BURKINA FASO

Unity-Progress-Justice

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MINISTRY OF HEALTH

FINANCIAL SUSTAINABILITY PLAN FOR THE EXPANDED PROGRAMME ON IMMUNISATION BETWEEN 2003 - 2009

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TABLE OF CONTENTS

ACRONYMS AND ABREVIATIONS 3
EXECUTIVE SUMMARY 5
INTRODUCTION 9
SECTION 1 : IMPACT OF THE COUNTRY AND CONTEXT OF THE HEALTH SYSTEM REGARDING COSTS OF THE IMMUNISATION PROGRAMME, FUNDING, AND FINANCIAL MANAGEMENT 10
I. CONTEXT OF THE COUNTRY AND ITS IMPACT ON THE EPI 10
A. At the geographic and demographic level 10
B. At the political, institutional, and administrative levels 10
C. educational 11
D. the macro-economic level 11
1. the economic situation 11
2. Public finances 12
3. The debt situation and the fight against poverty 12
13
E. Funding of health care 13
1. Progress of health care funding 13
2. Progress with EPI funding 15
3. The budget procedure and its implementation 16
3.1 Budget procedure 16
3.2 The budget implementation procedure 16
II. CONTEXT OF THE HEALTH CARE SYSTEM AND ITS IMPACT ON THE EPI 16
A. Health problems 16
B. National health care policy 17
C. Organisation of health care services 17
D. The vaccine supply network 18
E. Sectoral approach to health care funding 19
F. The inadequacy of resources being allocated to health care activities 19
1. Inadequate health care infrastructure 19
2. Insufficient human resources 19
3. Supplies allocated to health care activities do not cover the needs 19
SECTION II : CHARACTERISTICS, OBJECTIVES, AND STRATEGIES OF THE PROGRAMME 19
I. Results of the programme 19
A. The routine immunisation calendar 19
B. Population targeted by routine immunisation and additional activities 20
C. Quantitative and qualitative on the EPI and monitoring of diseases 21
Immunisation coverage and drop out rates according to 1997 - 2002 administrative data 21
Immunisation coverage and drop out rates according to external 1998 and 2003 audit data 21
3. The vaccine wastage rate 22
4. Disease monitoring performance levels 23
5. Administrative data regarding additional immunisation related activities 23
5.1 Additional immunisation activities against poliomyelitis 23
5.2 Additional immunisation activities against measles 24
5.3 Additional immunisation activities against neonatal tetanus 24
D. Objectives and revised objectives due to financial constraints 25
1. General objective 25
2. Specific objectives 25
2.1 Specific objectives regarding routine immunisation 25
2.2 Specific objectives regarding additional immunisations 26
Specific objectives of activities to epidemiologically monitor diseases targeted by the EPI 26
2.4 Specific objectives regarding injection safety 27

3. Exogenous reasons why the objectives were not achieved 27
II. Strategies and areas of action 27
A. Steps to significantly increase immunisation coverage in a sustained long-term manner 27
B. Improving antigen management 28
C. introduction of new vaccines 28
D. Ensuring injection safety 28
E. Ensuring affordable treatment 29
F. Improving communication to enhance development 29
G. Ensuring that diseases targeted by the EPI are monitored. 29
III. Coordination and management of the programme 29
IV. Activities and purposes of financial partners in the programme 30
A. Domestic partners 30
B. External partners 30
C. Consequences of changes 31
SECTION III : CURRENT STATUS OF EXPENDITURES AND BASIC FUNDING OF THE PROGRAMME 32
I. Current expenditures and funding of the programme (2001) 32
II.Current expenditures and funding of the programme (2002) 33
SECTION IV : FUTURE RESOURCE NEEDS AND FUNDING & ANALYSIS OF VARIANCE 35
I. Projection of resource needed 36
II. Projection of future resources 37
III. Analysis of funding differentials 38
SECTION V : STRATEGIC PLAN AND INDICATORS OF FINANCIAL SUSTAINABILITY 40
A. Strategies and measures that enable the evaluation of adequate resources 40
1. Mobilisation strategies of internal resources 40
2. Mobilisation strategies of external resources 41
Summary of specific measures that enable the mobilisation of appropriate resources 41
B. Strategies and measures to make resources more reliable 45
1. Strategies related to budget problems 45
2. Strategies regarding the disbursement of funds 45
3. Specific measures 45
C. Strategies and measures that make it possible to use resources more effectively 47
CONCLUSION 52
SIGNATURES OF THE MINISTRIES 53
Comments and signatures of ICC member partners 54

ACRONYMS AND ABBREVIATIONS

BCG :	Bacillus Calmette and Guerin
DCC :	Disease Control Center
MTEF :	Medium Term Expenditure Framework
CISCC :	Canadian International Study and Cooperation Centre
RHC :	Regional Hospital Centre
MCSF :	Medical Centre with a Surgical Facility
MC :	Management Committee
PNC :	Pre-Natal Consultation
SFFP :	Strategic Framework to Fight Poverty
HSPC :	Health and Social Promotion Centre
AFH :	Administrative and Financial Headquarters
DTP :	Diphtheria, tetanus, pertussis
WBGA :	Women at Birth-Giving Age
CDF :	Community Development Fund
PW :	Pregnant Women
HKI :	Hellen Keller International
BI :	Bamako Initiative
III :	Independent Immunisation Initiative
NID :	National Immunisation Days
MSF :	Médecins Sans Frontières
WHO:	World Health Organisation
NGO :	Non-Governmental Organisation
HDDP :	Health District Development Project
NHDP :	National Health Development Plan
AFP :	Acute Flaccid Paralysis
MSPSPOKK :	Multi-Sector Provincial Support Project for Oubritenga, Kourwéogo, and Kadiogo

HILIC :	Highly Indebted Low-Income Countries
HSPP :	Health Services Promotion Project
NHP :	National Health Policy
GPHC :	General Population and Habitat Census
MNT :	Maternal and Neonatal Tetanus
WAEMU:	West African Economic and Monetary Union
UNICEF :	United Nations Children Fund
AAV :	Anti-Amaril Vaccine
MEAS :	Measles Vaccine
TT :	Tetanus Toxoid vaccine
OPV :	Oral Polio Vaccine

EXECUTIVE SUMMARY

Burkina Faso is a Sahelian landlocked country in the heart of West Africa with an estimated population of 11.880.125 inhabitants in 2002. With a growth rate of 2,38% it should increase to 14 001 197 inhabitants by 2009.

At the political, institutional, and administrative levels, the country has implemented significant reforms since 1990 that have resulted with democratic reforms, the creation of a constitutional state, and administrative decentralisation intended to transfer major responsibilities to local communities, particularly with regard to health care and hygiene.

The economic situation remains critical, with very unfavourable external shocks having having left their mark. The result is a weak growth rate that does not enable improving the incomes of the poorest sections of the population. The GDP of US$ 230 per inhabitant makes Burkina Faso one of the poorest countries in the world. A human development indicator of 0,33 in 2002 places Burkina Faso among the bottom three countries in the global classification.

Decreasing budget revenues linked to the difficult economic situation has undermined the progress of public finances. The overall debt, although reasonable, remains an important burden for an economy based on revenues from low export volumes.

In spite of these unfavourable economic circumstances, the government has set itself the objective of reaching a growth rate of between 7 and 8% over the coming years, thanks to economic reforms implemented with the assistance of development partners.

The Health sector benefits from funds that originate from various sources such as the state, development partners, local communities, households, as well as from private and social insurances.

The State contributes to health care spending through its budget that takes its own resources into account, and those from development partners. External funding is provided in the form of subsidies and loans (bilateral and multi-lateral cooperation, not including funds from NGO's). Between 1996 to 2002, budget allowances allocated to health care increased at a rate of 3,58% per year on average and at current prices, while the state budget increased by 7,14% per year.

The EPI is funded by several sources: By the state (regular budget and HILIC), local communities, MC, and development partners. The amount funded by the state for the EPI was US$ 5 962 444 in 2001 and US$ 4 934 886 in 2002. The partners contributed US$ 5 378 481 in 2001, compared to US$ 3 499 399 in 2002. The MC contributed US$ US 5 690 in 2001, and US$ 15 493 in 2002. The contribution from local communities could not be assessed.

Although the constant commitment of the development partners and the significant support they provide alongside the Ministry of Health is favourable to creating an effective EPI, the efficient use of resources is hampered by the insufficient coordination of activities carried out by partners to achieve common objectives, inadequate monitoring of the use of funds at the central level, and by the fact that procedures applied by contributors of capital are not understood.

Like most of the countries in the sub-region, Burkina Faso is facing a difficult situation regarding health: High morbidity and mortality rates that are mainly caused by local endemics and epidemics, non-transmittable chronic infections, and those linked to pregnancy and precarious hygiene and sanitation. Morbidity and mortality is particularly high among children less than 5 years old, and is primarily the result of malaria, respiratory infections, diarrhoea related sicknesses, measles, and malnutrition.

Given this situation, Burkina Faso adopted a new health policy and health development plan in 2000 for 2001-2010 that emphasises immunisation as an important method to reduce morbidity and mortality from diseases that can be prevented by immunisation. The objectives to improve and expand the programme are set out in the 2001-2005 strategic plan of the EPI. The programme faces major challenges to be overcome, and focuses on increasing immunisation coverage with every anti-gene of the routine EPI, eradicating poliomyelitis, controlling

measles, eliminating maternal and neonatal tetanus, improving injection safety, and the introduction of new vaccines.

Since 1999, the expanded programme on immunisation has witnessed an improvement of coverage rates, reaching e.g. 69,10% for DTP-P in December 2002, compared to the target set at 65%. Dropout rates have also gradually fallen, and stood at 22% for DTP-1 in 2002. The wastage rate of vaccines remains persistently high in spite of the widespread dissemination of guidelines regarding the policy on opened vials. With regard to disease monitoring, the programme has adopted an integrated approach of activities related to monitoring diseases with a high epidemic potential, and has achieved significant progress with e.g. the monitoring systems of AFP, MNT, and measles. The additional immunisation activities carried out as part of the effort to eradicate poliomyelitis and tetanus were an outstanding success, and will take place for three more years at least during the NID's (polio), and until 2006 in the high risk districts for campaigns against tetanus. A number of campaigns were necessary in 1998,1999, and 2001 to control measles, in addition to the routine EPI, and made it possible to reach very satisfactory coverage rates against this disease. A further campaign is planned for 2004.

The objectives set out in the context of the financial sustainability plan are ambitious, and take into account the achievements made by the programme and the introduction of new vaccines as of 2004, with the aim of 90 to 95% coverage rates until 2009 depending on the vaccines concerned. Objectives to reduce the vaccine wastage rate and drop out rates between 2003-2009 have also been outlined, and should help to make the immunisation programme more effective.

Strategies will be elaborated to increase immunisation coverage in a constant and durable manner, to improve the management of antigens, to ensure a that new vaccines are properly introduced, to strengthen social mobilisation in favour of immunisation, to ensure injection safety, to make immunisation affordable, and to monitor those diseases targeted by the EPI.
Achieving these objectives will require significant funding, and explain the necessity to combine internal and external resources through this plan to ensure durable appropriate funding of all immunisation related activities, particularly once GAVI withdraws.

With regard to costs and funding of the base year and the previous year in support of the immunisation fund, the following results are highlighted:

- In 2001 and 2002, the total costs of the programme represented 31,23 % and 27,43 % respectively of public health spending. With the support of development partners included, these costs stand at 25,87 % and 23,25 %. The share of the cost of vaccines is of 4,25% of total costs in 2001 and 5,75 % in 2002. The cost to immunise infants with DTP-3 for the routine EPI was US$ 14,72 in 2001, and US$ 14,84 in 2002.

- Regarding the funding of the programme, the government share including resources from the HILIC initiative went from 52,41 % in 2001 to 55,91 % in 2002. The share of development partners stood at 47,26 % and 42,95% for the same period. Funding of management committees represented 0,33% and 1,14% during the same period in the context of poverty of the population.

The projection of resources required between 2003-2009 highlights the amount of US$ 135 480 176, i.e. US$ 19 354 311 on average per year without additional immunisation activities. When additional activities are not taken into account, the amount for resources required is estimated at US$ 81 997 398 i.e. US$ 11 713 914 on average per year.

The amount of funds projected for the period between 2003-2009 is estimated at US$ 82 895 487 i.e. US$ 11 842 212 on average per year, and only covers 61,19% of the needs.

When taking guaranteed and likely funds into account, the estimated amount for the entire duration that only covers 65,57% of the needs including additional activities, stands at US$ 88 838 536 i.e. US$ 12 691 219 per year.

By comparing costs and funding, the differential of overall ensured funding stands at US$ 52 584 689. When integrating possible funding, this differential is reduced to US$ 46 641 640 i.e. 11% less.

By dividing the periods and not taking into account the deadline of the plan for the introduction of new vaccines, the differential in funding, until the time when backing from the immunisation fund ends, stands at US$ 20 913 075, i.e. US 5 232 768 on average per year including additional activities, and on the basis of guaranteed funds.
Without these activities, there is a surplus on condition that the resources intended for the latter are allocated to the routine EPI. When guaranteed and probable funds and additional activities are taken into account, the financial differential is reduced to US$ 17 544 340, i.e. US$ 4 386 085 per year on average. Under these conditions, the differential is reduced by approximately 16%. Spending on vaccines represents 85,59% of the differential on average for the period between 2003 and 2006. For the period 2007 to 2009 and on the basis of guaranteed funds, the financial differential stands at US$ 31 653 614 with additional activities, and US$ 4 760 060 without these activities.

When looking at funding in general, the financial differential stands at US$ 29 097 300 with additional activities, and US$ 2 239 746 without them.
On the basis of the macro-economic and financial framework of the NHDP, the financial differentials with guaranteed funding, and those ensured and probable, represent 8% and 7% respectively of expected expenditures in the health sector[1] projected over the same period.

This differential can be made up with the implementation of strategies to mobilise adequate resources to make them reliable and to increase the efficiency with which they are used. The following authorities will be in charge of managing activities for the implementation of these strategies. The authorities at the Ministry of Health will have to gather support for the purpose of mobilising resources. The Director of Prevention through Immunisation, the Director of Administration and Finance, and those in charge of the decentralised structures of the EPI will have the primary role of implementing the strategies to make resources more reliable, and to make their use more efficient.

Regarding the mobilisation of internal resources, the government will be able to increase funding (regular budget and HILIC resources) for the EPI. This will go from 4,5% to 6% between 2003 and 2009. Funding for the purchase of new vaccines depends on the availability of the government counterpart that is valued at 2% of the cost of new vaccines between 2005 and 2009. The government will take over costs for both currently used and new vaccines as of 2010.

Improving awareness of local communities during 2004 will help to increase their contribution to funding the EPI. Help will be requested during the first two years from the Economic and Social Council that has set up a fund to fight poverty, and also from the Chamber of Commerce, who represent the private sector, to obtain their support in implementing immunisation activities. The increase of 5% per year of the contribution from the MC until 2009 will provide additional resources for the programme. The 7% annual increase of contributions from partners will help to ensure improved immunisation coverage of EPI target populations.

In order to make resources reliable, the main strategies still remain simplifying and improving budget procedures for the purchase of vaccines, and making the government budget available to the health districts by the end of March at the latest during the year concerned. Encouraging GAVI fund management committees and the implementation of a commission to track HILIC funds will help to improve the absorption rate of allocated funds. The key strategies and measures to make the use of funds more efficient are:

Reducing the wastage rate of BCG and AAV vaccines, that currently stands at 64% and 54% respectively, by 5% per year. An annual reduction of 3% is planned for TT.

The implementation of the opened vials policy, training of health staff in the use of new vaccines, sustaining the cold chain, and implementing and managing the EPI.

Health staff will have to be trained for the introduction of new vaccines. Management tools and storage capacities will have to be adapted where required.

[1] The denominator was estimated on the basis of the PNDS financial framework
in the basic document of the round tabel meeting of capital providers regarding the plan concerned.

- Vaccine management will be improved, by increasing vaccine availability, that currently stands at 2,15%, by 0,5% annually. This improvement could reduce vaccine supply shortages such as for AAV that reached 73,15% in 2003.
- Reducing of the dropout rate to 5% in 2009 will require searching for non-immunised infants. Improving social mobilisation will help to bring down the number of missed opportunities.

INTRODUCTION

Children are the productive force of the future, and as such they must be in good health and protected against diseases. Aware of this necessity, the World Health Assembly instituted the expanded programme on immunisation in its resolution WHA 27.57 of May 1974. Every child at a vulnerable age deserves to benefit from the immunisation against diphtheria, tetanus, tuberculosis, whooping cough, measles, yellow fever, poliomyelitis, and other diseases corresponding to the epidemiological profile of the country. During the 1980's, special attention was granted to the EPI regarding health policies and to the allocation of resources primarily provided by development partners. The strategic importance of immunising children has resulted in the limitations of resources that enable the EPI to operate to be overlooked.

Countries have experienced difficulties in handling immunisation costs over the years. The reduction of funding for the EPI resulted in gradually falling and later stagnating immunisation coverage rates in most developing countries.

In response to this situation and given the economic divide between industrialised and developing countries in terms of access to vaccines, the Global Alliance for Vaccines and Immunisations (GAVI) was created. It is in this context that Burkina Faso has been receiving GAVI support since 2001, after having submitted a 5-year strategic plan for the 2001-2005 period.

In order to ensure funding of its expanded programme of immunisation, Burkina Faso needs to elaborate a financial sustainability plan. The current financial sustainability plan, which was drafted by a team with various backgrounds and skills and with the help of partners for health development, is the result of a long effort. Workshops were organised for this purpose, and the first four sections were pre-revised by the team in charge of financial sustainability at the WHO in Geneva.

Relevant observations that were made have been taken into account while finalising this document.

The project plan, which was presented to member signatories of the Inter-Agency Coordination Committee, has 6 sections:

Impact of the country and the status of the health system on the costs of the immunisation programme, funding, and management.

Characteristics, objectives, and strategies of the programme
Current expenditures and basic funding of the programme
Future resource requirements and funding for the programme & analysis of the differential.
Strategies, measures, and indicators of financial sustainability
Comments from participating parties

SECTION 1: IMPACT OF THE COUNTRY AND CONTEXT OF THE HEALTH SYSTEM ON THE COSTS OF THE IMMUNISATION PROGRAMME, FUNDING, AND FINANCIAL MANAGEMENT

Following the declaration of Alma Ata in 1978 that emphasised the importance of the Expanded Programme of Immunisation (EPI) as a fundamental aspect of maternal and infantile health part of basic health care (BHC), Burkina Faso decided to introduce an EPI for the 1980-1990 decade with the objective of achieving immunisation coverage for the entire target population against major endemic and epidemiological diseases that can be prevented through immunisation.

The EPI had a slow and difficult beginning after its introduction in 1979, and became operational from 1980 onwards. Its impact really increased after the « commando immunisation » of December 1984 with the support from partners for health development. This backing made it possible to expand the programme throughout the country by supplying necessary equipment and means for it to be operational. The approach to Immunisation, and particularly the EPI, can only be effective when viewed within the specific context of the country and its health system.

I. CONTEXT OF THE COUNTRY AND ITS IMPACT ON THE EPI

A. AT THE GEOGRAPHIC AND DEMOGRAPHIC LEVEL

Burkina Faso, with a surface area of 274 200 km2 is a sahelian landlocked country located in the heart of West Africa in the Niger bend. The climate is one aspect that favours the development of many endemic and epidemiological diseases.

With an annual growth rate of 2,38% [2], the population of Burkina Faso was estimated at 11 880 125 inhabitants in 2002, and should reach 14 001 197 inhabitants by 2009. The gross birth rate is estimated at 46,1‰. There will be the problem of covering the needs regarding the immunisation of the target population given the shortage of resources. The repatriation of approximately 350 000 Burkina residents (August 2003), who lived in Ivory Coast given the social and political crisis in that country, made up primarily of women and children has further increased the target population, and thus the cost of the EPI.

Population density stands at 37 inhabitants per Km2. Its distribution throughout the country is uneven, varying from 5,8 inhabitants per Km2 in the province of Kompienga to 335 inhabitants in the province of Kadiogo, the capital.

The distribution of the population in certain provinces of the country has required the implementation of an adequate strategy to reach the entire EPI target population. This has led to fairly high extra costs.

B. AT THE POLITICAL, INSTITUTIONAL, AND ADMINISTRATIVE LEVEL

Burkina Faso has returned to democracy and multi-partism at a political and institutional level, and is currently enjoying stability thanks to political reforms introduced since 1990. The process of democratic reform in politics has become established through the adoption of the constitution in 1991 and the first steps in the creation of a state under the rule of law with the establishment of a constitutional government consisting of executive, legislative, and judiciary powers.

The right to good health is recognised by the constitution. Indeed, article 18 of the constitution mentions that « health, the protection of maternity and childhood, the assistance of the elderly or handicapped and social cases constitute social rights recognised by the present constitution that aims to promote these ».

The particularly dynamic civil society has the dual role of promoting development and regulating the process of democratic reform in the country. It is involved in many areas such as human rights, consumer rights, basic development activities, activities related to traditions and custom, activities linked to women, and sectoral activities. NGO's are involved in immunisation related issues.

[2] General population and habitat census, INSD, 1996

Texts concerning reforms of the public administration were endorsed at the administrative level in 1998, and are currently part of a much larger reform programme of the government. One of the key reforms is the implementation of an appropriate demerging policy to assist the process of decentralisation.

Burkina Faso is divided into 13 regions, 45 provinces, 320 departments, 49 communes, and approximately 8000 villages. The process of decentralisation is going ahead, and the texts regarding decentralisation guidelines (DG) outline the organisation and operation of political and administrative structures that need to be implemented. The DG allocate large responsibilities to local communities in the areas of health care and hygiene.

Decentralisation opens up new opportunities to local innovation as part of the effort to strengthen community participation, developing local leadership to promote health issues, and mobilising community organisations to back up basic health care actions such as immunisation.

C. EDUCATION

With a gross school attendance rate of 43,4% en 2001 and an adult literacy rate of 26%[3], the educational standard of the population is very low and is a drawback to economic development and to the improvement of health care standards, such as those regarding the use of preventive health care and social mobilisation in favour of immunisation.

D. THE MACRO-ECONOMIC LEVEL[4]

1. The economic situation

Since 1991 Burkina Faso has implemented macro-economic and structural reforms with the help from partners for development that aim to create the foundation of lasting economic and social development. Although the economy has seen significant progress in the context of reforms, the country continues facing major challenges, particularly with regard to urgent social needs such as health care. Action taken by the government has focused on creating economic growth capable of generating revenues to improve living standards of the population, particularly that of rural areas.

However, economic activity during this time has moved along under the effect of very unfavourable exogenous shocks (climatic conditions, falling repatriation of savings, large numbers of Burkina citizens returning home after residing abroad, and high oil prices). The growth rates achieved were not able to meet the expectations to significantly boost the incomes of least favoured sections of the population. Indeed, GNP increased from 1207,2 billion in 2001 to 1263,3 billion FCFA in 2002 i.e. a growth rate of 4,6% compared to 5,6% in 2001. In 2001 and 2002, spending on health care represented 2,55% and 3% respectively of the GNP.

The agricultural and livestock sectors employ 90% of the working population and account for 35,7% of GNP by themselves. Cotton plays a major role and will remain the main source of agricultural growth and the most widespread income generating farming activity in the short term. However, some major obstacles such as uncertainties of international markets and a price policy that adversely affects producers are the reasons that explain slow growth in cotton production[5]. The secondary sector represents 19,70% of GNP. The tertiary sector is an important source of growth at 44,6% of GNP. The presence of an informal sector that is developing mainly in urban areas is worth mentioning.

The economy of Burkina Faso faces major obstacles such as:

-Strong state intervention and very little freedom of action

-High production factor costs and low competitiveness

- High poverty levels

It nevertheless does have some advantages such as

-Inflation under control at a rate of 2,3% in 2002

[3] Demographic and health survey (EDS) 1998-1999, INSD, May 2000

[4] The FCA remained the same in this part in order to leave the various percentages supplied by the Ministry of the Economy and Finance unchanged

[5] Report on the economy of Burkina Faso, 2000 : Ministry of the Economy and Finance

- The pegging of the CFA Franc to the Euro, and a favourable exchange rate with the US Dollar.

The objective of the government is to achieve a growth rate of between 7 to 8% in the coming years. The macro-economic forecasts therefore remain favourable.

In spite of such positive forecasts, the GNP per inhabitant of US$ 230[6] in 2002 makes Burkina Faso one of the poorest countries in the world, with a PNUD human development indicator (0,33 en 2002) places the country among the final three of the global classification.

2. Public finance

Public finance has suffered the adverse effects from lower budget revenues due to the difficult economic conditions.

Current revenues have increased from 219,3 billion FCFA in 2000 to 259,4 billion FCFA in 2002 i.e. an increase of 18,3%. Total public spending increased between 2000 and 2002 in view of significantly higher current spending (mainly goods and services) up by 10% per year, to the detriment of capital spending that went down by 3% in 2002.

Budget saving has deteriorated over the years, having gone from 25 billion FCFA in 2000 to 5,5 billion FCFA in 2002. The consequence is a weak capacity to finance investments with domestic funds. The budget deficit (basic liabilities without donations) was 11,5% in 2002, compared to 12,1% in 2000. Nevertheless, the basic primary balance went down to 4,2% of GNP in 2001, compared to –0,6% of GNP in 2002. In terms of budget management, this has resulted in the adoption of measures to control spending while ensuring the payment of contractual commitments and protecting social spending.

In order to make public fund management more transparent, the government has introduced instruments and mechanisms such as a computerised spending network, a budget programme, medium term expenditure details, a review of public spending, the review of public procurement procedures, the obligation to explain public fund management and practices used for public accounting, and the creation of a court of accounts. Further actions include the implementation of a plan to improve budget management, a concise guideline to make budgets and the details of public spending more transparent, and that obliges all managers to justify their actions. An integrated network regarding revenues will be set up.

Debt collection from interior taxation is faced with weak tax returns and the informal sector. The coming into effect of the External Common Tariff (ECT) in 2000 in the context of West African Economic and Monetary Union (UEMOA) has resulted in lost customs revenues. This situation may yet be made worse by the continuing social and political crisis that has taken place in Ivory Coast since 2002. This will make it necessary for the government to seek possible solutions in terms of new markets regarding imports and exports with special emphasis on alternative access routes to the sea.

Such limited resources do not argue in favour of a consequent increase of budget allowances for the Ministry of Health, and subsequently for immunisation.

3. The debt situation

The volume of the debt is considered reasonable compared to other countries of the sub region (61% of current GNP on average in 2002) but its burden remains significant for an economy with weak export revenues. Between 2000 and 2002, efforts made in debt management enabled the country to avoid the accumulation of arrears for both internal and external payments. However, implementation of unexpected spending on humanitarian assistance (building of infrastructure to receive repatriated citizens, setting up of logistical means to facilitate their return to their home communities) and security contributed to expanding the interior debt.

[6] EPI review of Burkina Faso - 2003

To absorb the regular needs of the treasury, the government uses the fund-raising mechanisms on the capital markets of the waemu.

With regard to the initiative for foreign debt relief, also known as the « highly indebted poor countries » (HILIC), the country has been benefiting from debt relief since 2000. Resources are allocated to immunisation for the purchase of vaccines, medical consumables and equipment for the cold chain. From the overall amount of 29 975 million FCFA allocated to the Ministry of Health between 2000 and 2003, the sum of 1 320 million FCFA, or 4,41% was allocated to the routine EPI.

The aim of debt reduction is to help fighting poverty. The poverty level has increased from 41 099 FCFA in 1994[7] to 72 690 FCFA in 1998 and to 82 672 FCFA in 2003[8]. The percentage of Burkina residents living below the absolute poverty line has gone from 44,5% in 1994 to 45,3% in 1998 and 46,4% in 2003. This level of poverty limits participation of the population in funding health costs with regard to cost recovery.

Poverty is basically a rural characteristic. On average, women are more afflicted by poverty than men due to their low literacy rates and difficulties they face in gaining access to production means, primarily land.

With the objective of fighting against poverty and with the help of technical and financial partners, in 2000 the government of Burkina Faso elaborated a strategic framework to fight poverty (SFFP) for the period 2000-2003 that is the main reference for all actions regarding development. The SFFP gives major priority to social sectors where health care is based on the seven following guiding principles: redefining the role of the state, long term management of natural resources, promotion of a new partnership with capital lenders, promotion of good governance, reduction of disparities between regions, taking into account regional integration, and the type aspect.

A key issue in health matters is to promote access of the poor to medical care. The specific measures to fight poverty are based on three main guiding principles:

- -improving the indicators regarding the health status of the poorest :
- -Limiting the impact of health care costs on household revenues :
- -Involving the poorest users and communities in decisions regarding health issues.

Tracking of the SFFP includes indicators of health such as immunisation coverage and the use of services.

It is relevant to point out that an expansion of priority sectors that are part of the SFFP review might result in a reduction of resources allocated to the health sector if no action is taken to maintain or increase these.

The Economic and Social Council (ESC) has created a fund to fight poverty that is funded primarily by contributions from the private sector – a good opportunity to fund the EPI.

E. FUNDING OF HEALTH CARE

1. PROGRESS OF HEALTH CARE FUNDING

The health sector is funded by contributions from various sources such as the state, development partners, local communities, households, and private and social insurances.

The state contributes to health care funding through its budget that takes its own resources and those of development partners into account. External funding is made available as subsidies and loans (bilateral and multi-lateral cooperation, not including funds from NGO's). Table 1 shows the development of budget commitments of the health care sector from 1996 to 2002.

[7] Priority survey 1
[8] Priority survey 3 : living conditions of households

Table n°1: Development of budget commitments to the health care sector from 1996 to 2002[9] (millions of F CFA)

ITEMS	YEARS						
	1996	1997	1998	1999	2000	2001	2002
OPERATION*	**13373,2**	**14765,3**	**16036,5**	**19967,6**	**20639,6**	**22539,3**	**16640,6**
Personnel	5889,4	5633,5	5806,7	7504,1	7988,1	8958,4	6100
Goods and services	3047,7	3094,4	3120,5	3775,3	3759,8	3907	3779,9
Current transfers	4436,1	6037,4	7109,3	8688,2	8891,7	9673,9	6760,7
INVESTMENTS**	**15652,73**	**16553,04**	**8271**	**15329,93**	**7506,91**	**8956,12**	**9924,28**
Domestic resources	827,18	827,73	2790,47	3163,28	2452,7	3543,27	4044,8
External Resources	14825,55	15725,31	5480,53	12166,65	5054,21	5412,85	5879,48
TOTAL HEALTH	**29025,93**	**31318,34**	**24307,5**	**35297,53**	**28146,51**	**31495,42**	**26564,88**

*Data from the spending network (SN)

** Data from the public integrated investment programme (PIIP)

With regard to budget allowances, the 12% ratio indicated in the EPI review of 2003 does not take into account out of debt allowances and out of external funding. Between 1996 and 2002, budget allowances allocated to health care increased by 3,58% per year on average and at current prices, while the state budget increased by 7,14% per year. Although the budget allocated to the health sector is constantly rising in nominal value, the proportion of the state budget allocated to the former (out of inter-ministerial communal spending) between 1996 and 2002 is less than 10% with a maximum of 9,23% reached in 1999. The 10% standard recommended by the World Health Organisation (WHO) has therefore not been reached, and has constantly fallen since 1999 from 23% in 1999 to 7,09% in 2002. In April 2001, the heads of state from the Economic Community of West African States (CEDEAO) decided to increase public health spending to 15% of the state budget during the Abuja (Nigeria) summit. This decision, a real opportunity, should be an argument to plead in favour of increasing resources allocated to the health sector.

With regard to the budget of the Ministry of Health, the insufficient allowances results in a slow increase of credits allocated for the purchase of vaccines and medical consumables in relation to the Independent Immunisation Initiative (III) to which Burkina Faso is committed since 1996.

The health sector, which contributes to the mobilisation of resources from the European Union on the basis of financial backing, should be getting more resources. Disbursements of resources from the variable share by this institution are subsequent to results achieved by the sector through previously outlined targets such as immunisation coverage (BCG, DTP, VAT, and AAV).

GAVI funds are also linked to the result of achievements made with regard to immunisation coverage for DTP3.

In spite of efforts made by the government, resources allocated to health care are insufficient. This situation is made more difficult by insufficient equality in gaining access to health care, and by the inefficiency of government structures in making the best use of resources.

With regard to other sources of funding, social security covered approximately 11% of the overall population in 2001, with commercial insurance covering only an absolute minority of the population (less than 1%), with only a minority of privileged people being able to afford this insurance.

Households contribute to health care funding by means of direct and traditional (?) payments of treatments at public and private health facilities through community funding implemented in the context of the Bamako Initiative (BI).

In 2001, the evaluation of the management of fund resources mobilised by the management committees of the health centres (HC) in the context of the ex-health and nutrition development project (HNDP) revealed that 88,14% of funds for operational costs were covered by households i.e. approximately 3,313 million FCFA. The

[9] The regulating law between 1996 and 2000 does not provide details regarding payments from the Ministry

mechanisms to split health risks, such as mutual insurance companies are not very widespread in the health districts, but their wider introduction is being encouraged.

Local communities also contribute to health care costs by building and equipping health care facilities and by covering the salary costs of health staff working at these facilties. The current status and mechanisms regarding community participation is unknown, and there is no legal or regulatory basis that specifies a percentage of their budget that should be allocated to health care.

External funding in the form of subsidies and loans (with the exception of budget support) primarily concerns expenditures on projects and health programmes.

In addition to the resources made available in the context of bilateral and multi-lateral relations, the health sector also receives funding from NGO's, religious organisations and associations, and pairing committees that is intended first and foremost to the vulnerable groups of the population consisting of women and children.

The continuous commitment of the partners alongside the Ministry of Health and the significant support they give are helpful to developing an effective EPI. However, the lack of coordination of activities carried out by the partners to achieve common goals and the failure to understand the procedures of capital lenders are a drawback for the effective use of available resources.

2. Progress with EPI funding

The EPI is funded by several sources; by the government (regular budget and HILIC), local communities[12], MC and development partners. Table no. 2 provides information that shows the development of funding by source in 2001 and 2002.

Table n° 2: Development of EPI funding (US Dollars) in 2001 in 2002[10]

Sources/Years	2001	2002
Routine EPI	**4 770 555**	**5 288 038**
Government (regular budget)	3 744 608	3 999 080
HILIC	328741	340301
GAVI	0	273037
MC	37 037	100708
Other partners	660169	574902
Additional activities	**6 607 407**	**3 537 602**
Government (regular budget)	227123	479236
HILIC	1 661 972	116269
Partners	4 718 312	2 924 497
Total	**11 377 962**	**8 825 630**

Source: Table created by using data collected in relation to the financial sustainability plan.

In order to make the EPI more accessible and more efficient, the government decided to provide immunisation free of charge in 2002. With regard to implementation of this measure, the EPI review of 2003 showed that three reasons why people did not get immunised were the shortage of vaccines (8,5%), the absence of the health staff member responsible for administering the immunisation (5%), and their distance from the immunisation centre (4,5%). Cost reasons linked to the price of syringes and the vaccination certificate represent 4%. The fact that some operational facilities do not provide these services free of charge could have adverse effects on the success of the EPI.

[10] The figures shown in table 2 are different to those shown in the EPI review of 2003 because they include the amortisation of purchases and salaries (the amounts contributed were not assessed).

The lack of control of funding by the central level and the delay in explaining to financial partners how funds had been spent result in resources allocated to the EPI not being used most efficiently.

3. The Budget procedure and its implementation

3.1 The budget procedure

Since 1998, the Ministry of Health has been elaborating a triennial budget programme that involves the various structures. In order to improve the budget process, a sliding triennial medium term expenditure framework (MTEF) determines the sectoral envelopes. Endorsed since 2000, the MTEF[11] is an instrument that makes it possible to improve budget allocations, particularly to key sectors. The possibility of creating a MTEF for the health sector on the basis of the national MTEF is an opportunity for immunisation to be better taken into account in the budget of the Ministry of Health.
The needs expressed by the various sections of the Ministry of Health are consolidated by the Administration and Finance Authority. The preliminary budget project is subject to arbitration by the budget commission of the Ministry of Finance and the Budget, not including title VI (investments, equipment, and capital transfers) which is subject to arbitration by the Ministry of the Economy and Development.
This arbitration enables the Ministry of Finance and the Budget to submit the preliminary project of the state budget for endorsement by the Council of Ministers. Following this phase, the budget project is submitted to a vote in parliament. The law of finance of year N is endorsed in the month of December of the year N-1 at the latest.

Since 1999, and as part of the law of finance, the government has been allocating direct annual credits to the health districts to cover costs for goods and services through credit delegation. This enables them to purchase gas to operate the cold chain and to cover maintenance costs. Credits to purchase vaccines and injection material are handled by the central level. Credit delegations reach the health districts generally after the first quarter of the current year. This does not favour the rational use and satisfactory absorption of credits. In 2002, the government set up administrations for revenues and loans at the regional health headquarters and health districts to make the implementation of the budget from the Ministry of Health more efficient. Audits of public spending were carried out in the sectors of health, basic education, rural development, and road infrastructures in order to make the budget process more transparent.

3.2 The budget implementation procedure

The implementation of public spending takes place within the integrated expenditure framework according to three kinds of procedures:

The standard procedure has four categories: liabilities, liquidation, scheduling, and payment.

The simplified procedure is characterised by the fact that operations regarding liabilities and liquidation are carried out simultaneously. It is used for expenditures for which the amount is known or ascertained in advance (leasehold contract, invoices for water, electricity, telephone calls, transport costs, etc.)

The emergency procedure is activated by the credit administrators and requires a decision by the Minister in charge of Finance.

In the specific case of EPI expenditures based on the government budget, the three procedures are used according to cost application. The year-end closing of liabilities on November 20th of every year, which does not take delays due to the implementation of budget credits into account, is a major obstacle to the use of the credits.

II. CONTEXT OF THE HEALTH SYSTEM AND ITS IMPACT ON THE EPI

A. HEALTH PROBLEMS

General morbidity of the population of Burkina Faso is high, and is largely due to local endemics and epidemics, non-contagious chronic diseases, and those linked to pregnancy. Morbidity is particularly high among children younger than 5 years of age, and is mainly due to malaria, respiratory infections, diarrhoea, measles, and malnutrition.

[11] MTEF Medium term expenditure framework

From year to year, there are epidemic outbreaks of variable scale due to diseases such as measles, cerebro-spinal meningitis, yellow fever, and cholera that affect the population in a recurrent manner.

The epidemic caused by the HIV/AIDS infection has become a major problem for public health and development. The rate of HIV seroprevalence affected between 7 and 10% of the general population and 7,15% of pregnant women by the end of 1997. In 2002 it stood at 6,5%.

Other major endemics include:
Tuberculosis, a disease that has reappeared due its association with AIDS.
Leprosy, which has been increasing over the past few years.
Drancontiasis, or « Guinea worm », of which there have been fewer cases, down from 3241 in 1996 to 591 cases in 2002.
Measles remains a problem, and a campaign was organised in 2001 to tackle it. A further campaign is planned for 2004 to strengthen the routine EPI.
Poliomyelitis, a disease to be eradicated, is still being monitored, and neonatal tetanus remains a major health hazard in spite of progress achieved.
African human trypanosomiasis and onchocerosis are still being monitored even though they no longer present a public health problem.

Non transmittable medical conditions such as cardio-vascular diseases, tooth and mouth diseases, as well as chronic diseases such as diabetes and cancers are on the increase.

The prevalence of nutritional deficiencies is very high, and affects mainly children between 0-5 years of age as well as women at childbearing age.

The situation remains worrying for most pathologies, given that the notified cases only represent the tip of the iceberg in view the low rate of use of health services. It will be necessary to expect significant needs in terms of health care (whether specified or not).

The general death rate is also high (15,2%), and is largely due to the high infant death rate (105%) the infant - juvenile death rate (219%), and maternal death rate (484 for every 100,000 living births[12].)

The infant death rate due among other reasons to transmittable diseases such as malaria, diseases targeted by the EPI, malnutrition, diarrhoea related diseases, and serious respiratory infections. The maternal death rate is linked to direct causes such as infections, haemorrhage, dystocis, and forced abortions. In addition to these causes, there are other factors such as the poor nutritional status of mothers, short intervals between pregnancies and resulting complications, low pre-natal coverage, underused health services, particularly regarding those pertaining to reproduction.

B. NATIONAL HEALTH CARE POLICY

A National Health Policy (NHP) was endorsed in 2000. The goal of the NHP is to contribute to the well being of the population on the basis of principles of primary health care. The NHP was implemented by the means of a national health development plan (NHDP) for 2001-2010 that was endorsed in 2001. The latter will be made operational by means of sliding triennial plans.

The NHDP places immunisation high on the list as a means to reduce the incidence and prevalence of diseases that endanger public health, with specific objectives to improve immunisation coverage, eradicating poliomyelitis, and eliminating neonatal tetanus.

[12] GPHC 96 - EDS 98

C. ORGANISATION OF HEALTH SERVICES

Reforms of the health sector implemented by Burkina Faso between 1990 and 1996 resulted in the technical decentralisation of the health service based on the integrated district health service. The structure of the Burkina Faso health system is divided into three sections: the central level, organised around the Cabinet of the Ministry of Health, is in charge of elaborating policy, mobilising resources, controlling management, coordination of activities, and evaluating progress made.
The new administrative chart adopted in October 2002 set up the Disease Prevention through Immunisation Service as the managing unit (?) of disease prevention through immunisation.
The intermediate level currently has 13 health regions organised as regional headquarters in charge of coordination and providing backing to health districts.

The peripheral level currently consists of 55[13] health districts run by executive staff that manages the basic health care services. The health district represents the most decentralised operational elite of the health system. Every health district draws up an annual action plan that takes immunisation activities into account. The implementation of a national immunisation programme that makes it possible to achieve the coverage objectives set requires good organisational skills and effective coordination on the part of the government and its partners for health development.

The elaboration and implementation of a strategic national EPI plan since 2000 for the years 2001-2005 shows government commitment to consider the immunisation of target groups as a key issue of health policy. Furthermore, the existence of a health map based on the knowledge about the health structures and their distribution in the country represents a tool for those involved in health issues to plan immunisation coverage. Strengthening the process that has been started is fundamental to reach out to the largest number of people targeted by the EPI, with the help of local communities.

Public health care structures are organised in three levels that provide basic, secondary, and tertiary health care:

The first level created by the health district consists of two sections :
The first section is the health and social promotion centre (HSPC), the basic structure of the health system.
The second section is the medical centre with a surgical unit (MCSF) which serves as a reference for the basic health care facilities of the district. Some districts are centred on the RHC.
The second level consists of the Regional Hospital Centre (RHC) which serves as a reference and backup for the MCSF.
The third level consists of the University Hospital Centre (CHU), and represents the highest reference level for specialised medical care. It also serves as a training environment for the various categories of research staff.

Since 1993, public health facilities enjoy a certain degree of freedom in the way they are operated. In addition to the public sector there is a rapidly growing private sector that has yet to demonstrate its contribution to immunisation activities. This sector includes profit-oriented clinics and private medical practices, and institutions set up by associations and NGO's on a non-profit basis.

D. THE VACCINE SUPPLY NETWORK

Vaccines are supplied through the United Nations Children's Fund (UNICEF) according to the agreement on cooperation on III. The central EPI has no role in ascertaining where supplies come from. UNICEF selects suppliers according to the quality and cost of vaccines.
Two orders are made each year: in September of the current year to cover the need of the first quarter of the year ahead, and in March of the current year to cover the needs of the second quarter. The needs are expressed by the EPI in cooperation with UNICEF once the availability of financial resources has been confirmed at the AFH. UNICEF then requests a quotation from its supply service in Copenhagen that requires one month.

The supply system for vaccines and medical consumables therefore remains strongly dependent on imports that lead to higher costs of the EPI. Furthermore, a lack of planning regarding orders, inadequate communication between the structures involved in supplies, and administrative red tape prevent the process from operating in a timely manner. This frequently results in a shortage of antigens that in turn reduces the efficiency of the EPI. The return of approximately 355,000 repatriated nationals following the events in Ivory Coast since September 2002 will require further supplies of vaccines and consumables to ensure that women and children are immunised.

At country level, the central EPI supplies the regional storage facilities, which in turn supply the health districts.

[13] According to the new administrative chart of regional health headquarters - 2003

E. SECTORAL APPROACH TO HEALTH FUNDING

The Ministry of Health has started exchanging ideas on the approach to sectoral health care development with various partners. This approach will enable the smooth implementation of the NHDP by taking regional stability and equality into account. It can contribute significantly in providing to funding of the sector and to the appropriate allocation of resources to all key public health programmes such as immunisation.

F. THE INADEQUACY OF RESOURCES ALLOCATED TO HEALTH CARE ACTIVITIES

The efficiency of the health care system reflects the shortage of both human and financial resources, and the weak management abilities at the central, intermediate, and peripheral levels.

1. The inadequate health care infrastructure

Generally speaking, the health infrastructure network is characterised by inequality and the inadequate distribution of health facilities depending on the regions concerned. The average action radius of basic health care facilities was 9,23 kilometres in 2002. This situation has resulted in a shortage of fixed immunisation centres that made it necessary to adopt an appropriate strategy to reach target populations.

2. Insufficient human resources

Staff requirements in the health sector are not being met. In 2002, approximately 23,41% of health centres did not meet the national standards regarding staff (3 agents), thus compromising the implementation of activities for minimum services such as immunisation.
Regional disparities are notorious: although the cities of Ouagadougou and Bobo-Dioulasso only represent 10% of the population, they have 54% of all doctors, 57% of midwifes, 59% of pharmacists, and 33% of nurses.
In addition to staff shortages, competence levels of health agents in managing the EPI, and handling maintenance of equipment and the cold chain are insufficient. Hence the necessity of organising training sessions for health related staff at all levels. Furthermore, low staff motivation levels result in frequent absences, illegal private medical activities, low performance levels, and mediocre health care standards.

3. The shortage of supplies allocated to health care activities

The health centres carry out immunisation services lack equipment, particularly for the cold chain and means of transport (motorcycles). Moreover, the latter are frequently not adapted to climatic conditions and the terrain, and maintenance is patchy due to fund shortages for this purpose.

SECTION II: CHARACTERISTICS, OBJECTIVES, AND STRATEGIES OF THE PROGRAMME

The multi-annual strategic plan serves as a reference for previous and innovating activities that led to the reactivation of the programme.

I. RESULATS OF THE PROGRAMME

A. THE ROUTINE IMMUNISATION CALENDAR

With regard to infants, all antigens of the programme should have been administered in 5 separate immunisation stages before 1 year of age. The first vaccines are against tuberculosis (BCG), diphtheria, tetanus, whooping cough (DTPcoq), measles (TT), and yellow fever (AAV). The vaccine against yellow fever was introduced to the routine EPI from 1985 onwards following an epidemic that hit the region of Fada N'gourma in 1983. Table number 3 below shows the minimum recommended ages for each immunisation category:

Table n° 3: Routine immunisation calendar for infants between the age of 0 to 11 months.

Contact	Age	recommended antigens
1	Birth	BCG, polio 0
2	8 weeks	DTPoq 1, polio1
3	12 weeks	DTPoq 2, polio2
4	16 weeks	DTPoq 3, polio3
5	9 months	anti-measles, anti-amaril

As of 2004, the calendar will include two (2) new antigens: the vaccines against hepatitis B and haemophilus influenza b:

Table n° 4: Routine immunisation calendar for infants between the age of 0 and 11 months as of 2004.

Contact	Age	Recommended antigens
1	Birth	BCG, polio 0
2	8 weeks	DTPoq 1, polio 1, Hep1, Hib1
3	12 weeks	DTPoq 2, polio 2, Hep2, Hib2
4	16 weeks	DTPoq 3, polio 3, Hep3, Hib3
5	9 months	anti-measles, anti-amaril

With regard to the elimination of maternal and neonatal tetanus, the programme ensures the immunisation of women at childbearing age and pregnant women. In order to ensure efficient immunity and to protect the newly born, the immunisation calendar plans 5 contacts distributed as follows:

Table n° 5: Calendar for immunisations against tetanus for pregnant women and those at child bearing age.

Contact	Period	Antigens recommended
1	As soon as possible	TT 1
2	4 weeks at least after TT 1	TT 2
3	6 months at least after TT 2	TT 3
4	12 months at least after TT 3	TT 4
5	12 months at least after TT 4	TT 5

B. POPULATION TARGETED BY ROUTINE IMMUNISATION AND ADDITIONAL ACTIVITIES

Table n° 6: Population targeted by the EPI

Group	Proportion of the total population	Immunisation strategy
Infants aged 0-11 months	4,21%	Routine EPI
Infants aged 0-59 months	18,78%	NID
Infants aged 9-59 months	15,55%	Control of measles
Infants aged 6 months – 14 years	48%	Control of yellow fever

Pregnant women	4,61%	Elimination of neonatal tetanus
Women of child bearing age	22,80%	Elimination of neonatal tetanus

Source: *GPHC 1996 & EDS-II*

C. QUANTITATIVE AND QUALITATIVE DATA ON THE EPI AND MONITORING OF DISEASES

1. Immunisation coverage and drop out rates according to 1997 - 2002 administrative data

Table n° 7: Progress of immunisation coverage and drop out rates in percent between 1997 and 2002

ANTIGENS	YEARS					
	1997	1998	1999	2000*	2001*	2002*
BCG	46	52	60	80	84	90
DTP P 3	28	31	42	57	64	69
MEASLES	33	38	53	59	65	64
YELLOW FEVER	27	33	50	56	52	61
TT 2 (FE)	21	21	30	34	37	44
Drop out rate DTP-P1/DTP-P3	-	41	35	32	26	22

Source*: SPV/EPI * CV by district in annexes*

2. Immunisation coverage and dropout rates according to external 1998 and 2003 audit data.

Table n° 8: Immunisation coverage in percent from external audits between 1998 and 2003.

ANTIGENS	YEARS	
	1998	2003
BCG	72	90
DTP P 3	34	77
MEASLES	29	72
YELLOW FEVER	33	71
TT 2 (FE)	57	76
DROP OUT RATE DTP-P1/DTP-P3	38	16

Source: *SPV/PEV*

Immunisation coverage constantly progressed between 1997 and 2002. Sustained efforts made in the context of EPI reactivation, particularly since 1999, have resulted by increasing immunisation coverage that reached a rate of 69,10% for DTP-3 in December 2002, thus exceeding the objective set at 65% (2001-2005 strategic plan). However, there are marked differences between the health districts. The EPI introduced the « vacci-plus » strategy in order to deal with this situation. Furthermore, there has been a gradual fall in the dropout rates (DTP1-DTP3 = 22% in 2002) which shows the ability of health facilities of reducing the number of missed opportunities (this rate is even slightly lower that the recommended target of 25%). Moreover, the results of the audit regarding data reliability revealed a 57,6% verification factor (DQA 2002) which is below the 80% mark recommended. This emphasises the need to improve training standards and for the dissemination of guidelines

regarding data reliability. This low reporting rate shows in the results of immunisation coverage surveys (1998 and 2003) that are higher than those of administrative results.

3. The vaccine wastage rate

The wastage rate between 1997 and 2002 does not show an improving trend with regard to both freeze-dried and non-reconstituted vaccines. Wastage rates remain high in spite of the widespread dissemination of guidelines regarding the opened vial policy and the holding of immunisation information sessions. The main causes of vaccine wastage are fundamentally:

Insufficiently trained health agents
Contaminated vials
Technical errors on the part of health agents
Vaccines that have reached their expiry date
Stock management rules that are misinterpreted
The difficulty of managing reconstituted vaccines, particularly BCG, VAR, and AAV that leads to tremendous losses, especially in the advanced strategy.
The packaging of vaccines in 10 or 20 dose vials.

Table n° 9: Vaccine wastage trend in percent between 1997 and 2000

ANTIGEN	YEARS			
	1997	**1998**	**1999**	**2000**
BCG	58	62	73	67
Oral POLIO	30	28	32	30
TT	38	40	48	48
DTPCoq	25	30	41	35
MEAS	64	50	72	66
AAV	70	66	79	74

Source: SPV / Study survey regarding vaccine wastage rates between 2001 and 2002

Table n° 10: Progress of vaccine wastage rates in percent between 2001 and 2002

	2001	**2002**
BCG	56	64
POLIO Oral	45	45
VAT	39	44
DTPCoq	11	28
VAR	54	-
AAV	52	49

Source: SPV / Routine EPI (estimations on the basis of administrative data)

4. Disease monitoring performance levels

The programme has developed towards a comprehensive approach with regard to the monitoring of diseases with an epidemic potential. The current system consists of immediate notification and the taking of a sample in cases of measles and acute flaccid paralysis. This is complemented by a weekly notification of cases by each of the 55 districts, as well as a monthly notification regarding the number of vaccine doses administered in addition to the cases of measles, neonatal tetanus, and acute flaccid paralysis. Diseases are proactively and passively monitored the context of the eradication of poliomyelitis, control of measles, and the elimination of neonatal tetanus (PNT).

Table n° 11: Progress of performance indicators on AFP monitoring from 1997 to 2002.

YEAR	AFP cases expected	AFP cases notified	Non polio AFP rate	% AFP - stool samples coll. within 14 days	Compatible cases	Confirmed polio cases	Rate of cases promptly announced
1997	52	12	0,2	25%	01	02	-
1998	52	18	0,1	50%	06	04	-
1999	53	53	1	26%	01	00	68%
2000	56	100	1,9	67%	08	00	69%
2001	58	109	1,9	92%	00	00	75%
2002	59	151	2,5	93%	03	01	81%

Sources: *SPV/EPI*

Progress achieved with the system of AFP monitoring is considerable, and has enabled the country to move from clinical classification to a virological classification, thus taking a decisive step forward to eradicating poliomyelitis. These efforts to improve performance clearly show in the progress of indicators over the past 6 years (see table n° 11 below).

Monitoring of diseases targeted by the EPI, particularly of yellow fever and measles has improved, with laboratories being involved in confirming the diagnostic of cases that were previously simply notified. The programme to eliminate maternal and neonatal tetanus started in 2002.

Table n° 12: Cases of EPI diseases targeted by the EPI from 1997 until 2002

YEAR	PNT	YELLOW FEVER*		MEASLES		
	Cases notified	Cases notified	Cases sampled	Cases notified	Cases sampled	Cases analysed
1997	14			1 481		
1998	16			5 790		
1999	19			5 516		
2000	22			4272		
2001	12	57	57	4144		
2002	03	102	102	1773	1773	1773

Source: *SPV/PEV * cases of febril icterus (jaundice)*

5. Administrative data regarding additional immunisation related activities

5.1 Additional immunisation related activities against poliomyelitis

The National Immunisation Days organised annually since 1996 had a remarkable success, with immunisation coverage rates exceeding 100% throughout the country. The oral polio vaccine was frequently combined with vitamin A supplements and/or the measles vaccine. The NID's have always had political backing at the highest levels (these are officially launched the Head of State or his wife, who is the « godmother » of the NID's), and backing from partners.
During these campaigns, the immunisation coverage rate always exceeded 100%. This situation is due to:

An inadequately ascertained target population (the denominator.

A population infatuated by oral vaccines.
Insufficiently training of immunisation administering staff.

The NID's could still take place for another three (3) years given that the wild polio virus was still affecting the sub-regions in 2002 (Nigeria, Ghana, and Niger), and given the recent discovery of four new cases with the wild polio virus in the Yako and Zorgho districts en 2003.

Table n° 13: Progress in percent of additional immunisation activities against Poliomyelitis between 1996 and 2002.

YEAR	OPV				
	CV		ZERO DOSE	WASTAGE RATE	CASES OF AFP
	1er Passage	2nd Passage			
1996*	96	107			
1997	107	107			
1998	101	102			
1999	102	107			
2000	115	118			
2001	112	114			
2002	100	114	6		11

Source: *SPV/EPI * January & February 1997*

5.2 Additional immunisation activities against measles

In order to control measles, Burkina Faso carried out several mass campaigns intended for children aged between 9 month and 5 years in 1998 and 1999, with respective coverage rates of 107% and 109%. In 2001, the campaign was carried out for children aged 09 months and 15, with a coverage rate of 103%. This last campaign made it possible to administer at least one dose of vaccines to 5 307 251 children in compliance with maximal injection safety procedures. Health agents were able to use auto-destructing syringes, safety boxes to collect used syringes, and incinerators to destroy the used syringes collected, for the first time during a mass campaign. These good results were confirmed by an immunisation coverage survey. A further mass campaign is planned for 2004 for children aged between 09 months and 5 years as part of the effort to control measles.

5.3 Additional immunisation activities against tetanus

Eight (8) health districts have been chosen to start activities. They consist of rural districts that have infrastructures, competent staff, and a good rate of use of preventive medical services:
Rate of use regarding PNC>50%
Coverage rate with TT 2<30%
Rate of assisted births< 30%

However, only four carried out the immunisation campaign. The strategy consisted of administering a first dose to all women at birth giving age that had not received a single dose. The districts of Yako and Boromo were able to comply with these guidelines, and achieved the set target of 80%.
The eight districts could not be covered in view of insufficient TT vaccine supplies and the delayed delivery of injection material.
These immunisation campaigns will carry on in the high-risk districts until 2006 as part of the effort to eliminate PMT.

Table n° 14: Immunisation coverage in percent following additional activities against tetanus in 2003

DISTRICT	FIRST PHASE		SECOND PHASE	
	TT 1	TT 2	TT 1	TT 2
BOROMO	88			
DIAPAGA	62	16	59	47

YAKO	99		82	
REO	62			

Source: SPV/EPI

D. OBJECTIVES AND OBJECTIVES REVISED DUE TO FINANCIAL LIMITATIONS

1. General objective

To reduce infant mortality and morbidity rates linked to diseases prevented by immunisation

2. Specific objectives

2.1 Specific objectives regarding routine immunisation

To bring immunisation coverage of infants aged 0 to 11 months and pregnant women to national levels by 2009 :

Table n° 15: **Annual immunisation coverage targets in percent for the 2003-2009 period**

Antigen /Year	2003	2004	2005	2006	2007	2008	2009
BCG	90	91	92	93	94	95	95
DTPP-P1	90	91	92	93	94	95	95
DTP-P3	75	80	85	87	89	90	90
MEAS	75	80	85	87	89	90	90
AAV	75	80	85	87	89	90	90
TT-2 (Pregnant women at birth giving age	70	80	85	86	87	90	90

Introduction of new vaccines (hepatitis B and haemophilus influenza b) to the routine EPI in Burkina Faso in 50% of health districts from 2004 onwards.

Table n° 16: Annual immunisation coverage targets in percent for the new vaccines for the 2003-2009 period

Antigen /Year	2004	2005	2006	2007	2008	2009
Hep-Hib	80	85	87	89	90	90

The introduction of the new vaccines was initially planned in 2003 (in compliance with the new vaccines introduction plan submitted to GAVI) has been shifted to 2004, mainly due to a low DQA verification factor and the absence of a recent external audit. The target of 80% in 2004 concerns 60% of the target population i.e. an immunisation coverage rate of 48% compared to the overall population. The new vaccines will be provided to the rest of the country as of 2005. These changes also take considerations such as equality, technical obstacles into account so as to avoid the simultaneous use of different data gathering tools, different vaccine packaging methods, and different immunisation calendars over the next 4 years.

Reduction of the vaccine wastage rate until 2009 by:

25% for reconstituted vaccines.
15% for non-reconstituted vaccines (depending on the choice of packaging formats).

Table n° 17: Annual wastage targets in percent for the 2003-2009 time period

ANTIGEN	WASTAGE RATE						
YEAR	2003	2004	2005	2006	2007	2008	2009
BCG	55	50	45	35	30	25	25
DTP	25	20					
DTP-Hib		20	15	15	15	15	15
Measles	45	42	40	35	30	25	25
Polio (Sabin)	45	40	35	25	15	15	15
Tetanus	40	35	30	25	15	15	15
Yellow fever	45	42	40	35	30	25	25
Hepatitis B	0	20	15	15	15	15	15

Reduction of the DTP1 / DTP3 dropout rate to less than 5% by 2009.

Table n° 18: Annual dropout targets in percent for the 2003-2009 period.

	YEAR						
	2003	2004	2005	2006	2007	2008	2009
DTP1/DTP DROP-OUT RATE	17	12	8	6	5	5	5

2.2 Specific objectives regarding additional immunisations

- **Specific objectives for additional immunisation campaigns against poliomyelitis: administer two drops of vaccine to each infant aged 0-59 months.**
- Organisation of two (2) additional immunisation campaigns against poliomyelitis in 2004 and 2005 ;
- Organisation full-scale immunisation campaigns against poliomyelitis in regions where the wild polio virus is detected.

- **Specific objectives for additional immunisation campaigns against measles :**
- Immunisation of at least 95% of infants aged between 09 and 59 months throughout the entire country during the 2004 mass campaign.

- **Specific objectives for additional immunisation campaigns against maternal and neonatal tetanus :**
- Elimination of PNT in the hard to reach high risk areas by means of additional immunisation activities between 2004 and 2007, and the immunisation of 80% of women at birth giving age in these areas.

2.3 Specific objectives of activities to epidemiologically monitor diseases targeted by the EPI

Target set for the monitoring of AFP cases :
To reach and maintain national performance indicators of AFP monitoring for the certification of the eradication of poliomyelitis by 2004.

Target set regarding measles
To reach and maintain national performance indicators outlined with regard to monitoring of cases based on the control of measles by 2004.

Target set regarding maternal and neonatal tetanus

To reach and maintain national performance indicators outlined with regard to monitoring of cases based on the control of post-maternal tetanus by 2004.

2.4 Specific objectives regarding injection safety

To ensure a regular supply of auto-destruct syringes and safety boxes in appropriate quantities to all health facilities between 2004 and 2009.

To ensure that all waste is correctly collected and disposed of at all health facilities by 2009.

3. Reasons why the objectives were not achieved

The low use of health services (0,22 contacts per inhabitant and person in 2001) require a more enhanced immunisation strategy focused primarily on population groups that have limited access to the former due to geographic reasons.

The antigen supply network faced obstacles linked to the lack of communication regarding budgets allocated for the purchase of vaccines, consumables, and technical material, which led to delays in deliveries. The Ministry of Health set up a unit to coordinate and monitor the progress of these different aspects to alleviate this situation.

The wider application of HILIC funds to other key areas could lead to lower allocations in the health sector, and thus to the need to plead in favour of this sector.

Finally, the social and political situation of the sub-region due to the conflict in Ivory Coast has resulted in a flow of repatriation that is currently estimated at more than 350,000 people in August 2003, consisting mainly of women and children. These various factors linked to the shortage of anti-genes in 2002 and 2003, particularly for BCG and TT, could prevent objectives from being achieved if no appropriate steps are implemented.

II. STRATEGIES AND AREAS OF ACTION

Achieving these objectives requires the implementation of various strategies over the coming seven years.

A. STEPS TO SIGNIFICANTLY INCREASE IMMUNISATION COVERAGE IN A SUSTAINED LONG-TERM MANNER

The following strategies have been selected:

1. Enhancement of standard immunisations at fixed facilities, of the advanced strategy and reactivation of the mobile strategy.

The two immunisation strategies currently being implemented will be emphasised, and include:
The fixed strategy that focuses on population groups living at less than 5 Kilometres from a health facility.
The advanced strategy that focuses on those living 5 kilometres and further from a health facility.
The mobile strategy, (which focuses on population groups living more than 15 kilometres from a health facility) that had gradually been abandoned due to budget restrictions applied by major partners, will be reactivated where relevant (particularly in the Sahel districts with hard to reach areas and a very scattered population.

2. Strengthening of the « Vacci-Plus » / RED strategy

The « vacci-plus » strategy is intended for districts with low immunisation coverage and relatively high population numbers. Among other things, It consists of regularly organising immunisation sessions based on effective social mobilisation, immunisations being free of charge, locating non-immunised individuals, nearby immunisation services, and the systematic verification of the immunisation status of all children and women at birth giving age who make use of health services.

3. Improvement of planning and management standards at all levels

This strategy depends on improving the standards of strategic and operational planning (district plans and HSPC micro-plans) by involving the partners and communities, and by updating the medical installations at health facilities. Steps to be taken include:
- The elaboration of a maintenance plan
- The implementation of a plan regarding supplies and the plan to re-establish logistical means.
- Improving the resource mobilisation potential by securing the budget for vaccines, consumables, and gas.
- Mobilising resources in association with the partners, and involving communities in the funding of activities.

4. Improvement of immunisation standards

This requires raising the training standards of health agents, and providing them with equipment adapted to immunisation activities. Steps will include:

Finalising the training curriculum
Implementing the training curriculum
Improving follow-up and evaluation standards at all levels.
Reducing the dropout rate by identifying non-immunised individuals with a more energetic approach involving the community, adopting/improving the scheduling system or the vaccination certificate, and developing sponsorship of children.
Reducing the number of missed opportunities by disseminating guidelines (pros and cons of immunisation, opened vial policy, systematic status checks).
Providing health facilities with suitable logistical means.
The supply of vaccines (regular allocation of currently used and new vaccines).
Increasing HSPC staff numbers by effectively applying staff related standards.

5. Organisation of additional immunisations

- For immunisations against measles, meningitis, poliomyelitis, and neonatal tetanus.

B. IMPROVING ANTIGEN MANAGEMENT

This will require:

Tracking ordering procedures and the delivery of vaccines and technical material by the tracking and coordination unit set up for this purpose, and that incorporates the technical and administrative headquarters of the Ministry of Health, the Ministry of Finance, and the partners.
Complying with the supplies plan.
Improving the ability of those running the EPI and regional health headquarters in estimating needs, managing stocks and technical material, by providing training in using software for vaccine management.
Reducing wastage rates by:
Implementing the opened vial policy.
Reorganising fixed centre, advanced, and mobile immunisation activities.
Complying with the immunisation programme.
Encouraging dialogue with the communities.

C. INTRODUCTION OF NEW VACCINES

Vaccines against hepatitis B and haemophilus influenza b will be introduced in 50% of the districts in 2004, and will be extended to the whole country in 2005. This introduction will require:

Health agents being trained
Adapting management tools
Adapting storage facilities where necessary.

D. ENSURING INJECTION SAFETY

Injection safety will require:
Providing immunisation centres with injection material and safety boxes in a continuous manner.

Appropriate collection and disposal of waste at all health facilities.

E. ENSURING AFFORDABLE TREATMENT & ACCESS TO IMMUNISATION

It will be necessary to ensure that syringes are free of charge for standard immunisations, with government control to ensure that free immunisations remain free of charge.

F. IMPROVING COMMUNICATION FOR DEVELOPMENT & SOCIAL MOBILISATION

A rational approach to communication for development / social mobilisation requires the:
Elaboration of a social mobilisation and communication plan by the districts that takes local attitudes and the approach of the media (local radio, traditional and religious leaders, etc.).
Implementation of the national communication/ social mobilisation plan that will enable all those involved working towards achieving EPI objectives.

G. ENSURING THAT KEY DISEASES TARGETED BY THE EPI ARE MONITORED

Monitoring key EPI diseases will require:

Improving skill levels through training/refresher training in integrated epidemiological monitoring.
Coordinating the activities between the various levels.
Involving the communities.
Actively monitoring key diseases.

III. GENERAL PROGRAMME MANAGEMENT

The Disease Prevention through Immunisation Headquarters, which underlies the General Health Headquarters (Direction générale de la santé), has the following roles:

Developing, planning, coordinating, tracking, and evaluating immunisation activities.
Ensuring that key diseases targeted by the expanded programme on immunisation are monitored in conjunction with the Headquarters for the Fight against Diseases.
Participating in operational research on immunisations.

The Disease Prevention through Immunisation Headquarters is placed under the authority of a director in charge of organising, coordinating, and controlling the state of the health services. There are 20 staff members (3 doctors, 1 health advisor, 6 health attaches, 1 state nurse, one qualified nurse, and one administrator of hospitals, 1 driver, 1 messenger, 1 secretary, 3 workers, and 1 guard).

The decree project of the DPV administrative chart currently being endorsed is planning a secretariat and 5 departments:
An administration and finance department.
A planning, training and research department.
A monitoring, data management, and epidemiological monitoring department.
A supplies and logistical maintenance department.
A social communication and social mobilisation department.

Decentralisation of EPI management includes:

- At the central level :

The Ministerial EPI Health Coordination Committee and Partners for the EPI was created on 26 September 1989 in an effort to strengthen partner coordination (Raabo N°0012 MSAN6AS/SG/DSEV), and is the unit for follow-up, backing, and counselling.
The DPV also receives technical backing from a full-time WHO team (1 international EPI consultant, 2 national consultants, and one secretary).

At regional level

13 regional storage facilities for vaccines and consumables, under the control of local managers in charge were created with the goal of bringing the management structures of the beneficiaries closer together (the vaccine and technical materials supply network). Enhanced storage facilities in two new regions (southern centre: manga and the central plateau: Ziniaré) will bring vaccines closer to the population.

At district level

30 of the 55 districts are equipped with storage facilities situated in the main towns of districts.
The peripheral level: approximately 1168 health facilities are equipped with cold chain material to cover immunisation needs.

Of the motorcycles used to facilitate advanced activities, only 461 of 1226 counted were in good condition i.e. less than 5 years old. Only 592 of 1135 refrigerators were in good working condition i.e. less than 5 years old.

Monitoring of diseases and the management of immunisation campaigns against meningococcus meningitis A, C, and W135 is handled by both the DPV and the DLM, which occasionally creates confusion regarding data gathering, processing, and analysis and with regard to immunisation campaign management. More clearly defined roles and tasks as well as better coordination of activities are proving to be necessary to avoid occasionally conflicting sources of data.

IV. FUNCTIONS AND ATTRIBUTIONS OF FINANCIAL PARTNERS OF THE PROGRAMME

A. DOMESTIC PARTNERS

These consist of the government, communities, development partners, and private sector NGO's.

B. EXTERNAL PARTNERS

WHO: technical and financial backing for all EPI activity sectors and logistics.

UNICEF: Technical and financial backing with emphasis on communication, training, management tools, backing of the advanced strategy, the cold chain, and supplemental immunisations. UNICEF exerts its role primarily in the convergence areas of the United Nations system, and at the central level.

The EUROPEAN UNION via the FED ARIVA/CATR project: technical and financial backing in the fields of training, research, management tools, providing routine EPI anti-gene supplies, and epidemiological monitoring.

HKI: Financial backing for the purchase of vitamin A, training of volunteers during additional immunisation activities, and fairly shortly for the routine EPI.

ROTARY: Financial backing for social mobilisation, the cold chain, and supplies of OPV, either direct or via the WHO.

HDDP: Provides financial backing to the regions and districts with regard to the implementation of their annual plans of action.

MSF: Provides technical and financial backing to the districts of the waterfalls region

CDF: provides logistical support to the Saponé health district.

MSPSPOKK: provides technical, financial, and logistical backing to the districts of the central plateau, with the exception of the Zorgho district.

The Burkina Plan: provides technical, financial, and logistical backing to the districts of the central northern, south-western, and central eastern regions.

HSPP: provides technical, financial, and logistical backing in the regions of the south-west, the upper basins, and the Mouhoun loop.

AMP: provides technical backing in the area of training and supervision of twenty (20) districts, and for the diagnostic and monitoring of severe bacterial meningitis.

SCPB: Provides financial backing to the districts of the central Northern and Manga (DRS Southern centre) regions.

DCC: provides technical and financial backing with regard to health information management, and supervision and monitoring at three (3) trial districts (Boulsa, Dano and Zorgho).

CISCC: provides financial backing for training, logistics, and operational costs to the districts of Kossodo and sector 30.

C. CONSEQUENCES OF CHANGES

The World Bank and the SCPB will no longer provide direct backing for the immunisation programme in view of their new partnership with the country. Furthermore, the MSPSPOKK and CISCC projects ended in 2002. However, the Red Cross will provide backing to the immunisation programme with emphasis on social mobilisation and training. These changes will require a more efficient use of available resources and efforts to obtain further resources.

SECTION III: CURRENT STATUS OF EXPENDITURES AND BASIC FUNDING OF THE PROGRAMME

The methodology used is fundamentally based on the one recommended in the financial sustainability elaboration guide.

The exchange rates of 1 US$ for 716 FCFA and 700 FCFA have been used respectively for 2001 and 2002 for calculations in this section.

The costs of staff involved with immunisation at all levels were ascertained according to the amount of time devoted to this activity depending on the structures. Average indicators for each staff category were ascertained on the basis of the salary scale that applies since 1999. This has made it possible to assess the financial incidence by taking allowances and contributions linked to the Independent Civil Service Pension Fund (CARFO) into account.

The time of 18,20% devoted by staff at fixed immunisation centres is taken from the EPI audit of 1998[14]. With regard to the EPI central level, regional storage centres and those of health districts, the time of 100% and 90% are derived from the study of EPI costs and funding in Burkina Faso carried out in 2000. The salary WHO staff providing full time EPI backing was not taken into account in 2001. It was not possible to extract the amount of daily payments that is included in the operational costs. The amount regarding salaries is therefore underestimated.

To calculate the cost of capital amortisation, the useful lifespan of any kind of equipment depends on fiscal provisions. When the purchasing cost of an item is unknown, the current value of this item is used to ascertain the cost of capital. This cost was not calculated for buildings.

The amount spent was used to estimate the cost of injection material in 2001, given that data from the Headquarters for Prevention through Immunisation pertaining to transfers of stock was not available.

The cost ascertained per child immunised with DTP-3 did not include the costs of additional activities that are not exclusively focused on the population targeted by the routine EPI. This is due to the fact that the campaigns against measles and meningitis cover a wider age bracket (9 months to 15 years for measles, and 2 –30 years for meningitis). The share of routine EPI funding represents 41,93% of total costs. This limitation results in an underestimation of the cost per child DTP-3 immunisation.

Funding of local communities was not taken into account, given that the amounts are unknown. The contribution of the MC for the entire country was estimated on the basis of data from the provisional report on the study of community participation and the funding of immunisation activities[15] carried out in 2003. The MC contribution was evaluated at US$ 5690 in 2001 and US$ 15,493 in 2002 based on the sample consisting of eight health districts.
The share of vaccine funding from the European Union could not be ascertained, given that its financial support is not specifically targeted. The working group did not obtain any information from the relevant sources.

BASIC COSTS AND FUNDING OF THE PROGRAMME(2001)

1. BASIC COSTS OF THE PROGRAMME EN 2001

The total cost of the programme in 2001 prior to the use of GAVI funds i.e. the base year (annex 1) is evaluated at US$ 11 377 962 of which US$ 4 770 555 is for the routine EPI. The per capita cost for the entire programme is US$ 0,98, of which US$ 0,41 is for the routine EPI.

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[14] Year for which data is most recent. The EPI audit of 2003 did not record this information.
[15] ARIVA ;2003

The total cost of the programme represents 31,23 %[16] of total public expenditures on health. It falls to 25,87% when the backing from partners for development is included. However, this percentage is underestimated due to

.
The fact that the public investment programme (PIP) which corresponds to title IV (equipment, investments, and capital transfers) part of the government budget does not take funding of all partners into account.

The cost per child to be immunised with DTP-3 is US$ 14,72 for the routine EPI.

When analysing the cost structure, the recurrent costs of routine immunisation represent 16,77%. The share of routine vaccines in the total cost is 4,25% and 25% of recurrent costs. The capital costs and those of additional activities represent 6,37% and 58,07% respectively. The share of divided costs is 18,79%.

2. BASIC FUNDING OF THE PROGRAMME IN 2001

The total cost of the programme was covered by the government (52,41%) of which 34,91% came from the regular budget, 17,50% from HILIC resources, the MC (0,33%) and partners (47,26%). The share of internal funding represents 52,74% when including MC backing.
The government mainly funded vaccines, injection material and salaries, transport, maintenance costs, and gas. The MC helped covering costs for gas, servicing of motorcycles, transport (petrol), and spreading awareness. The development partners basically funded vaccines, activities to monitor and control routine EPI diseases, and additional activities.

CURRENT COSTS AND FUNDING OF THE PROGRAMME (2002)

1. PROGRAMME COSTS IN 2002

The total cost of the programme in 2002 (see annex 2), the year when GAVI funds started being used, is evaluated at US$ 8 825 630, of which US$ 5 305 631 went to the routine EPI. The per capita cost for the whole programme is US$ 0,74, of which US$ 0,45 for the routine EPI.

The total cost of the programme represents 27,43 % of public expenditure on health, but falls to 23,25% when backing from partners for development is included.

The lower per capita cost is primarily due to the lower cost of the programme and the higher estimated population number that increased from 11 603 951 inhabitants in 2001 to 11 880 125 inhabitants in 2002. The reduction of total costs of the programme by 22,43% compared to 2001 is largely due to the fact that the measles campaign was not carried out in 2002. The cost per infant immunised with DTP-3 is US$ 14,84[17] for the routine EPI.

The analysis of the cost structure shows that recurrent costs represent 24,41% of the overall cost, and increased by 12,91% largely due to the increase in costs in practically all sectors, including routine vaccines which was up by 5,37%).

Routine vaccines represent a share of 5,75% of total costs, and 23,60% of recurrent costs. Costs in capital represent 8,59% of the total cost of the programme, and increased by 4,19% compared to 2001. This can be explained the taking into account of the amortisation value of equipment carried out in 2001 in addition to that of 2002. Additional activities represent 39,88%, of which 55,75% was allocated to the poliomyelitis campaign. The share of divided costs is 27,12%.

The chart shown below better illustrates the breakdown of costs [18].

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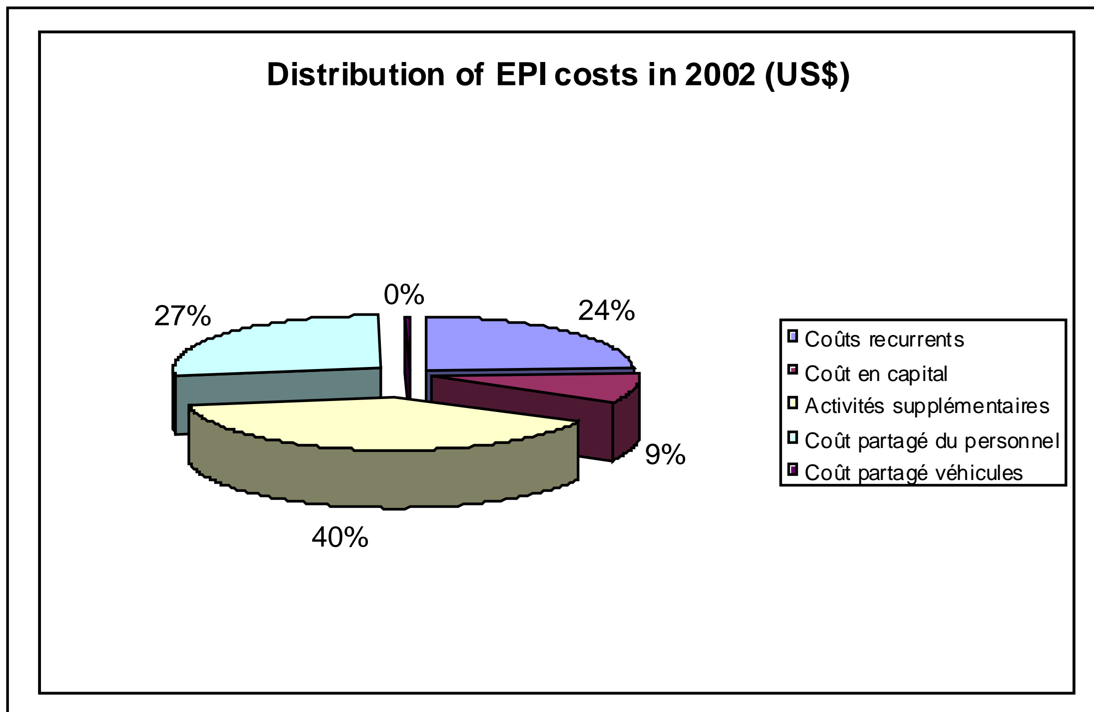
[16] Estimated share due to the simple fact that the denominator does not take PPTE resources into account.

[17] The number of infants completely immunised with DTP-3 increased from 323,986 in 2001 to 357,465 in 2002 according to EPI data.

[18] With, however, minor differences in the percentages calculated using Excel spreadsheet software.



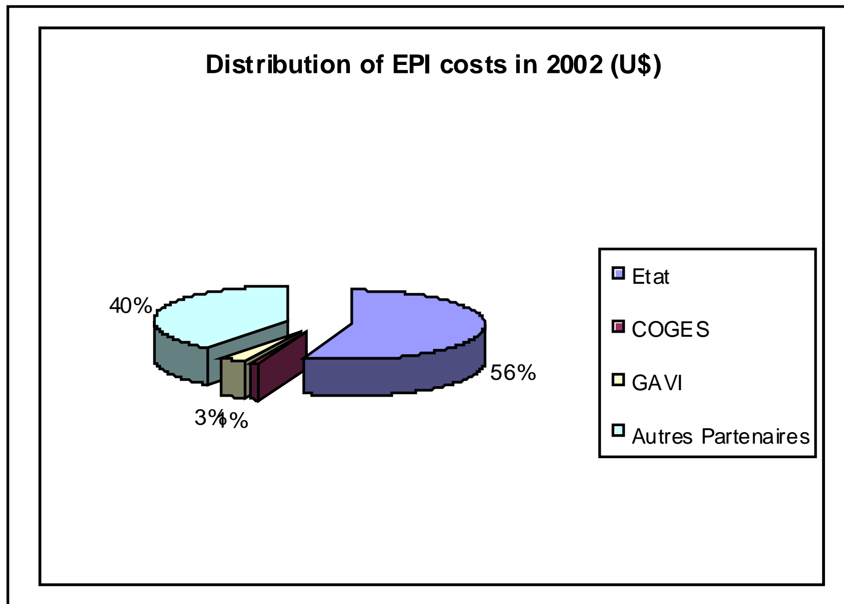
2. BASIC FUNDING OF THE PROGRAMME IN 2002

As in 2001, the total cost of the programme was covered by the government (55,91%), of which 50,74% from its regular budget and 5,17% from HILIC resources, 1,14% from the MC, 3,09% by GAVI, and 39,86% by other partners. The share of internal funding is 57,05%, with external funding at 42,95%. The introduction of GAVI funds did not modify the funding structure in 2002. This situation is partly linked to the fact that the cost in capital only concerns amortisation.
Government funding fell by 17, 23% from US$ 5 962 444 in 2001 to US$ 4 934 886 in 2002. Funding from partners also fell by 29,53% from US$ 5 378 481 in 2001 to US$ 3 790 036 in 2002. The absence of a measles campaign partly explains this situation.
However, the estimated contribution from the MC to the entire country increased from US$ 37 037 in 2001 to US$ 100 708 in 2002, up by 171,91%. With the health and nutrition development project having ended in 2001, the peripheral health facilities had to cover certain expenses that this project had previously covered almost entirely.

Government funding was mainly devoted to vaccines, injection material for the routine EPI, salaries, and vaccines for additional activities. The MC funded the same items as in 2001. GAVI funding was largely used for injection safety purposes (injection supplies for the routine EPI), to increase the means of immunisation services (purchase of motorcycles for which only amortisation was taken into account), perdiems for immunising staff with regard to the implementation of the strategy to speed up the EPI, and social mobilisation. The partners funded the vaccines and the transport of these, injection material, control and monitoring activities for the routine EPI, poliomyelitis, neonatal tetanus, and meningitis as part of the additional activities.

The chart below better illustrates the breakdown of funding by source[19] .

[19] With, however, minor differences in the percentages calculated using Excel spreadsheet software.



SECTION IV: FUTURE RESOURCE NEEDS AND FUNDING & ANALYSIS OF VARIANCE

This section covers the projections of resources necessary for the EPI to operate, and funding expected to cover the needs. The analysis of discrepancy will indicate whether or not to mobilise additional resources and/or to develop other appropriate strategies, and to guarantee financial sustainability of the programme.

On the methodological side, the estimation of resources is largely based on the 2001-2005 strategic plan, and on the dossier submitted to GAVI for support. The objectives have been updated in accordance with current progress of the EPI.

The estimation of resources includes:

The target population based on the GPHC of 1996, with a growth rate of 2,38% and the immunisation coverage rate to achieve every year :
The gradual introduction of the new vaccines (hepatitis B and DTP-3 combined with haemophilus influenza) as of 2004. The goal is to cover 60% of the target population in 50% of health districts in 2004 i.e. 48% of the total target population, and 100% of the population as of 2005 in all health districts.
The improvement of injection safety (incinerators, auto-destruct syringes).
The prices of doses are the reference prices of 2003 from UNICEF included in the guide to elaborate the PVF.
The campaigns against poliomyelitis, tetanus, and meningitis are taken into account respectively every year, and will be until 2005, 2007, and 2009.
That salaries have been estimated on the same basis as in section 3, and by taking into account changes in the number of fixed immunisation centres based on guidelines of the triennial plan for the implementation of the national health development plan (42 on average per year).
The rate of 3% has been used regarding developments with salaries and other expenditures.
The distances covered for the delivery of vaccines and the advanced strategy to estimate the cost of fuel and other maintenance costs.
The replacement of the current equipment being planned on the basis of 25% per year given the absence of accurate information about the purchasing dates (for the cold chain and other purchases planned in the EPI strategic plan).
The inflation rate used is 3%, and is in line with convergence criteria of the UEMOA.

The exchange rate used is US$ 1 for 615 FCFA. It was obtained by calculating the average exchange rate at the beginning of January and at the end of July 2003.

The funding estimations were made on the basis of data provided by the development partners and the projects of the Ministry of Health between 2003 and 2006. The contribution of the government was estimated on the basis of previous allowances, and on the principle that the government will continue to pay the salaries, vaccines, and medical consumables in the context of III. Since 1996, the government has set up a national fund to fight epidemics (FONALEP) for additional activities. It is receives US$ 325 203 on an annual basis, an amount considered as financially sound.

With regard to funding of the new vaccines, it is recommended that GAVI take over the entire cost in 2004 to enable the government implement the necessary steps to provide its contribution from 2005 onwards. It is suggested that the government covers up to 2% of the vaccine costs per year until 2009, in accordance to the proposals regarding the plan for the introduction of new vaccines submitted to GAVI. The amount allocated for the contribution to routine EPI funding will be made available every year until 2006. The amount of funding linked to the reward was estimated on the basis of the expected coverage rate with DTP-3 (US$ 10 for each infant immunised with this antigen) every year as of 2004, and until 2006, with a shift in 2007 to include progress made in 2006.

The contribution of local communities could not be ascertained. The estimation of the probable contribution by the MC was made on the basis of a 5% rate of increase that takes into account the poverty level of the population and the non-representative nature of the sample.
With regard to financial risk assessment, the risk (1) and (2) is considered as financially sound and probable. Government funding of the routine EPI is considered sound due to the III, and the same applies to the new vaccines. The funding amounts announced by development partners are being considered as guaranteed until 2005. As of 2006, their funding is considered probable since they have committed themselves until 2005. The funding from GAVI is considered as guaranteed until at least 2009, along with funding for the introduction of the new vaccines. The share of funding linked to the results in the form of a reward is considered as probable.

I. PROJECTION OF RESOURCES NEEDED

The amount necessary for resources for the 2003-2009 period is estimated at US$ US 135 480 176, or US$ 81 997 398 without additional activities (see table no. 19). On average, the annual amount of necessary resources is US$ 19 354 311, or $ US 11 713 914 without additional activities.

Table n° 19: Necessary resources from 2003 to 2009

Years	2003	2004	2005	2006	2007	2008	2009	TOTAL
Necessary resources	11363736	19410673	20044053	19018868	20233506	21101427	24307913	**135480176**
Necessary resources Without additional activities	6221406	11438940	12779094	12772666	12885888	12382437	13516967	**81997398**
Necessary resources With reduction of Wastage rate	11360164	19407012	20040103	19015880	20240767	21099442	24305881	**135469249**

By reducing the wastage rate, the amount to cover needs is US$ 135 469 249. This reduction does not seem to influence the amount covering necessary resources.

For rest of the period (2003-2006) covered by the GAVI fund, except for the funding of new vaccines that will be used until 2009, the amount to cover necessary resources is US$ 69 837 330, or $US 17 459 333 on average per year. Without additional activities, this amount is US$ $ US 43 212 10, or US$ 10 803 027.

Consecutive to this fund, and for the 2007-2009 period, the amount is US$ 65 642 846, or US$ 21 880 949 per year, without the new vaccines. This amount is reduced to US$ 38 785 292, or $ US 12 928 431 without additional activities.

When looking at the cost structure, recurrent costs represented 41,78% of total costs, and more than two-thirds of these costs (69%) without additional activities during the whole period of the plan. This situation is largely explained by the introduction of new vaccines to the routine EPI that has high vaccine costs. Vaccines represent 28,41% of the total costs, and 46,94% without additional activities. Divided costs for equipment costs, additional activities represent 8,64%, 39,48% and 10,10% respectively of total cost.

II. PROJECTION OF FUTURE RESOURCES

Various sources are involved in the funding of the EPI. The government, the WHO, UNICEF, and GAVI are the main sources of funds.

The amount of guaranteed payments for the 2003-2009 period is estimated at US$ 82 895 487, or US$ 11 842 212 on average per year (see table no. 20) and covers 61,19% of all needs.

Table n°20: Guaranteed and probable funding between 2003 and 2009

	2003	2004	2005	2006	2007	2008	2009	TOTAL
Guarant.funds	11603797	13106823	13176656	11018979	10970564	11353839	11664829	**82895487**
Probable & Guarant.funds	11704230	13547068	14821852	12219840	11785110	12221519	12538917	**88838536**

For the remaining time between 2003 and 2006, the amount of guaranteed funds stands at US$ US 48 906 255, or US$ 12 226 564 per year. The share of needs covered when taking additional activities into account is 70%. Without these activities, needs are largely covered if the resources allocated to the former are reallocated to the routine EPI instead. The amount of funds for the 2007-2009 period is US$ 33 982 232, or US$ 11 327 411 per year. This only covers 51,77% of needs for that period, and is due to the fact that the partners do not make commitments exceeding 3 years.

When considering guaranteed and probable funds, the amount estimated for the entire period that covers only approximately 65,57% of needs including additional activities is US$ 88 838 536, or $ US$ 12 691 219 per year. The amount of guaranteed and probable funds for the 2003-2006 period is US$ 52 292 990, or US$ 13 073 248 per year. The share of covered resources is 74,88%. For the 2007-2009 period, the amount is US$ 36 545 546, or US$ 12 181 849 per year, which only covers 55,67% of needs. This situation endangers the financial sustainability of the programme, and points out the necessity to develop appropriate strategies to reduce funding requirements.

The analysis of the breakdown of funding sources in terms of guaranteed funds shows that the government will contribute 41,82%, GAVI 41%, and other health development partners 17,18%, for the 2003-2009 period. When taking probable funds into account, the respective shares are 39,02%, 40,41% and 19,65%. The share of funds from the MC is 0,92%. Funding of the programme depends on health development partners during this period. Funding is guaranteed for the 2003-2006 time period.

The contributions of guaranteed and probable funds from all sources are summarised in annex 3 and 4.

III. ANALYSIS OF FUNDING DIFFERENTIALS

The funding differentials take guaranteed funds and those that are probable, into account (table no.21).

Table n°21: Funding Differentials between 2003 and 2009

	2003	2004	2005	2006	Total	2007	2008	2009	Total	TOTAL
Costs (1)	11363736	19410673	20044053	19018868	69837330	20233506	21101427	24307913	65642846	**135480176**
Guarant.funds	11603797	13106823	13176656	11018979	48906255	10970564	11353839	11664829	33989232	**82895487**
Fund. diff. (2)	-240061	6303850	6867397	7999889	20931075	9262942	9747588	12643084	31653614	**52584689**
Costs (3)	6221406	11438940	12779094	12772666	43212106	12885888	12382437	13516967	38785292	**81997398**
Fund. diff. (4)	-5382391	-1667883	-397562	1753687	-5694149	1915324	1028598	1852138	4796060	**-898089**
Guarant.funds and probable f.	11704230	13547068	14821852	12219840	52292990	11785110	12221519	12538917	36545546	**88838536**
Fund.diff (5)	-340494	5863605	5222201	6799028	17544340	8448396	8879908	11768996	29097300	**46641640**
Fund. diff(6)	-5482824	-2108128	-2042758	552826	-9080884	1100778	160918	978050	2239746	**-6841138**

(1)= Cost with additional activities

(2)=Funding differential with additional activities

(3)= Cost without additional activities

(4)= Funding differential without additional activities

(5)= Funding differential without additional activities

(6)= Funding differential without additional activities

With the exception of 2003 when the guaranteed amount of funds exceeded the needs including additional activities, this amount will not be sufficient for the years ahead. The surplus of funds is linked to the specific nature of the W135 germ of the meningitis epidemic in 2002. The resources mobilised for this purpose largely exceeded the estimated needs. The differential in funding is rising from year to year, and is in US Dollars.

When looking at guaranteed and probable funds, the total differential is reduced by approximately 11%. When taking into account the needs without additional activities, the funds cover these. More specifically, the excess funds for 2003-2005 fully cover the funding deficits expected between 2006 and 2009.

By dividing the periods, the differential in funding is US$ 20 913 075, or US$ 5 232 768 on average per year including additional activities, and on the basis of guaranteed funds, until backing from the immunisation fund comes to an end, providing the deadline regarding the introduction plan of the new vaccines is not taken into account. There is a surplus without these activities providing that the resources devoted to the latter are allocated to the routine EPI. The financial differential is brought to US$ 17 544 340, or US$ 4 386 085 on average per year by taking guaranteed and probable funds as well as additional activities into account. Under these conditions, the differential is reduced by approximately 16%. Expenditures on vaccines represent 85,59% of the financial differential on average between 2003-2006. Between 2007 and 2009, the financial differential is US$ 31 653 614 with additional activities, and US$ 4 760 060 without these activities, based on guaranteed funds.

When looking at all funds, the financial differential is US$ 29 097 300 including additional activities, and US$ without these activities. On the basis of the macro-economic and financial framework of the NHDP, the financial differentials, with guaranteed funds and those that are guaranteed and probable, represent approximately 8% and 7 % of planned expenditures on the health sector[20] projected over the same period. The chart regarding projection tools shows a significant difference between necessary resources and probable funding.

In as far as risks to funding are concerned, a lasting social and political crisis in Ivory Coast will have negative repercussions on the economies of countries in the sub-region. The low competitiveness of prices of cash crops, particularly with regard to cotton on the international markets, linked primarily to subsidies granted to farmers in developed countries, can affect the cotton producing developing countries if no compensation mechanisms or if market rules are not applied. Insufficient resources with regard to the budget can affect funding of the social sectors if no efforts are made to maintain the levels of at least their current allowances to cover their expenditures.

With regard to funding of management committees, the progress of its contribution to funding health to recover costs, will be minimal given the growing poverty of the population[21]. The long-term future of the EPI very much depends on external guaranteed and probable funds being available for the entire time period of the plan.

[20] The denominator was estimated on the basis of the PNDS financial framework in the basic document of the meeting of capital lenders of the plan mentioned.

[21] Approximately 46% of the population lives below the poverty level according to results of the survey on living conditions of the households carried out in 2003 by the National Statistics and Demographics Institute

SECTION V: STRATEGIC PLAN & INDICATORS OF FINANCIAL SUSTAINABILITY

The strategic plan is the basis of the financial sustainability plan. Indeed, following the review of advantages, obstacles, opportunities, and risks linked to future funding in the previous sections, the strategy to be implemented to mitigate shortcomings and to contemplate the sustainability of the EPI primarily within the health sector is the quintessence of this document.
This strategic plan, the goal of which is to ensure long-term « financial autonomy of the EPI », is fundamentally focused on the way allocated are used with regard to mobilisation, reliability, and efficiency. This section therefore concentrates on three aspects:

I. Strategies and measures that make the mobilisation of adequate resources possible.

II. Strategies and measures enabling resources to be used more efficiently.

III. Strategies and measures that will maximise the efficiency of the ways resources are used.

These various strategies are scheduled in tables 22,23, and 24 on the next pages.

A. STRATEGIES AND MEASURES ENABLING THE MOBILISATION OF ADEQUATE RESOURCES

1. STRATEGIES AND MOBILISATION OF INTERNAL RESSOURCES

1.1 Steps taken by the government

Funding of routine EPI vaccine purchases is covered by the government as part of the III. It is recommended that the government increases funding of the health sector in its regular budget to get closer to the 10% standard recommended by the WHO, and possibly to the 15% standard decided by the Heads of State in Abuja in April 2001. This would enable higher credit allocations to the EPI. Indeed, the performance of the EPI helps in mobilising the varying share of budget support from the European Union.
Funding for the purchase of the new vaccines also depends on the release of the governmental counterpart evaluated at 2% of the cost of new vaccines between 2005 and 2009, in accordance with the plan for the introduction of the new vaccines. The government will take over costs for new and already used vaccines from 2010 onwards.
The government will also continue providing money to the national fund to fight epidemics on a yearly basis.
With regard to debt relief, the government should maintain, or possibly increase the current level of resources linked to the HILIC initiative that are allocated to the health care sector. Special attention is given to the EPI within the health sector in view of its role to fight diseases that immunisation prevents. The share of 4,41% devoted to the 2000-2003 immunisation programme for the purchase of vaccines, consumables, and the cold chain was calculated on the basis of previous funds granted to the EPI. This share must be left unchanged or increased over the next seven years. HILIC resources are currently allocated to the health and education sectors. The share of resources allocated to health care might fall if no efforts to plead for support are made to sustain at least the current share devoted to health care, with the SFFP currently under revision having to expand the priority areas.

1.2 Measures at community level

In addition to social mobilisation, local communities contribute to funding health care, particularly the EPI. Unfortunately, the amount of their current contribution is unknown, even though they will be called upon to play an important part with regard to administrative decentralisation. Their contribution must be ascertained.

1.3 Measures at institutional level

The Social ad Economic Council has set up a fund to fight poverty. Pleading to obtain support for this institution can help to mobilise additional resources to finance the EPI.

1.4 Measures regarding non-governmental internal sources

The analysis of current and future funding of the EPI highlights the importance of contributions from the government and the MC in relation to health development partners.
The possible reallocation of contributions from certain partners to other sectors could reduce the backing given to the immunisation programme, and put its future at risk.
The programme will also have to seek other internal non-governmental financial sources in order to be financially independent.
Stronger support from the MC and local communities could be other additional financial sources. Coordinating the participation of the NGO's will enhance transparency and improve efficiency in the way resources are used.
Strengthening cooperation between the public and private health care sectors, profit making or not, will significantly help the immunisation programme.

1.5 Implementation of the sectoral approach

The implementation of the sectoral approach along with various development partners can significantly help funding of the sector and an appropriate and timely allocation of resources to all key programmes including immunisation.

2. MOBILISATION STRATEGIES FOR EXTERNAL RESOURCES

Cooperation programmes with multilateral institutions involved in funding the EPI are subject to short durations (two to three years). This creates the need to obtain further resources from traditional partners when their cooperation periods with Burkina Faso come to an end. Furthermore, GAVI funds, which finance the important new vaccines, will stop in 2010, making it necessary to seek new sources of funding while keeping within the deadline for the introduction of the new vaccines. Strengthening the cooperation with the partners by giving the ICC a stronger role is recommended.

3. SUMMARY OF SPECIFIC MEASURES ENABLING THE MOBILISATION OF APPROPRIATE RESOURCES (Cf. table n° 22)

The indicators show the main strategy, actions, the person in charge of implementation, the estimated cost of implementation, a progress indicator, and the current value of the indicator.

Table n°22 *: Summary of specific measures enabling the mobilisation of appropriate resources*

Key strategy	Actions	Person in charge	Starting date	Estimated cost of implementation	Progress indicator	Actual value of the indicator
To make a plea for the government share allocated to the EPI to be increased by 6% over 7 years.	Organisation of a workshop to update the EPI multi-year plan based on revised strategies and objectives.	Director of prevention though immunisations	November 2003	PM	Total government expenditure on the immunisation programme	4,5 %
	Call a meeting of the ICC to endorse the plan	Secretary-General of Health Care	January 2004	PM		
	Prepare a summary of the EPI financial sustainability report with the costs and differentials of the programme.	Director of prevention though immunisations	November 2003	PM		
	Present the PVF to the Minister of Health, Minister of Finance and the Budget, and to the Minister of the Economy and development.	Director of Administration and Finance of the Ministry of Health	January 2004			
	Present the PVF to Ministry of Health staff involved in budget negotiations.		January 2004			
Make a plea for local communities to increase their contribution every year for 7 years.				PM		
				PM		
	Evaluate the contribution from local communities to the EPI	Director of prevention though immunisations	March 2004	6 500 USD	Total expenditure of the communities on the programme	N.A.
	Present the PVF of the EPI with cost of the programme and differentials to local community authorities.	Secretary-General of Health Care	June 2004	PM	Total expenditure of the communities on the programme	N.A.

Table n°22 *: Summary of specific measures enabling the mobilisation of appropriate resources(next)*

Key strategy	Actions	Person in charge	Starting date	Estimated cost of implementation	Progress indicator	Actual value of the indicator
To make a plea for the MC share allocated to the EPI to be increased by 5% over 7 years.	Present the EPI financial sustainability plan with the costs and differentials to Regional Health Care Directors.	Director of prevention though immunisations	December 2003	PM	Total expenditures of the MC on the immunisation programme	1,14%
	Present the EPI financial sustainability plan with the costs and differentials to the district managerial teams.	Directors of Regional Health	February 2004	PM		
	Present the EPI financial sustainability plan with the costs and differentials to the head nurses of centres and to the presidents of the MC.	Doctors in charge of districts	March 2004	PM		
	Help setting up mutual health insurance(mutuelles de santé) in the health districts.	Director of prevention though immunisations Directors of Regional Health DRS and MCD	April 2004	PM		
Make a plea for external partners to increase their contribution by 7% every year for 7 years.	Hold the quarterly meetings of the ICC	Secretary-General of Health	December 2003	PM	Total expenditures of the partners on the immunisation programme	N.A.
	Update the structure of the ICC by including other partners	Secretary-General of Health	November 2003	PM		
	Present the financial sustainability plan to ICC members	Director of prevention though immunisations	December 2003	PM		

	Finding financial partners for the health districts that do not have them to fund the EPI.	Director of prevention though immunisations Directors of Regional Health Doctors in charge of districts	January 2004	PM		
Make a plea to mobilise resources of the CES fund to fight poverty for the EPI	Present the EPI financial sustainability plan with the costs and differentials to those in charge of the CES.	Minister of Health	During the 1st. Session of the CES	PM	Total CES expenditures on the EPI	0 %
Make a plea with the business sector to mobilise resources	Present the EPI financial sustainability plan with the costs and differentials to the business sector	Minister of Health	During the 1st. Session of the Chamber of Commerce and crafts.	PM	Total expenditures of the private sector on the EPI	0%

B. STRATEGIES AND MEASURES THAT MAKE IT POSSIBLE TO USE RESOURCES MORE EFFECTIVELY

STRATEGIES LINKED TO BUDGET PROBLEMS

1. 1. Procedure for the budget and its implementation

The annual direct allocation of credits to the health districts for expenditures covering goods and services has improved fund management. However, the delayed implementation of the budget after the first budget of the current year, and the deadline regarding the closure of liabilities by November 20th of every year does not favour the rational use and satisfactory absorption of credits. The needs planned for the EPI should be better taken into account with view to the elaboration of the MTEF for the health sector.

THE FUND DISBURSEMENT STRATEGIES

Simplification of procedures

The complexity of national budget procedures and those of development partners complicates fund disbursement, and simplifying the former would ensure an appropriate use of resources.

Understanding the procedures of the partners

A better understanding of procedures used by technical and financial partners will help to improve make more efficient use of allocated funds. This equally applies to the forwarding of supporting documents within the time limits by those receiving funds.

Increasing the number of staff in charge of managing resources

A higher number of qualified staff is necessary to improve the follow-up of EPI funds.

SPECIFIC MEASURES

3.1 A simplified vaccine purchasing procedure

The burden of administrative red tape imposed by the government and UNICEF is an obstacle to completing the process within reasonable time, and frequently results in anti-gene supply shortages that reduce the effectiveness of the programme.
Improved communication between the structures involved in the supply process and better planning of orders will help to provide the immunisation structures with regular supplies of vaccines.

Table n° 23 *: Summary of specific measures aimed at making resources more reliable*

Major strategy	Actions	People in charge	Starting date	Estimated cost of implementation	Progress indicator	Current value of the indicator
Simplification and improvement of budget procedures for the purchase of vaccines	Setting up a unit that monitors supplies of vaccines and technical material, and holding planned meetings on a regular basis.	Director of Disease Prevention though Immunisation	18 September 2003	PM	Absorption rate of funds allocated to the EPI	N.A.
	Increase number of staff in charge of budget management at the Disease Prevention through Immunisation Headquarters.	Director of Disease Prevention though Immunisation	January 2004	PM		
	Make credits allocated to the health districts available to them by 31 March of every year at the latest.	Director of Administration and Finance at the Ministry of Health	March 2004	PM		
	Negotiate the reallocation of unused funds with the partners.	-Director of Disease Prevention though Immunisation Director of Administration and Finance	January 2004	PM		
	Revitalise the two GAVI fund management and coordination committees.	Director of Disease Prevention though Immunisation	January 2004	PM	Absorption rate of GAVI funds	50%
Follow-up of HILIC funds allocated to the EPI	Hold quarterly meetings with the Administration and Finance Authority to track the use of HILIC funds.	Director of Disease Prevention though Immunisation	March 2004	PM	Absorption rate of HILIC funds allocated to the EPI	N.A.

C. STRATEGIES AND MEASURES TO MAKE THE USE OF RESOURCES MORE EFFICIENT

1. Reduction of the wastage rate

The current wastage rates are high. Reduction of the vaccine wastage rate by 2009 to :
25% for reconstituted vaccines
15% for non- reconstituted vaccines (depending on packaging choices)

2. The opened vial policy

The vaccine wastage rate should fall as staff administering immunisations gradually gets trained accordingly with regard to the opened vial policy. This will result in lower costs for the purchase of additional required vaccines, and thus increase immunisation coverage (by replacing losses).

3. Keeping up the Cold chain and training of immunisation staff in using the cold chain.

An appropriate policy regarding an efficient cold chain and training of immunisation staff among other things should help to ensure good vaccine preservation standards, and to reduce the wastage rate.

4. Improving planning and management standards at all levels

This strategy calls for the improvement of strategic and operational planning standards (district plans and micro HSPC plans) by involving partners and communities, as well as bringing the health facilities up to standard.

5. Complying with the immunisation programmes, particularly in the advanced and mobile strategies.

A stronger involvement of field staff, particularly the village administrative delegates, the MC and association groups will help to increase the participation of mothers at immunisation sessions.

6. Controlled introduction of the new vaccines

The tetravalent vaccine will be introduced in 2004 in 50% of the health districts, and will involve 60% of the population i.e. 48% of the target population. It will be extended to the rest of the country from 2005 onwards, and will require :

Training of health staff
Adapting management tools
Adapting storage capacity where necessary

Reduction of the drop-out rate

The external audit carried out in 2003 shows a dropout rate of 16% for DTPoq 1 and 3. This rate must be reduced to less than 5% by 2009. The following steps will be necessary to achieve this:

a. Strengthening social mobilisation

Placing more emphasis on the social mobilisation strategy should help to increase coverage rates by reducing the dropout rate. This strategy will have to concentrate on target communities, and on administrative structures and their dependants. Insufficient mobilisation efforts reduces the number of children immunised at the health centres, and thus increases the probability of purchased vaccines being lost i.e. expiry data and wastage.

b. Simultaneous implementation of the mobile and advanced strategies and the vacci-plus strategy

Combining these strategies should make the efforts of the immunisation teams more efficient, and will enable reaching all targets, thereby reducing the dropout rate.

C. Reducing missed opportunities

The strategy here is to immunise a patient who shows up at a health facility for a medical problem of any kind, and whose vaccination certificate is not up to date.

d. Vaccine stock management

Stock shortages

The insufficient number of vaccines in relation to the total number of individuals to be immunised does not enable the programme to achieve its objectives with regard to immunisation coverage.
The availability of EPI vaccines in inadequate, according to the results of the external EPI audit of 2003.

It is therefore vital to improve managerial skills in order to carry out an appropriate estimation of vaccine requirements, and to make a vaccine available at the right time.

Required standards of the cold chain

The results of the EPI audit of 2003 show that the cold chain meets the required standards in the country.

Table n° 24 *: Strategies adopted to improve the efficiency of the way resources are used*

Major strategy	**Actions**	***Person in charge***	**Starting date**	**Estimated implementation cost**	**Progress indicator**	**Current value of the indicator**
Reducing the anti-gene wastage rate over the 7 year period -OPV: by 5 points per year -DTP: by 5 points per year -AAV: by 5 points per year -MEAS: by 2 - 5 points / year -TT: by 3 points per year -BCG : by 5 points per year	Train Directors of regional health on the EPI	*Director of Disease prevention through immunisation*	-January 2004 - January 2007	USD 5 606	Anti-gene wastage rate	Anti-gene wastage rate -OPV: 45% (2002) - DTP: 28% (2002) -AAV: 49% (2002) -MEAS: 54% (2001) -AAV: 44% (2002) -BCG: 64% (2002)
	Train Doctors in charge of districts on the EPI	*Directors of regional health*	-January 2004 - January 2007	USD 22 989		
	Train nurses in charge on the EPI	*ECD*	2004 and 2005	USD 125 937		

		-				
	-Regular supervision of Immunisation facilities	- Directors of regional health -District management teams	February 2004	PM		
	Train the heads the central, regional, and district levels in operating the cold chain	Director of Disease prevention through immunisation	-January 2004 -January 2008	USD 32 229		
	Train those in charge of supervision of the regional and district level in epidemiological monitoring	Director of Disease prevention through immunisation	-January 2004 – January 2008	USD 14 647		
Increasing vaccine supplies by 0,5% each year for 7 years.	Modify the critical threshold for vaccine orders	Director of Disease prevention through immunisation	January 2004	PM	Anti-gene shortage rate	Vaccine availability: 2,15 points out of 5 (EPI audit of 2003) Shortage rate in 2002 of: OPV : 51,78% DTP : 46,44% AAV: 10% MEAS : 0% TT: 73,15% BCG : 50%
	Planing anti-gene requirements in a realistic manner	Director of Disease prevention through immunisation	January 2004	PM		

Organise a quarterly meeting with the structures involved in ordering anti-genes (DPV, AFH, UNICEF, CATR, and General Budgeting Authority).	Director of Disease prevention through immunisation	January 2004	PM			

Table n• 24 *: Strategies adopted to improve the efficiency of the way resources are used*

Main strategy	**Actions**	**Person in charge**	**date de début**	**Estimated implementation cost**	**Progress indicator**	**Current value of the indicator**
Reduction of the wastage rate for DTP-1 and 3 by 2% per year during 7 years.	Organise national, regional, district level, and HSPC meetings with field staff regarding non-immunised individuals, and dropout rates (Administration, MC, associations, and leaders).	Director of Disease prevention through immunisation Directors of regional health Doctors in charge of districts Nurses in charge of outlets	October and December 2003 (to be integrated in the 2003 NID's)	PM	Wastage rate between DTP-P1 et 3	Drop-out rate between DTPoq1 and 3 : 16% en 2003
	Locate non-immunised individuals by using the census documents or any other suitable method.	Nurses in charge of outlets	January 2003	PM		
	Enhance the three standard immunisation strategies and other strategies to ensure the immunisation of the target population by complying with elaborated programmes and working together with the population (vacci plus/Reaching Every District).	Nurses in charge of outlets	October 2003	PM		

CONCLUSION

Like other developing countries, the population of Burkina Faso continues to suffer the burden of transmittable diseases that can be avoided by immunisation for the most part. Convinced that immunisation remains the most effective strategy for public health in terms of the cost – benefit relationship, the government has placed immunisation as one of the key priorities regarding its national health development plan for 2001-2010, with particular emphasis on women at birth giving age and children. This challenge can only be met on the basis of guaranteed and adequate long-term funding as suggested in this financial sustainability plan. The main challenge of this plan lies in its actual implementation i.e. successfully achieving the efforts planned to mobilise the resources.

With this in mind, there is room for optimism from the moment onwards when national political will is clearly present, and that the efforts of national as well as bi-lateral and multi-lateral partners are more significant involved.

BURKINA FASO

Unity – Progress – Justice

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Ouagadougou, 26 November 2003

Signatories

The Minister of Health

The Minister of the Budget and Finance

Mr. Alain Bédouma YODA

Mr. Jean Baptiste COMPAORE

Details regarding documents
(Electronic files forwarded to GAVI)

Financial sustainability plan

Section 3:

Annex 1 : Costing tool (2001)

Annex 1 : Costing tool (2002)

Section 3 : tables 3.1 and 3.2

Section 4 : Projection table
PVF Scœnario A
PVB Scœnario B

Routine Immunisation coverage 2001 – 2002

Letter : Ministry of Health
Signatures of the Ministers
Comments and signatures of ICC Members