SUMMARY

The principal mission of the EPI is to protect all children against avoidable diseases by vaccination. Burundi started its programme in 1980 with vaccination against diphtheria, tuberculosis, whooping-cough, measles, poliomyelitis and tetanus. Two new vaccines were introduced in 2004, namely the vaccine against viral hepatitis B and haemophilus influenzae type B. In spite of the severe effects of the war on the vaccination system, the EPI Burundi is on course to regain the performances before the crisis. However, this latter is experiencing difficulties in carrying out its mission.

The major challenges which the EPI must face are *inter alia*:

- A weak cover in VAT for all the provinces of the country (11 % in 2005);
- A high level of the rate of total abandonment at the national level (14% in 2005);
- Frequent out-of-stock conditions in vaccines at the peripheral level following poor forecasting and transport problems;
- Low rates of vaccine cover in DTC3 (lower than 80%) in 3 medical provinces out of 17 (Ngozi, Bururi and Mwaro);
- Low rates of vaccine cover against measles (lower than 80%) in 3 medical provinces out of 17 (Ngozi, Bujumbura Town hall and rural Bujumbura);
- Rates of the non polio PFA lower than 2/100,000 children less than 15 years old in 6 medical provinces;
- Frequent out-of-stock conditions in oil;
- The absence of a national policy of waste management;
- The absence of a plan of monitoring/ evaluation.

This complete multi-annual plan proposes the ways and means of facing these challenges which are structured around the following objectives:

1. To reach a vaccinal coverage greater than or equal to 80% in 0-11 month old children in all the medical provinces by 2007;
2. To maintain the vaccinal coverage at more than 90% for all vaccinations at the national level;
3. To reach a VAT coverage of 60 % at the national level and greater than or equal to 50% for all the medical provinces from 2007 to 2011;
4. To reduce the rate of total abandonment from 21% in 2004 to 10% by 2011;
5. To develop and implement the new multi-annual plan of communication for the EPI in 2007;
6. To reach a rate of detection of the PFA of 2/100,000 children less than 15 years old in all the medical provinces from 2007;
7. To reach a rate of detection of suspected cases of measles of 2/100,000 children of less than 15 years old in all the medical provinces from 2007;
8. To reach a rate of detection of suspected cases of neonatal tetanus of 1/1000 births in all the medical provinces from 2007;
9. To maintain the surveillance guard from paediatric meningitides to haemophilus influenzae type B;
10. To assure the permanent availability of vaccines and vaccination material at all levels from 2007;
11. To reach a coverage in the functional refrigeration chain of at least 98% of the CDS by the end of 2007;
12. To carry out quality control of vaccines on all levels by the end of 2008;
13. To apply an efficient vaccination waste management for the safety of injections by 2008;
14. To develop and apply a plan of monitoring/ evaluation by the end of 2007;
15. To apply modern planning methods of activities and resources in all districts by the end of 2007;
16. To make a plea for the increase in the national financing of vaccination.

This PPAC refers to the Global Immunization Vision and Strategy (GIVS) 2006-2015 and has the aim of helping those responsible to plan their vaccination programme. This document is the fruit of a multidisciplinary team made up of the focal points of the Ministry of Finances, the Ministry of Planning, the partners of the EPI like UNICEF and WHO and executives of the Ministry of Health.

This PPAC includes:

- scenarios and strategies to make it possible to assure the financial viability of the programme;
- a calendar of the principal activities throughout the whole period of the plan;
- evaluations of costs and financing;
- a plan of monitoring/ evaluation.

The implementation of this action plan requires the strong involvement of the Government and its partners both internal and external which will particularly result in the increase in their financial contributions to the EPI.

The global budget of this PPAC amounts to **thirty six million five hundred and thirteen thousand nine hundred and ninety seven American dollars** (36,513,997 $ US) distributed as follows:

- Financing assured by the Government and its traditional partners: 23,712,972 $ US
- Probable financing: 7,691,998 $ US
- Financing gap: 5,109,027 $ US

The financing strategy adopted for this PPAC considers the following favourable assumptions:

- The lightening of the debt (thus significant additional resources released for health);
- the economic growth which is at 7 % per annum on average;
- the Government's firm and strong commitment to health (resulting from the allocation of a higher percentage of public expenditure to the sector).

The success of the implementation of this plan will depend primarily on the political commitment of the partners in national and international development including the civil society. An annual operational plan with mechanisms for monitoring/ evaluation will be developed each year for the effective implementation of the plan.

I CONTEXT

I 1 Geographical situation

Burundi is a landlocked country located in Central-East Africa. Its surface area is 27,834 km^2 . It is bordered on the north by Rwanda, the south and east by Tanzania and on the west by the Democratic Republic of Congo.

I.2. Demographic situation.

In 2006, the population of Burundi is estimated at 7,607,089 inhabitants with a rate of growth of 2.9%. One of the principal characteristics of this population is that it is rural (93%) and very young (46.1% less than 15 years old).

With a population density of 273 inhabitants per km^2, Burundi is classified among the most densely populated African countries.

I.3 Social, political and economic context

Burundi is a republic with a decentralized administration down to the base. It comprises 17 provinces and 130 communes which are subdivided into 300 zones and 2,727 census districts. Each census district is run by a district chief who is himself assisted by the heads of 10 households. The EPI relies on this administrative structure to take the actions of social communication.

From the political point of view, Burundi has been in a situation of armed conflict for more than a decade, thus paralysing the operation of all sectors of national life. The socio-economic analysis of the country notes a strong deterioration in the living conditions of the population after more than a decade of war. The latter has resulted in the dislocation of the social fabric, the abandonment of the land by part of the population (become refugees and displaced), the promiscuity and the recrudescence of endemic epidemics including HIV/AIDS, malaria, tuberculosis, malnutrition and the fall in the majority of development indicators. Thus Burundi is classified 169^{th} according to the index of sustainable human development.[1]

The current socio-economic and political situation is dominated by a progressive return to normality. It is noted that armed confrontations have appreciably decreased and that negotiations with the last armed movement have just led to the conclusion of a cease fire

1.4 General context.

The female population constitutes nearly 52.2% of the population of Burundi. The agricultural production workforce is primarily made up of women. The participation of the woman in the development process is regarded as a determining element in all the strategies for the reduction of poverty and development.
With the advent of the Government resulting from the 2005 elections, the representation of women now amounts to more or less 30% in the country's institutional and decision making authorities.

[1] Global report on human development 2005 (PNUD)

1.5 Medical context

1.5.1 Organization of the health system

Burundi's health system is structured on 3 levels:

The central level which is responsible for the definition of medical policy and the development of the strategies of intervention, planning, administration and coordination in the health sector, the definition of quality standards, their monitoring and their evaluation. It is represented by the Minister's private office, the General Inspectorate of Public Health, the Directorate-General of Public Health and the Directorate-General of Resources as well as their departments and the management bodies for the various health programmes and services.

The intermediate level is composed of 17 Provincial Health Offices (BPS). The medical provinces are subdivided into Medical Sectors. The Provincial Health Offices are in charge of the coordination of medical activities at the provincial level and support for the health centres as well as the continuous training of the health personnel under their jurisdiction.

The peripheral level is composed of the whole of all the health centres and hospitals of sectors distributed on the national territory. The administrative function is assured by the managers of health centres who have the responsibility for planning, organizing and managing all the activities of these structures. The Government is promoting the policy of community participation in the management of the health centres of, but it still lacks a legal framework relating to it.

The care system is made up of the health centres, the hospitals of the sector and the province, and regional and national hospitals.

The same pyramidal configuration is found in the organization of the care network which comprises 4 stages:
- the basic level is constituted by the health centres, the gateway to the formal national care system;
- hospitals of first reference (hospital of the Medical Sector);
- hospitals of second reference (provincial hospitals);
- hospitals of national reference.

The analysis of the medical map of Burundi shows that, at the end of 2005, the country had 570 operational health centres of which 63% were in the public sector. The country has 46 hospitals of which 42 are operational. Among the latter, 33 are first reference, 5 are second reference and 4 are national reference. Physical accessibility in absolute term is satisfactory due to the fact that 80% of the population is geographically located at a distance less than 5 km from a health centre.
However the situational analysis of the care infrastructures reveals significant disparities in their distribution according to the location (rural and urban). It should be noted that some of these structures were damaged and/or plundered during the war.

Generally, the technical aspect of the care structures is inadequate. The buildings housing the various medical structures are, in the great majority, in a dilapidated and decayed state.

1.5.2 Medical profile

At the beginning of June 2004, the National Forum on the States General of health organized by the Government permitted the development of a national health policy 2005-2015. The analysis of the situation revealed that the following problems deserve special attention on behalf of the health actors:

- A state of health characterized by strong morbidity/ mortality in the population in general, and in women and children less than 5 years old in particular. The principal causes of mortality for those less than 5 years old in 2003 according to data from EPISTAT are, in order of decreasing importance: Malaria (48%), Malnutrition (15%), acute respiratory insufficiency (10%), Anaemia (8%), diarrhoeal diseases (5%). Intestinal parasitosis constitutes the 4th cause of consultation in medical establishments and a major cause of anaemia and malnutrition in children less than 5 years old.
- A very high maternal mortality rate estimated at 855 per 100,000 live births explained by a low rate of childbirth assisted by qualified personnel, haemorrhages, infections of the post partum, malaria, etc.
- A high neonatal mortality rate in medical establishments varying between 11 and 57 per 1000 live births, with an average rate of 32 per 1000
- Poor access to and use of the health services due to several factors;
- The poor performance of the national health system.

The principal major risk factors to which the population is exposed are:

- Factors relating to behaviour and lifestyle;
- Factors relating to the environment including the lack of drinking water, bad cleansing, air pollution;
- Promiscuity and the unhealthy habitat;
- Poverty and its causes of various origins.

In addition to the factors reported above, the poor performance of the national health system is also due to:

- An insufficiency of human resources in quantity and quality;
- The lack of motivation of personnel due to the fact that wages are very low varying between 10 and 70 American dollars depending on the various categories;
- An insufficiency of material and financial resources;
- A still weak awareness of the link between bad health and poverty;
- A low level of partnership and coordination for the mobilization and use of resources;
- A series of difficulties in the implementation of the reforms in spite of the political will;
- A low level of schooling and problems of food safety which weigh negatively on the health sector.

In addition, the distribution circuit for medicines and consumables to the health structures has experienced enormous problems. Indeed, the Provincial Health Offices come up against significant logistical and management problems such as out-of-stock conditions as a result of the inadequacy of the means of transport, the absence of pharmaceutical depots and poor managerial capabilities.

1.5.3. Financing the health sector.

The sources of financing for the health sector are the State, the development partners and the community. For lack of national health accounts, it is difficult to know the contribution of each one in the financing of the health sector.

The socio-economic and political reforms undertaken by the Government since 1986 have involved a reduction in public expenditure especially in the social sectors including health. Moreover, it has been observed that since 1993, the external assistance allocated to the health sector has decreased strongly and has changed its nature passing from development aid to emergency humanitarian aid.

Table 1: Evolution of the ordinary budget of the Ministry of Public Health in USD thousands

2002			**2003**			**2004**			**2005**			**2006**		
Health budget	Budget Nat.	% Health	Health budget	Budget Nat.	% Health	Health budget	Budget Nat.	% Health	Health budget	Budget Nat.	% Health	Health budget	Budget Nat.	% Health
4343	172158	2.57	4001	184172	2.17	4 822	244 925	1.9	5 055	326 195	1.5	16986	414751	4.1

Source: Public finance laws 2002-2006

The share of the State's annual budget allocated to the Ministry of Health has increased in nominal terms while in real terms this budget has appreciably decreased. This budget is devoted primarily to the remuneration of health personnel and at a minimum to the operation of services. Thus, the health programmes are mainly financed by the development partners.

The system of financing health care is not effective and that is revealed by the following problems:

At the State level, the problems noted include poor allocation of resources for the investment and operation of the health services (6% of the national budget in 2005 against the standard of 15%).

At the level of the public health care structures:

- The insufficiency of qualified and motivated personnel (very low wages);
- The insufficiency of drugs compared to needs, where out-of-stock conditions are frequent;
- The unsatisfactory quality of health care;
- Costs of health care are very low compared to the real costs of production of health care in a context of insufficient subsidy;
- The weakness of the system for covering costs;
- Lack of means of supply.

At the population level:

- Difficulties of access to health care related to the high costs of the care compared to the low purchasing power of the majority of the population;
- Inefficiency of the map of medical assistance (CAM) put in place by the State;
- Problem of taking care of the poor (clientelism and payment of invoices);
- Dissatisfaction of recipients with the quality of services: lack of medicines, bad reception, long waiting times.

NB: Since May 2006, the Government has subsidized to 100% the care lavished on children less than 5 years old and on women who are confined in approved public medical establishments, including the childbirth by caesarean

1.6. Principal development indicators

Population in 2006	7,607,089
GDP	83 USD en 2004. against 214 USD in 1990
Women of childbearing age	22.3%
Pregnant women	4.8%
Children from 0 to 11 months	3.94%
Children of less than 5 years	14.38%
Children of less than 15 years	46.1%
Fecundity index	46°/∞
Infant mortality rate	176/1000 (MICS 2005)
Maternal mortality rate	855 / 1000 live births
Chronic rate of malnutrition (MICS 2005)	52.5%
Rate of total acute malnutrition (MICS 2005)	7.4%
Rate of total low birth rates	39.2%
Vitamin A deficiency	28% in children from 6 to 59 months
Anaemia among pregnant women	56%
Life expectancy at birth	43.6 years
Life expectancy in good health	37.9 years
Annual growth rate of population	2.9%
Total rate of schooling	79%
Gross rate of schooling of boys	86%
Gross rate of schooling of girls	69%
Rate of adults literacy	58.9% in 2003
Geographical access to health services	80%
Population below the poverty line	90%
Access to drinking water	64.3%. urban: 79.7%. Rural : 63.4%
Rate of latrinisation	89% in rural places of which 22% meet the standards
Rate of latrinisation	72% in urban places of which 100% meet the standards
Total expenditure allocated to health	3.7% in 2004

II ANALYSIS OF THE INTERNAL ENVIRONMENT OF THE EPI

The principal EPI operations are divided into two categories: the 5 operations (provision of services, logistics, supply of quality vaccines, communications and pleas, monitoring of diseases) and 3 support components (management of the programme, financing and reinforcement of capabilities).

II.1. EPI operations

II.1.1. Provision of services

The Expanded Program on Immunization (EPI) began in April 1980, with the support of WHO, UNICEF and the USAID. It initially began in the pilot medical sector of Muramvya. It then gradually extended to all the health sectors to cover the whole country in May 1985.
The vaccination of women of childbearing age was added in 1986 to contribute to the elimination of neonatal tetanus. Moreover, the supplementation in vitamin A has been introduced into routine vaccination since February 2003, and vaccination against viral hepatitis B and the haemophilus influenzae of type B since February 2004.

The goal of the EPI in Burundi is to contribute to the reduction of morbidity and mortality due to avoidable diseases by vaccination. These latter are: tuberculosis, diphtheria, poliomyelitis, tetanus, whooping-cough, measles, hepatitis B and paediatric meningitides with haemophilus influenzae of type B. The vaccinal calendar in force in Burundi is included in the table which follows.

Table no. 2: Vaccinal calendar in force with the EPI and the antigens used

Antigens	**Period of vaccination**
BCG	At birth
VPO	Birth; 6; 10; 14 weeks
DTC – HepB-Hib	6; 10; 14 weeks
VAR	9 months
Vit A	9 months, then every six months up to 5 years
VAT	VAT1 at 1st contact, VAT2 after 1 month, VAT3 after 6 months, VAT4 after year, VAT5 after 1 to 3 years.
VAT non pregnant women	VAT1 at 1st contact, VAT2 after 1 month, VAT3 after 6 months, VAT4 after 1 year, VAT5 after 1 to 3 years.

Between 1985 and 1993, the evolution of the vaccinal coverage was satisfactory and constantly higher than 80%. Unfortunately, in 1994, the EPI suffered negative fallout from the war which started in October 1993, namely movements of personnel and the destruction and plundering of medical infrastructures and equipment. An insufficiency of material and financial resources has sometimes been the handicap to the organization of vaccination

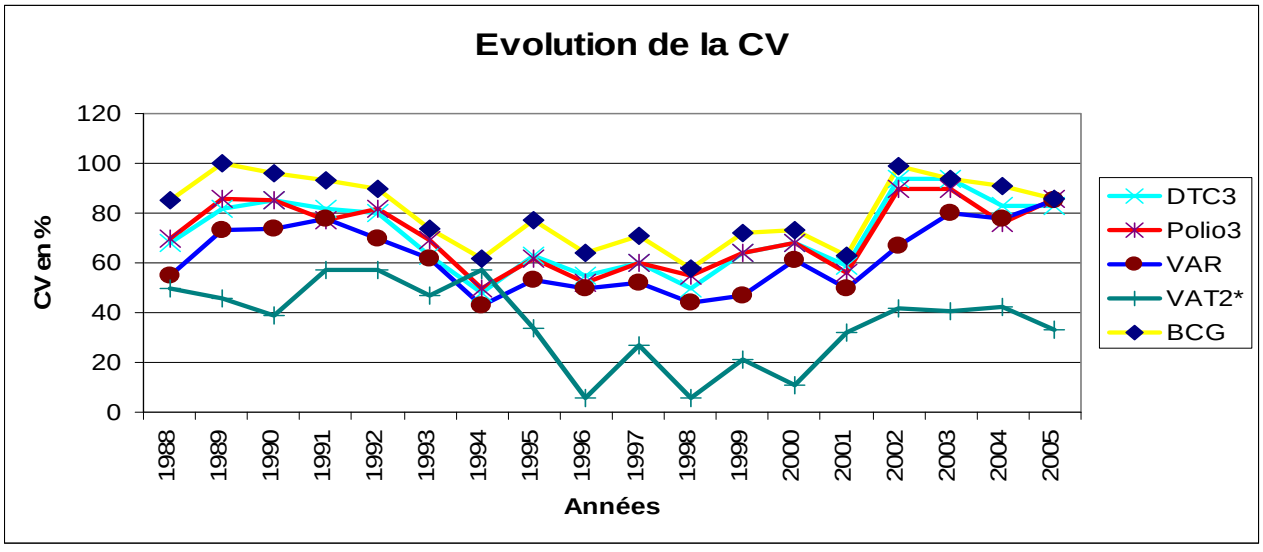
activities in an advanced strategy. The consequence was the fall of the vaccinal coverage for all the antigens as graph no. 1 shows.

Since 2002, we observe a progressive improvement in the vaccinal coverage for all antigens following:

- the progressive improvement of safety in the majority of provinces: 90% of medical establishments in the country assure routine vaccination services;
- the rehabilitation of medical infrastructures, materiel and the refrigeration chain;
- the improvement in social mobilization,
- the training of vaccination providers at all levels,
- the integration of EPI activities with other health programmes on the operational level since the launching of the programme is an asset which has permitted a rapid rise in the performance of the vaccination services.
- the implementation of the strategy "To Reach Every District" (ACD): within this framework, vaccination activities in advanced strategy are regularly organized in the zones with difficult access, or isolated by the wars. The Ministry of Public Health in collaboration with its partners, has organised each year since 2003, a week dedicated to the health of the mother and child. The latter integrates catching up vaccination activities for all the antigens, the distribution of mosquito nets to children vaccinated against measles, the supplementation of children from 6 to 59 months with vitamin A, the intestinal deparasiting of children from 2 to 14 years and the supplementation of pregnant women with iron-folate. This activity makes it possible to raise the vaccinal coverage from 6 to 10 %.

However, constraints in the provision of services persist: it in particular concerns the shortage of staff in quantity and quality, the relaxation of supervision at all levels, an insufficiency of means of transport, frequent oil shortages for refrigerators and the absence of a reliable system of monitoring unfavourable post immunization effects and the high abandonment rate (higher than 10 %). The uncontrolled movements of the refugee population now repatriated entail a lack of control of the target population. The VAT2+ coverage rate has been lower than 50% for more than 10 years

Graphic 1: Evolution of vaccinal coverage between 1988 and 2005



Source: annual report of the EPI 2005

II.1.2. The logistics of the EPI

II.1.2.1. Vaccines and vaccination material.

The supply of traditional vaccines and vaccination material is assured by UNICEF. New vaccines and vaccination material relating to them are financed by GAVI. One sometimes observes out-of-stock conditions in vaccines at the peripheral level following the inadequacy of the means of transport and the managerial capabilities of the persons in charge.

II.1.2.2. The refrigeration chain.

The refrigeration chain operates on three levels: the central level, the intermediate level and the peripheral level.

At the central level, the EPI has three positive cold rooms and 11 freezers which take the place of the negative cold room. These apparatuses benefit from regular routine maintenance. It should be noted that the conservation capacity of vaccines at the central level is sufficient. However, the warehouse for vaccination material is not sufficient so that one is sometimes obliged to rent depots. It is necessary to provide for the construction of an additional warehouse to avoid these rentals.

At the intermediate level, the refrigeration chain includes refrigerators, freezers and ice boxes. Following the introduction of new vaccines, refrigerators of large capacity have been allocated to Provincial Health Offices and the health sectors. In spite of that, the storage capacity at the level of Provincial Health Offices and BSS remains insufficient. It is necessary that each sector has its own refrigerator and freezer. The major problem with the maintenance of the refrigeration chain and the conservation of vaccines is the inopportune breakdown in electrical current throughout the country. To mitigate this problem, it is more than urgent to equip each Provincial Health Office and BSS with an emergency power generating unit.

At the peripheral level, approximately 570 health centres carry out vaccinations throughout the country and are equipped with oil powered refrigerators. Efforts have been made on this level because approximately 350 new refrigerators have been installed since 2002. The major problem noted is that the health centres sometimes experience out-of-stock conditions for oil as a result of the low imports of the product into the country. This severely handicaps the refrigeration chain and the vaccination services.

II.1.2.3. Vehicles for supervision and supply.

The central level lacks trucks for supplying the provinces with vaccines and vaccination materials and the means of transport for the maintenance of the refrigeration chain of the peripheral level, the monitoring/ evaluation and the integrated supervision of diseases avoidable by vaccination.

The 39 health sectors experience difficulties in carrying out the supplying, supervision, monitoring/ evaluation and the maintenance of the refrigeration chain as a result of the insufficiency of the means of transport (see tables 13, 14 and 15).

II.1.2.4. Safety of injections

Burundi adopted the policy of safety of injections in 1999 by the introduction of the use of syringes self-blocking (SAB) and safety boxes. Thus, according to the study made on the safety of injections in 2004, 83% of the health centres use syringes self-blocking in the preventive services against 23% of the hospitals. The waste elimination is done by incineration and burial but unfortunately the incinerators available in the country are not efficient enough.

II.1.3. The supply of quality vaccines

The central level uses the supply services of UNICEF for traditional vaccines as well as for new vaccines. All the arrangements are made so that the vaccine arrives at the EPI level in good condition. In case of doubt, quality controls are organized abroad with the assistance of the partners. The conditions of storage of the EPI are met to maintain the quality of the vaccines.

The distribution of vaccines in the medical provinces is assured either by the EPI, or by the Provincial Health Offices by road. When the Provincial Health Offices have not been able to convey the vaccines to the CDS, these latter have fetched by bicycle.

There remains a problem of the management of vaccines at the provincial level because the distribution does not take account of the target population, with the result that one observes an out-of-stock condition in such and such other health centre at the time when there is excess stock in others. The lack of the means of transport in Provincial Health Offices is also at the origin of these stock shortages.

II.1.4. Communication and plea

The social mobilization and the plea currently constitute one of the cornerstones of the success of the activities of the national vaccination programme. The EPI, in collaboration with the National Service for the Promotion of Health regularly carries out activities of social mobilization in favour of vaccination.

The involvement of the administration at all the levels constitutes an asset and allows a great mobilization of the population in favour of vaccination. However, this component suffers from the poor allocation of resources and the monitoring/ evaluation.

II.2. Support components: Management, Reinforcement of capabilities and Financing

II.2.1. Management of the Programme

The Expanded Programme on Immunization falls within the Management of Health Services and Programmes, itself dependent on the Directorate-General of Public Health which depends in its turn on the private office on the Minister of Public Health. This organisation chart causes enormous problems. Indeed, the chain of decision making is too long, coupled with administrative slowness, for a Programme which, at times, has to make urgent decisions. It is therefore necessary to grant the EPI autonomous administrative management.

The EPI, in its organisation chart, functions under the coordination of its Director assisted by a deputy. The services of the EPI are currently the following:

- Management;
- Logistics;
- Training and supervision;
- Communications and Social Mobilization;
- Monitoring the diseases targeted by the EPI.

The activities of the EPI are integrated at all levels. Formative supervision is one of the key activities of the Provincial Health Offices and each health centre is supervised at least once a month. The central level organizes quarterly monitoring and evaluation activities. However, these activities are not regularly undertaken as planned as the result of various constraints, in particular the insufficiency of resources.

II.2. 2. Reinforcement of capabilities

II.2.2.1. Strengthening of institutions

II.2.2.1.1. Infrastructures

The building is dilapidated and tiny. In spite of the need for fleshing out the executive team of the EPI, the current situation of the offices does not allow it because of their smallness. Moreover, the warehouses for storing the injection equipment are insufficient. The EPI is obliged to rent buildings elsewhere for the conservation of this material. This is why it is necessary to consider an extension and a rehabilitation of the offices of the EPI and the warehouses for storing the injection equipment.

II.2.2.1.2. Equipment

The dilapidated state of the EPI's furniture and the office equipment does not make it possible to work under good conditions and to meet the requirements of the rapid production of quality documents. Indeed the EPI's computer equipment is obsolete and insufficient. In order to improve work, new equipment and an efficient system of network connection to the Internet is necessary.

II.2.2.1.3. Training

The initial training in vaccination is given in all the country's paramedical schools and the Faculty of Medicine. However, the programme remains summary and insufficient and there is a real need for training and equipment with modern teaching material.

At the level of continuous training a national course on the management of EPI was held in 2003, after having adapted the MLM course to the national context. A course on social mobilization was carried out in all the medical provinces. The country has a pool of 10 trainers trained at EPI's management courses. However, insufficiencies remain:

At the central level a certain number of new executives need to take the course on the management of the EPI.
At the intermediate level there is a demand for reinforcement of the capabilities of the personnel with regard to:

- Logistics, in particular inventory control, waste management, the refrigeration chain;
- The plea and communications;
- Supervision and evaluation.

At the peripheral level the programme's innovations and the instability of the personnel explain the intermittent requirements in training/ reassigning on the supply of vaccines, the logistics of the EPI and social communications.

II.2.2.1.4 Personnel

The central level employs 22 people including 2 doctors, 3 mid range executives, 4 technicians and 13 support agents. These personnel are insufficient if the programme's volume of work is considered (see Table no.16).

At the intermediate and peripheral level, even if the activities of the EPI are integrated, the personnel remain insufficient and overloaded.

II.2.3. Financing of the EPI

At soon as it was launched in 1980, the Expanded Programme on Immunization achieved a level of vaccinal coverage among the most efficient in Africa until the beginning of the 1993 crisis. This performance was the result of the efforts of the Government and its partners (UNICEF, WHO, ECHO, Rotary Club International etc.) in the mobilization of the resources necessary for the achievement of the programme's activities. The vaccination services were and remain free of charge according to the medical policy in force.

Table 3: Evolution of the EPI budget by source of financing (in USD thousands)

Source	2002	2003	2004	2005	2006
Total budget countries	172,157,684	184,172	244,925	326,195	414,751
Budget MSP	4,342,708	4,001	4,822	5,055	16,986
Budget EPI/ Government	20,139	27,200	31,947	33,261	2,408,961
Budget EPI/ donors	2,509,192	3,162,629	6,089,924	5,378,737	5,510,514
Total budget EPI	2,529,331	3,189,829	6,121,872	5,411,999	7,919,475
% external support for EPI	96.3%	99%	99.5%	99.4%	69.6%
Government contribution to EPI (%)	3.7%	1%	0.5%	0.6%	31.4%
Proportion budget EPI (Government) compared to budget MSP	0.46%	0.7%	0.7%	0.7%	14.2%
Proportion budget EPI (Government) compared to total national budget	0.011%	0.015%	0.013%	0.010%	0.581%

Source: Ministry of Finances and Ministry of planning

The Government's share in the financing of the EPI (overheads and vaccine independence) remains low and accounted for 3.7% in 2002 and 0.6% in 2005. Thanks to the reduction of the debt resulting from the PPTE initiative, the Government's contribution to the financing of the EPI has appreciably increased going from 0.6% in 2005 to 31.4% in 2006.
The support of the external partners who accounted for 96.3% in 2002 and 99.4% in 2005 is a mark of Burundi's significant dependence with respect to external aid.

The external funds basically finance the purchase of vaccines, the refrigeration chain, staff training and the organization of vaccination campaigns against poliomyelitis, measles and maternal and neonatal tetanus as well as the monitoring of the diseases avoidable by vaccination. This situation of dependence on the outside compromises the autonomy and perenniality of the programme in the short and medium term.
The precariousness of the financial resources as well as their use constitute major challenges to the realisation of the programme and deserve detailed attention to achieve the goals pursued by this latter.

Table 4: Synthesis of the operations/ components of the vaccination system between 2001 and 2005.

Component of the vaccination system	**Indicators**	**National situation**				
		2001	**2002**	**2003**	**2004**	**2005**
Routine coverage	Coverage by DTC3	64.0%	95.0%	94.0%	83.0%	93.60%
	% of provinces with a cover > 80%	12%	94%	88%	70.60%	84.3%%
	National rate of specific abandonment DTC1-DTC3	8%	14%	2%	12%	10%
	Rate of total abandonment (BCG-anti-measles)	22.4%	41.3%	13%	21.30%	13.6%
	Percentage of provinces with a rate of abandonment DTC1-DTC3 > 10	52.9%	76.3%	17.60%	52.90%	41.2%
New vaccines introduced in 2004	Pentavalent vaccinal coverage				83%	93.60%
Routine supervision	% of the reports of supervision of sectors received at the national level compared to the discounted number	98.30%	99.20%	99.50%	94.60%	96.40%
Refrigeration chain / logistics	% of health centres sufficiently equipped in material for refrigeration chain in operational state	ND	ND	76.3%	68.9%	67.4%
	Number of out-of-stock oil breakdowns at national level	0	0	2 of 1 month	1 of 1 month	1 of 2 months
Vaccination safety	% of provinces equipped with a sufficient number of syringes self-blocking for routine vaccination	100%	100%	100%	100%	100%
	% of the CDS using syringes self-blocking	ND	ND	ND	83 %	ND

Source: EPISTAT reports, EPI annual reports

Component of the vaccination system	Indicators	National situation				
		2001	2002	2003	2004	2005
Supply of vaccines	Number of out-of-stock conditions in vaccines at the national level				2 of 2 months of BCG. VPO	0
	No. of health sectors having experienced out-of-stock condition in vaccines	Yes. but ND	Yes. but ND	Yes. but ND	18 in BCG. 31 in VPO. 31 in VAR	Yes. but ND
Communications	EPI communication plan developed for a 3 year period 2003-2006			Yes		
Management of vaccines	Rate of loss	ND	ND	ND	ND	ND
Financial viability	% of routine vaccinations that was financed by public funds (including loans and other than the external public financings)		3.70%	1%	0.50%	0.60%
Link with other medical interventions	Week health mother-child			Yes	Yes	Yes
	EPI–Nutrition through the administration of VitA			Yes	Yes	Yes
	EPI-Palu through the distribution of impregnated mosquito nets to children vaccinated against measles			Yes	Yes	Yes
Availability of human resources	Number of nurses looking after 10,000 inhabitants		3	3	3	4
Management planning	Existence of an annual action plan	Yes	Yes	Yes	Yes	Yes
	Existence of a plan of formative supervision	Yes	Yes	Yes	Yes	Yes
	Existence of a plan of monitoring/ evaluation	No	No	No	No	No
	Existence of a system of collection of indicators at all levels	Yes	Yes	Yes	Yes	Yes
National authority for the regulation of the quality of medicines and vaccines	Existence of a manager having among his functions the quality control of vaccines	No	Yes	Yes	Yes	Yes
	Existence of quality control procedures of vaccines at all the levels	No	No	No	No	No
CCIA	Number of meetings during the past year		4	4	4	3
Waste management	Existence of a national waste management plan	No	No	No	No	No
	Existence of waste disposal activities in care structures (including vaccination waste)	Yes	Yes	Yes	Yes	Yes
Efficiency of the programme	Existence of vaccine management software					Yes
	System of control of losses of vaccines	No	No	No	No	No
	Number of external evaluations	2	2	2	3	2
	Rate of use of the funds mobilised				100%	100%

II 3. Supervision and accelerated control of diseases

Eradication of poliomyelitis

Burundi has subscribed to the world initiative for the eradication of poliomyelitis. National days of mass vaccination (JNV) against poliomyelitis were organized from 1997 to 2002; the vaccinal coverage reached varying between 83 and 99%. In 2002, local vaccination days against poliomyelitis were organized in the frontier provinces with the RDC whose monitoring system was not satisfactory and 2 provinces which had not reached the vaccinal coverage of 80% in the preceding JNV. These activities were followed by the installation of an EPI monitoring system to detect any cases of wild poliovirus which could emerge. This system was initiated in 1999. In 2001, Burundi passed to the virological system of grading of cases of EPI. Monitoring committees of the activities of certification were set up (CNC, CNEP, GSC). The performances for the supervision of the EPI are relatively satisfactory because the rate of non polio EPI is higher than 1 case for 100,000 children of less than 15 years of age. Since the installation of a supervision system permitting the confirmation of cases by laboratory tests, no confirmed case of poliomyelitis has been declared in Burundi. National documentation for the certification of a Burundi free of poliomyelitis has been just accepted by the regional commission of certification for the African area. However, the country is not safe from a possible importation of wild poliovirus because there are still reservoirs of poliovirus in Africa. For this reason the rate of non polio EPI should be raised to 2 cases for 100,000 children of less than 15 years of age; which is far from being met.

The control of measles

Since 2002, Burundi has made efforts to control measles. Two vaccination campaigns against this disease were already organized in 2002 and 2006 with respective vaccinal coverage of 90% and 114%. In the course of these campaigns other health interventions have been combined with them, such as the deparasiting of children in Albendazole and the administration of vitamin A.

Cases of measles have appreciably decreased. Indeed, from 30,790 suspected cases notified in 2001, one has gone to 94 suspected cases in 2005. No case was confirmed by the laboratory in 2005 and no death due to measles has been reported for 5 years. However, we can observe a recrudescence of cases in a sporadic fashion with a light concentration in the Gasorwe Congolese refugee camp in Muyinga Province.

The elimination of maternal and neonatal tetanus

Burundi is one of the 54 countries which has not yet eliminated TMN. Sporadic cases of neonatal tetanus are notified in nearly all of the provinces. VAT2+ vaccine coverage among pregnant women is very low (less than 50%). It is even lower among women of childbearing age (less than 10%). An action plan for the elimination of maternal and neonatal tetanus over the period 2006 to 2010 has been developed. A vaccination campaign of women of childbearing age is planned for the beginning of 2007 in 7 high-risk provinces: rural Bujumbura, Bururi, Rutana, Ruyigi, Gitega, Muramvya and Kirundo.

The action plan provides for the introduction of anti-tetanus vaccination of girls in the schools, the improvement of the childbirth conditions by qualified personnel and under the best conditions of safety and hygiene.

Table 5: Analysis of situation by initiative in the accelerated fight against disease

Component	Indicators	National situation					
		2001		2002		2003	2004	2005
Poliomyelitis	Routine vaccinal coverage VPO3	61%		89%		89.5%	76%	87.7%
	Vaccinal campaign	JNV		JLV				
	Number of turns	T1	T2	T1	T2			
	Vaccinal coverage	92%	92%	99%	83%			
	Rate of non polio PFA for 100,000 children less than 15 years old			2.83		2.84	2.52	1.12
Measles	Routine anti-measles vaccinal coverage	54%		67%		8%	78%	89%
	National vaccination campaign against measles for older children from 9 to 14 Associated with	90%						
	Monitoring campaign organized at the national level for children from 9 to 59 months in 2006							114%
	Number of flare-ups notified	1		1		0	0	0
	Number of suspected cases of measles notified	1673		1016		326	54	94
	Number of suspected cases of measles confirmed by the laboratory					3	0	0
Maternal and neonatal tetanus	Routine vaccinal coverage among pregnant women	32%		42%		40%	42%	33%
	Number of notified cases	25		45		40	21	11
	Vaccination campaign against maternal and neonatal tetanus	0		0		0	0	0
	Number of provinces notifying more than one case/1000 live births	0		0		0	0	0
	Strategic plan for elimination of maternal and neonatal tetanus 2006-2010							yes

Table 6: Strengths, weaknesses, opportunities and threats of the EPI

Strengths	Weaknesses	Opportunities	Threats
Integration of the EPI with other medical interventions	Inadequacy of personnel in quality and quantity.	Progressive return of peace	Strong dependence of the program on external financing
The supervision of the target diseases of EPI (PFA, Measles, TNN) is integrated into the SIMR	Effective absence of monitoring-evaluation mechanism	Strong political commitment. Vaccination is one of the priorities of the government and the Ministry of Health	Strong morbidity and mortality
Documentation for the certification of Burundi free of polio was accepted by the CRCA in October 2006	Insufficiency of resources	Burundi benefits from the advantages of the PPTE initiative	
Vaccinal coverage is high	Frequent breakdown of oil and stocks at the peripheral level	Commitment of the traditional partners of the EPI to support the programme	
There is a significant network of health centres (80% of the population live 5 km from the CDS	Poor quality of data	Promise from GAVI to support the reinforcement of health systems	
Existence of a road network developed between the various levels of the system	Insufficiency of social mobilization		
Existence of a transverse service of IEC	Inadequacy of the storage capacity of the refrigeration chain at the level of the health sectors		
	Problem of electricity and oil supply		

III ESTABLISHMENT OF PRIORITIES

Table 7: National priorities, objectives and stages of the EPI, regional and world goals in order of priority

Description of the problems and national priorities	Objective of the EPI	Stages of the EPI	World and regional goals (by 2010)	Order of priorities
Coverage rate DTC3 lower than 80% in 3 provinces out of 17 (Ngozi, Bururi and Mwaro)	To reach a coverage rate DTC3 equal to or higher than 80% in all the medical provinces from 2007 to 2011.	2007 :100% of the provinces	At the latest in 2010 all countries have a coverage of routine vaccination of 90% at the national level and at least 80% in all the provinces	1
Coverage rate against measles lower than 80% in 3 provinces out of 17 (Ngozi, Bujumbura Town hall and rural Bujumbura	To reach a vaccinal coverage rate against measles equal to or higher than 80 % in all the provinces from 2007 to 2011	2007 :100% des provinces	At the latest in 2010 all countries have a coverage of routine vaccination of 90% at the national level and at least 80% in all the provinces	1
Rate of total abandonment equal to 21.3% at the national level in 2004	To bring back the rate of total abandonment to 10 % by the end of 2011	2007 :17% 2008 :15% 2009 :12% 2010 : 10% 2011 : 10%	At the latest in 2010 all countries have a coverage of routine vaccination of 90% at the national level and at least 80% in all the provinces	1
Coverage VAT 2+ of 33 % at the national level in 2005	To reach a cover VAT2+ of 60 % at the national level and equal to or higher than 50% for all the provinces from 2007 to 2011	2007 :40% 2008 :45% 2009 :50% 2010 : 55% 2011 : 60%	At the latest in 2010 all countries have a coverage of routine vaccination of 90% at the national level and at least 80% in all the provinces	1
Out-of-stock conditions in vaccines at the peripheral level following poor forecasting and transport problems:	To ensure the permanent availability of vaccines and material for intermediate and peripheral vaccination from 2008	2007: 90% of CDS without out-of-stock conditions From 2008: 100% of CDS without out-of-stock condition		2
	To have controlled measles by 2011.	Monitoring campaign in 2010 Routine vaccinal coverage higher than or equal to 95% from 2008		
	To have eliminated maternal and neonatal tetanus in 2011	Campaign in 7 high-risk provinces in 2007 Anti-tetanus vaccination of		

		girls in the schools from 2007		
	To have eradicated poliomyelitis in Burundi in 2011	Vaccinal coverage higher than or equal to 90% from 2007.		
Rate of non polio PFA lower than 2/100,000 children less than 15 years old in 6 health provinces	To reach a rate of PFA of 2/100,000 children less than 15 years old in all the provinces	2007 : 15 provinces 2008 : 17 provinces		4
Problem of refrigeration chain in certain provinces.	To reach 98% of CDS having an operating refrigeration chain in 2007	2007	To guarantee access to vaccines and their quality	2
Absence of a national waste management policy	To set up a national waste management policy	2007		3
Absence of a plan of monitoring-evaluation	Development of a plan of monitoring -evaluation including the indicators on : ✓ Quality of vaccines ✓ Rate of losses of vaccines ✓ Out-of-stock conditions of vaccines and vaccination materials ✓ Waste disposal	2007		3

Prioritisation criteria:

1. Objectives aimed at directly increasing vaccinal coverage
2. Objectives which contribute indirectly to the increase in vaccinal coverage
3. Objectives aimed at improving the quality of the immunization system
4. Objectives aimed at controlling disease

IV PLANNING THE STRATEGIES FOR EACH COMPONENT OF THE SYSTEM

Table 8 a: Provision of services

Objectives	Strategies	Essential activities
To reach a vaccinal coverage higher than or equal to 90% at the level national and higher than or equal to 80% in some 0-11 month old children in the all provinces by 2010	Routine vaccination	To vaccinate every working day
		To inform health personnel, mothers and child carers
		To assure social mobilization
	Recovery of abandonments	To use the schedules at the level of health centres and to establish a system of convening the abandonments by the intermediary of the district chiefs and community health agents
		To organize micro-planning workshops
	Advanced vaccination strategy	To create a data base of the district indicators
		To vaccinate in zones with weak vaccinal coverage
		To organize 2 weeks -mother child health per annum
		To organize monitoring and supervision visits of the planned activities
	Reduction in missed appointments	To check the health records of children who attend the CDS and in the event of need to vaccinate any child having missed a dose
	Integration of other health interventions with activities of catching up vaccination	To organize each year 2 tours of mother-child health weeks
		To distribute mosquito nets impregnated with insecticide to children at the time of vaccination against measles
	Contractualisation of performance	To set up a system of motivation based on performances
	Reinforcement of communications	To produce and make available communication tools in favour of vaccination at the level of the health centres and community health agents
		To involve communities in vaccination activities

To reach a coverage of VAT of 60 % at the national level and equal to or higher than 50% for all the provinces from 2007 to 2010	Routine vaccination	To organize a micro-planning workshop
		To organize vaccination and advanced strategy activities in the zones with weak vaccinal coverage
		To propose anti-tetanus vaccination to any woman of childbearing age (pregnant or not) who attends a health centre
		To create a data base of the district indicators
	To reach every district	To organize activities of monitoring and supervision of the planned activities
		To introduce anti-tetanus vaccination into girls schools
	To integrate other health interventions with activities of catching up vaccination	To organize a week dedicated to the health of the mother and child twice a year
	Reinforcement of capabilities	To develop and implement an annual training plan
	Supervision of the MAPI	To integrate the MAPI into the district data base
	Reinforcement of social mobilization	To involve communities and women's groups in favour of vaccination against tetanus. .
To have eliminated maternal and neonatal tetanus by 2011	Organization of additional vaccination activities	To organize a vaccination campaign in high-risk provinces in 2007
To have controlled measles by 2011	To introduce the 2nd dose of vaccine against measles and to reach a vaccinal coverage of at least 70% by the end of 2009	To prepare and submit a financing proposal to GAVI
		To train health personnel
		To involve local government, community health agents and religious organisations in communications activities
	Organization of additional vaccination activities	To organize a national vaccination campaign against measles and to integrate vitamin A, albendasole, mosquito net impregnated with insecticides

Table 8 b: Information and communication

Objectives	Strategies	Essential activities
To ensure that 90% of mothers and child carers are informed about vaccination and have their children vaccinated	Planning communication activities	To develop, adopt and implement a multi-annual communication plan for the EPI
	Social mobilisation	To involve women 'groups, associative movements of young people, community leaders, religious organisations, the administration at the base and the public and private media in favour of vaccination.
	Communication for the change in behaviour	To produce and distribute communication tools at the level of health centres
		To train/ reassign health personnel in interpersonal communication in order to improve reception.
		To train relay agents in interpersonal communication and to equip them with adequate communication tools
		To produce and broadcast radio messages on vaccination
		To integrate the essential messages on the improvement of vaccination in traditional songs and the theatres
	Plea	To make a plea for the mobilization of resources s
		To continue the plea to maintain political commitment at the highest level

Table 8 c Integrated supervision of diseases avoidable by vaccination

Objectives	Strategies	Essential activities
To reach a rate of detection of PFA of 2/100,000 children less than 15 years old in all the provinces by 2007	Active supervision in high-risk districts	To train the focal points on the supervision of PFA and the active research of cases
		To actively seek cases by focal points
		To hold periodic meetings of the focal points
		To carry out periodic reviews of care registers
		To mobilize financial resources
		To prepare the response to any case of imported PFA
To reach a rate of detection of suspected cases of measles of 2/100,000 children less than 15 years old in all the provinces by the end of 2007	Routine supervision based on the community	To notify cases by community
		To investigate, take and transport samples by health personnel
	Reinforcement of the National laboratory	To buy and make reagents available
		To train laboratory staff
		To assure the external quality control of the laboratory
To reach a rate of detection of suspected cases of neonatal tetanus 1/1000 births by the end of 2007	Routine supervision at the level of health structures	To regularly notify cases by the health structures and especially the hospitals
		To supervise the hospitals regularly
To maintain the sentinel supervision of Hib	Study of the charge of Hib	To assure a periodic quality control
		To assure the operation of the Hib sentinel site
To reach a rate of completeness of 100% and promptness 80% of data by 2011.	Improvement of data management and the communication system	To protect the districts data base by antivirus
		To create a districts data base
		To assure an Internet and Intranet subscription for updating the antivirus and electronic data transfer
		To train data managers
		To carry out formative supervision of data managers

Table 8 d: Supply of vaccines, quality and logistics

Objectives	Strategies	Essential activities
To ensure that no out-of-stock condition in vaccines or vaccination materials occurs at the central, intermediate and peripheral level by 2011	Improvement in the conservation conditions of vaccines and storage of material at the central level	To extend the EPI depots
	Mobilization of the necessary resources s	To make a plea to the Government and partners for an increase in the resources necessary for the purchase of vaccines and vaccination material
	Control the demand in relation to the supply of the districts	To control districts stocks in a data base
	Correct application of the methods to estimate requirements s	To install computerized tools for inventory control at the intermediate level
		To train personnel in inventory control
		To check inventory control in each district t
	Improvement of the transport of vaccines and materials	To equip medical districts with supply vehicles
	Improvement in the conservation conditions of vaccines and storage of material at the intermediate level	To build depots in medical districts
	Reinforcement of capacities in inventory control	To install computerized tools for inventory control at all levels
		To train personnel in inventory control
To reach 98% of CDS having an operating refrigeration chain by the end of 2007	Improvement in the conservation conditions of vaccines at the peripheral level Correct operation of the refrigeration chain	To carry out an inventory of the equipment of the refrigeration chain
		To work out a logistics plan for rehabilitation including the refrigeration chain
		To buy and make available refrigeration material to replace the equipment 10 years old or more each year
		To regularly supply the districts and the CDS with oil products
		To train the managers of the refrigeration chain
		To regularly assure the maintenance and the repair of the refrigeration chain
To carry out quality control of vaccines at all levels by the end of 2008	Set up procedures for the quality control of vaccines at all levels	To prepare the handbook of procedures
		To mobilize resources for the installation of the inspection arrangements for quality control of vaccines (human resources; equipment, material and supplies; operation)
To apply an efficient vaccination waste management by 2008	System of waste management and network of incinerators	To buy incinerators for 50% of districts at the latest in 2008
		To establish a system of waste collection and management

Table 8 e: Management of the Programme

Objectives	Strategies	Essential activities
To assure better operating conditions and monitoring-evaluation of the EPI	Improvement in the working conditions of the EPI personnel	To rehabilitate and equip the offices of the EPI
		To equip the programme with vehicles for executives and monitoring/ evaluation of the districts
		To put the data-processing park of the EPI in a network
	Improvement of communications	To put the central level and the districts in an Internet network
	Motivation of personnel	To establish contractualisation on the basis of total performance of the EPI services
To apply a plan of monitoring-evaluation by the end of 2007	Installation and application of a monitoring-evaluation plan	To develop a computerized plan of quarterly monitoring /evaluation including the indicators on:: – The quality of vaccines – The rate of loss of vaccines – The out-of-stock conditions of vaccines and vaccination materials – Waste disposal
		To organize a mid term evaluation in 2009 and a final evaluation in 2011
	Formative supervision of the EPI activities at the peripheral level	To update the supervision tools
		To train the districts executive teams
		To equip the districts with supervision vehicles
To apply modern methods of planning of activities and resources in all districts by the end of 2007	Reinforcement of planning capacities	To train personnel in the planning and management of EPI activities at all levels
		To install planning and management tools at all levels
Increase in the national financing of vaccination according to the Financial Viability Plan	Integration of planning in the national budgeting procedures	To develop liaison procedures to facilitate the transfer of information on the establishment of costs to the decision making authorities for the national budget
		To reinforce the capacities for planning and financial management
	Implemented of the PVF for the EPI	To make a plea to the Government and partners so that they fulfil their commitments.

V. IMPLEMENTATION

Table 9: Calendar of activities

Table 9 a: Provision of services

Objectives	Strategies	Essential activities	2007	2008	2009	2010	2011
To reach a vaccine cover higher or equal to 90% at the national level and higher or equal to 80% in some 0-11 month old children in all provinces by 2010	Routine vaccination	To vaccinate every working day					
		To inform health personnel, mothers and child carers					
		To assure social mobilization					
	Recovery of abandonments	To use the schedules at the level of health centres and to establish a system of convening the abandonments by the intermediary of the district chiefs and community health agents					
		To organize micro-planning workshops	X	X	X	X	X
	To reach every district	To create a data base of the district indicators	X				
		To vaccinate in zones with weak vaccinal coverage					
		To organize 2 weeks -mother child health per annum	X X	X X	X X	X X	X X
		To organize monitoring and supervision visits of the planned activities					
	Reduction in missed appointments	To check the health records of children who attend the CDS and in the event of need to vaccinate any child having missed a dose					
	Integration of other health interventions with activities of catching up vaccination	To organize each year 2 tours of mother-child health weeks					
		To distribute mosquito nets impregnated with insecticide to children at the time of vaccination against measles					
	Contractualisation of performance	To set up a system of motivation based on performances	X				

	Reinforcement of communications	To produce and make available communication tools in favour of vaccination at the level of the health centres and community health agents					
		To involve communities in vaccination activities					
To reach a coverage of VAT of 60 % at the national level and equal to or higher than 50% for all the provinces from 2007 to 2010	Routine vaccination	To organize a micro-planning workshop	X	X	X	X	X
		To organize vaccination and advanced strategy activities in the zones with weak vaccinal coverage					
		To propose anti-tetanus vaccination to any woman of childbearing age (pregnant or not) who attends a health centre					
		To create a data base of the district indicators	X				
	To reach every district	To organize activities of monitoring and supervision of the planned activities					
		To introduce anti-tetanus vaccination into girls schools					
	Integration of other health interventions with activities of catching up vaccination	To organize a week dedicated to the health of the mother and child twice a year	X X	X X	X X	X X	X X
	Reinforcement of capabilities	To develop and implement an annual training plan					
	Supervision of the MAPI	To integrate the MAPI into the district data base					
	Reinforcement of social mobilization	To involve communities and women's groups in favour of vaccination against tetanus.					
To have eliminated maternal and neonatal tetanus by 2011	Organization of additional vaccination activities	To organize a vaccination campaign in high-risk provinces in 2007					
To have controlled measles by 2011	To introduce the 2nd dose of vaccine against measles and to	To prepare and submit a financing proposal to GAVI					

	reach a vaccinal coverage of at least 70% by the end of 2009	To train personnel					
		To involve local government, community health agents and religious organisations in communications activities					
	Organization of additional vaccination activities	To organize a national vaccination campaign against measles and to integrate vitamin A, albendasole, mosquito net impregnated with insecticides in the campaign					

Table 9 b: Information and communication

Objectives	Strategies	Essential activities					
To ensure that 90% of mothers and child carers are informed about vaccination and have their children vaccinated	Planning communication activities	To develop, adopt and implement a multi-annual communication plan for the EPI					
	Social mobilisation	To involve women 'groups, associative movements of young people, community leaders, religious organisations, the administration at the base and the public and private media in favour of vaccination. against tetanus.					
	Communication for the change in behaviour	To produce and distribute communication tools at the level of health centres					
		To train/ reassign health personnel in interpersonal communication in order to improve reception.					
		To train/ reassign relay agents in interpersonal communication and to equip them with adequate communication tools					
		To produce and broadcast radio messages on vaccination					
		To integrate the essential messages on the improvement of vaccination in traditional songs and the theatres					
	Plea	To make a plea for the mobilization of resources s					
		To continue the plea to maintain political commitment at the highest level					

Table 9 c: **Integrated supervision of diseases avoidable by vaccination**

Objectives	**Strategies**	**Essential activities**					
To reach a rate of detection of PFA of 2/100,000 children less than 15 years old in all the provinces by 2007	Active supervision in high-risk districts	To train the focal points on the supervision of PFA and the active research of cases	X		X		X
		To actively seek cases by focal points					
		To hold periodic meetings of the focal points					
		To carry out periodic reviews of care registers					
		To mobilize financial resources					
		To prepare the response to any case of imported PFA	X	X	X	X	X
To reach a rate of detection of suspected cases of measles of 2/100,000 children less than 15 years old in all the provinces by the end of 2007	Routine supervision based on the community	To notify cases by community					
		To investigate, take and transport samples by health personnel					
	Reinforcement of the National laboratory	To buy and make reagents available	X	X	X	X	X
		To train laboratory staff	X	X	X	X	X
		To assure the external quality control of the laboratory					
To reach a rate of detection of suspected cases of neonatal tetanus 1/1000 births by the end of 2007	Routine supervision at the level of health structures	To regularly notify cases by the health structures and especially the hospitals					
		To supervise the hospitals regularly					
To maintain the sentinel supervision of Hib	Study of the charge of Hib	To assure a periodic quality control					
		To assure the operation of the Hib sentinel site					
To reach a rate of completeness of 100% and promptness 80% of data by 2011.	Improvement of data management and the communication system	To protect the districts data base by antivirus					
		To create a districts data base					
		To assure an Internet and Intranet subscription for updating the antivirus and electronic data transfer					
		To train data managers					
		To carry out formative supervision of data managers					

Table 9d : Supply of vaccines, quality and logistics.

Objectives	Strategies	Essential activities					
To ensure that no out-of-stock condition in vaccines or vaccination materials occurs at the central, intermediate and peripheral level by 2011	Improvement in the conservation conditions of vaccines and storage of material at the central level	To extend the EPI depots					
	Mobilization of the necessary resources s	To make a plea to the Government and partners for an increase in the resources necessary for the purchase of vaccines and vaccination material					
	Control the demand in relation to the supply of the districts	To control districts stocks in a data base					
	Correct application of the methods to estimate requirements s	To install computerized tools for inventory control at the intermediate level					
		To train personnel in inventory control	X		X		X
		To check inventory control in each district t					
	Improvement of the transport of vaccines and materials	To equip medical districts with supply vehicles					
	Improvement in the conservation conditions of vaccines and storage of material at the intermediate level	To build depots in medical districts					
	Reinforcement of capacities in inventory control	To install computerized tools for inventory control at all levels					
		To train personnel in inventory control	X		X		X
To reach 98% of CDS having an operating refrigeration chain by the end of 2007	Improvement in the conservation conditions of vaccines at the peripheral level	To carry out an inventory of the equipment of the refrigeration chain					
	Correct operation of the refrigeration chain	To work out a logistics plan for rehabilitation including the refrigeration chain					

		To buy and make available refrigeration material to replace the equipment 10 years old or more each year					
		To regularly supply the districts and the CDS with oil products					
		To train the managers of the refrigeration chain	X		X		X
		To regularly assure the maintenance and the repair of the refrigeration chain					
To carry out quality control of vaccines at all levels by the end of 2008	Set up procedures for the quality control of vaccines at all levels	To prepare the handbook of procedures					
		To mobilize resources for the installation of the inspection arrangements for quality control of vaccines (human resources; equipment, material and supplies; operation)					
To apply an efficient vaccination waste management by 2008	System of waste management and network of incinerators	To buy incinerators for 50% of districts at the latest in 2008					
		To establish a system of waste collection and management					

Table 9e: Management of the Programme

Objectives	Strategies	Essential activities					
To assure better operating conditions and monitoring-evaluation of the EPI	Improvement in the working conditions of the EPI personnel	To rehabilitate and equip the offices of the EPI					
		To equip the programme with vehicles for executives and monitoring/ evaluation of the districts					
		To put the data-processing park of the EPI in a network					
	Improvement of communications	To put the central level and the districts in an Internet network					
	Motivation of personnel	To establish contractualisation on the basis of total performance of the EPI services					
	Formative supervision of the EPI activities at the peripheral level	– To update the supervision tools – To train the districts executive teams – To equip the districts with supervision vehicles					
To apply a plan of monitoring-evaluation by the end of 2007	Installation and application of a monitoring-evaluation plan	To develop a computerized plan of quarterly monitoring /evaluation including the indicators on:: – The quality of vaccines – The rate of loss of vaccines – The out-of-stock conditions of vaccines and vaccination materials – Waste disposal					
		To organize a mid term evaluation in 2009 and a final evaluation in 2011					
To apply modern methods of planning of activities and resources in all districts by the end of 2007s	Reinforcement of planning capacities	To train personnel in the planning and management of EPI activities at all levels					
		To install planning and management tools at all levels					
Increase in the national financing of vaccination according to the Financial Viability Plan	Integration of planning in the national budgeting procedures	To develop liaison procedures to facilitate the transfer of information on the establishment of costs to the decision making authorities for the national budget					
		To reinforce the capacities for planning and financial management	X		X		X
	Implemented of the PVF for the EPI	To make a plea to the Government and partners so that they fulfil their commitments					

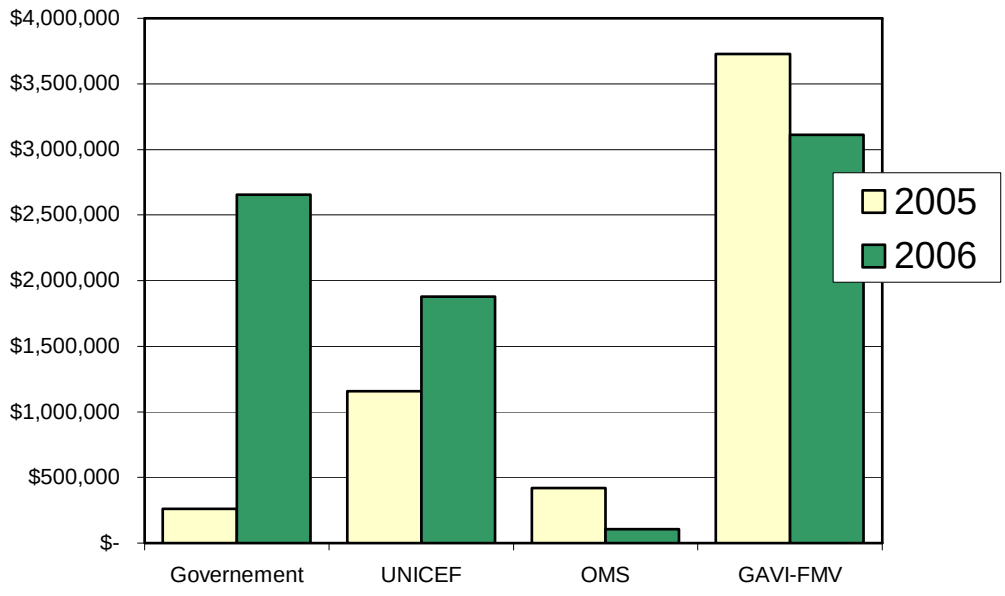
VI ANALYSIS OF COSTS AND FINANCING AND CHALLENGES OF FINANCING THE MULTI-ANNUAL PLAN

1. Analysis of costs and expenditure for 2005 and 2006

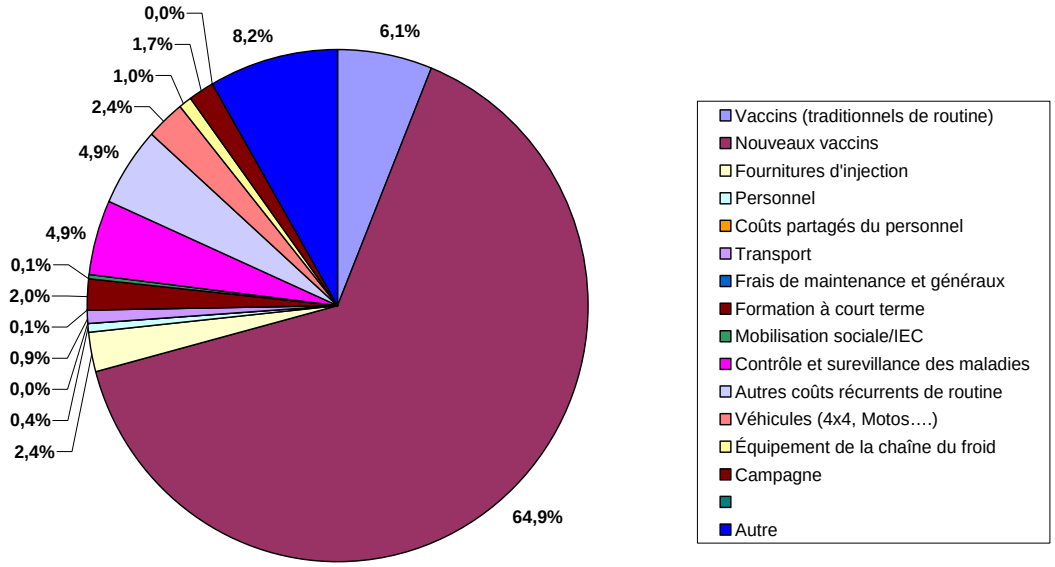
For the base year and the current year, the total cost of the programme is respectively 5,746,777 and 7,605,397. The expenditure is largely dominated by new vaccines (38.2% in 2006 and 69 % in 2005). The new vaccines are followed by material for the refrigeration chain which also occupies a select place in the total cost of the EPI (20.9%) as well as injection equipment and recurring costs.
Concerning the financing of the EPI for the period 2005-2006, first place is occupied by GAVI which buys the new vaccines and their injection equipment which have a higher cost compared to the other categories of recurring cost. This expenditure increases year by year according to the target population and especially when there is a campaign.

The principal sources for the financing of the EPI are the Government, UNICEF, WHO and GAVI as the graphs in appendix show. Subsequent to the handing-over of the debt within the framework of the PPTE initiative, the Government has made a very remarkable effort in the financing of the EPI during 2006; While it participated in the EPI to the extent of 0.6% in 2005, it has increased its share of financing in the EPI to reach 31.4% of the programme's budget in 2006.

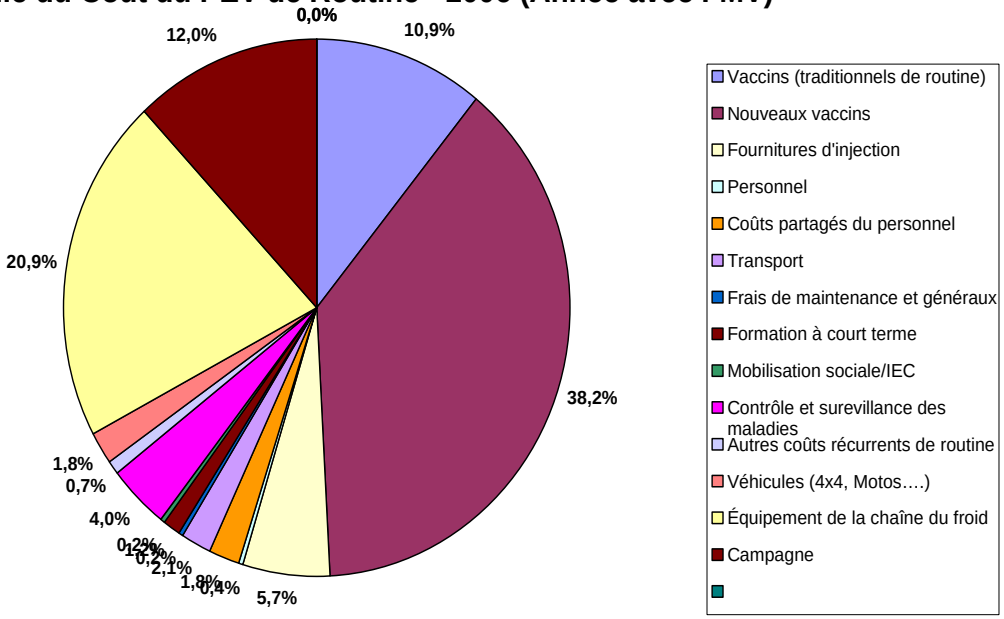
Evolution du Financement Total pour le PEV par partenaire



Profile du Coût du PEV de Routine - 2005 (Année avant FMV)



Profile du Coût du PEV de Routine - 2006 (Année avec FMV)



2. Analysis of the evolution in the financing of the EPI for the 5 years to come

Table no. 10 Synthesis of the budget by heading

	TOTAL	ASSURED TOTAL	PROBABLE TOTAL	TOTAL NOT FINANCED
Recurrent costs	**US$**	**US$**	**US$**	**US$**
Vaccines				
- Traditional vaccines	2 611 295	350 000	1 894 073	367 222
- New and under-used vaccines	22 079 397	22 079 397	-	- 0
Injection equipment	1 957 946	220 000	1 005 208	732 738
Personnel	-	-	-	-
- Salaries of full time personnel (central, provincial and local level)	70 131	54 642	-	15 489
- Daily compensation for the advanced strategy / mobile teams	33 887	6 512	-	27 375
- Daily compensation for the supervision	237 591	63 808	45 655	128 128
Transport	-	-	-	-
- Fixed strategy and delivery of vaccines	359 576	-	340 030	19 546
- Advanced and mobile strategy	46 917	8 968	-	37 949
Maintenance and overheads	-	-	-	-
Refrigeration chains	1 556 966	-	982 542	574 424
Other equipment	144 212	62 671	45 600	35 941
Buildings	706 546	68 916	69 658	567 972
Short tern training	1 451 722	-	1 451 722	- 0
Social mobilisation and IEC	796 218	-	796 218	0
Control and supervision of diseases	415 769	81 491	314 884	19 394
Management of the programme	429 644	128 727	215 300	85 617
Other recurring costs	-	-	-	-
Sub Total of Recurring Costs	**32 897 817**	**23 125 132**	**7 160 890**	**2 611 795**
Capital Costs	**-**	**-**	**-**	**-**
Vehicles	303 700	-	217 028	86 672
Equipment for the refrigeration chain	110 184	48 000	-	62 184
Other capital costs	659 990	-	143 768	516 222
Sub Total of Capital Costs	**1 073 874**	**48 000**	**360 796**	**665 078**

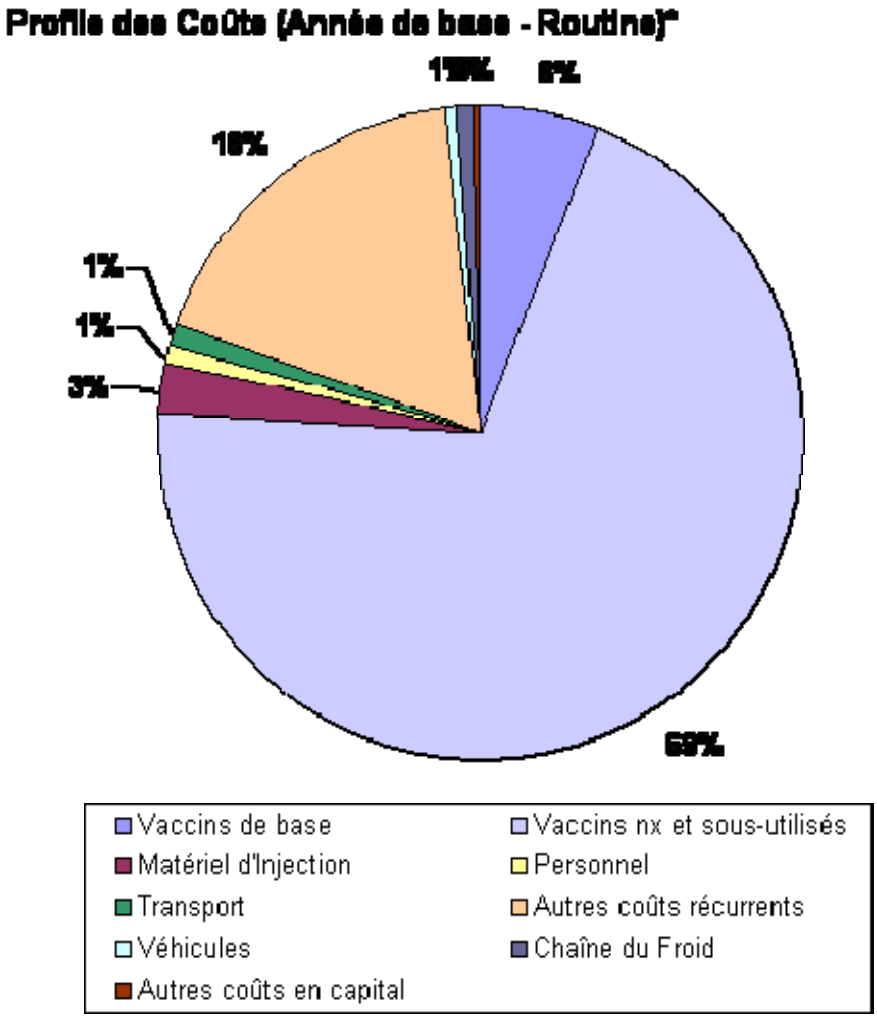
	TOTAL	ASSURED TOTAL	PROBABLE TOTAL	TOTAL NOT FINANCE
Vaccination Campaigns	-	-	-	-
Polio	-	-	-	-
Vaccines	-	-	-	-
Operational costs	-	-	-	-
Measles	-	-	-	-
Vaccines and Injection Equipment	323 977	-	-	323 977
Operational costs	510 154	-	-	510 154
Yellow fever	-	-	-	-
Vaccines and Injection Equipment	-	-	-	-
Operational costs	-	-	-	-
Neonatal tetanus	-	-	-	-
Vaccines and Injection Equipment	187 375	187 375	-	0
Operational costs	287 976	287 976	-	0
Other campaigns	-	-	-	-
Vaccines and Injection Equipment	-	-	-	-
Operational costs	-	-	-	-
Other campaigns	-	-	-	-
Vaccines and Injection Equipment	-	-	-	-
Operational costs	-	-	-	-
Other campaigns	-	-	-	-
Vaccines and Injection Equipment	-	-	-	-
Operational costs	-	-	-	-
Other campaigns	-	-	-	-
Vaccines and Injection Equipment	-	-	-	-
Operational costs	-	-	-	-
Sub Total of Campaign Costs	**1 309 482**	**475 351**	**-**	**834 131**
Shared costs	-	-	-	-
Shared costs of personnel	16 275	9 571	3 319	3 385
Shared costs of transport	280 189	54 918	166 993	58 278
Buildings	936 360	-	-	936 360
Sub total of Shared Costs	**1 232 824**	**64 489**	**170 312**	**998 023**
GENERAL TOTAL	**36 513 997**	**23 712 972**	**7 691 998**	**5 109 027**
Routine Services	**35 204 515**	**23 237 621**	**7 691 998**	**4 274 896**
Vaccination Campaigns	**1 309 482**	**475 351**	**-**	**834 131**

The financing provided for in the course of the next five years amounts to 36,513,997 US$ or on average 7,302,799 US $ per annum. The distribution of funds according to the components will be found in the table and graph which follow.

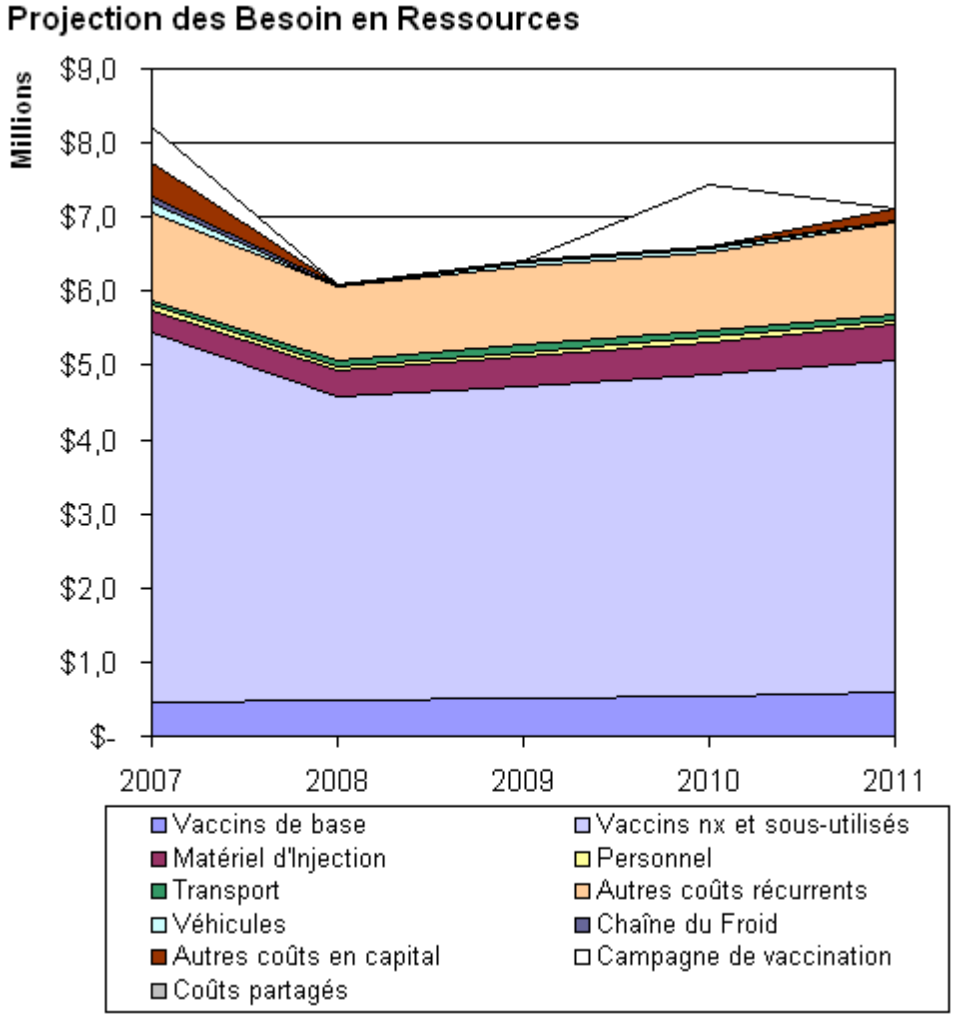
Table 11: Synthesis of annual financing by component

Components of the Multi-annual Plan	2007 US$	2008 US$	2009 US$	2010 US$	2011 US$	Total US$
Vaccines, Injection equipment and Logistics	6614889	4950456	5186649	5736037	5745832	28233863
Reinforcement of the Vaccination System	1356725	765935	803698	1273079	796158	4995596
Pleas and Communications	153000	156060	159181	162365	165612	796218
Epidemiological Monitoring and Supervision	79894	81491	83121	84784	86479	415769
Management of the Programme	63118	1140819	227650	248440	392523	2072550
General Total	**8267626**	**7094762**	**6460300**	**7504705**	**7186604**	**36513997**

Graphic no. 2 :



Graphic no. 3 :

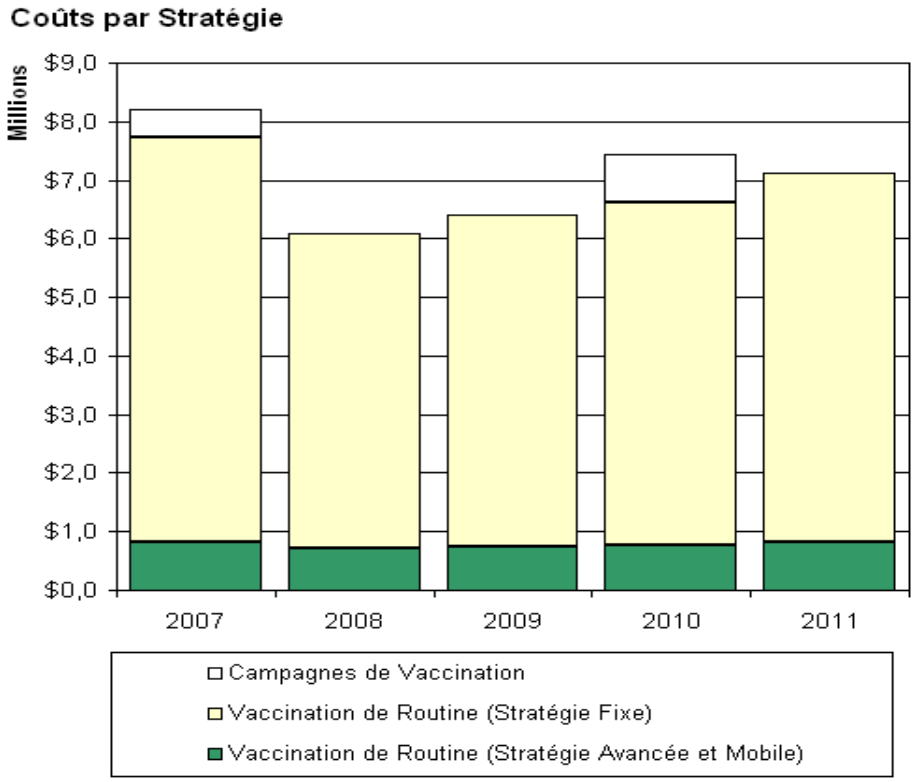


The analysis of the table and graphics above shows that new vaccines will absorb more than 69% of the total budget. Recurring costs account for 18% of the budget, then come routine vaccines which only cost 6% of the budget, injection equipment the cost of which amounts to 3% and finally the other components the cost of each of which comes to around 1%

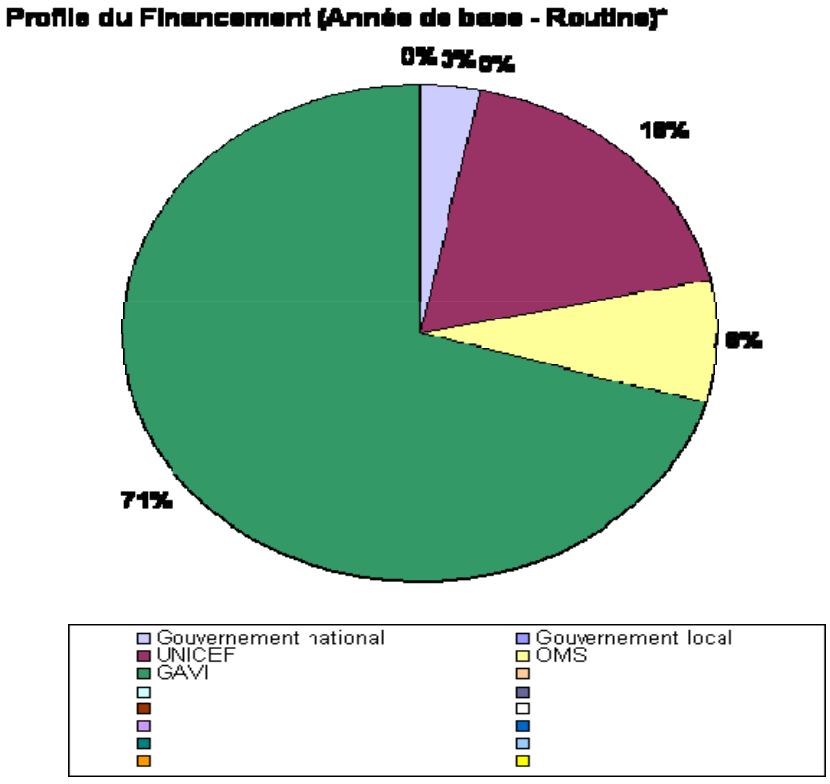
Estimate of costs according to strategies

Routine vaccination covers the whole period of the multi-annual plan and consequently takes the near total of the financing envisaged. Indeed, out of 36,513,997 USS reserved for these 2 strategies, the amount reserved for routine vaccination accounts for 35,204,515 US $ or 96,4% whereas that reserved for vaccination campaigns accounts for 3.6% of the budget. This report is illustrated by graphics no. 4 and 5.

Graphic no. 4 :



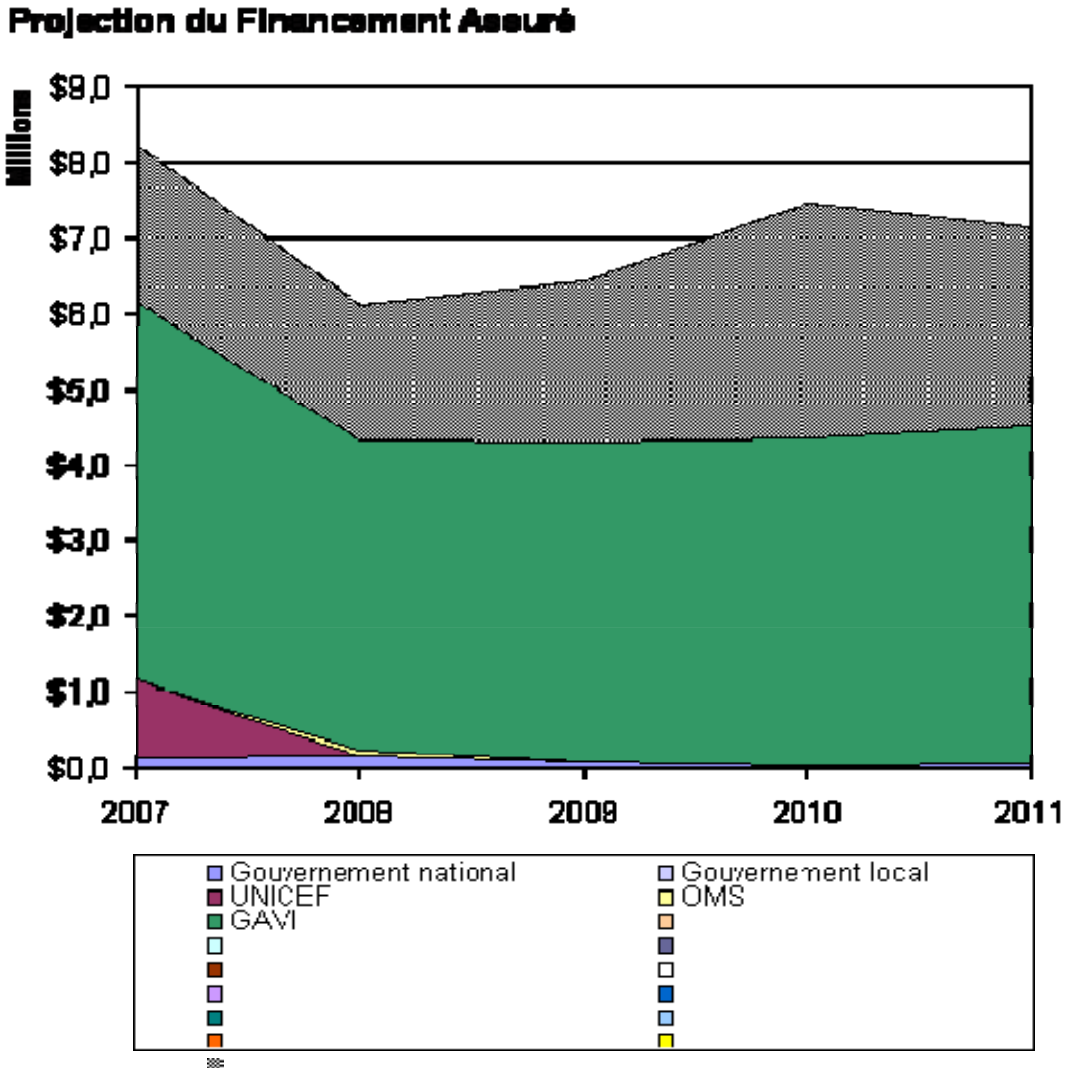
Graphic no. 5 :



Assured financing

Analysis of the 2 graphics nos. 6 and 7 reveal that the financing from the Government and its traditional partners is mainly assured in 2007. This financing becomes in large part probable for the remainder of the period of the PPAC with in consequence a strong increase in the financing gap. This gap is reduced appreciably by combining the assured financing and the probable financing. It should be noted here that the projection of the Government's probable contribution is increasing from 2007 to 2008 thanks to the significant share of the funds of the PPTE initiative reserved for the social services, including the EPI.

Graphic no. 6 :



Graphic no. 7 :

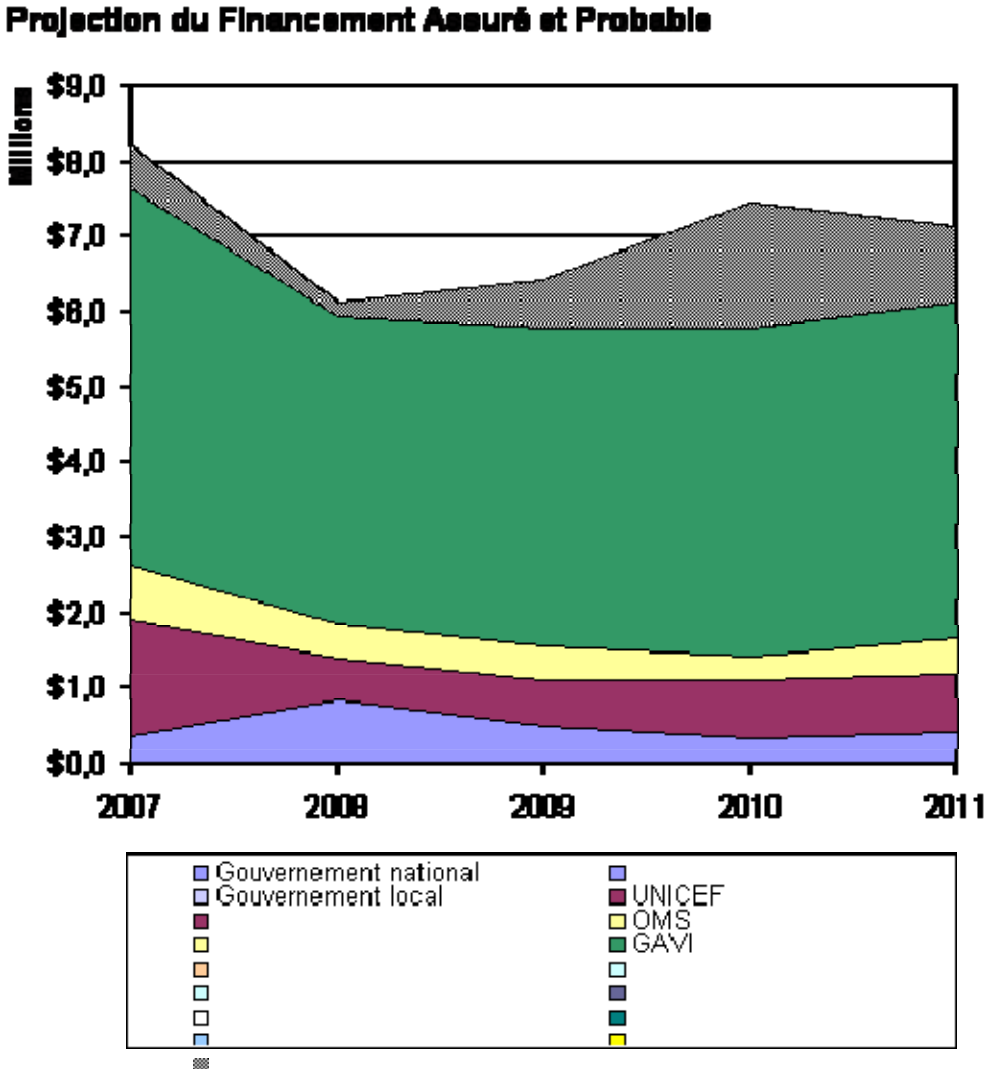

Projection du Financement Assuré et Probable
Millions
$9,0
$8,0
$7,0
$6,0
$5,0
$4,0
$3,0
$2,0
$1,0
$0,0
2007
2008
2009
2010
2011
Gouvernement national
Gouvernement local
UNICEF
OMS
GAVI

Table no. 12: Analysis of financial viability

Macroeconomic and Financial Viability indicator	2005	2007	2008	2009	2010	2011
Bench-mark datum						
GDP per capita ()	83	83	83	83	83	83
Total expenditure on health per capita (in SDR)	16.0	16.0	16.0	16.0	16.0	16.0
Population	7,206,400	7,630,432	7,851,714	8,079,414	8,313,717	8,554,815
GDP ()	598,131,185	633,325,822	651,692,271	670,591,346	690,038,495	710,049,612
Total expenditure on health (in DTS)	115,302,397	122,086,905	125,627,426	129,270,621	133,019,469	136,877,034
Total government expenditure on health (in DSG)	16,142,336	17,092,167	17,587,840	18,097,887	18,622,726	19,162,785
Requirement in resources for vaccination	,	,	,	,	,	,
Vaccination routine and campaign	5,309,415	8,210,657	6,100,295	6,401,031	7,444,250	7,124,940
Routine only	5,309,415	7,735,306	6,100,295	6,401,031	6,610,119	7,124,940
Per child DTC3	17.4	24.7	19.0	19.3	19.4	20.3
% of the total expenditure on health						
Requirement in resources for vaccination						
Vaccination routine and campaign	4.6%	6.7%	4.9%	5.0%	5.6%	5.2%
Routine only	4.6%	6.3%	4.9%	5.0%	5.0%	5.2%
Financial gap						
With assured financing		1.7%	1.4%	1.6%	2.3%	1.9%
With assured and probable financing		0.5%	0.1%	0.5%	1.3%	0.7%
% of the total government expenditure on health						
Requirement in resources for vaccination						
Vaccination routine and campaign	32.9%	48.0%	34.7%	35.4%	40.0%	37.2%
Routine only	32.9%	45.3%	34.7%	35.4%	35.5%	37.2%
Financial gap						
With assured financing		12.2%	10.0%	11.6%	16.6%	13.6%
With assured and probable financing		3.5%	1.0%	3.5%	9.1%	5.3%
% GDP						
Requirement in resources for vaccination						
Vaccination routine and campaign	0.89%	1.30%	0.94%	0.95%	1.08%	1.00%
Routine only	0.89%	1.22%	0.94%	0.95%	0.96%	1.00%
per capita						
Requirement in resources for vaccination						
Vaccination routine and campaign	0.74	1.08	0.78	0.79	0.90	0.83
Routine only	0.74	1.01	0.78	0.79	0.80	0.83

Table 13: Detailed budget

Headings	2 007				2 008				2 009				2 010				2 011			
	Requirements in Resources	Assured Financing	Probable Financing	Not Financed	Requirements in Resources	Assured Financing	Probable Financing	Not Financed	Requirements in Resources	Assured Financing	Probable Financing	Not Financed	Requirements in Resources	Assured Financing	Probable Financing	Not Financed	Requirements in Resources	Assured Financing	Probable Financing	Not Financed
Recurrent costs	US	US	US	US	US	US	US	US	US	US	US	US	US	US	US	US	US	US	US	US
Vaccines																				
- Traditional vaccines	471 269	350 000	0	121 269	486 129	0	486 129	0	508 765	0	508 765	0	545 953	0	300 000	245 953	599 179	0	599 179	0
- New and under-used vaccines	4 974 152	4 974 152	0	0	4 094 722	4 094 722	0	0	4 213 469	4 213 469	0	0	4 335 660	4 335 660	0	0	4 461 394	4 461 394	0	0
Injection equipment	297 907	220 000	0	77 907	344 017	0	344 017	0	391 191	0	391 191	0	438 306	0	170 000	268 306	486 524	0	100 000	386 524
Personnel																				
- Salaries of full time personnel (central, provincial and local level)	13 476	13 476	0	0	13 746	9 988	0	3 758	14 021	10 188	0	3 833	14 301	10 391	0	3 910	14 587	10 599	0	3 988
- Daily compensation for the advanced strategy / mobile teams	6 512	6 512	0	0	6 642	0	0	6 642	6 775	0	0	6 775	6 910	0	0	6 910	7 048	0	0	7 048
- Daily compensation for the supervision	45 655	0	45 655	0	46 568	15 481	0	31 087	47 500	15 791	0	31 709	48 450	16 107	0	32 343	49 419	16 429	0	32 990
Transport																				
- Fixed strategy and delivery of vaccines	68 731	0	68 731	0	70 106	0	70 106	0	90 940	0	90 940	0	60 253	0	60 253	0	69 545	0	50 000	19 545
- Advanced and mobile strategy	8 968	8 968	0	0	9 147	0	0	9 147	11 866	0	0	11 866	7 862	0	0	7 862	9 074	0	0	9 074
Maintenance and overheads																				
Refrigeration chains	298 615	0	298 615	0	313 327	0	313 327	0	319 593	0	0	319 593	309 619	0	240 600	69 019	315 811	0	130 000	185 811
Other equipment	27 183	0	20 000	7 183	27 727	27 727	0	0	28 759	0	0	28 759	25 600	0	25 600	0	34 944	34 944	0	0
Buildings	39 658	0	39 658	0	161 803	68 916	0	92 887	165 039	0	0	165 039	168 340	0	0	168 340	171 707	0	30 000	141 707
Short tern training	542 640	0	542 640	0	220 565	0	220 565	0	224 976	0	224 976	0	229 476	0	229 476	0	234 065	0	234 065	0
Social mobilisation and IEC	153 000	0	153 000	0	156 060	0	156 060	0	159 181	0	159 181	0	162 365	0	162 365	0	165 612	0	165 612	0
Control and supervision of diseases	79 894	0	60 500	19 394	81 491	81 491	0	0	83 121	0	83 121	0	84 784	0	84 784	0	86 479	0	86 479	0
Management of the programme	23 460	23 460	0	0	42 656	42 656	0	0	62 611	62 611	0	0	80 100	0	39 300	40 800	220 816	0	176 000	44 816
Other recurring costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total of Recurring Costs	**7 051 121**	**5 596 568**	**1 228 799**	**225 754**	**6 074 706**	**4 340 981**	**1 590 204**	**143 521**	**6 327 807**	**4 302 059**	**1 458 174**	**567 574**	**6 517 977**	**4 362 158**	**1 312 378**	**843 441**	**6 926 206**	**4 523 366**	**1 571 335**	**831 505**

Heading	2 007				2 008				2 009				2 010				2 011			
	Requirements in Resources	Assured Financing	Probable Financing	Not Financed	Requirements in Resources	Assured Financing	Probable Financing	Not Financed	Requirements in Resources	Assured Financing	Probable Financing	Not Financed	Requirements in Resources	Assured Financing	Probable Financing	Not Financed	Requirements in Resources	Assured Financing	Probable Financing	Not Financed
Capital Costs																				
Vehicles	153 000	0	130 000	23 000	0	0	0	0	63 672	0	0	63 672	64 946	0	64 946	0	22 082	0	22 082	0
Equipment for the refrigeration chain	66 167	48 000	0	18 167	25 589	0	0	25 589	0	0	0	0	18 428	0	0	18 428	0	0	0	0
Other capital costs	465 018	0	135 000	330 018	0	0	0	0	9 551	0	0	9 551	8 768	0	8 768	0	176 653	0	0	176 653
Sub Total of Capital Costs	**684 185**	**48 000**	**265 000**	**371 185**	**25 589**	**0**	**0**	**25 589**	**73 223**	**0**	**0**	**73 223**	**92 142**	**0**	**73 714**	**18 428**	**198 735**	**0**	**22 082**	**176 653**
Vaccination Campaigns																				
Polio																				
Vaccines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operational costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles																				
Vaccines and Injection Equipment	0	0	0	0	0	0	0	0	0	0	0	0	323 977	0	0	323 977	0	0	0	0
Operational costs	0	0	0	0	0	0	0	0	0	0	0	0	510 154	0	0	510 154	0	0	0	0
Yellow fever																				
Vaccines and Injection Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operational costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Neonatal tetanus																				
Vaccines and Injection Equipment	187 375	187 375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operational costs	287 976	287 976	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other campaigns																				
Vaccines and Injection Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operational costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other campaigns																				
Vaccines and Injection Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operational costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other campaigns																				

Headings	2 007				2 008				2 009				2 010				2 011			
	Requirements in Resources	Assured Financing	Probable Financing	Not Financed	Requirements in Resources	Assured Financing	Probable Financing	Not Financed	Requirements in Resources	Assured Financing	Probable Financing	Not Financed	Requirements in Resources	Assured Financing	Probable Financing	Not Financed	Requirements in Resources	Assured Financing	Probable ncing	Not Financed
Vaccines and Injection Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operational costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other campaigns																				
Vaccines and Injection Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operational costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total of Campaign Costs	**475 351**	**475 351**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**834 131**	**0**	**0**	**834 131**	**0**	**0**	**0**	**0**
Shared costs																				
Shared costs of personnel	3 127	3 127	0	0	3 190	3 190	0	0	3 254	3 254	0	0	3 319	0	3 319	0	3 385	0	0	3 385
Shared costs of transport	53 841	0	53 841	0	54 918	54 918	0	0	56 016	0	56 016	0	57 136	0	57 136	0	58 279	0	0	58 279
Buildings	0	0	0	0	936 360	0	0	936 360	0	0	0	0	0	0	0	0	0	0	0	0
Sub total of Shared Costs	**56 968**	**3 127**	**53 841**	**0**	**994 467**	**58 108**	**0**	**936 359**	**59 270**	**3 254**	**56 016**	**0**	**60 455**	**0**	**60 455**	**0**	**61 664**	**0**	**0**	**61 664**
GENERAL TOTAL	**8 267 626**	**6 123 046**	**1 547 640**	**596 940**	**7 094 762**	**4 399 089**	**1 590 204**	**1 105 469**	**6 460 300**	**4 305 313**	**1 514 190**	**640 797**	**7 504 705**	**4 362 158**	**1 446 547**	**1 696 000**	**7 186 604**	**4 523 366**	**1 593 417**	**1 069 821**
Routine Services	**7 792 274**	**5 647 695**	**1 547 640**	**596 939**	**7 094 762**	**4 399 089**	**1 590 204**	**1 105 469**	**6 460 300**	**4 305 313**	**1 514 190**	**640 797**	**6 670 574**	**4 362 158**	**1 446 547**	**861 869**	**7 186 604**	**4 523 366**	**1 593 417**	**1 069 821**
Vaccination Campaigns	**475 351**	**475 351**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**834 131**	**0**	**0**	**834 131**	**0**	**0**	**0**	**0**

VII. APPENDICES

Appendix 1. Situation of EPI vehicles
Table no. 14 : Situation of EPI vehicles

Type of vehicle	Year entered service	Quantity	Operational condition	From
Toyota Hilux 4x4 DC	2000	2	operational	OMS
Toyota Hilux 4x4 DC	2005	2	1 operational	GAVI
Toyota Hilux	1986	1	decommissioned	USAID
Toyota Corolla	1986	1	decommissioned	USAID
Toyota LC	1999	2		OMS
Toyota Dyna	1995	1	Poor condition	SC
Camion 10 T	-	0	-	-
Moto	2000	5	operational	OMS

Table 15 : Equipment of BPS in vehicles

Province	**Vehicle**	**Year entered service**	**Operational condition**	**From**
Bubanza	Land Rover Toyota Hilux	2002 2005	operational operational	7th FED OMS
Buja Mairie	Land Cruiser Toyota Hilux	before 1993 2005	Broken down operational	MSP OMS
Buja Rural	Land Cruiser Toyota Hilux	before 1993 2004	old operational	MSP OMS
Bururi	Toyota Hilux Toyota Hilux	2003 2004	operational operational	UNICEF OMS
Cankuzo	Land Rover	2002	operational	7th FED
Cibitoke	Land Rover Toyota Hilux	2002 2005	operational operational	7th FED OMS
Gitega	Toyota Hilux Land Rover	2004	operational Broken down	UNICEF Save Children
Karusi	Toyota Hilux	2004	operational	OMS
Kayanza	Land Cruiser Toyota Hilux Toyota Hilux	 2003 2004	Old and broken down operational operational	MSF after use UNICEF OMS
Kirundo	Toyota Hilux	2004	operational	OMS
Makamba	Toyota Hilux	2004	operational	OMS
Muyinga	Toyota Hilux	2004	In accident	OMS
Muramvya	Toyota Hilux	2003	operational	OMS
Mwaro	Mazda	2004	operational	Coopération Belge
Ngozi	Toyota Hilux Toyota Hilux	2004 2001	operational operational	OMS UNICEF
Ruyigi	Land Rover	2002	Broken down	7ème FED
Rutana	Land Rover	2002	Broken down	7ème FED

Tableau 16 : Vehicles of sectors

Provinces	Sector	Vehicle	Year entered service	Condition of vehicle	From
Bubanza	Bubanza Mpanda	Toyota Hilux	-1995 -	Decommissio ned	UNICEF -
Bururi	Bururi Mugamba Rumonge Matana	Toyota Hilux - Toyota Hilux -	1995 - 1995 -	Decommissio ned Decommissio ned	UNICEF UNICEF
Buja-Mairie	Sector Nord Sector Centre Sector Sud	Toyota Hilux	1995	Decommissio ned	UNICEF
Buja-Rural	Sector Isale Sector Kabezi Sector Rwibaga	Toyota Hilux - -	1995	Decommissio ned	UNICEF UNICEF
Cankuzo	Sector Cankuzo	Toyota Hilux	1995	Decommissio ned	UNICEF
Cibitoke	Sector Cibitoke Sector Mabayi	Toyota Hilux -	1995	Decommissio ned	UNICEF -
Gitega	Sector Gitega Sector Mutaho Sector Kibuye Sector Ryansoro	Toyota Hilux - Toyota Hilux -	1995 1995	Decommissio ned - Decommissio ned	UNICEF UNICEF -
Karusi	Sector Buhiga	Toyota Hilux	1995	Decommissio ned	UNICEF
Kayanza	Sector Kayanza Sector Musema	Toyota Hilux -	1995 -	Decommissio ned	UNICEF
Kirundo	Sector Kirundo Sector Mukenke	Toyota Hilux Toyota Hilux	1995 -	Decommissio ned Decommissio ned	UNICEF -
Makamba	Sector Makamba Sector Nyanza-lac	Toyota Hilux -	1995	Decommissio ned	UNICEF
Muyinga	Sector Muyinga Sector Gashoho	Toyota Hilux Toyota Hilux	1995 1995	Decommissio ned Decommissio ned	UNICEF UNICEF
Muramvya	Sector Muramvya Sector Kiganda	Toyota Hilux -	1995	Decommissio ned	UNICEF
Mwaro	Sector Kibumbu Sector Gisozi	Toyota Hilux -	1995	Decommissio ned	UNICEF UNICEF
Ngozi	Sector Ngozi Sector Kiremba	Toyota Hilux Toyota Hilux	1995 1995	Decommissio ned	UNICEF UNICEF

	Sector Buye	-		Decommissioned	-
Rutana	Sector Rutana	Toyota Hilux	1995	Decommissioned	UNICEF
Ruyigi	Sector Ruyigi Sector Butezi Sector Kinyinya	Toyota Hilux - -	1995 - -	Decommissioned - -	

Appendix 2: Situation of EPI personnel

Table n° 17 : EPI personnel

TYPES	SERVICES														
	Administration and Management			Logistics			Supervision and Training			Social Mobilisation			Monitoring Evaluation		
	Requirements	Available	Missing	Require	Available	Missing	Require	Available	Missing	Requiren	Available	Missing	Requiren	Available	Missing
Doctors	2	1	1	1	0	1	1	1	0	0	0	0	1	0	1
Technicians Sup	2	1	1	2	1	1	2	0	2	1	0	1	2	1	1
Technicians A2	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
Technicians A3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secretaries	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Support secretariat	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Managers	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0
Bookkeepers	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Workers	2	1	1	4	2	2	0	0	0	0	0	0	0	0	0
Night watchmen	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Chauffeurs	2	2	0	1	1	0	1	0	1	1	0	1	1	0	0
Nurses A2	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
Maintenance engineer	0	0	0	1	0	1	0								
Total	18	12	5	15	8	7	4	1	3	2	0	2	4	1	2

Personnel requirements all categories included 43
Available all categories included: 22
Missing : 21
The details are shown in the table
As the office is very small and narrow, we cannot start recruiting. This will be possible after the construction of an adequate office.

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