparation of a decentralized human resources management procedures manual;
- strengthening of capabilities of the Regional Health Directorate and decentralized structures in the management of human resources;
- analysis of the effect of performance-based financing on the motivation of personnel and the implementation of corrective measures;
- definition of other motivation strategies for the entire system and their implementation;
- evaluation of satisfaction of personnel regarding incentive measures;
- preparation of the plan to redeploy personnel for the entire system;

- preparation of the career, recruitment and benefit management plans for employees;
- creation and operational implementation of the human resources watchdog;
- implementation of HR management software that operates at the district level.

By 2015, the Ministry of Public Health and Fighting AIDS will pursue the reforms undertaken related to management and will consolidate the gains of the performance-based financing strategy in order to promote effective decentralization of HR and alignment of profile to jobs. Standards for human resources will be updated and supplemented for each structure and each level in order for the number of personnel to correspond to needs, thanks to an equitable and proportional distribution of health personnel throughout the entire territory. Benefits management for personnel via a decentralized human resources management manual will be developed.

Strategic Focus 3: Improvement of the production of human resources with the required qualifications

Production of qualified personnel contributes greatly to the improvement of the supply and demand for services. In order to do this, the capabilities of public schools for training medical and paramedical personnel will be strengthened in order to train all the necessary categories. The following interventions will be implemented:

- preparation of an integrated plan and policy for ongoing training;
- implementation of a mechanism for coordination and follow-up of basic and ongoing training of personnel;
- strengthening of capabilities of the INSP to ensure ongoing training of human resources (midwives);
- strengthening of capabilities of the INSP to ensure ongoing training of human resources (odontology, stomatology, mental health);
- training of general practitioners in emergency surgery and gynecology-obstetrics;
- refresher training of nursing assistants (A3).

The anticipated results target basic and ongoing training that is organized and better adapted to the needs of the country for the next 5 years. Inter-sectorial collaboration in particular with the Ministry of Higher Education and Scientific Research will allow the Ministry of Public Health and Fighting AIDS to make specialist physicians and pharmacists available. The opportunities for South-South Cooperation will be explored for training categories that will fulfill the needs of the country.

Strategic Focus 4: Availability of medications and other quality health products, and their accessibility

The recommended interventions are as follows:

- Implementation of an integrated supply and distribution chain as well as mechanisms for monitoring-evaluation of operation;
- Integration of needs related to nutritional supplies, contraceptives, vaccines, tuberculosis medications (1st and 2nd line) and mosquito nets in the planning of Government budgets and into management;
- Preparation of enabling texts for the pharmaceutical framework law (approval, inspection, pharmaceutical oversight, quality assurance, price regulation, etc.) in accordance with the existing tests in the East African Community;
- Strengthening of quality control for pharmaceutical services;
- Preparation of a regulation relative to traditional medicine;
- Strengthening of the capabilities of CAMEBU, the INSP laboratory, DPML and IGSP;
- Development of a public-private partnership to strengthen local production of medications;
- Promotion of inter-sectorial cooperation in the regulation of medication prices and prices of other health products, as well as collaboration in the fight against the illegal sale and counterfeiting of medications;
- Assurance of the availability of safe blood products in all hospitals.

By 2015, accessibility to medications and other quality health products will be assured within an improved pharmaceutical regulatory framework.

Strategic Focus 5: Improvement of coverage with health infrastructure and equipment

In the context of improving capabilities to provide care, a physical and qualitative inventory will allow an exhaustive situation of infrastructure and equipment in the sector. A plan to extend health coverage and an investment planning system taking health standards into consideration will be adopted. The primary interventions that will be carried out are:

- assurance of the availability of water and electricity in health structures;
- implementation of the plan to extend coverage in relation to the infrastructure;

- implementation of a maintenance plan for infrastructures, biomedical and non-medical equipment at all levels;
- the physical demarcation of the limits of the land of health structures;
- implementation of the plan to extend coverage in relation to new equipment;
- Construction/equipment and rehabilitation of auxiliary services (laboratories, CAMEBU, CATB, NBTC, INSP, district hospitals, BDS and pharmaceutical warehouses).

The implementation of the NHDP II will allow coverage with infrastructure and equipment to be ensured, in accordance with health standards.

Strategic Focus 6: Increase in financing for the health sector and improvement of its use

In accordance with the commitments made in regards to the allocation of financial resources for health, efforts will continue during the implementation of this NHDP in order to attain the target of 15% (ABUJA Declaration) through the mobilization of internal and external resources.

The following actions will be carried out:

- the preparation and implementation of a strategy to mobilize funds;
- the strengthening of community health mutual insurance funds;
- the improvement and standardization of financial management tools;
- the strengthening of internal and external control mechanisms;
- Institutionalization of the medium-term expenses framework as a tool for negotiating the annual budget and preparing the National Health Accounts;
- control of information regarding financing from the Technical and Financial Partners in the health center and implementation of the same;
- preparation and implementation of the common fund.

The Ministry of Public Health and Fighting AIDS, through the NHDP II, shall authorize the coordination of financing from the sector and the involvement in all levels of the budgeting and implementation process. This will allow transparency, equity and efficiency in the management of financial resources to be improved.

All these actions will contribute to the strengthening of the offer of care and the feasibility of demand in order to ensure universal access in the long term.

Strategic Focus 7: Strengthening and perpetuation of performance-based financing associated with free care

In the context of results-oriented management, the Ministry of Public Health and Fighting AIDS will pursue the implementation of financing based on performance associated with free care.

The actions planned for the period of 2011-2015 are:

- strengthening the capabilities of the providers and managers at all levels of the health pyramid;
- execution of contracts with the private sector and NGOs/Associations;
- monitoring/evaluation of performance-based financing for greater efficacy and efficiency.

The continuation of this reform will contribute to improving management, motivating personnel, supply and demand for quality care for the population.

Strategic Focus 8: Strengthening Governance and leadership in the health sector;

Improving governance and strengthening leadership of the sector is one of the conditions for success of the implementation of the NHDP II.

Its implementation will involve the following actions:

- the development of institutional and organizational capacities;
- the strengthening of collaboration between sectors, Coordination and partnerships;
- the implementation of legislative/regulatory frameworks for the implementation of health reforms;
- the review of standards for the establishment of a national health card;
- participation in sub-regional, regional and international instances;
- the effective decentralization of health services through the development of the Health District;
- participation by populations and transfer of responsibility to them for the management of health services at the operational level.

In the next 5 years, the strengthened leadership and good governance will be able to ensure the direction of the effective and efficient implementation of the NHDP II and the reforms undertaken in the sector.

Strategic Focus 9: Strengthening the Health Information, Planning and Monitoring and Evaluation System

Drawing lessons from the evaluation of the NHDP I, the NHDP II is innovative in regards to the strengthening of the National Health Information System in Burundi. Shared management and operation of the data will be strengthened for the definition, design, direction of policies and strategies that are suited to the needs of the population and the realities in the field.

The NHDP II will allow improvement in the health information, planning and monitoring and evaluation information system, via the following actions:

- the implementation of an integrated, effective health information system;
- the implementation of a strategic plan to strengthen the health information system;
- the implementation of an institutional planning framework;
- the alignment and coordination of strategic and operational planning cycles;
- the delivery of reference planning tools;
- the improvement of availability and accessibility of Information and Communications Technology at all levels;
- the implementation of a follow-up / evaluation plan for the NHDP II;
- the promotion of health research.

Structures at the central and decentralized level will be held responsible in their role for production, analysis, dissemination and use of reliable information regarding determining health factors, the operation of the health system and the health condition of the population.

These 9 focuses synergistically and complementarily comprise the bases for strategic orientations for the preparation of the strategic and operational plans for central, intermediate and peripheral structures of the Ministry of Public Health and Fighting AIDS. These structures will define their specific objectives, the anticipated results, the activities that will be effectively conducted by each level of responsibility in the context of results-focused management.

VI. CHAIN OF RESULTS, RISKS AND CONDITIONS FOR SUCCESS

6.1. Chain of Results

The chain of results is a set of anticipated results over time and related to each other in a cause and effect relationship. It is comprised of three types of results: immediate results (output or products), medium-term results (effects) and long-term results (impact). These results may also be classified into two major categories: operational results (products) and the results of development (effects and impact).
For the NHDP 2011-2015, this chain includes three (3) impact results, one (1) effect and forty (40) products distributed by strategic focuses in the logical framework (Appendix No.) of the NHDP, which are:

Impacts:

1. Reduction of morbidity-mortality of communicable and non-communicable diseases;
2. Reduction of maternal and neonatal mortality rates;
3. Reduction of mortality in children under 5 years of age.

Effect:

Ensuring accessibility by the population to quality health services and care in order to promote better use.

Products:

Distribution of the 40 products by strategic focus, allowing a certain number of products to be attained, broken down as follows:

Strategic Focus 1: Strengthening of quality health services and care (preventive, curative, promotional and rehabilitation) at all levels of the health system

1. the package of health services and care is defined and applied by level;
2. the quality of the care is assured (comprehensiveness, integration, continuity);
3. all the aspects of the fight against HIV/AIDS are integrated into the package of care at all levels of the health system;
4. the supply of basic and complete obstetric and neonatal emergency care is assured;
5. the availability, accessibility and use of services intended to control demographic growth are assured;
6. the availability and accessibility of quality care for infants is assured;
7. intervention for prevention, promotion of health and response to epidemics are strengthened;

8. community intervention for the adoption of best health and nutrition practices are implemented in a coordinated manner;
9. the intervention package of essential actions is assured;

Strategic Focus 2: Improvement of the production of human resources with the required qualifications

10. on-going, better-organized training is assured;

Strategic Focus 3: Strengthening the management of available human resources

11. each health structure has personnel who are qualified according to standards;
12. decentralizing of human resources management is effective;
13. the system of motivation considers financial and non-financial incentives and is operational;
14. personnel management tools are available and are used at all levels;

Strategic Focus 4: The availability and accessibility of medications and other quality health products are assured

15. The regulatory framework of the pharmaceutical sector is improved;
16. The geographic accessibility of medications and other health products is improved;
17. Quality control of medications and other health products is assured;
18. The rational use of medications is improved;
19. Para-clinical laboratory exams are improved;
20. The profession of optometrists, opticians and upper-level technicians in ophthalmology is regulated;

Strategic Focus 5: Improvement of coverage with infrastructure and equipment

21. the inter-sector dialogue is improved;
22. the coverage with infrastructure that respects health standards is assured;
23. the coverage with equipment that respects health standards is assured;

Strategic Focus 6: Increase in financing for the health sector and improvement of its use

24. financing of the health sector is augmented;
25. management of financing of the health sector is improved;
26. transparency, equity and efficiency in the allocation of financial resources are assured;
27. coordination of financing of the health sector is improved;

Strategic Focus 7: Strengthening and perpetuation of performance-based financing coupled with free care

28. perpetuation of performance-based financing coupled with free care is assured;

Strategic Focus 8: Strengthening Governance and leadership in the health sector

29. institutional and organizational capabilities of the health sector are strengthened;
30. legislative and regulatory frameworks of the various reforms of the Ministry of Public Health and Fighting AIDS are implemented;
31. the coordination of the health sector is assured;
32. rational and transparent management is assured at all levels;
33. the process of planning and oversight-evaluation is regular and well coordinated at all levels;
34. cooperation among sectors to consider determining health factors is developed at all levels;

Strategic Focus 9: Strengthening of the Health Information System, planning, monitoring and evaluation and health research

35. a functional and effective planning system is put in place;
36. an integrated and effective monitoring and evaluation system is put in place;
37. a National Health Information System (SNIS) is put in place and is functional;
38. an institutional framework for coordination and promotion of health research is put into place;
39. Information and communications technology are available, accessible and used;
40. an institutional framework for coordination and promotion of health research is put into place;
41. the institutional health communication system is improved.

6.2. Conditions for Success and Risks

Consolidation of peace and institutional stability are means of gauging whether the environment is favorable to the implementation of the NHDP II. The conditions for success are relative, in particular (i) to the political will displayed by the Government which is committed via the merger of the Ministry of Public Health and the Ministry to Fight Aids and the adoption of a new organizational structure. The Ministry of Public Health and Fighting AIDS will base itself on the multi-sectorial nature of the fight against AIDS to ensure leadership and to fully perform its role of designing, steering, implementing, mobilizing resources and monitoring sectorial health policy and the National Health Development Plan; (ii) sustained motivation, the stability of health personnel and the implementation of contracting.

The opportunities offered involve (i) the will and commitment of the partners to adhere to the implementation of a common fund in the context of the sector-wide approach (SWAP) could present an opportunity for the implementation of the NHDP; (ii) the preparation of the NHDP II at the same time as the 2nd Generation of the strategic framework for poverty reduction; the health sector could have the relevant strategies to strengthen the Health System defined in order to ensure the supply of quality care and an increased demand by the population in particular poor and those most at-risk.
The international and national financial crisis environment is the primary risk with the potential decline of allocations and the ability to forecast financial resources allocated to the sector;

VII. FRAMEWORK FOR IMPLEMENTATION

7.1. Institutional Framework for Implementation

In accordance with the instructions of the Government, the National Health Plan for 2005-2015 was implemented through a five-year Health Development Plan (NHDP). The NHDP II will be carried out in the context of the new organization of the Ministry of Public Health and Fighting AIDS. In its implementation of the institutional audit of the Ministry of Public Health conducted in 2009 and following the merger of the two ministries (Public Health and Fighting AIDS), new structures will nevertheless lead the institutional reform of the Ministry of Public Health and Fighting AIDS. So, the roles and responsibilities of the various structures at the central, intermediate and operational levels will be specified in the procedures manual and the internal regulation of the Ministry of Public Health and Fighting AIDS.

At the national level, the Strategic Framework for Poverty Reduction is the frame of reference for strategic planning for the sectors, including the Health Sector and the AIDS Sector. A Partners Coordination Group (GCP) coordinates the sectorial instances for cooperation, including the CPSD for Health.

The central level is charged with defining Health Policy and the preparation of strategies for intervention and planning, primarily for formulating sectorial policy, strategic planning, coordination, mobilization and assignment of resources as well as monitoring-evaluation. This level fulfills the regulation and standardization function via:

- The Cabinet of the Ministry of Public Health and Fighting AIDS The party responsible for implementation of sectorial policy and steering the sector; he is responsible to the Government for implementation of the NHDP II.
- The Permanent Executive Secretary of the National Council to Fight AIDS (SEP/CNLS) with autonomous management: in particular responsible for providing technical support to public and private organizations, NGOs, religious orders, associations and grass-roots communities involved in the performance of the National Strategic Plan to Fight AIDS (PSNLS); to ensure the monitoring and evaluation of implementation of the PSNLS; for collaborating with other structures of the central administration of the Ministry of Public Health and Fighting AIDS to ensure integration of the national response to the HIV pandemic.

- The Permanent Secretariat: is charged in particular with the strategic and technical coordination of the NHDP, relations of the Ministry of Public Health and Fighting AIDS with the Technical and Financial Partners (PTF), the Supervision, the Monitoring and Evaluation of Action Plans of the General Directorates, the 6 departments, specialized institutions, 9 health programs and the 17 Provincial Bureaus of Health and to Fight AIDS and related offices.
- The General Directorates and Specialized Institutions, generally charged with a regulatory, regulation, monitoring, supervision and technical oversight role for services, programs and health projects.
- The coordination and management committee of the General Directorate of Planning must fulfill the roles of validation and evaluation of operating plans of the central directorates, the provincial and district bureaus.

The intermediate level includes 17 Provincial Bureaus of Health (BPS) charged with coordinating all health activities of the province. They are charged with the supervision and monitoring of implementation of the operational plans of the health districts, coordination of activities of the Technical and Financial Partners, and they ensure the effective inter-sector collaboration and community participation.

The operational level includes 45 Health Districts distributed throughout 129 cities in the country. They are coordinated by the District Supervisory Teams which coordinate implementation of the NHDP at the peripheral level. They are also charged with the preparation, implementation and monitoring-evaluation of the operational plans of health centers and district hospitals, in cooperation with the corresponding sectors at the peripheral level, communities, technical and financial partners and the private sector.

The merger of the Ministry of Public Health with the Ministry to Fight AIDS will entail a change in the organization of the intermediate and peripheral levels in order to include coordination and implementation structures for the national anti-AIDS strategy.

7.2. Operational Planning of the NHDP

The NHDP will be implemented through operational plans at all levels–central, intermediate and peripheral. At the central level, the General Directorates, Departments, specialized institutions, national hospitals, programs and services must have strategic plans that are aligned with the NHDP II. The Provincial Bureaus must have provincial health development plans. They must also ensure that each Health District has an operational working plan that includes communal development plans. This operational planning will use the updated standards and planning tools (health card, health standards, coverage plan, etc.).

7.3. Coordination Mechanisms

Coordination at all levels must contribute to the implementation of the NHDP. At the central level, the Cooperation Framework for Health Development is charged with coordinating Partners to implement the NHDP II.

At the intermediate level, a Provincial Committee for Health and to Fight AIDS (COPROSALS) will be established to coordinate all intervention in regards to health and the fight against AIDS in the province. Alongside this instance, other specialized entities will contribute to the technical coordination of the activities of the NHDP II, such as the provincial verification and validation committee (CPVV). All these technical entities and committees must be aligned and integrated, and their functional links must be defined.

At the Peripheral level, District Steering Committees (COPIDI), under the supervision of local authorities, will be put in place to coordinate activities. They will involve the technical and financial partners and the private sector at the local level, with the full participation of the communities.

VIII. Framework for monitoring and evaluation

A framework for monitoring and evaluation was prepared and includes a matrix of key indicators for monitoring and evaluation of the NHDP II. The mechanisms for organization of monitoring and evaluation of the NHDP are described for each level of the health pyramid and the monitoring and evaluation framework is equipped with a plan of action for implementation of the NHDP in 5 years. In terms of the organization, joint reviews by the Ministry of Public Health and Fighting AIDS and related sectors and partners in the NHDP are provided for every quarter for the districts, every six months for the regions and at the national level.

The Coordination and Management Committee of the General Directorate of Planning validates and evaluates the operational plans of the Central Directorates, the Provincial Offices and Districts once per year, in the fourth quarter of each year with the participation of all the stakeholders.

8.1. Monitoring and evaluation indicators

In the context of results-oriented management, and in accordance with the logical framework of the NHDP II, monitoring-evaluation will primarily be based on the list of key indicators of the NHDP chosen jointly with the implementation partners.

This list of indicators is established in the context of the monitoring-evaluation that requires data collection, transmission, calculation and analysis procedures.

In general the monitoring-evaluation of the progress of actions that fall within the NHDP and results obtained (outputs/outcome) rests with an effective information system that is prepared to provide all the necessary information in a timely manner.

8.2. Evaluation of the NHDP II

The Joint Assessment of National Health Strategies and Plans (JANS) with the stake holders is planned before beginning implementation of the NHDP. It will allow the strengths and weaknesses of the NHDP II to be identified and will help to improve the quality of the document and its compliance with the existing national development frameworks. It will also allow the trust of the partners for more forecastable financing, that is better aligned to be strengthened, and to prepare the signature of a compact.

A mid-point evaluation of the NHDP is planned to redirect or strengthen actions, as necessary.

A final evaluation will serve to measure the results obtained and the impact of the NHDP, the level of attainment of the MDOs, drawing lessons to provide corrective measures and possibly to direct sector health policy. The mid-point evaluation is planned for 2013 and the final evaluation in 2015.

Out of a concern for appropriation by the Ministry of Public Health and Fighting AIDS executives, the mid-point and final evaluations will include an internal evaluation, a prevalence survey and a satisfaction survey of beneficiaries, the results of which may be used for external evaluation. The reference terms for these evaluations will be defined in cooperation with the various stakeholders involved.

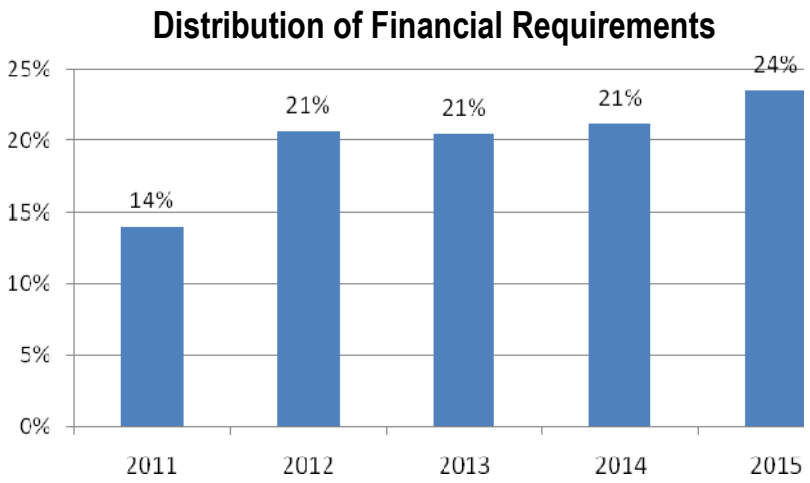
IX. Programmatic and budget framework

During the preparation of the budget, it was necessary to breakdown actions into activities in order to estimate the overall cost of the NHDP II (costing). The costing was prepared based on the logical framework and specifies the expected level of action, of allocation, as well as the nature of the expenses. This exercise also allowed the medium-term expense framework (CDMT) of the health sector to be populated, which is the tool for implementation of the NHDP II, prepared based on the logical framework and the costing. This sectorial CDMT also lines up with the global CDMT of the Ministry of Finance.

9.1. Estimate of financing needs

The estimate of financing needs for the NHDP 2011-2015 provides an amount of 1.656 billion FBU or 1.724 billion FBU, taking monetary depreciation over the period of the NHDP into consideration. The evolution of the resources necessary in each year changes significantly from 2011 to 2012 and from 2014 to 2015, as shown by the following graphic.

Figure 3: Distribution of Financial Requirements for the NHDP II



9.1.1. Estimate of needs by level of the health system

9.1.1.1. Level of activity

Table 2: Distribution of the budget by level of activity

LEVEL OF ACTIVITY	2011	2012	2013	2014	2015	TOTAL	%
CENTRAL	213,297,707,546	318,842,546,549	318,459,889,439	328,694,690,703	359,721,945,015	1,539,016,779,251	93%
INTERMEDIATE	864,736,580	2,034,244,660	2,146,281,980	2,095,387,580	9,815,387,580	16,956,038,380	1%
PERIPHERAL	18,682,091,264	21,552,712,390	19,491,431,793	19,991,733,099	20,302,586,402	100,020,554,947	6%
TOTAL	232,844,535,390	342,429,503,599	340,097,603,212	350,781,811,381	389,839,918,997	1,655,993,372,579	100%

During the five years of the NHDP II, the distribution of the financial needs between the levels of financial activity indicates a concentration of resources at the central level, i.e. 93%, compared to 1% at the intermediate level and 6% at the peripheral level. This is due to the fact that the central level provides the commitment of expenses for other levels (for example salaries, medications, infrastructures and equipment, etc.). The proportion of financing managed by the central level will remain more or less the same between 2011 and 2014 and will fall slightly from 2014 to 2015 following the implementation of national decentralization policy which begins in 2014.

9.1.1.2. Level of allocation of resources

Table 3: Distribution of the budget by level of allocation

LEVEL OF ALLOCATION	2011	2012	2013	2014	2015	TOTAL	%
CENTRAL	19,486, 587,136	33,289, 576,985	29,213, 732,038	28,012, 292,905	42,074, 265,044	152,076, 454,107	9%
INTERMEDIATE	9,579, 462,843	13,001,078,810	13,993, 406,516	12,195, 500,819	11,463, 851,944	60,233, 300,931	4%
PERIPHERAL	203,778, 485,411	296,138, 847,804	296,890, 464,658	310,574, 017,658	336,301, 802,009	1,443,683, 617,540	87%
TOTAL	232,844, 535,390	342,429,503,599	340,097, 603,212	350,781, 811,381	389,839, 918,997	1,655,993, 372,579	100%

The foregoing table also shows the significant resources allocated to the peripheral level (87%), while the intermediate level receives 4% of allocated resources, and the central level, 9%.

Table 4: Distribution of the budget by type of expenditure

Type of Expenditure	2011	2012	2013	2014	2015	TOTAL	%
Investment	26,555,161,287	57,389,498,260	36,717,878,805	27,138,556,468	33,620,396,654	181,421,491,475	11%
Operating	90,362,134,193	155,559,943,242	163,752,478,801	176,087,654,739	200,365,187,207	786,127,398,181	47%
Personnel	34,752,121,399	38,326,567,111	43,370,136,480	46,191,537,398	49,011,988,390	211,652,350,778	13%
Medications and other health products	81,175,118,511	91,153,494,986	96,257,109,126	101,364,062,777	106,842,346,745	476,792,132,145	29%
TOTAL	232,844,535,390	342,429,503,599	340,097,603,212	350,781,811,381	389,839,918,997	1,655,993,372,579	100%

Table 4 shows the distribution of financial needs by type of expenses, with 47% for operation, 29% allocated to medications and other health products, 13% for personnel (wages and allowances) and 11% for investment.

The category of "operation" includes, in addition to regular operating expenses, expenses for the reimbursement of care (subsidies of the performance-based financing system, health mutual insurance funds as well as the Medical Assistance Card, etc.) which may explain its high rate.

The category "personnel" includes all salaries and allowances for personnel of the ministry, using the budget act of 2011 as a base year. Thereafter this budget was increased by 8% each year to account for new hires and increases in salaries.

Table 5: Distribution of the investment budget for performance-based financing

Type of Expenditure	2011	2012	2013	2014	2015	Total	Part.
Overall Total FBP (NHDP)	459,242,283,098	670,795,246,408	669,908,584,199	692,394,076,629	767,435,393,272	3,130,605,753,682	
Investment in FBP 5%	22,962,114,155	33,539,762,320	33,495,429,210	34,619,703,831	38,371,769,664	162,988,779,180	
Initial planned investment in the NHDP	26,555,161,287	57,375,998,260	36,704,378,805	27,138,556,468	33,606,896,654	181,380,991,475	
Investment	49,517,275,442	90,915,760,581	70,199,808,015	61,758,260,299	71,978,666,318	344,369,770,655	20%
Operating	83,031,436,119	144,300,750,784	150,496,977,771	160,511,184,510	182,073,457,000	720,413,806,183	41%
Personnel	34,752,121,399	38,340,067,111	43,383,636,480	46,191,537,398	49,025,488,390	211,692,850,778	12%
Medications and other health products	81,175,118,511	91,153,494,986	96,257,109,126	101,364,062,777	106,842,346,745	476,792,132,145	27%
TOTAL	232,844,535,390	342,429,503,599	340,097,603,212	350,781,811,381	389,839,918,997	1,753,268,559,761	100%

9.1.2. Estimate of needs by Strategic Focus

Table 6: Financing needs by strategic focus

STRATEGIC AXES	2011	2012	2013	2014	2015	TOTAL	%
Strategic Focus 1: Strengthening of quality health services and care (preventive, curative, promotional and rehabilitation) at all levels of the health system	42,669,997,960	59,014,713,518	58,866,366,035	63,135,443,413	67,862,187,906	291,548,708,832	17.6%
Result 1.1: The package of care and services is defined and provided at Health Facilities	0	192,750,000	47,000,000	13,500,000	37,000,000	290,250,000	
Result 1.2: The quality of the care is assured (comprehensiveness, integration, continuity);	5,007,143,813	8,055,173,509	6,605,911,740	5,054,513,217	4,878,898,874	29,601,641,153	
Result 1.3: The package of care is integrated at all levels of the health system, including all aspects of the fight against HIV/AIDS	34,151,907,400	38,460,078,750	42,726,490,000	47,739,618,400	51,887,722,200	214,965,816,750	
Result 1.4: The supply of basic and complete obstetric and neonatal emergency care is assured;	27,035,000	2,006,025,000	679,462,000	1,743,623,000	556,123,000	5,012,268,000	
Result 1.5: The availability, accessibility and use of services intended to control demographic growth through:	342,500,000	864,346,200	837,595,200	761,595,200	683,935,200	3,489,971,800	
Result 1.6: The availability and accessibility of quality care for infants is assured;	3,141,411,747	5,287,206,817	3,331,186,853	3,299,943,356	5,177,458,392	20,237,207,165	
Result 1.7: The intervention package of essential actions is assured;	0	2,209,025,240	3,023,285,240	3,052,805,240	3,234,845,240	11,519,960,960	
Result 1.8: Intervention for prevention, promotion of health and response to epidemics are strengthened;	0	1,456,230,002	969,320,002	790,520,000	828,970,000	4,045,040,004	
Result 1.9: Community intervention for the adoption of best health and nutrition practices are implemented in a coordinated manner;	0	483,878,000	646,115,000	679,325,000	577,235,000	2,386,553,000	

AS 2: Strengthening the management of available human resources	386,472,000	2,104,651,080	865,781,900	579,300,000	418,850,000	4,355,054,980	0.3%
Result 2.1: On-going, better-organized training is assured;	60,222,000	392,763,580	370,844,400	336,950,000	328,350,000	1,489,129,980	
Result 2.2: Decentralizing of human resources management is effective;	0	649,287,500	153,000,000	153,000,000	3,000,000	958,287,500	
Result 2.3: The motivation system includes financial and non-financial incentives and is operational;	0	366,937,500	66,937,500	37,500,000	37,500,000	508,875,000	
Result 2.4: Personnel management tools are available and are used at all levels;	0	470,662,500	50,000,000	51,850,000	50,000,000	622,512,500	
Result 2.5: A quality assurance system for providers is put into place	326,250,000	225,000,000	225,000,000	0	0	776,250,000	
AS 3: Improvement of the production of human resources with the required qualifications	34,839,271,399	40,488,259,611	43,519,231,480	46,224,907,398	48,707,430,890	213,779,100,778	12.9%
Result 3.1: Training schools produce Human Resources with the required qualifications	87,150,000	3,458,692,500	4,014,095,000	3,898,370,000	3,564,942,500	15,023,250,000	
Result 3.2: Each health structure has personnel who are qualified according to standards;	34,752,121,399	37,029,567,111	39,505,136,480	42,326,537,398	45,142,488,390	198,755,850,778	
AS 4: Availability and accessibility of the population to quality medications and other health products	79,017,539,473	90,062,431,947	94,347,392,048	98,638,021,298	103,710,876,467	465,776,261,233	28.1%
Result 4.1: The regulatory framework of the pharmaceutical sector is improved	1,000,000	479,853,000	253,420,000	236,620,000	216,370,000	1,187,263,000	
Result 4.2: The geographic accessibility of medications and other health products is improved	75,396,601,111	84,929,984,086	88,989,678,126	93,289,801,377	97,918,190,545	440,524,255,245	
Result 4.3: Quality control of medications and other health products is assured (blood, therapeutic foods, pesticides, etc.)	0	65,200,000	123,900,000	11,300,000	61,300,000	261,700,000	
Result 4.4: The rational use of medications is improved	16,650,000	341,878,000	226,113,000	206,428,000	215,428,000	1,006,497,000	
Result 4.5: Para-clinical laboratory exams are improved	3,603,288,362	4,214,485,362	4,740,831,922	4,893,871,922	5,299,587,922	22,752,065,488	
Result 4.6: The establishment of optical warehouses is improved	0	31,031,500	13,449,000	0	0	44,480,500	

AS 5: Improvement of coverage with infrastructure and equipment	24,379,367,747	53,323,146,113	34,251,523,533	26,116,147,641	26,171,667,255	164,241,852,290	9.9%
Result 5.1: Improved dialogue between sectors	0	0	0	0	0	0	
Result 5.2: Infrastructure coverage that complies with health standards	17,782,264,937	32,931,900,000	17,831,150,000	19,996,322,500	20,089,500,000	108,631,137,437	
Result 5.3: Equipment coverage that complies with health standards	6,597,102,810	20,391,246,113	16,420,373,533	6,119,825,141	6,082,167,255	55,610,714,853	
AS 6: Increase in financing for the health sector and improvement of its use	11,390,242,221	32,417,608,204	31,582,690,014	28,764,422,374	28,638,026,377	132,792,989,190	8.0%
Result 6.1: Financing of the health sector is augmented;	1,257,000,000	20,256,672,092	19,944,150,983	17,427,978,182	16,798,249,659	75,684,050,917	
Result 6.2: Management of financing of the health sector is improved	10,107,722,221	11,935,416,112	11,605,294,031	11,295,474,192	11,611,991,718	56,555,898,274	
Result 6.3: Transparency, equity and efficiency in the allocation of improved financial resources	25,520,000	25,520,000	33,245,000	40,970,000	51,785,000	177,040,000	
Result 6.4: Coordination of financing of the health sector is improved	0	200,000,000	0	0	176,000,000	376,000,000	
AS 7: Assured ongoing financing based on performance, coupled with free care	36,753,840,770	56,426,772,690	66,377,855,550	77,982,701,545	91,559,001,435	329,100,171,990	19.9%
AS 8: Strengthening Governance and leadership in the health sector	272,745,000	3,350,587,950	5,335,148,970	5,364,713,991	13,054,702,507	27,377,898,417	1.7%
Result 8.1: The institutional and organizational capacities of SS are improved.	209,625,000	712,750,000	1,700,000,000	1,700,000,000	1,400,000,000	5,722,375,000	
Result 8.2: Legislative and regulatory frameworks of the various reforms of the Ministry of Public Health and Fighting AIDS are implemented;	18,500,000	1,036,919,950	1,989,065,950	1,989,989,450	1,963,469,450	6,997,944,800	
Result 8.3: The coordination of the health sector is assured;	44,620,000	1,284,718,000	1,309,883,020	1,300,024,541	9,311,033,057	13,250,278,617	
Result 8.4: Rational and transparent management is assured at all levels;	0	311,200,000	331,200,000	369,700,000	375,200,000	1,387,300,000	
Result 8.6: Cooperation among sectors to consider determining health factors is developed at all levels;	0	5,000,000	5,000,000	5,000,000	5,000,000	20,000,000	

Strategic Focus 9: Strengthening of the monitoring and evaluation system	3,135,058,820	5,241,332,485	4,951,613,682	3,976,153,721	9,717,176,160	27,021,334,868	1.6%
Result 9.1: A functional and effective planning system is put in place;	123,490,000	1,955,040,400	125,182,612	103,159,311	1,707,114,090	4,013,986,413	
Result 9.2: An integrated and effective monitoring and evaluation system is put in place;	1,904,693,820	1,373,114,280	3,050,266,820	2,097,485,160	6,279,347,820	14,704,907,900	
Result 9.3: A National Health Information System (SNIS) is put in place and is functional;	914,375,000	914,375,000	902,500,000	878,750,000	902,500,000	4,512,500,000	
Result 9.4: Information and communications technology are available, accessible and used;	22,500,000	20,000,000	20,000,000	10,000,000	20,000,000	92,500,000	
Result 9.5: An institutional framework for coordination and promotion of health research is put into place;	0	551,346,805	178,708,250	459,303,250	133,258,250	1,322,616,555	
Result 9.6: The institutional health communication system is improved.	170,000,000	427,456,000	674,956,000	427,456,000	674,956,000	2,374,824,000	
TOTAL	232,844,535,390	342,429,503,599	340,097,603,212	350,781,811,381	389,839,918,997	1,655,993,372,579	100%

Table 6 shows financing requirements by strategic area. It shows that the strategic areas related to financing, infrastructures/equipment and performance based financing represent a large portion of the budget, i.e. 38% The strategic areas related to human resources and the National Health Information System respectively represent 13% and 2%, which seem to be underestimated.

9.2. Financing of the NHDP

The budget framework of the NHDP 2011-2015 was prepared in particular based on national direction documents (Strategic Framework to Reduce Poverty, Macro-economic award letter, overall CDMT, macroeconomic model, etc.) with an additional effort at projecting macroeconomic and sectorial aggregates for 2012 through 2015. This exercise attempted to take into account to the greatest extent possible the instructions or guidelines for economic and financial progress by the country based on the opinion of experts from the Bretton Woods institutions. Other national documents were used to do this work, such as the study of national health accounts, the PETS survey, and the 2009-2010 household/quality census.

9.2.1. Presentation of scenarios

In this section, we have limited ourselves to presenting the middle-case scenario (selected). The other scenarios are presented in the appendix.

The following table indicates the various parameters that allowed the award of financing to sectors to be carried out, with the budget resources necessary for implementation of the NHDP as well as the middle-case scenario. It was prepared based on data from the overall CDMT of the Ministry of Finance, the National Health Accounts for 2007 as well as data regarding contributions from partners collected by the Ministry of Public Health and Fighting AIDS.

Table 7: Macroeconomic and budget allocation components of the NHDP 2011-2015

Macroeconomic Award Components						
		2011	2012	2013	2014	2015
1 .	*Demographic data*					
	Total population (in thousands)	8,647	8,855	9,067	9,285	9,507
2 .	*Gross Domestic Product*					
	National GDP in current values (billions of FBU)	1,243,785	1,307,218	1,383,037	1,477,083	1,568,663
	Real growth rate (%)	4.5	5.1	5.8	6.8	6.2
3 .	*Total public expenses*					
	Total expenses of public administrations (billions of FBU)	643,400	682,519	783,143	909,709	926,960
	Ratio: Public expenses as a percentage of GDP (%)	51.7	52.2	56.6	61.6	59.1
4 .	*Public health expenses*					
	Budget of the Ministry of Public Health and Fighting AIDS (billions of FBU)	72,364	78,737	90,521	107,816	112,476
	Percentage of the budget of the Ministry of Public Health / Total administration expenses	11.25	11.54	11.56	11.85	12.13
	Health expenses of other ministries (billions of FBU)	14,155	15,015	17,229	20,014	20,393
	Percentage of health expenses of other ministries as a percentage of total public expenses	2.20	2.20	2.20	2.20	2.20
	Other public funds (INSS, MFP, public/state-related companies) in billions of FBU	20,717	21,977	25,217	29,293	29,848
	Percentage of health expenses of other structures as a percentage of total public expenses	3.22	3.22	3.22	3.22	3.22
	Total public health expenses (billions of FBU)	107,236	115,730	132,967	157,122	162,717
	Ratio: State health expenses/total expenses (%)	16.7	17.0	17.0	17.3	17.6
5 .	*Private health expenses*					
	Households					
	Total expenses of households (billions of FBU)	82.16	87.49	94.06	101.14	108.74
	Total direct health expenses of households (billions of FBU)	77.2	82.2	88.4	95.1	102.2
	Direct health expenses in the public sector (80%)	61.8	65.8	70.7	76.1	81.8
	Health expenses per capita ($)	**6.89**	**6.89**	**6.89**	**6.89**	**6.89**
	Total expenses of private institutions participating in public health (Private insurance companies and private companies outside of health insurance) in billions of FBU	0.752	0.791	0.836	0.893	0.949
	Total health expenses of the private non-profit health sector	5,308	5,308	5,308	5,308	5,308
	Total private expenses for public health	67,843	71,887	76,880	82,257	88,031
6.	*Expenses of technical and financial partners (PTF)*					
	Total expenses of the PTF (millions $)	208,173	201,439	212,895	223,032	233,653
	PTF health expenses (millions $)	115,340	100,720	106,447	111,516	116,827
	Proportion of health expenses of PTF as a percentage of their total expenses	55%	50%	50%	50%	50%
	Health expenses of PTF per capita ($)	**13.34**	**11.37**	**11.74**	**12.01**	**12.29**
	Annual average rate of change	1379.0	1434.0	1505.7	1581.0	1660.0

	Total resources in relation to public health expenses in billions of FBU	**334.1**	**332.0**	**370.1**	**415.7**	**444.7**
	Per capita expenses in $	**28.02**	**26.15**	**27.11**	**28.32**	**28.18**
	Portion of expenses assumed by households (%)	**18.5**	**19.8**	**19.1**	**18.3**	**18.4**
	Ratio: Public expenses as a percentage of GDP (%)	**26.86**	**25.40**	**26.76**	**28.14**	**28.35**

The following table (Table 8) shows the forecast resources by financing source, based on the middle scenario, constructed on the following hypotheses:

- Maintaining the level of GDP trends indicated by the Ministry of Finance in April 2011;
- The share of the Ministry of Public Health and Fighting AIDS complies with the amounts indicated in the budget allocations proposed in the overall CDMT 2012-2014 (except for 2015, which will maintain the same trends as previous years);
- Health expenses of households per capita that have reached a level of 6.89 dollars i.e. 9,501 FBU in 2008, are maintained at this level for the entire period.

Table 8: Financing potential for the NHDP II (middle scenario - budget allocation by source in billions of FBU)

Source	2011	2012	2013	2014	2015	TOTAL	Percentage
GOVERNMENT*	107,236	115,730	132,967	157,122	162,717	675,773	35.63%
TFP	159,054	144,432	160,278	176,305	193,936	834,005	43.97%
Private, incl. HOUSEHOLDS**	67,843	71,887	76,880	82,257	88,031	386,898	20.40%
Total in billions of FBU	334,133	332,049	370,125	415,684	444,684	1.896,676	100%

*Aside from the MSPLS, this includes resources from other Ministries and other public funds (INSS, MFP, Public/state-related companies)

** Aside from households, this includes total expenses of private institutions that are active in public health (Private insurance company and private companies excluding medical insurance) and total health expenses of the private non-profit health sector.

In regards to partners, the 2012 allocation shows the withdrawal of significant partners from the health sector, bringing the share of health expenses as a percentage of total expenses down to 50% in 2012, instead of the 55% shown in the previous year (2011). This rate is maintained in the subsequent years. Out of 1,896 billion FBU that can be mobilized for financing of the NHDP, 35.63% would come from the State, 43.97% from partners and 20.40% from the private sector, in particular from households. Between the beginning and the end of the NHDP period, annual resources to be mobilized would increase by one-third (33%). Considering the costs of the NHDP II, we see that this middle scenario allows financing needs to be covered, by including monetary depreciation: 1,724 billion in financing needs compared to financing potential totaling 1,896 billion FBU. The middle scenario is the scenario chosen to develop analyses of the potential financing of the NHDP (the high and low scenarios are described in Appendices 2 and 3).

In this middle scenario, the contribution by households per capita is held to 6.89[67] dollars per year, however this effort must be able to be integrated into a context of expanding the implementation of health mutual insurance funds. This contribution by households is high, considering their impoverishment. However, the government will continue other strategies to reduce financial barriers.

Currently the financing anticipated from partners for 2013 through 2015 is below what is anticipated in the selected scenario. This is due to the unforeseeable nature of long-term financing. Maintaining financing from partners as posited in this scenario thus requires significant mobilization/lobbying on the part of the government to ensure that the financing gap resent as of 2013 and thereafter will be made up to the greatest extent possible.

[67] Household quality survey 2009-2010, CORDAID

APPENDICES

Appendix 1: Logical Framework of the NHDP

Vision: Looking towards 2015, Burundi will have lasting peace and socio-political stability with economic growth permitting every citizen to have access to basic health care through individual and community participation mechanisms and with the strengthened leadership of the Ministry of Public Health. The various participants, partners and the population, in step with the government, will have reduced diseases related to poverty, exclusion and ignorance within a context of good governance and of sustainable development of a proactive and effective health system for an economically, socially and humanly acceptable. This achieved vision will allow the residents of this country to live with greater dignity and longer, in a better environment. They will be more aware of their responsibilities for promoting their health and that of the communities to which they belong. The various at-risk groups will no longer die in massive numbers from avoidable diseases.

Aim: To improve the health condition of the population, not only because it is a human right, but also to allow the recovery of the economy and a decrease in poverty while maintaining the human population in good health.

Gen. Obj.	Description		
	1	To contribute to reducing morbidity-mortality related to communicable and non-communicable diseases	
		Target 1	The prevalence of malaria among children less than 5 years of age reduced from 59% to 30% by 2015
		Target 2	The prevalence of HIV/AIDS reduced from 2.97% to 2% by 2015
		Target 3	Complications from high blood pressure among adults reduced by 20% by 2015
		Target 4	A reduction of morbidity-mortality related to DBT and its complications
		Target 5	Reducing weight insufficiency from 29% to 21% by 2015
		Target 6	Reducing morbidity-mortality related to tuberculosis
		Target 7	Reducing morbidity-mortality related to mental diseases
	2	Contribute to reducing maternal and neonatal mortality through	
		Target 1	The maternal mortality rate reduced from 866 (RGPH 2008) to 390 deaths per 100,000 live births by 2015
		Target 2	Reduce the neonatal mortality rate by 50% through 2015
	3	Reduction of mortality in children under 5 years of age	
		Target 1	Reduce the maternal mortality rate from 59 (EDSB 2010) to 34 deaths per 1000 live births by 2015
		Target 2	Reduce the infant-juvenile mortality rate from 96 (EDSB 2010) to 71 deaths per 1000 live births by 2015

Type	Description	BASELINE INDICATORS		2011	2012	2013	2014	2015
Obj.	Ensuring accessibility to quality health services and care by the population in order to promote better use.							
Target 1	Health coverage increases from 80% (PET Survey, 2008) to 97% by 2015	Health coverage rate	80%	82%	87%	92%	95%	97%
Target 2	Rate of use of treatment services increases from 0.18 (PMS Survey, 2010) to 0.35 (consultations/resident/year)	Treatment services usage rate	N/A	0.28	0.3	0.35	0.4	0.45
Target 3	Vaccine coverage (fully immunized children) maintained at least at 83% (EDSB 2010)	Percentage of children fully immunized	83%	>90%	>90%	>90%	>90%	>90%
Target 4	Percentage of children less than 5 years of age who sleep under an ITN increases from 45% to 70% by 2015 (EDSB 2010)	ITN coverage among children less than 5 years of age	45%	45%	51%	≥ 80%	≥ 80%	≥ 80%
Target 5	Contraceptive coverage increased from 18.6% (EDS 2010) to 28% in 2015	Contraception coverage rate	18.6%	22%	24%	26%	28%	30%
Target 6	Percentage of pregnant women with assistance from a trained health care personnel increases from 60% (EDSB 2010) to 80% in 2015	Coverage rate of assisted births	60%	62%	68%	74%	78%	80%
Target 7	Coverage of PMTCT increased from 15.4% (EPISTAT, 2009) to 85%	PMTCT coverage rate	15.4%	20%	30%	40%	60%	85%
Target 8	ARV coverage increased from 45% to 80%	ARV coverage rate	45%	52%	60%	67%	74%	80%
Target 9	In-hospital mortality reduced by one-half	Hospital mortality rate	N/A					
Target 10	CMAM coverage at 70%	CMAM coverage rate	60%	60%	60%	65%	65%	70%

Str. Area 1	Strengthening of quality health services and care (preventive, curative, promotional and rehabilitation) at all levels of the health system							
Result 1.1	The package of care and services is defined and provided at Health Facilities	Proportion of District Health Centers that provide the Minimum Package of Activities	N/A	10%	30%	50%	65%	80%
		Proportion of hospitals that provide the Complete Package of Activities as defined in the revised standards document		30%	50%	65%	80%	90%
Activity 1.1.1	Preparation/updating of sub-sectorial strategic directions based on the NHDP	Proportion of specific programs that set forth a strategic plan aligned with the NHDP	0%	23%	100%	100%	100%	100%
Activity 1.1.2	Revision of health standards documents for all levels	Percentage of health institutions having a revised standards document	0%	20%	100%	100%	100%	100%
Activity 1.1.3	Bring Health Facilities that do not comply with the revised standards into compliance	Percentage of health institutions that are in compliance with revised standards	N/A		25%	35%	50%	65%
Result 1.2	The quality of the care is assured (comprehensiveness, integration, continuity);	Percentage of Health Facilities that offer care and services that comply with quality criteria	N/A	20%	30%	40%	50%	> 60%
Activity 1.2.1	Definition of the path of patients between levels of care (referral and counter-referral);	Percentage of Health Facilities that have clinical tools (SPT and treatment guidelines)	N/A	20%	40%	60%	80%	100%

Activity 1.2.2	Definition of patient management (medical file, care booklet, deadlines)	Percentage of Health Facilities using patient management documents	N/A	20%	100%	100%	100%	100%
Activity 1.2.3	Definition/updating of diagnostic and treatment protocols	Percentage of Health Facilities using the diagnostic and treatment protocols	N/A	20%	100%	100%	100%	100%
Activity 1.2.4	Development of a national network of laboratories for quality control of tests	Proportion of laboratories with tests subject to quality control	N/A	20%	40%	60%	100%	100%
Activity 1.2.5	Implement a quality assurance system at all levels	Percentage of Health Facilities that apply the standards of the MSPLS in relation to quality assurance for care (the complaint-treatment strategy, treatment guides and other operational orders)	N/A	20%	40%	60%	80%	100%
Result 1.3	All aspects of the fight against HIV/AIDS are integrated into the package of care at all levels of the health system	Percentage of health structures offering integrated services based on predefined standards (voluntary screening center, etc.)	N/A	10%	20%	30%	50%	80%
		Percentage of hills that have at least one community organization offering integrated services	N/A	5%	20%	40%	60%	80%
Activity 1.3.1	Review of the institutional framework taking into consideration the integration of HIV/AIDS in order to strengthen the health system	Revised institutional framework		x				

Activity 1.3.2	Consolidation of multi-sectorial gains in regards to the fight against HIV/AIDS at all levels	Existence of a permanent framework for cooperation among the various sectors involved			x			
Result 1.4	The supply of basic and complete obstetric and neonatal emergency care is assured	Proportion of Health Facilities offering BEmONC		0,87% (5/753)	20%	30%	40%	50%
		Proportion of Health Facilities offering SEmONC		33% (17/51)	50%	60%	70%	80%
Activity 1.4.1	Strengthening of technical capabilities of care structures in BEmONC and CEmONC (training providers, equipment);	Percentage of Health Facilities complying with BEmONC and SEmONC standards		40%	50%	60%	70%	80%
Result 1.5	The availability, accessibility and use of services intended to control demographic growth through:	Contraception coverage rate	18,6%	21%	23%	25%	27%	30%
Activity 1.5.1	Strengthening of technical and institutional capabilities of the health system to offer FP services	Proportion of Health Facilities with personnel trained in FP techniques	N/A	15%	25%	50%	75%	100%
		Percentage of Health Facilities that are not aware of interruptions of inventory of contraceptive products	N/A	100%	100%	100%	100%	100%
		Percentage of Health Facilities that offer FP services	N/A	76%	80%	85%	90%	100%

Activity 1.5.2	Increase in demand for FP services, emphasizing community and human participation	Rate of acceptance of modern contraceptive methods		29%	32%	36%	40%	45%
Result 1.6	The availability and accessibility of quality care for infants is assured;							
Activity 1.6.1	Strengthening of infant disease prevention services and follow-up of the health condition of children	Percentage of children less than 5 years of age who receive ENA	N/A	N/A	40%	60%	70%	80%
		Percentage of Health Facilities that offer infant immunization and prevention services	N/A					95%
Activity 1.6.2	Scaling up ICMI	Percentage of health facilities that offer an essential prevention service (FP, Pre-natal consultation, Post-natal growth-nutrition monitoring, Immunization)	N/A			50%	75%	90%
Result 1.7	Intervention for prevention, promotion of health and response to epidemics are strengthened;	Percentage of Health Facilities that have at least one person trained in epidemic response				50%	75%	90%
Activity 1.7.1	Preparation and implementation of integrated IEC/CCC tools	Percentage of Health Facilities that hold health education meetings each day		18%	20%	30%	40%	50%
Activity 1.7.2	Support for/strengthening of education services for health at all health facilities	Rate of use of HIV/AIDS screening services		N/A	20%	30%	40%	50%
Activity 1.7.3	Strengthening of emergency services at all levels of care	An updated integrated contingency plan for treatment of emergency cases and fighting epidemics		X				
Activity 1.7.4	Preparation/updating of an integrated plan and a device for fighting epidemics	Percentage of health facilities with tools for epidemic response			10%	20%	30%	40%

Activity 1.7.5	Strengthen the waste management system	Percentage of health facilities that use an incinerator in accordance with standards			50%	75%	100%	100%
Activity 1.7.6		Percentage of health facilities that have a functional DBM collection and processing system				50%	75%	100%
Result 1.8	Community intervention for the adoption of best health and nutrition practices are implemented in a coordinated manner;	Percentage of hills that have at least one community organization for promoting health, in accordance with previously-established standards				50%	75%	100%
		Percentage of households that adopt the 5 essential practices (FP, exclusive breastfeeding for 6 months, washing hands at critical times, 3CPN, use of ITNs)				25%	35%	50%
Activity 1.8.1	Preparation of strategic and operational direction documents for community participants	Percentage of health facilities that have the instruction document	N/A	N/A	N/A	50%	65%	80%
Activity 1.8.2	Strengthening capabilities of community participants	Percentage of grassroots organizations trained for strengthening capabilities				30%	70%	90%
Result 1.9	The intervention package of essential actions is assured							

Activity 1.9.1	Strengthening of integration of global treatment for malnutrition in the minimum package of activities and complete package of activities	Percentage of health facilities providing nutritional care according to the CMAM approach	60%	60%	65%	70%	75%	75%
Activity 1.9.2	Strengthening of technical skills of health providers in health and nutrition promotional activities	Percentage of health facilities that have personnel trained in promotional and nutritional activities						
		Percentage of children less than six months of age that are breastfed exclusively	69%	69%	74%	79%	84%	85%
		Percentage of children that received appropriate supplemental food as of 6 months	70%	70%	75%	80%	85%	85%
		Prevalence of anemia among children less than 5 years of age	45%	45%	40%	35%	30%	25%
		Percentage of households using iodized salt	78%	78%	>80%	>85%	>85%	>85%
		Prevalence of anemia among pregnant women	19%	19%	17%	15%	13%	11%
		Vitamin A coverage rate	89%	89%	>90%	>90%	>90%	>90%
Activity 1.9.3	Strengthening the framework for multi-sectorial cooperation to fight chronic malnutrition	Existence of a functional framework for multi-sectorial cooperation in the fight against malnutrition	X	X	X	X	X	X
Str. Area 2	Improvement of the production of human resources with the required qualifications							
Result 2.1	Training schools produce Human Resources with the required qualifications							
Activity 2.1.1	Accelerate paramedical reform in progress	Frames of reference for professions, training, skills and evaluation of paramedical personnel used and available			X	X	X	X
		Standards for paramedical schools are available and applied			X	X	X	X

Activity 2.1.2	Implement training procedures not yet developed, medical rehabilitation, buccal-dental care, mental health, nutrition, Upper-level Ophthalmological Technician and maintenance of biomedical equipment	Number of training procedures in place at the INSP	9		10		12	
Activity 2.1.3	Improve the production of specialized physicians, pharmacists, specialized nurses and midwives	Frames of reference for professions, training, skills and evaluation of paramedical personnel exist				X	X	X
		Number of coordination meetings between the Min. of Public Health and medical schools						
Activity 2.1.4	Monitoring-evaluation of the quality of training in schools, institutes and universities	Rate of supervision and quality control	N/A	N/A	50%	70%	90%	100%
Result 2.2	Each health structure has personnel who are qualified according to standards;							
Activity 2.2.1	Equitable distribution of HR throughout the country	Redeployment plan prepared and approved		X	X	X	X	X
		Recruitment plan prepared and approved		X	X	X	X	X
Activity 2.2.2	Description of categories for each structure	Manual containing descriptions of duties and profiles adopted by the Ministry			X			
Activity 2.2.3	Implement and revitalize an order for each unit to strengthen ethics and ethical conduct	Number of orders in place and operational	N/A					
Str. Area 3	Strengthening the management of available human resources							
Result 3.1	On-going, better-organized training is assured;	Percentage of service units per level with personnel who have had continuing education	N/A	N/A	30%	50%	70%	80%
Activity 3.1.1	Preparation of an integrated plan and policy for ongoing training;	Continuing education plan available and disseminated	N/A	X	X	X	X	X

Activity 3.1.2	Implementation of a mechanism for coordination and follow-up of basic and ongoing training of personnel;	Coordination entity in place and operational at the level of the Ministry of Public Health and Fighting AIDS	N/A	X	X	X	X	X
Activity 3.1.3	Strengthening of capabilities of the INSP to ensure ongoing training of human resources	Service responsible for continuing education available and operational	N/A	X	X	X	X	X
Activity 3.1.4	Training of general practitioners in emergency surgery and gynecology-obstetrics	Percentage of district hospitals with general practitioners trained in emergency surgery and gynecology-obstetrics	N/A	40%	60%	80%	100%	100%
Activity 3.1.5	Refresher training for nursing assistants (A3) at health structures	Percentage of nursing assistants (A3) taking refresher training	N/A	N/A	20%	40%	50%	70%
Result 3.2	Decentralizing of human resources management is effective;	Percentage of health facilities with autonomous HR management as defined in the HR policy	N/A	0%	60%	80%	90%	100%
Activity 3.2.1	Preparation of a decentralized human resources management procedures manual	Percentage of service units using a personnel management procedures manual	N/A	N/A	100%	100%	100%	100%
Activity 3.2.2	Strengthening of capabilities of the Regional Health Directorate and of decentralized structures in human resources management	Percentage of service units having personnel trained in human resources management	N/A	N/A	10%	20%	30%	40%
Result 3.3	The motivation system includes financial and non-financial incentives and is operational;	Percentage of health personnel satisfied with incentive measures put in place				40%		70%
Activity 3.3.1	Analysis of the effect of performance-based financing on the motivation of personnel and the implementation of corrective measures	Study regarding the effect of performance-based financing on the motivation of personnel carried out and a road map for improvement available	N/A	N/A	X		X	
Activity 3.3.2	Definition of other motivation strategies for the entire system and their implementation	Availability of a strategy for motivation of the entire system at all levels	N/A	N/A		X		

Activity 3.3.3	Evaluation of satisfaction of personnel regarding incentive measures	Performance of a survey on the effect of motivation strategies on personnel	N/A	N/A	X			
Result 3.4	Personnel management tools are available and are used at all levels	Percentage of service units that have and use the package of all HR management tools				30%	60%	80%
Activity 3.4.1	Preparation of the plan to redeploy personnel for the entire system	Plan to redeploy personnel available by the end of 2011		X				
Activity 3.4.2	Preparation of the career, recruitment and benefit management plans for employees	Plan prepared no later than late 2012			X			
Activity 3.4.3	Create and make the HR watchdog operational	Functionality of the watchdog as of 2012			X			

Activity 3.4.4	Implement and bring HR management software online (at the district level)	Software installed and in use at the district level			30%	60%	80%	100%
Str. Area 4	Availability of medications and other quality health products assured, as is their accessibility by the population							
Result 4.1	The regulatory framework of the pharmaceutical sector is improved	Percentage of pharmaceutical institutions and/or establishments that are in compliance with the national pharmaceutical policy and legislative and regulatory texts	0%	30%	40%	50%	70%	80%
Activity 4.1.1	Implementation of an integrated supply and distribution chain as well as mechanisms for monitoring-evaluation of operation	Existence of a ruling describing the chain	N/A		X			
		Existence of a document describing the mechanisms for monitoring/evaluation of this chain	N/A		X			
Activity 4.1.2	Integration of needs related to nutritional supplies, contraceptives, vaccines, tuberculosis medications (1st and 2nd line) and mosquito nets in the planning of Government budgets and into management	Existence of the respective budget line items and increase in budgets	N/A		x	x	x	x
Activity 4.1.3	Preparation of enabling legislation for the pharmaceutical framework act (approval, inspection, pharmaceutical oversight, quality assurance, price regulation, etc.)	Number of texts for application of the pharmaceutical framework act prepared and implemented	N/A		1	2	2	
Activity 4.1.4	Strengthening of capabilities of the Office of Pharmacies, Medications and Laboratories	Increase in the budget allocated to the Office of Pharmacies, Medications and Laboratories, number of upper-level technicians assigned per year	4 Pharmacists and 3 upper-level technicians					

Activity 4.1.5	Strengthening of general inspection capabilities for public health	Percentage of public establishments in compliance with standards	40%	50%	60%	75%	90%	100%
Activity 4.1.6	Strengthening of quality assurance of pharmaceutical services	Percentage of providers trained in quality assurance	N/A	10%	20%	30%	40%	50%
		Percentage of pharmaceutical establishments in compliance with service quality standards	N/A	10%	20%	30%	40%	50%
Activity 4.1.7	Strengthening of mechanisms for coordinating participants in the pharmaceutical sector	At least one (1) monthly meeting of the medication GT	8	12	12	12	12	12
Activity 4.1.8	Preparation of a regulation relative to traditional medicine	At least 2 regulatory texts regarding traditional medicine adopted	0	0	1	1		
Activity 4.1.9	Adoption of new bylaws for CAMEBU	New CAMEBU bylaws available			x			
Result 4.2	The geographic accessibility of medications and other health products is improved	Percentage of the population having easy access to medications at an affordable price	N/A					95%
Activity 4.2.1	Strengthening of capabilities of CAMEBU	Percentage increase in revenue	6.5 billion	5%	5%	5%	5%	5%
Activity 4.2.2	Creation of decentralized structures of CAMEBU (regional distribution warehouses)	CAMEBU decentralization impact and costs study report is validated			x			
Activity 4.2.3	Improvement of capacities to supply and manage medications in the Health Districts	Rate of increase of operating funds for District Pharmacies	200 million	5%	5%	5%	5%	5%

		Percentage of interruptions in inventory of tracer medications at the level of Health Centers	N/A	0%	0%	0%	0%	0%

Activity 4.2.4	Development of a public-private partnership to strengthen local production of medications	Percentage contribution of local production to meeting requirements for essential medications	5%	5%	5%	5%	10%	15%
Activity 4.2.5	Promotion of inter-sectorial cooperation in the regulation of prices for medication and other health products	Percentage of Health Facilities displaying the rates for medications and/or implementing price regulation	0%			50%	75%	100%
		Percentage of pharmaceutical facilities that respect prices	0%	0	0	50%	60%	75%
Activity 4.2.6	Assurance of the availability of human resources in sufficient quantity and quality in the pharmaceutical sector	Percentage of health districts having at least one upper-level pharmacy technician	20%	25%	30%	40%	60%	80%
Activity 4.2.7	Assurance of the availability of safe blood products in all hospitals	Percentage of interruption of inventories of safe blood products	N/A					0%
Activity 4.2.8	Creation of regional blood transfusion centers (CRTS)	Number of functional regional centers	0					4
Result 4.3	Quality control of medications and other health products is assured (blood, water, foods, pesticides, etc.)	Percentage of medication and other health product analysis tests that are satisfactory	N/A					90%
Activity 4.3.1	Contribution of basic texts by the National Reference Laboratory of the INSP	Basic texts of the INSP laboratory adopted	-	1	2			
Activity 4.3.2	Strengthening of capabilities of the INSP laboratory	Number of tests conducted	0	100	200	300	400	500
Activity 4.3.3	Development of operational research regarding the effectiveness and safety of medications and pharmaceutical oversight	Number of studies or surveys conducted regarding the effectiveness and safety of medications	N/A	1	1	1	1	1
Activity 4.3.4	Strengthening of inter-sector collaboration in the fight against the illegal sale and counterfeiting of medications	Number of meetings of the National Commission charged in particular with fighting the illegal sale and counterfeiting of medications	4	6	6	6	6	6

Result 4.4	The rational use of medications is improved	Percentage of the population that only takes prescribed medications	N/A					50%
Activity 4.4.1	Periodic review of the national list of essential medications	The national list of essential medications is revised every two years		X		X		X
Activity 4.4.2	Preparation of treatment guidelines for Health Facilities	Treatment guidelines prepared and disseminated to Health Facilities	0		X	X	X	
Activity 4.4.3	Strengthening of capabilities in regards to the rational prescription of medications at all levels, including the community level	Percentage of Health Facilities having at least 50% of providers trained in the rational prescription of medications	PM	10%	25%	50%	75%	90%
Activity 4.4.4	Promoting awareness of communities regarding the dangers of self-medication and the abuse of medication and other health products	Percentage of adults made aware regarding the dangers of self-medication and the abuse of medication and other health products	N/A	N/A	5%	25%	35%	50%
Result 4.5	Para-clinical laboratory exams are improved	Percentage of laboratories conducting para-clinical exams according to standards.						
Activity 4.5.1	Adoption of a national laboratories policy for biomedical analysis and standardize it with the EAC policy	National policy document of biomedical analysis laboratories adopted	0			x		
Activity 4.5.2	Implementation of a master plan for development of the network of laboratories	Master plan available for the development of the laboratories network	0			X		
		Percentage of laboratories in the network	0					
		Number of inter-laboratory tests carried out						

Activity 4.5.3	Strengthening of the technical level of the national reference laboratory (Cf. Item 3.4.2)	Percentage of national reference laboratory in compliance with standards	0			X		
Result 4.6	The establishment of optical warehouses is improved	Regulatory text for establishment of optical warehouses validated and applied	0		X			
Activity 4.6.1	Implementation of a master plan for the regulation of optical warehouses	Master plan for optical warehouses available	0		X			
Str. Area 5	Improvement of coverage with infrastructure and equipment							
Result 5.1	Improved dialogue between sectors	Number of meetings held for collaboration within and between sectors			50%	70%	80%	85%
Activity 5.1.1	Implementation of a framework for collaboration within and between health sectors	Document defining the collaboration framework prepared		X				
Activity 5.1.2	Ensure that water and electricity are available at health facilities	Percentage of health facilities with water and electricity	76%	76%	81%	84%	87%	90%
Result 5.2	Infrastructure coverage that complies with health standards	Percentage of infrastructures respecting standard plans	N/A					
Activity 5.2.1	implementation of the plan to extend coverage in relation to the infrastructure;	Percentage of structures built annually in comparison to needs defined in the coverage expansion plan	30%	30%	50%	60%	70%	80%
Activity 5.2.2	Implementation of a plan for maintenance of facilities at all levels	Percentage of treatment units that have conducted maintenance on facilities in relation to the needs specified in the plan	N/A		70%	80%	90%	100%

Activity 5.2.3	Make asset registration documents available	Percentage of health structures that have their asset registration documents	N/A		25%	40%	60%	80%
Activity 5.2.4	Physical demarcation of the limits of the land of health structures	Percentage of health structures enclosed	N/A		15%	30%	50%	70%
Result 5.3	Equipment coverage that complies with health standards	Percentage of health facilities that comply with health standards in terms of equipment	22%	22%	37%	50%	63%	76%
		An inventory document of available equipment	0	X		X		X
Activity 5.3.1	implementation of the plan to extend coverage in relation to new equipment	Percentage of care facilities structures equipped annually in comparison to needs defined in the coverage expansion plan			50%	60%	60%	70%
Activity 5.3.2	Implementation of the plan to redistribute equipment for better equity	Percentage of equipment redistributed in comparison to plan			70%	80%	90%	100%
Activity 5.3.3	Implementation of the biomedical and non-medical equipment maintenance plan at all levels	Percentage of treatment units that have received maintenance for equipment in relation to the needs specified in the plan			70%	80%	90%	100%
Str. Area 6	Increase in financing for the health sector and improvement of its use							
Result 6.1	Financing of the health sector is augmented;	Rate of increase of financing of the health sector			5%	6%	7%	7%
Activity 6.1.1	Preparation and implementation of a strategy to mobilize funds	Percentage of the national budget allocated to health	7,7%	7,7%	10%	12%	15%	15%

		Rate of increase of the total financial contribution by partners			5%	5%	4%	4%
Activity 6.2.2	Strengthening of community health mutual insurance funds;	Rate of the population covered by community health mutual insurance funds			20%	40%	50%	70%
Result 6.2	Management of financing of the health sector is improved	Percentage of service units audited that apply management procedures		50%	70%	80%	90%	100%
Activity 6.2.1	Improvement and standardization of financial management tools	Percentage of service units that use standard financial management tools		50%	100%	100%	100%	100%
Activity 6.2.2	Strengthening of internal and external control mechanisms	Percentage of service units that were subjected to an internal audit		25%	40%	50%	60%	70%
Activity 6.2.3	Operation of health institutions	Percentage of operating expenses at the central level	84%	87%	79%	84%	86%	85%
		Percentage of operating expenses at the intermediate level	2%	4%	2%	2%	2%	3%
		Percentage of operating expenses at the peripheral level	14%	9%	19%	15%	13%	12%
Result 6.3	Transparency, equity and efficiency in the allocation of improved financial resources (*)	Percentage of State financing specified in the CDMT that is provided under the budget act	12,13%	32%	35%	36%	38%	38%
		Percentage of financing from partners specified in the CDMT and that is guaranteed	49%	48%	43%	43%	42%	42%
Activity 6.3.1	Involvement of all levels in the budgeting process	Percentage of structures that comply with requests from the central level during the budgeting process			75%	100%	100%	100%

Activity 6.3.2	Institutionalization of the CDMT as tools for negotiation of the annual budget	Annually updated CDMT exists		x	x	x	x	x
Result 6.4	Coordination of financing of the health sector is improved							
Activity 6.4.1	Preparation of National Health Accounts every two years	Existence of updated National Health Accounts	x	x			x	
Activity 6.4.2	Control of information regarding financing from the Technical and Financial Partners in the health center and implementation of the same	Mapping of information regarding financing from the Technical and Financial Partners (actual and forecasts) in the health sector carried out annually	MOU	x	x	x	x	x
Activity 6.4.3	Preparation and implementation of the common fund	Percentage of financing from financial partners in the common fund			10%	15%	20%	25%
Activity 6.4.4	Alignment of financing from partners with the NHDP II	Percentage of financing of projects from partners that relate to the NHDP		100%	100%	100%	100%	100%
Str. Area 7	Strengthening and perpetuation of performance-based financing coupled with free care							
Result 7.1	Perpetuation of performance-based financing coupled with free care is assured	Percentage of expenses for the poor allocated to free care	3%	3%	5%	5%	5%	5%
Activity 7.1.1	Strengthening of program management capabilities at all levels	Percentage increase in the number of providers trained		5%	5%	5%	5%	5%

Activity 7.1.2	Contracting of participants	Percentage increase in facilities that signed the contract and that have performed correctly		5%	5%	5%	5%	5%
Str. Area 8	Strengthening Governance and leadership in the health sector							
Result 8.1	The institutional and organizational capacities of SS are improved.	The plan to develop institutional and organizational capabilities is available and implemented at all levels				X		
Activity 8.1.1	Implementation of a national strategy to stabilize personnel at all levels	Existence of the national strategy for personnel stabilization	N/A	X				
		Number of policy and administrative measures taken for the benefit of personnel stabilization	N/A		X	X	X	X
Activity 8.1.3	Implementation of strategy for decentralization of the health sector	One (1) strategy for decentralization of the health sector is available and implemented	N/A					X
Activity 8.1.4	Planning of technical assistance necessary for implementation of the NHDP	One (1) plan for technical assistance to Health Districts is available and implemented	N/A		X	X	X	X
		One (1) health district development plan (PDSD) is available	N/A		X			

Result 8.2	Legislative and regulatory frameworks of the various reforms of the Ministry of Public Health and Fighting AIDS are implemented	Percentage of legislative and regulatory frameworks of the various reforms of the Ministry of Public Health and Fighting AIDS are adopted and implemented				X	X	X
Activity 8.2.1	Adoption of legislative and regulatory texts regarding the primary reforms; (Decentralization, Financing, HR Reform, Medications)	Law and decrees applicable to decentralization of the health sector are adopted and applied						X
		Law and decrees applicable to the status and operation of CAMEBU are adopted and applied			X			
		Law and decrees applicable to hospital reform are adopted and applied						X
		Relevant regulatory or legislative texts or bylaws and those related to the operation of Health Centers, health facilities and health schools are adopted and applied					X	
Activity 8.2.2	Implementation of a sector-based mechanism to fight corruption and financial misappropriation with a spirit of zero tolerance	A legal unit established within the Ministry of Public Health and Fighting AIDS				X		
Activity 8.2.3	Strengthening of the General Inspectorate and other monitoring and evaluation services to assume the role of respecting laws and regulations	The annual internal audit report is produced by the General Inspectorate				X	X	X
		The quality control plan for public food products and systems (pharmacies, restaurants, public displays) is available and implemented by the INSP				X	X	X

Activity 8.2.4	Administrative and functional reform of the Ministry of Public Health and Fighting AIDS	Text of the law for reorganization and restructuring of the central and intermediate levels is adopted and applied		X				
Activity 8.2.5	Update and application of health standards	Health standards are updated and applied		X	X	X	X	X
Result 8.3	The coordination of the health sector is assured;	CPSD is the sole functional and regulatory entity for coordination of the health sector at all levels				X	X	X
Activity 8.3.1	Coordination of Technical and Financial Partner participants, the private sector, civilian society, governments and providers at all levels	Percentage of subject-specific and joint meetings conducted in comparison to forecasts at all levels of the health sector	0.7	80%	90%	100%	100%	100%
		Percentage of joint field visits conducted in comparison to forecasts at all levels of the health sector	0.3	80%	90%	100%	100%	100%
		Percentage of joint reviews conducted in comparison to forecasts at all levels of the health sector	0.3	80%	90%	100%	100%	100%
Activity 8.3.2	Implementation, strengthening and standardization of coordination structures at all levels (central, provincial, district)	Percentage of coordination structures operational at all levels	0.3	80%	90%	100%	100%	100%
Activity 8.3.3	Development of a Sector-wide Approach	Existence of a Sector-wide Approach (SWAP)	N/A	N/A	x	x	x	x
Activity 8.3.4	Integration of Burundi into international, regional and sub-regional health authorities	Percentage of FOR A, conferences, meetings, assemblies, experience exchanges, etc. in which Burundi is represented	N/A	50%	60%	70%	80%	100%
		Percentage of texts and policies standardized and adopted	N/A	50%	60%	70%	80%	100%

Result 8.4	Rational and transparent management is assured at all levels;	Number of health programs and structures audited by the General Inspectorate		2%	10%	30%	30%	30%
Activity 8.4.1	Implementation of harmonized tools for management of the health provinces and districts	Operational guide for Health Provinces and Health Districts is available and applied			X	X	X	X
		Health card is available and regularly made available based on the plan to extend health coverage			X			X
Activity 8.4.2	Organization of external audits at all levels	Percentage of hospitals that are under autonomous management that were subjected to an external report, in comparison to forecasts				60%	80%	90%
		Percentage of Health Districts, including District Pharmacies, that were audited at least once, in comparison to forecasts				60%	80%	90%
		Percentage of programs/projects/services that had an external audit, in comparison to forecasts	N/A	N/A	60%	80%	90%	100%
Result 8.5	The process of planning and oversight-evaluation is regular and well coordinated at all levels	Percentage of Health Districts with a validated evaluation report of their annual plan of action	N/A	0%	0%	50%	80%	100%
Activity 8.5.1	Harmonization and alignment of strategic and operational planning cycles with the NHDP	The qualitative evaluation report of the NHDP (JANS) is available and strengthens the commitment of partners	N/A	x		x		x
		Percentage of strategic plans of the national programs aligned with the NHDP	N/A	50%	70%	80%	100%	100%
		Percentage of financing agreements from technical and financial partners that align with the NHDP	N/A	N/A	N/A	50%	60%	80%

Result 8.6	Cooperation among sectors to consider determining health factors is developed at all levels	Percentage of sectors that included health activities in their strategic plans	N/A	N/A	20%	30%	45%	60%
Activity 8.6.1	Involvement of sectors and institutions related to the health sector in planning, implementation and monitoring for consideration of primary health determining factors (water, hygiene and cleanliness, demography, gender, agriculture and nutrition, governance, energy, Min. of the Interior and Public Safety, Justice)	Percentage of Ministry having one (1) health and anti-AIDS contact person in the targeted ministries	N/A	N/A	100%	100%	100%	100%
Str. Area 9	Strengthening of the planning and monitoring and evaluation system							
Result 9.1	A functional and effective planning system is put in place	Percentage of service units having a plan of action within the corresponding term	N/A	30%	60%	80%	100%	100%
Activity 9.1.1	Implementation of an institutional planning framework	One (1) institutional framework for planning available		x				
Activity 9.1.2	Alignment and coordination of strategic and operational planning cycles	Percentage of structures respecting the planning cycle of the NHDP at all levels	N/A	N/A	30%	70%	100%	100%
Activity 9.1.3	Delivery of reference planning tools	Percentage of structures that use standardized planning tools	N/A	N/A	100%	100%	100%	100%
Result 9.2	An integrated and effective monitoring and evaluation system is put in place	Percentage of services having S&E reports within the corresponding term	N/A	20%	30%	60%	80%	100%
Activity 9.2.1	Implementation of a framework for monitoring results of the NHDP	Number of key NHDP indicators followed	N/A	80%	85%	90%	95%	100%

Result 9.3	A National Health Information System (SNIS) is established and is functional	Percentage of service units providing complete health data on-time	40%	45%	50%	60%	75%	90%
Activity 9.3.1	Implementation of data management tools (Collection, analysis, validation, generation of reports, dissemination, archival)	Percentage of structures that use integrated data management tools	N/A	30%	80%	100%	100%	100%
		Data completeness and on-time percentages	N/A	30%	80%	100%	100%	100%
Result 9.4	Information and communications technology are available, accessible and used	Percentage of service units that use the Information and Communications Technologies specified in the standards	0%	10%	20%	35%	55%	75%
Activity 9.4.2	Revitalization of the supply and use of the MSPLS web site	Annual Statistics of the National Health Information System are posted on the site annually	N/A	x	x	x	x	x
		Percentage of structures supplying the site	N/A	10%	20%	35%	55%	75%
Result 9.5	Institutional framework for coordination and promotion of health research is established	Number of institutions conducting research that complies with national standards and priorities	N/A	1	2	4	4	4
Activity 9.5.1	Strengthening of capabilities of health research institutions	A training plan for researchers exists	N/A		x			
		Number of institutions that received a research subsidy	N/A			2	3	4
Activity 9.5.2	Organization of operational research in health	One (1) directory of studies related to health exists and is updated	N/A		x	x	x	x

Result 9.6	The institutional health communication system is improved	Percentage of service units that use an institutional communications plan	N/A	10%	20%	30%	55%	75%
Activity 9.6.1	Implementation of a strategic and continuous communication mechanism at all levels	The document defining this mechanism exists.	N/A	x				
Activity 9.6.2	Strengthening of the capabilities of the IEC/CCC service	Number of personnel trained	N/A	10%	20%	30%	55%	75%
		Rate of increase in subsidies received	N/A	10%	20%	30%	30%	30%

Appendix 2: Low Scenario of the NHDP

Financing needs for the NHDP are not covered when considering the low scenario, in which the amount of resources available for mobilization totals 1,649 billion, i.e. a shortfall of 74 billion FBU, (4% of requirements). We have noted that this low scenario contains the following components:

- Maintaining the level of GDP trends indicated by the Ministry of Finance in April 2011;
- A decline in the corresponding State budget portion allocated to health for 2012 and maintaining the new rate of 9.93% instead of 12.13%;
- A decrease in average expenses per capital based on the level achieved in 2008, for 3.39 dollars per capita in 2015. This is explained by the application and intensification of the free care policy;
- Regarding partners, in 2012, due to the withdrawal of a significant partner and the start-up of new projects that risk being delayed, a significant decline in the level of health expenses as a percentage of total expenses is anticipated. This overall level will gradually recover in the subsequent years.

Macroeconomic Award Components						
		2011	2012	2013	2014	2015
1 .	*Demographic data*					
	Total population (in thousands)	8,647	8,855	9,067	9,285	9,507
2 .	*Gross Domestic Product*					
	National GDP in current values (billions of FBU)	1,243,785	1,307,218	1,383,037	1,477,083	1,568,663
	Real growth rate (%)	4.5	5.1	5.8	6.8	6.2
3 .	*Total public expenses*					
	Total expenses of public administrations (billions of FBU)	608,107	743,363	858,912	903,041	926,980
	Ratio: Public expenses as a percentage of GDP (%)	48.9	58.9	62.2	61.1	59.1
4 .	*Public health expenses*					
	Budget of the Ministry of Public Health and Fighting AIDS (billions of FBU)	73,793	73,854	85,431	89,716	92,092
	Percentage of the budget of the Ministry of Public Health / Total	12.13	9.93	9.93	9.93	9.93
	Health expenses of other ministries (billions of FBU)	13,378	16,354	18,918	19,867	20,393
	Percentage of health expenses of other ministries as a percentage of total public expenses	2.20	2.20	2.20	2.20	2.20
	Other public funds (INSS, MFP, public/state-related companies) in billions of FBU	19,581	23,937	27,689	29,078	29,848
	Percentage of health expenses of other structures as a percentage of total public expenses	3.22	3.22	3.22	3.22	3.22
	Total public health expenses (billions of FBU)	106,752	114,145	132,038	138,861	142,333
	Ratio: State health expenses/total expenses (%)	17.6	15.4	15.4	15.4	15.4
5 .	*Private health expenses*					
	Households					
	Total expenses of households (billions of FBU)	84.27	82.09	58.93	57.10	53.50
	Total direct health expenses of households (billions of FBU)	60.4	58.4	56.3	53.7	50.3
	Direct health expenses in the public sector (80%)	48.3	46.7	45.1	42.9	40.2
	Health expenses per capita ($)	**5.39**	**4.89**	**4.39**	**3.89**	**3.39**
	Total expenses of private institutions participating in public health (Private insurance companies and private companies outside of health insurance) in billions of FBU	0.752	0.791	0.836	0.893	0.949

	Total health expenses of the private non-profit health sector	5,308	5,308	5,308	5,308	5,308
	Total private expenses for public health	54,382	52,790	51,214	49,141	46,491
6.	***Expenses of technical and financial partners (PTF)***	55%	50%	46%	43%	41%
	Total expenses of the PTF (millions $)	208,173	201,439	212,895	223,032	233,653
	PTF health expenses (millions $)	115.340	100.720	106.447	111.516	116.827
	Proportion of health expenses of PTF as a percentage of their total	55%	50%	50%	50%	50%
	Health expenses of PTF per capita ($)	**13.34**	**11.37**	**10.80**	**10.33**	**10.08**
	Annual average rate of change	**1379.0**	**1434.0**	**1505.7**	**1581.0**	**1660.0**
	Total resources in relation to public health expenses in billions of FBU	**320.2**	**311.4**	**330.7**	**339.4**	**347.9**
	Per capita expenses in $	**26.85**	**24.52**	**24.22**	**23.12**	**22.04**
	Portion of expenses assumed by households (%)	**15.1**	**15.0**	**13.6**	**12.7**	**11.6**
	Ratio: Public expenses as a percentage of GDP (%)	**25.74**	**23.82**	**23.91**	**22.98**	**22.18**

Appendix 3: Low Scenario of the NHDP

The high scenario (see table below) is based on the following parameters:

- Rate of growth of GDP adjusted upwards, in particular for 2012 and 2013;
- Health sector share of the total budget anticipated to increase to 15% in 2015;
- According to trends, and in spite of free care, the household contribution will reportedly increase to at least approximately 8 dollars in 2011 (2010 CORDAID household survey shows more than 10 dollars). It is anticipated that this amount will remain fixed through 2015, due to efforts that the MSPLS should intensify towards at-risk groups in the fight to reduce poverty;
- In regards to partners, the 2012 allocation shows the withdrawal of significant partners from the health sector, bringing the share of health expenses as a percentage of total expenses down to 50% in 2012, instead of the 55% shown in the previous year (2011). This rate is maintained in the subsequent years.

In this high hypothesis, resources total 2,052 billion FBU, i.e. a 328 billion margin over the cost of the NHDP, with the latter seeming in this case a bit ambitious in relation to the potential for the sector.

Macroeconomic Award Components						
		2011	2012	2013	2014	2015
6 .	Demographic data					
	Total population (in thousands)	8,647	8,855	9,067	9,285	9,507
7 .	Gross Domestic Product					
	National GDP in current values (billions of FBU)	1,243.785	1,318,412	1,410,701	1,508,829	1,800,040
	Real growth rate (%)	4.5	6.0	7.0	6.8	6.2
8 .	Total public expenses					
	Total expenses of public administrations (billions of FBU)	608,107	743,383	868,912	903,041	928,960
	Ratio: Public expenses as a percentage of GDP (%)	48.9	56.4	61.0	56.9	57.9
9 .	Public health expenses					
	Budget of the Ministry of Public Health and Fighting AIDS (billions of FBU)	73,793	95,561	116,732	129,089	139,044
	Percentage of the budget of the Ministry of Public Health / Total	12.13	12.85	13.57	14.29	15.00
	Health expenses of other ministries (billions of FBU)	13,378	16,354	18,918	19,867	20,393
	Percentage of health expenses of other ministries as a percentage of total public expenses	2.20	2.20	2.20	2.20	2.20
	Other public funds (INSS, MFP, public/state-related companies) in billions of FBU	19,581	23,937	27,689	29,078	29,848
	Percentage of health expenses of other structures as a percentage of total public expenses	3.22	3.22	3.22	3.22	3.22
	Total public health expenses (billions of FBU)	106,752	135,842	163,339	178,033	189,285
	Ratio: State health expenses/total expenses (%)	17.6	18.3	19.0	19.7	20.4
1 0	Private health expenses					
	Households					
	Total expenses of households (billions of FBU)	95.39	101.58	109.22	117.43	126.26
	Total direct health expenses of households (billions of FBU)	89.7	95.5	102.7	110.4	118.7
	Direct health expenses in the public sector (80%)	71.7	76.4	82.1	88.3	94.9
	Health expenses per capita ($)	8.00	8.00	8.00	8.00	8.00
	Total expenses of private institutions participating in public health (Private insurance companies and private companies outside of health insurance) in billions of FBU	0.752	0.797	0.853	0.911	0.968

	Total health expenses of the private non-profit health sector	5,308	5,308	5,308	5,308	5,308
	Total private expenses for public health	77,796	82,493	88,293	94,527	101,225
6.	***Expenses of technical and financial partners (PTF)***					
	Total expenses of the PTF (millions $)	208,173	201,439	212,895	223,032	233,653
	PTF health expenses (millions $)	115.340	100,720	106,447	111,516	116,827
	Proportion of health expenses of PTF as a percentage of their total	55%	50%	50%	50%	50%
	Health expenses of PTF per capita ($)	**13.34**	**11.37**	**11.74**	**12.01**	**12.29**
	Annual average rate of change	**1379.0**	**1434.0**	**1505.7**	**1581.0**	**1660.0**
	Total resources in relation to public health expenses in billions of FBU	**343.6**	**362.8**	**411.9**	**448.9**	**484.4**
	Per capita expenses in $	**28.82**	**28.57**	**30.17**	**30.58**	**30.69**
	Portion of expenses assumed by households (%)	**20.9**	**21.2**	**19.9**	**19.7**	**19.6**
	Ratio: Public expenses as a percentage of GDP (%)	**27.63**	**27.52**	**29.20**	**29.79**	**30.28**

Tables and graphics