Financial Sustainability Plan
Of The Expanded Programme on Immunisation
Ghana Health Service

Submitted on 20 November 2002 to the Global Alliance for Vaccines and Immunization (GAVI) and the Vaccine Fund

SIGNATURES OF THE GOVERNMENT AND THE INTER-AGENCY CO-ORDINATING COMMITTEE

The Government of the Republic of Ghana commits itself to developing national immunization services on a sustainable basis in accordance with the Financial Sustainability Plan and multi-year plan presented with this document. Districts performance on immunization will be reviewed annually through a transparent monitoring system. The Government requests that the Alliance and its partners contribute financial and technical assistance to support immunization of children as outlined in this application.

Signature: ……

Dr Kwaku Afriyie

Title: The Honourable Minister of Health

Date: 25 November 2002

Signature…….

Mr. Yaw Osafo Maafo

Title: Minister of Finance

Date: 25 November 2002

In case the GAVI Secretariat has queries on this submission, please contact:

Name: Dr George Amofah

Title/Address: Director, Public Health

Tel.: 233 21 684 202

Ghana Health Service
Private Mail Bag

Fax No.233-21-662 982

Ministries, Accra

E-mail: gamofah@africaonline.com.gh

Ghana

Alternative address:

Name: Dr Mercy Ahun

Title/Address: EPI Manager

Tel.: 233- 21 678 078

Disease Control Unit

Fax No.233-21 678 078

P.O.Box KB 493

E-mail: epighana@africaonline.com.gh

Korle-Bu, Accra, GHANA

We, the undersigned members of the Inter-Agency Co-ordinating Committee endorse this proposal.

Agency/Organisation	Name/Title	Date Signature
Ghana Health Service (GHS)	Prof. Agyemang Badu Akosa/Director GHS	15 Nov 2002
Ghana Health Service	Dr Sam Adjei/ Dep. Dir. GHS	15 Nov 2002
Ghana Health Service	Dr George Amofah/ Dir. Public Health Division, GHS – ICC Chairman	15 Nov 2002
Ghana Health Service	Dr Henrietta Odoi-Agyarko/Dep. Dir. Family Health, GHS	15 Nov 2002
Ghana Health Service	Dr Frank Nyonator/Dir. PPME, GHS	15 Nov 2002
WHO	Dr Melville George/Country Representative	15 Nov 2002
UNICEF	Dr Ramesh Shestra/Country Representative	15 Nov 2002
USAID	Dr Jan Paehler /Health Officer	15 Nov 2002
DFID	Ms Sandy Bampoe/Health Officer	15 Nov 2002
Noguchi Memorial Institute for Medical Research	Prof. David Ofori-Adjei, Director, NMIMR	15 Nov 2002
DANIDA		15 Nov 2002
World Bank		15 Nov 2002
GTZ		15 Nov 2002
European Union		15 Nov 2002
Rotary		15 Nov 2002
JICA		15 Nov 2002

Acronyms

5YPOW	**Five Year Programme Of Work**
ATF	**Accounting, Treasury and Financial**
BMC	**Budget and Management Centre**
CTCS	**Close-to-Client System**
DACF	**District Assemblies Common Fund**
DANIDA	**Danish International Development Agency**
DFID	**Department For International Development**
DPF	**Donor Pool Fund**
EPI	**Expanded Programme of Immunisation**
EU	**European Union**
FSP	**Financial Sustainability Plan**
GAVI	**Global Alliances for Vaccines and Immunization**
GHS	**Ghana Health Service**
GoG	**Government of Ghana**
GPRS	**Ghana Poverty Reduction Strategy**
HF	**Health Fund**
HIPC	**Highly Indebted Poor Country**
IAU	**Internal Audit Unit**
ICC	**Inter Agency Co-ordination Committee**
IGF	**Internally Generated Funds**
JICA	**Japanese International Co-operation Agency**
MDAs	**Ministry Department and Agency**
MDVP	**Multi Dose Vial Policy**
MTEF	**Medium Team Expenditure Framework**
MTHS	**Medium Term Health Strategy**
NID	**National Immunisation Days**
NIP	**National Immunisation Programme**
OPV	**Oral Polio Vaccine**
PHD	**Public Health Division**
PLWHA	**People Living With HIV/AIDS**
PPME	**Policy Planning Monitory And Evaluation**
PRSP	**Poverty Reduction Strategy Paper**
PUFMARP	**Public Financial Management Reform Programme**
RDHS	**Regional Director Of Health Services**
SoF	**Source Of Funds**
SWAp	**Sector Wide Approach**
TT	**Tetanus Toxoid**
UNAIDS	**United Nations AIDS programme**
UNICEF	**United Nations**
USAID	**United States Agency For International development**
VVM	**Vaccine Vial Monitor**
WHO	**World Health Organization**
YF	**Yellow Fever**

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

1.0 COUNTRY AND HEALTH SYSTEM CONTEXT 3

1.1 POLICY ENVIRONMENT 3
1.1.1 Government of Ghana 3
1.1.2 The Health Sector 3
1.2 GOVERNANCE AND MANAGEMENT OF HEALTH SECTOR 4
1.2.1 Organisation of the Health Sector 4
1.2.3 SWAp and Decentralisation 5
1.2.3 SWAp and Decentralisation 5
1.3 CHANGES IN ALLOCATION TO THE HEALTH SECTOR 6
1.3.1 National Challenges and MoH Health Priorities in 2002-2006 PoW 6
1.3.2 Changing Allocation within the Health Sector 6
1.2.2 The National Immunisation Programme (NIP) 7
1.3.3 Impact on Financing of NIP 7

2.0 FINANCIAL MANAGEMENT 9

2.1 FUNDING OF THE GHANA HEALTH SECTOR 9
2.2 FLOW OF FUNDS INTO THE HEALTH SECTOR 9
2.3 PLANNING & BUDGETING 10
2.4 CASH MANAGEMENT AND DISBURSEMENT OF FUNDS 10
2.6 ACCOUNTING AND FINANCIAL INFORMATION SYSTEMS 11
2.7 AUDITING 11
2.7.1 Internal Audit 11
2.7.2 External Audit 11
2.8 FINANCIAL REPORTING AND PERFORMANCE ASSESSMENT 11
2.9 PLANS FOR IMPROVEMENT OF FINANCIAL MANAGEMENT SYSTEM 12
2.10 IMPLICATION FOR NATIONAL IMMUNIZATION PROGRAM 12

3. PROGRAMME CHARACTERISTICS, OBJECTIVES AND STRATEGIES 13

3.1 OBJECTIVE 13
3.2 RELEVANCE TO FINANCIAL SUSTAINABILITY 13
3.3 QUANTITATIVE AND QUALITATIVE INFORMATION ABOUT PROGRAMME PERFORMANCE TARGETS 14
3.4 CHANGES IN PROGRAMME OBJECTIVES IN LIGHT OF FINANCIAL CONSTRAINTS 15
3.5 GOVERNANCE AND MANAGEMENT OF THE IMMUNIZATION PROGRAMME 16
3.6 ROLES AND RESPONSIBILITIES OF PARTNERS IN IMMUNIZATION FINANCING, SERVICE DELIVERY AND OTHER ASPECTS OF THE PROGRAMME 16

4. BASELINE AND CURRENT PROGRAMME COSTS AND FINANCING 18

4.1 QUANTITATIVE INFORMATION ABOUT PRE-VACCINE FUND (BASELINE) PROGRAMME COSTS AND FINANCING PATTERNS 18
4.2 QUANTITATIVE INFORMATION ABOUT CURRENT EXPENDITURES AND FUNDING PATTERNS, INCLUDING THE VACCINE FUND RESOURCES. 18
4.3 QUALITATIVE INFORMATION ABOUT TRENDS IN THE VOLUME AND RELIABILITY OF GOVERNMENT AND EXTERNAL FUNDING IN THE RECENT PAST 19

5.0 FUTURE RESOURCE REQUIREMENTS AND PROGRAMME FINANCING 20

5.1 PROJECTIONS OF RESOURCE REQUIREMENTS 20

6. SUSTAINABLE FINANCING STRATEGIC PLAN AND INDICATORS 22

6.1 IMMUNIZATION FINANCING 22
6.1.1 Introduction 22
6.2 STRATEGIES AND ACTIONS TO MOBILISE ADEQUATE RESOURCES 22
6.3 STRATEGIES AND ACTIONS TO INCREASE THE RELIABILITY OF RESOURCES 24
6.4 STRATEGIES AND ACTIONS TO INCREASE EFFICIENT USE OF RESOURCES 24

7.0 STAKEHOLDER COMMENTS 28

EXECUTIVE SUMMARY

The Government of Ghana joined the Highly Poor Indebted Country (HIPC) in 2001. The Poverty Reduction Strategy Paper outlined poverty reduction strategies as the means of improving the health of the people. The Health sector strategic direction for the next Five Year Programme of Work (2002 – 2006) is geared towards reducing poverty by bridging the inequality gap in health outcomes that exists in the country.

The key programmatic objectives are to:

- Achieve at least 80% coverage in 80% districts by 2005
- Attain Polio free certification by 2005
- Reduce measles morbidity by 90% and mortality by 95% by 2005
- Eliminate maternal and neonatal tetanus by 2005
- Prevent, detect cases early and provide timely response to yellow fever outbreaks from 2002
- Introduce Hepatitis B and Haemophilus influenzae type b vaccine into routine EPI by 2002
- Determine the disease burden of vaccine preventable disease of Public health significance (meningitis, Congenital Rubella Syndrome)
- To reduce wastage of OPV and TT vaccines to 10% by 2005
- Improve vaccine and data management

The key financial issues facing the programme are the introduction of the relatively more expensive pentavalent vaccine in 2002 and a dwindling human resource base for programme implementation.

The GPRS document addresses both issues by putting aside funds for vaccine procurement and also making funds available for attracting staff to service delivery areas.

Over the past five years, adequate resources have been provided for the procurement of vaccines and cold chain equipment. Occasional delays in the release of funds by government have sometimes affected service delivery.

Current and future programme costs and sources of financing For funding of the programme, the total programme specific costs were about $3.6million for the baseline year (2000). Routine EPI represents about 53% of the total costs. Funding from the GoG and DPF represents about 31% of the total cost of the immunisation programme. Vaccines represent about 26% of the costs of routine EPI.

For the current year, 2002, the cost of the routine programme has increased to $14.3 million, and represents 66% of the total cost for the programme. The increase is mainly due to the introduction of the pentavalent vaccine. Contributions from the Health Fund form about 21% of total costs. New and under used vaccines represents about 56% of the total costs of routine EPI whilst the traditional vaccines have reduced to about 4%.

Over the period of Vaccine Fund Support, (2002 – 2006), a total amount of $68.5 million will be needed for routine immunisation costs. An additional amount of $19.9 million for accelerated disease control activities. For the period 2007 to 2011, $81.6 million will be needed for the routine programme. In conclusion, an amount of $150.1 million will be needed over the period 2002 to 2011 for the routine programme.

Strategic priorities for financial sustainability The basis of the financing strategy is the assumption that the Government of Ghana will work towards meeting the commitment to the

health sector. The Abuja Declaration requires that the Government of Ghana contribution to the health sector be increased from the present level to 15% by 2006**.** The GoG will graduate the funding of vaccines during the period of GAVI support in order to lesson the impact when GAVI funding ends. Two assumptions will be adopted to ensure that funds are available for vaccine procurement. The first is based on the assumption that all SWAp partners will remain with the present arrangements and will not move to national budget support through the MoF at least for the duration of the 2nd PoW (2002-2006). This is a probable case scenario. The second strategy is based on the assumption that some SWAp partners will move to national budget support.

Under the first or probable scenario GAVI funds will be used to fund 85% of vaccine procurement in 2003 and 50% in 2006 The GoG and Health Partners will mobilise funds to support the procurement of vaccines from a 15% level in 2003 to 100% in 2011. The post vaccine period will be difficult to project but specific strategies will be developed for advocacy and dialogue with health partners to make commitments of support for the post vaccine period. It is expected that GAVI partners will advocate for a reduction in the price of the pentavalent vaccine to ease the impact on the national budget

Short and medium term actions to move toward financial sustainability Advocacy and dialogue with the MoF at the highest level between the Ministers of Health and Finance and health partners will be continued. Several strategies would be adopted to facilitate timely disbursement of funds from MoF to MoH. A memorandum of understanding will be developed on the modalities for full and timely disbursement of funds from Government**.**

Indicators to monitor progress towards the objectives set for financial sustainability A plan of action will be implemented to ensure efficient use of available resources. The monitoring indicators include:

- Proportion of Ghana government/Health Fund funds received by the Ghana Health Service as compared to what was budgeted for
- Proportion disbursed on a timely basis.
- Proportion of the GHS budget given to the district level will also be monitored.
- Percentage reduction of the liquid vaccines (OPV and TT).

This Financial Sustainability plan has been presented to the Inter Agency Co-ordination Committee of EPI and SWAp Partners. The main concerns are issues on price reduction of the pentavalent vaccine over time; the effects of Health Partners changing from the sector wide approach of the health sector to direct budget support of the Ministry of Finance and how to ensure timely release of funds to the health sector.

Both the Ghana Government and Health Partners are committed to the success of the country's Expanded Programme on Immunisation. Under the current programme of work (2002 – 2006); the immunisation programme is sustainable.

1.0 COUNTRY AND HEALTH SYSTEM CONTEXT

The Republic of Ghana is situated on the West Coast of Africa bordered by the Atlantic Ocean to the south, La Côte d'Ivoire to the west, Burkina Faso to the north and Togo to the east.

Administratively, Ghana is divided into ten regions and 110 districts, each with an elected District Assembly. Decentralisation of the Government of Ghana extends to the district level. The Ministry of Health has further zoned each district into 5-7 sub-districts with catchment populations usually ranging between 20,000 and 50,000 people.

The final 2000 Census estimated the population to be 18,912,079 with a growth rate of 2.7%. Children 0 –11 months constitute 2.8% of the population. This is lower than projections, which has been in use prior to the census. The Ministry of Health is waiting for further clarifications from the Census Secretariat before it adopts the results fully.

1.1 Policy Environment

1.1.1 Government of Ghana

A few months after taking office, the new government of Ghana in 2001 took the bold decision and joined the Highly Indebted Poor Country (HIPC) initiative. The Poverty Reduction Strategy (PRSP) has therefore been a major component of the Government's strategy as a result of being HIPC. The Ghana Poverty Reduction Strategy (GPRS) aims to ensure sustainable equitable growth, accelerated poverty reduction and the protection of the vulnerable within a decentralised, democratic environment.

The GPRS outlines the main areas for achieving its objectives as;

- Ensuring economic stability for accelerated growth
- Increasing production and promoting sustainable livelihoods
- Facilitating direct support for equitable human resource development
- Providing special programmes in support of the vulnerable and excluded
- ensuring good governance and the increased capacity of the public sector
- The active involvement of the private sector as the main engine of growth and partner in nation building.

The GPRS creates a framework of national macro-level policies and identifies key sectoral strategies, which will be needed to achieve poverty reduction. The framework for the development of pro-poor sector policies has been developed with a number of priority target areas and groups for poverty reduction. A geographical focus on the four, most deprived regions is proposed (Northern, Upper West, Upper East and Central), together with special measures for those in extreme poverty and vulnerable groups including women, out-of-school children, the elderly, disabled and People Living With HIV/AIDS (PLWHA). The Ghana health sector is committed to the GPRS and has developed a series of working papers aimed at linking the GPRS with the five-year Programme of Work (5YPoW II).

1.1.2 The Health Sector

The GPRS recognises that improving the health of the poor is crucial for reducing poverty, given that ill health is both a consequence and cause of poverty. Thus in line with government's policy of poverty reduction, the health sector's strategic policy direction for the next five years is geared

towards reducing poverty by bridging the inequality gap in health outcomes that exists in the country.

During the current medium term the sector is committed to improving the health outcomes of the poor, by pursuing the following

- A health related poverty strategy that focuses on the Community -Based Health Planning and Services (CHPS). This initiative focuses on placing health workers in communities that are deprived and requires that they deliver preventive and primary health care including family planning services

- To focus on the Priority Health Interventions for the next five-year period (2002 – 2006) which are:
  The Expanded Programme of Immunisation (EPI)/Child Health
  HIV/AIDS, Emergency care, Tuberculosis, Reproductive and Maternal Health, Malaria Control, Guinea worm Eradication

- Ensuring sustainable financial arrangements that protect the poor i.e. exemptions and other Alternative Health Financing Schemes

The main focus will be on four nationally recognised deprived regions and corresponding thirty districts.

1.2 Governance and Management of Health Sector

1.2.1 Organisation of the Health Sector

The Ministry of Health (MoH) has undergone health sector reforms for the past twenty years. In the past five years the ministry was reorganised by an act of parliament (Act 562) into a ministry-agency relationship. Subsequently the MoH has been restructured along with its implementing agencies namely, the Ghana Health Service (GHS), Tertiary Institutions, Specialised Institutions, Statutory and Regulatory bodies. The Ministry is responsible for policy formulation and co-ordination whilst the implementing agencies are responsible for service delivery. [1]

[1] **Reference: Common Management Arrangements, for the implementation of the second programme of Work, MoH, Ghana, 2001**

1.2.3 SWAp and Decentralisation

The Ghana Ministry of Health (MoH) embarked on a sector-wide approach (SWAp) to planning and funding of the health sector during the latter part of the last century (1997-2001). This is because it became increasingly clear after more than a decade of health sector reforms (during which all programmes including the immunisation programme has been integrated at the district level) that it was necessary to embark on a single programme, if the gains of the sector, were to be maximised. SWAp is an approach that emphasises one single sector programme that is owned by the government, accepted and supported by development partners/donors and all stakeholders.

Elements of the Ghanaian Health SWAp

SWAp in Ghana was characterised by a situational analysis, which was essential in order to uncover what the major issues in the health sector were. This was followed by the formulation of appropriate policies that could address the issues unearthed. The next stage culminated in the formulation of an integrated strategy, which came to be known as the Medium Term Heath Strategy (MTHS) based on an agreed set of sector objectives and plans; out of which a Five-year programme of work was developed (5YPOW1997-2001). The programme highlighted five main objectives for the medium term, set out targets and highlighted priority health service interventions for the programme period. It also proposed a corresponding five-year resource envelope for financing the health's sector programme.

The financing of the 5YPOW is based on a common funding arrangement known as the 'common basket' or 'pooled funds'. It projected all sources of funding available to the sector namely the Government of Ghana (GoG), both capital and recurrent, as well as that from donors/development partner sources and the health sector's own internally generated funds (IGF). These projections were made based on some macro economic assumptions that were made for the planned period (five-year period). Stable macro-economic conditions are vital if the funding targets, especially those from the government are to be met.

SWAp, decentralisation and change of Policy Direction

In line with the ministry's policy of decentralisation, it also has a distinguishing feature where resources were shifted progressively to the lower levels, from the central and regional levels to the district level. From the district level the budget was further decentralised to the sub-district levels. Reallocations were also made from the tertiary level to the secondary and primary levels. Regarding the recurrent budget there was an attempt to alter the balance from wage recurrent towards non-wage recurrent expenditures. The capital budget however was to be kept constant so as not to disrupt recurrent expenditures as increasing capital budgets had recurrent implications. There were also attempts to factor in equity considerations in regional budgetary allocations, bearing in mind IGF and donor assistance to the various regions. The budgetary allocation criteria were made more responsive to deprivation and vulnerability. More resources were re-directed to deprived areas namely the three northern regions as well as disadvantaged and vulnerable groups. An exemption policy was formulated later to provide free care to children under-five, pregnant women and the elderly (above 70yrs).

Public Private Partnerships

The private sector is supported by the NIP with vaccines, syringes, and fridges. The GHS staff helps to administer the immunisations and also provide training for staff of private institutions on how to administer the immunisations.

1.3 Changes in Allocation to the Health Sector

Ghana reached the decision point for HIPC in February 2002. Therefore the country will benefit from it through additional funds to improve on the Poverty Alleviation Targets (PAT) as set in the GPRS. The budget statement and economic policy of the Government of Ghana for 2002 financial year indicates that under the HIPC initiative, government will make savings of $650 million in debt relief in the medium term (2002 – 2004). Ghana is expected to receive an annual estimate of 15% of HIPC relief.

In the past five years (1997-2001), the Government of Ghana has made attempts to gradually increase health sector budgets to targets agreed in the health sector PoW. Actual flow of funds has not followed planned levels. In general, government commitment to targets for non-staff budgets was about 60%[2]. Resource targets as stated in the GPRS, provides for government contribution to the health sector to move from 5.7% in 2000 to 7% in 2004. Please see table 1.3. for selected indicative targets stated in the GPRS for the health sector. Health partners are advocating for a shift of GoG resources to 11% by 2006. This is stated in the 2002-2006 PoW.

Table 1.3: Indicative targets for 2004 as set in GPRS

Targets	2001	2004
% of total government expenditure on health	5.7	7.1
% of recurrent spending on districts	42	44
% of recurrent spending on subdistricts	21	30
% of recurrent spending on three northern regions & Central region	32	39
Infant mortality rate	57/1000	40/1000
% of children under five who are malnourished	25	20
DPT3 Coverage	76%	90%

1.3.1 National Challenges and MoH Health Priorities in 2002-2006 PoW

1.3.2 Changing Allocation within the Health Sector

The policy environment provides challenges for redistribution of health sector resources to achieve targets within the medium term. One key challenge is how the public health sector allocates its resources to address the changes within the environment.

The Ghana Health Sector has an internally decentralised structure and recognises the district level as the focal point for service delivery. This has informed resource allocation which is biased in the first instance towards greater funding to the district and sub-district levels. Resource allocation from national to sub-national level is based on varying criteria agreed on by the national and regional directors of health on one hand and between regional and district directors on the other. The basis of resource allocation pattern is likely to change in the near future. The 2nd PoW and the accompanying Management Arrangement (CMA) proposes more population/need-based criteria.

The Poverty Reduction Strategy targets will influence resource allocation and the need to address health inequalities towards those deprived. With the available data, resources will be targeted to address health inequalities, introduce fairness in financing for the poor and increased access to health care for the population. Subsequently, a key factor in the criteria will be population. A

[2] Presentation from Director of Budget, MoH at health sector summit meeting

second dimension to affect resource allocation will be the shift towards service provision at the sub-national level to communities using the Community-Based Health Planning and Services (CHPS). In this regard, it is likely that budget flow to the sub national level will exceed the stated targets and go beyond the 45%. Resource allocation to the four deprived regions is expected to be 55% according to the GPRS and the corresponding response from the health sector. The GPRS also proposes a shift of 30% of non- salary recurrent budget to Sub-district level.

The process of transferring funds from national to sub-national level has improved over the years, making funds more accessible to sub-national levels. This is likely to continue and an increasing shift from within the district to community level is likely to happen due to the CHPS programme, which is a focus of the 2nd PoW for 2002-2006.

Resource allocation in the Ghana Public Health Sector is based on a number of criteria depending on the source of funds, level and type of Budget Management Centre (BMC). As part of the SWAp arrangements, part of the external domestic funds (Donor Pooled Fund)) forms part of the direct budget support to the health sector from donors. Formulae for the allocation of financial resources are restricted to domestic public finance (GoG) and the DPF. The MoH receives a block budget ceiling for salary, non-salary recurrent and investment from the Ministry of Finance. Health partners also provide best estimates of their likely contribution into the Pooled Funds. This forms the core budget for the MoH. At the national level, combined resources are allocated to BMC group and then to regions based on a set of criteria. Each region takes the ceiling according to the BMC group and further allocates it to the individual BMCs within each BMC group.

There are on going discussions by a number of key donors in the health sector to move from sector support to national budget support. Already, the European Union (EU) provides budget support through the Ministry of Finance. This arrangement will constitute a major paradigm shift on how resources are allocated to the health sector and might affect the level of resources made available to the health sector.

1.2.2 The National Immunisation Programme (NIP)

Immunisation activities are integrated and form part of the overall activities at the district and sub-district levels. Under the newly restructured public health sector it will primarily be the function of the GHS, supplemented by the tertiary and specialised institutions as well as the private sector. The NIP is funded through the health fund or pooled donor fund under the Sector Wide Approach (SWAp) arrangement. Vaccines, syringes, fridges, cold chain etc are purchased by the programme through direct donor support from the national level and distributed to the regions and districts for implementing routine immunisation. Under the HIPC funds, the health sector is supposed to obtain $10 million dollars to implement its poverty programme, of which the NIP is a key component. Currently the health sector spends 3.7m (39% is spent on personnel) on the NIP.

1.3.3 Impact on Financing of NIP

Within the framework of the SWAp arrangements, part of the benefits accruing to the health sector from HIPC would be extended to the National Immunisation Programme. The key question is to what extent will the NIP benefit from the additional funds? Indeed, given the focus of the PoW as addressing poverty, the NIP is likely to receive greater attention. However the extent to which this can be realised depends largely on improvements in the linkage between the planning process and performance (linking inputs to outputs). Immunisation targets are one of the indicators set in the GPRS for the health sector.

Two major policy shifts are likely to affect the NIP. First is the possible move by donors towards national budget support through the MoF. In as much as this is good, the degree and speed for moving into total budgetary support can affect the NIP. With the health sector commitment to the pentavalent vaccine, expenditures will have to be met irrespective of national macro economic situations. Delays in budget releases will affect delivery of routine immunisation. With emphasis on CHPS, availability and timeliness of flow of funds to the sub-national levels are key to the success of EPI. One key challenge is the commitment of the government to targets in funding to the health sector.

Secondly, resource allocation must be strengthened to be need based. Within the context of the above, a need based resource allocation formulae will ensure that resources for achieving immunisation targets are made available at all levels and will not be affected by decentralised and integrated service delivery structures.

The amount of resources available for vaccine procurement will have to be sustained and increased. Within this framework, any reduction in funds by Government will impact negatively on the NIP. Earmarking for NIP will have to continue and integrated gradually into the routine planning process. Planning for the phasing off and integration into the normal planning process is key as in all other priority interventions. Sustaining the level of capital investment (cold chain equipment) and vaccine procurement, storage and distribution and monitoring are issues, which require attention in an integrated system and are likely to affect the delivery of the immunisation programme.

In the medium term, earmarked funding for the National Immunisation Programme is likely to continue. Subsequently, support expected from GAVI Funds and other donors would form a major portion of the NIP programme-funding requirement within the period.

2.0 FINANCIAL MANAGEMENT

The Government of Ghana is undergoing a financial management reform. The reform programme has eight components including revenue generation, decentralisation, and computerisation of entire government accounting system. It is expected that some of the benefits of the reforms will include decentralised systems, better forecasting of revenues, better cash flow forecast, medium term planning and budgeting, credible and reliable accounting information and accountability.

The MoH began its financial reform programme in the early 1990s just before the government Public Financial Management Reform Programme (PUFMARP). The financial management reforms form part of the health sector reforms, which dates back to the 1970s. MoH has decentralised its financial management systems. It has created decentralised structures at district and sub-district levels. Each district administration and district hospital is a cost centre known as Budget and Management Centre (BMC). Each BMC is a budget holder and manages its own funds.

2.1 Funding of the Ghana Health Sector

As part of the health sector reforms and the SWAp framework, the MoH is funded based on an annual PoW and budget. During our annual health summit the Government of Ghana and SWAp partners provide indicative resources to be made available to fund the PoW.

The health sector is funded from several sources. The sources are:

- Domestic Public Revenues (central and sub-national)
- External Public Finance
- Bilateral and multilateral
- SWAp
- Debt Relief (HIPC)
- National Budget Support
- Development Loans
- Domestic Private Finance (User Fees)

2.2 Flow of Funds into the Health Sector

The GoG provides the bulk of the funds to the health sector. Total Government of Ghana recurrent allocation to the health sector at the beginning of the first PoW (1997) was 8.4%. By 2001 it had dropped to about 7%. Total health sector budget allocated to salaries is about (60-70%). Recently, District Assemblies have been charged to allocate 1% of District Assembly Common Fund (DACF) to district health activities.

A number of donors provide project grants (both bilateral and multilateral) to the health sector. This assistance comes in the form of technical assistance, goods in kind (e.g. vaccines) and cash. Most of the project funds are specific to projects and programmes with very little flexibility for supporting administrative structures. Ghana has joined the HIPC initiative and will benefit from debt relief from 2002. The government policy is to devote 15% of the annual relief to the health sector. As part of the SWAp arrangements, the MoH has created a Health Fund (account) where a selected number of health partners contribute into a pool of fund to support the health sector PoW. Funds from the health Account are disbursed similarly like the domestic public revenues to BMCs and are not tied to specific programmes or projects. The European Union has in the past several years supported the health sector through national budget support. The MoH also receives

development loans from some of its partners to support health activities. External Public Financing sources are used for non-salary expenditure.

The last source of funds to the health sector is from domestic private revenues. DPRs are charges derived from hospital fees. Hospital fees are composed of drugs (cost to be fully recovered) and hospital services. DPRs are collected and retained by health facilities (100%). They are used for all types of expenditure including allowances to staff.

2.3 Planning & Budgeting

The MoH has adopted the Medium Term Expenditure Framework (MTEF) for preparing its medium term plans. Annual and medium term plans are derived from the 5YR PoW. The planning process begins with the MoF sending guidelines on government policies and budget ceiling to each Ministry, Department and Agency (MDA). The MoH defines its policies and priorities for the medium term within the overall government policies for the health sector. Budget ceilings are allocated to decentralised levels based on agreed resource allocation criteria (formulae). Budgets are received in three different ceilings from MoF. These are personnel emoluments (salaries and allowances), administrative overheads and service activities and investments. The budget ceilings received from government includes funds expected from central domestic public revenues, budget support and health partners into the health accounts. Funds to be received from other external public financing sources do not form part of the annual budget but are included in the overall resource envelop of the MoH. Plans for these are drawn separately with donors and funding partners. BMCs who generate domestic private revenues, plan and budget for expected inflows outside the normal plans and budget and are reviewed and approved by their respective Regional Directors of Health Services.

2.4 Cash Management and Disbursement of Funds

The MoH non-salary recurrent MTEF budget is made up of two main sources; GoG and the Health Fund. The total budget for non-salary recurrent is made up of both sources. Amount contributed by each source is based on an agreed percentage of the total non-salary budget.

The MoH has created different bank accounts for each BMC where the service component of government MTEF budget and the service and administration budget from the health fund are kept. Cheques are deposited in BMC accounts. Quarterly disbursements of funds from these two sources are released to BMCs by cheques written in the name of the BMC. The cheques are deposited into BMC accounts and are used by BMCs to support their approved activities. Project funds are transferred to the health sector when the activity is due.

The flow of funds especially from government to the health sector has experienced some delays in the past. Subsequently, disbursements of funds to regional and sub-regional levels continue to delay thereby affecting the delivery of services (including immunisation programmes). On average, the flow of funds into the health account and from project grants has been timely.

Procurement

The MoH has a structured procurement system, which ensures value for money for centralised procurement of goods and services. A procurement manual has been developed and in use by all BMCs. An annual procurement audit is conducted to identify gaps in the procurement process. Vaccines are procured by UNICEF and paid from the health account. UNICEF provides funds for cold chain equipment. Logistic and supplies for the immunisation programme are reflected in the MoH procurement plan.

2.6 Accounting and Financial Information Systems

The MoH accounting system is based on a modified accrual system. As part of the financial reform programme in the MoH, an Accounting Treasury and Financial (ATF) reporting rules and instructions was developed as the procedural manual to unify accounting and reporting for all BMCs. All BMCs are using the same set of books for recording accounting transactions for all sources of funds.

The MoH has partially computerised its accounting system. Financial transactions are manually recorded and consolidated at the regional and national levels.

All direct expenditure on immunisation programme provided from project sources is captured into the information system as immunisation expenditure by the Source of funds (SoF). In view of the SWAp arrangements all immunisation expenditures from GoG or health account cannot be traced within the accounting and information system.

2.7 Auditing

2.7.1 Internal Audit

An internal Audit Unit (IAU) has been set-up to enhance accountability at the service delivery level. The Internal Unit is independent of the Financial Controller and reports to the Chief Director of the MoH. The same structure is replicated at the GHS and the Teaching Hospitals where the Internal Auditor reports to the Director General and the Chief executive respectively.

MoH Internal Audit focus more on systems audit but help to determine and ensure that:

- Policies, standards and procedures are complied with
- Established controls are adequate and provide the necessary degree of reasonable assurance that resources are safeguarded and used judiciously with due regard to economy and efficiency
- Reported financial information is reliable and programme and operational objectives are being met.

2.7.2 External Audit

External audit are carried out annually by a joint audit between the Auditor General and a private independent audit firm. There are instances where specific donors do request for a separate audit on funds provided as earmarked for programmes. The report of the external audit is circulated to all health partners and to the Government of Ghana for necessary action. Any audit queries arising from the audit report are discussed and appropriate actions taken.

2.8 Financial Reporting and Performance Assessment

The MoH produces quarterly financial statement for the Public Health Sector. The contents of the financial statement are discussed and agreed by all health partners. It is a comprehensive statement that shows total funds received and spent by source and type of expenditure. In view of this arrangement, all donors rely on the financial statement as the financial assessment tool for the health sector.

On an annual basis the health sector is assessed by a team of independent experts looking at all areas of the health sector and report on the performance of the health sector compared to targets in the PoW. A set of performance indicators is used for assessing the health sector. DPT3 coverage forms part of the set of national indicators for MoH. The report of the independent team is discussed at an annual health summit between MoH and its health partners. Issues from the annual summit are tabled in an Aide Memoir to be addressed in the coming year. The Aide Memoire is signed by MoH and SWAp partners.

2.9 Plans for Improvement of Financial Management System

One of the key actions is to address the occasional delay in disbursement of funds from government. As part of the arrangements, the SWAp partners have agreed to disburse more funds at the beginning of the year when Government funds delay. Further discussions are on going to ensure that government sustains its commitment to increase the percentage allocation to health and to improve on timely disbursement.

Government computerisation programme (PUFMARP) is expected to ensure reliability of government cash flow and enhance predictability of government funds.

The MoH is working to provide full subvented status for the GHS. This if successful, will improve the cash flow situation of BMCs. Timely disbursement of funds from MoF will facilitate this process.

The planning process in the health sector is being reformed to ensure better costing data for priority interventions, (which includes immunisation) to enhance knowledge of cost of integrated services.

2.10 Implication for National Immunization Program

Timely disbursement of funds is very essential to support sub-national immunisation activities. Though funds for procurement of vaccines will always be available on time at the central level, immunisation activities will be affected if funds for service delivery do not reach where it is needed on time.

3. PROGRAMME CHARACTERISTICS, OBJECTIVES AND STRATEGIES

3.1 Objective

Ghana launched its EPI Programme in 1978. Since 1985, EPI has been operational in all 10 regions and 110 districts of the country. The programme has experienced modest increases in coverage since then. Between 1991 and 2001, BCG coverage increased from 56% to 91% and measles coverage increased from 40% to 79%. EPI is one of the priority health interventions in the Ministry of Health Medium Term Health Strategy (MTHS). EPI vaccination coverage is a key health performance indicator for the entire health sector and is monitored at all levels.

Specifically for EPI, the strategic direction is to:

- Achieve at least 80% coverage for all vaccines in 80% districts by 2005
- Attain Polio free certification by 2005
- Reduce measles morbidity by 90% and mortality by 95% by 2005
- Eliminate maternal and neonatal tetanus by 2005
- Prevent, detect cases early and provide timely response to yellow fever outbreaks from 2002
- Introduce Hepatitis B and Haemophilus influenzae type b vaccine into routine EPI by 2002
- Determine the disease burden of vaccine preventable disease of Public health significance (meningitis, Congenital Rubella Syndrome)
- To reduce wastage of OPV and TT vaccines to 10% by 2005
- Improve vaccine and data management

The major strategies for increasing immunisation coverage over the next five to seven years are reducing drop out rate (DPT1 – DPT3). Another key strategy is the placement of health workers in hard to reach communities for immunisation services delivery (Community-based Health Planning Services, CHPS)[3],[4] All Health Staff involved in EPI will be given training in reducing missed opportunities and increasing coverage. Support visits and regular feedback on immunisation coverage and wastage rates will be given to districts and region to help improve their performance.

3.2 Relevance to Financial Sustainability

The above strategic objectives can be achieved with adequate and reliable funding for all aspects of the programme. A solid financial basis is one of several elements to ensure continuity of services and to fund continuous increases in coverage, quality and access to both traditional EPI and newer vaccines. It is essential to achieve the objectives outlined for the country's immunisation programme.

Financial targets and actions need to be tied to programme goals and strategies to make it relevant. In Ghana, a newer, more expensive vaccine has been introduced; although coverage is relatively high, we are targeting increase in coverage for all antigens. In addition the human resource base of the programme is also dwindling. The majority of staff who render immunisation services are leaving for other training programmes. The emphasis of our financing strategy is therefore based on obtaining and sustaining the funding levels of vaccine procurement, training and salaries for additional personnel, plus the other additional recurrent costs associated

[3] The Community-Based Health Planning and Services (CHPS) Initiative, PPMED, GHS, Oct.,2002

[4] CHPS The Strategy for Bridging the Equity Gaps in Access to Quality Health Services, PPME, GHS, Oct. 2002

with an expanded immunisation schedule. The training and salaries of additional personnel are shared costs so will be borne under the Sector budget.

The FSP has also been done to fulfil GAVI requirements. The issues raised in the document will draw attention to funding needs especially concerning the financial implications of the introduction of the new pentavalent vaccine (DPT-Hep B-Hib) into the country's immunisation programme after support from The Vaccine Fund ends.

Finally, the country will use the experience of completing the FSP to undertake similar activities for other Public Health programmes of the Ministry of Health

3.3 Quantitative and Qualitative Information about Programme Performance Targets

At present, the Immunisation programme offers nine antigens according to the following schedule:

At Birth BCG, OPV0

6 weeks OPV1, (DPT-Hep B+Hib) 1

10 weeks OPV2, (DPT-Hep B+Hib) 2

14 weeks OPV3, (DPT-Hep B+Hib) 3

9 months Measles, Yellow fever

The EPI strategic Plan (2000 – 2004) states as one of its objectives the introduction of hepatitis B and Haemophilus influenzae type B vaccines into the programme. The pentavalent vaccine (DPT-Hep B+Hib) was introduced into the programme nation wide in January 2002. It is replacing DPT in the immunisation schedule and is expected to achieve similar coverage. Auto-Disable syringes have been in use in the country's immunisation programme since 1996. The programme targets of achieving 80% coverage in 80% of districts set for the next five years are considered to be realistic because 67% of districts achieved DPT3 Coverage of at least 80% in 2000.

The date and expected coverage of the new vaccine are shown in Table 3.1
Table 3.2 and 3.3 show data on current and overall district coverage by antigen and antigen specific wastage rate specifically.

Table 3.1

New antigen/different formulation of standard antigen	Anticipated start date	Expected rate of uptake
DPT-Hep B +Hib	January 2002	82% from first year

Table 3.2 Data on Current and target overall and district level coverage by antigen

Antigen	Target Overall Coverage	No. of districts With coverage <50%	No of districts with Coverage between 50% - 80%	No of districts With coverage >80%
BCG	80%	0	17	93
OPV3	80%	2	57	51
DPT3	80%	1	60	49
Measles	80%	3	49	58
Yellow Fever	80%	8	64	38

Table 3.3 Information on antigen specific wastage rate

Antigen	Wastage rate % (2001)
BCG	51
OPV	23.8
DPT	15.5
Measles	29.9
Yellow fever	30.1
TT	26.3

The wastage rates of the reconstituted vaccines, BCG, Measles, Yellow fever is about 30% or higher. This is within the standards given by WHO. For the liquid vaccines, the wastage rate of DPT is within acceptable limits. The wastage rate of TT and OPV are rather high. Adherence to the use of the Vaccine Vial Monitor (VVM) and the multi dose vial policy needs to be monitored at lower levels.

Special subgroups

Although access to services is increasing with improvements in the cold chain system, it is still limited in some areas of Ghana. For example, communities bordering large lakes and rivers or living on islands are often not receiving regular health services. One example is the island communities in the Volta Lake. Other areas have limited access to services because roads are inaccessible during the rainy season, e.g. communities near Afram Plains in Ashanti.

These riverine communities can be reached only by boat. It costs on average about 30 times more to immunise a child in these areas as compared to those in more accessible areas. Some boats have been procured over the last two years to reach these communities. More resources are needed to cover these areas.

3.4 Changes in programme objectives in light of financial constraints

Funding for the routine programme is virtually secured for the next five to eight years. The major funding gap will be in terms of financing of the pentavalent vaccine. The Ministry of Health expects that it will contribute in an incremental way to the procurement of vaccines starting from 2003. It is expected that by 2011, the Ministry will be responsible for funding 100% of the costs of the pentavalent vaccine. Funds will be sourced from Government of Ghana, Health Partners, HPIC funds and earmarked funds.

3.5 Governance and management of the immunization programme

The Programme is under the Public Health Directorate of the Ghana Health Service. . The GHS is the service delivery arm of the Ministry of Health.

The programme has a national manager with about five staff (Logistician, Data Manager, Cold Chain Manager, NID Co-ordinator and Secretary) at the national level that work full time for EPI. Management and monitoring of service delivery is decentralised to regions and districts. At the regional and district levels, there are Regional and District Health Management Teams respectively who oversee Public Health activities. Each district has 4 – 7 sub districts. The sub district is the service delivery level. Community/Public Health Nurses, midwives and Disease Control officers deliver immunisation as part of an integrated service delivery at static and outreach clinics.

Two exceptions to decentralisation are the procurement of vaccines and the setting of immunization targets, which is conducted at the EPI office at the central level.

3.6 Roles and Responsibilities of Partners in Immunization Financing, Service Delivery and other aspects of the Programme

The Interagency Co-ordinating Committee (ICC) is an inter-sectoral body, which provides support for the national immunisation programme.
It is made up of government representatives, the private sector and partners. It was formed in order to respond to the planning needs of polio eradication, applying for GAVI funding and resolving other issues of the immunisation programme.

Partners are providing significant support to the national immunization program. The Department for International Development (DFID) is one of the major contributors to the Health Fund. The Government of Japan pays for vaccines for the polio NIDs. USAID provides technical assistance to the immunization programme, as well as financing of the cold chain and support for the NIDs. UNICEF is the procurement agent for vaccines, supplies and equipment as well as providing support for training for routine immunization, NIDs and surveillance.

Other donors are specifically focusing their support on the NIDs and surveillance activities: WHO and Rotary International finance operational costs, social mobilisation, and planning activities,

Private Sector
Some of the private-for-profit providers as well as NGOs are providing immunization services in their facilities. The Government of Ghana provides vaccines, supplies, cold chain equipment and training[5] for private providers. Contributions from this sector to the EPI programme include personnel time, cold chain equipment, supplies, and building space. Table 3.4 summarises the role of the various EPI partners

Table 3.4 Roles & Responsibilities of EPI partners

Partner	Role & responsibilities	Pending changes in range of development support
Private sector/NGOs (non profit)	Service delivery	None
WHO	Technical support, financing of EPI activities,	

5 GoG also provides salaries for some personnel of mission facilities.

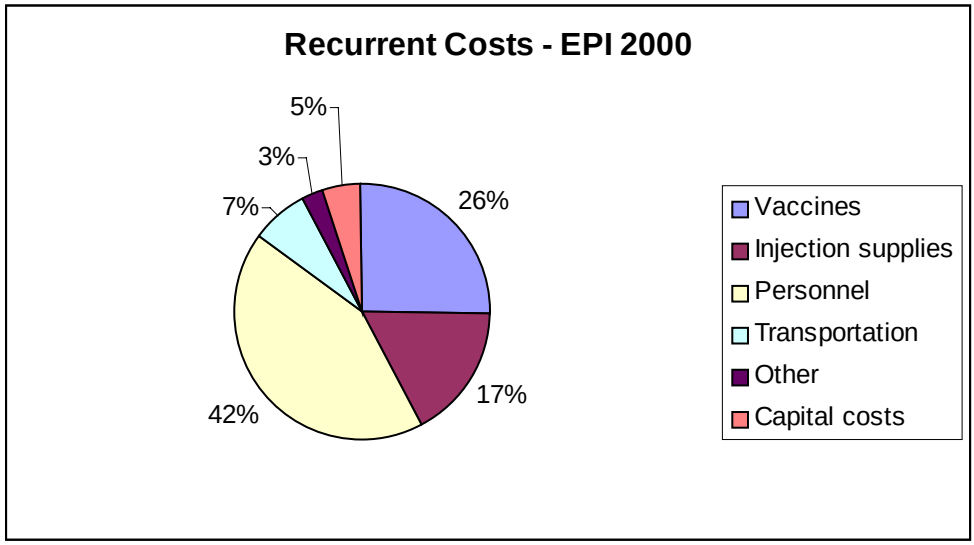
	SIAs & surveillance	None
UNICEF	Procurement of vaccines, cold chain Equipment, Technical support & financing of EPI activities, SIAs & Surveillance	None
USAID	Technical support & Financing of cold chain Equipment, EPI activities, SIAs and surveillance	None
Govt of Japan/JICA	Financing of vaccines, cold chain equipment, EPI activities and SIAs	None
Red Cross	Programme Communication activities and financial support for SIAs	Support for Programme Communication activities for Routine EPI
Rotary	Financing of SIAs, Assist in service delivery (NIDs)	None
Other Partners (DFID, DANIDA, World Bank, etc.,)	Financing of vaccine procurement, support of health system	None
GAVI/Vaccine Fund	Financing of vaccine procurement, Immunisation services support	Not known

4. BASELINE AND CURRENT PROGRAMME COSTS AND FINANCING

4.1 Quantitative information about pre-Vaccine Fund (baseline) programme costs and financing patterns

The year 2000 is taken as the baseline year because the first tranche of GAVI support for strengthening immunisation services was received in 2001. Table 4.1a and 4.1b give details of different cost inputs by activities and by Funding Source. In Ghana, vehicular costs are mainly borne under the Sector Wide Approach and so are shared costs and not programme specific costs. Although generally building costs are shared costs; Incinerators were built with measles funds so have been included in programme specific costs. The total programme specific costs was about $3.6million. Routine EPI represents about 53% of the total costs. The Health Fund (GoG and Donor pool) represents about 31% of the total cost. Vaccines represent about 26% of the costs of routine EPI. (Fig 4.1)

Fig 4.1



4.2 Quantitative information about current expenditures and funding patterns, including the Vaccine Fund resources.

The year 2002 is taken as the current year. Use of the pentavalent vaccine was started nation-wide in January 2002. For the current year, 2002, the cost of the routine programme has increased to $14.375 million, and represents 66% of the total cost for the programme. New and under used vaccines represent about 56% of the total costs of routine EPI whilst the traditional vaccines has reduced to 4% (Fig 4.2). Table 4.2a and 4.2b provides details on different estimated cost inputs by activity and funding source.

The increase is mainly due to the introduction of the pentavalent vaccine. Fig 4.3 shows the sharp increase in projected recurrent costs in 2002.There is a gradual increase from 2002 to 2006 from projected population increase. Contributions from the Health Fund form about 21% of total costs.

Fig 4.2

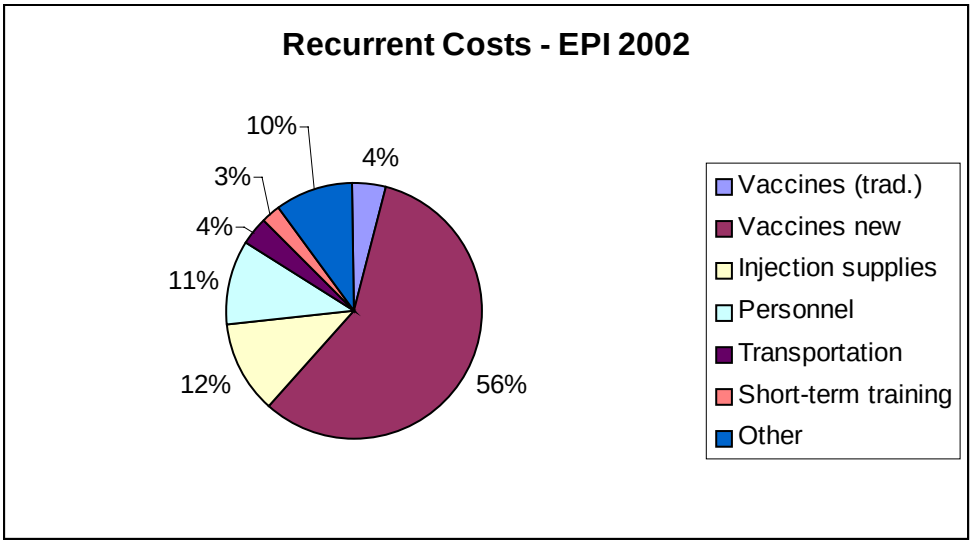
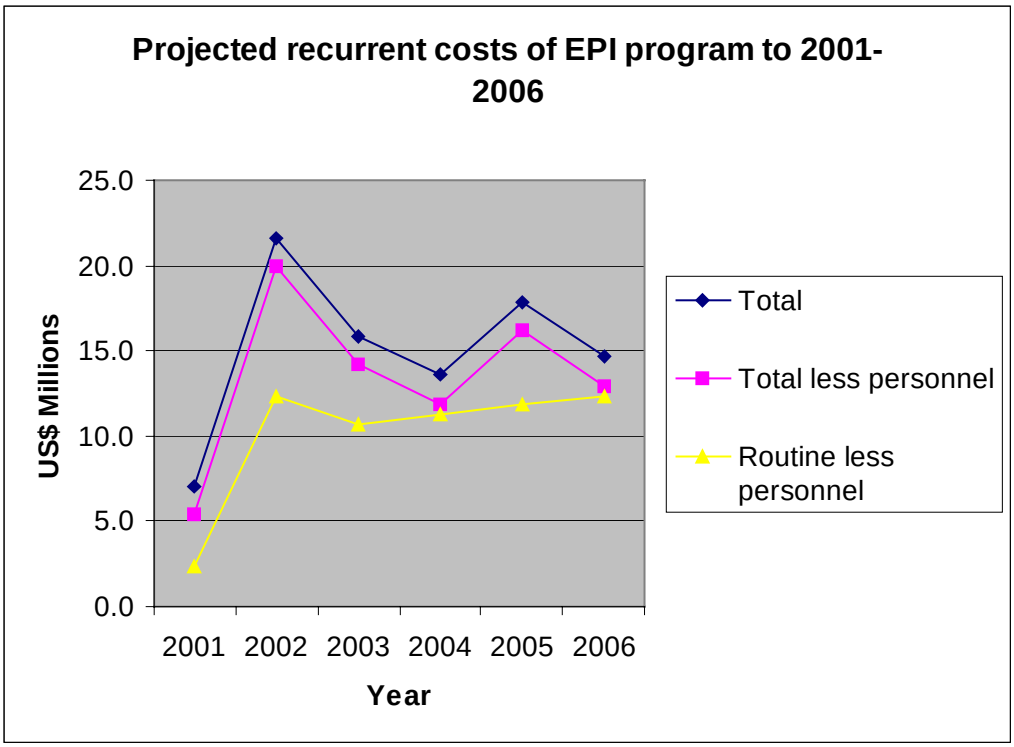


Fig 4.3



4.3 Qualitative information about trends in the volume and reliability of government and external funding in the recent past

The Ghana Health Sector has launched its 2nd five year-programme of work (2002-2006). The first five year PoW was from 1997-2001. The 1997-2001 PoW begun with the SWAp where the use of the common basket approach to funding of the health sector began. The first year (1997) of the programme experienced some delays in donor disbursement and level of inflows for the administrative and service budgets, but Government commitments were on target. The trend over the years showed improvement in inflows and disbursements from donors. Government commitments were not on schedule and did not meet expected target levels. Evidence from a review of the 1st PoW showed that external funds were on target in reliability and volume. Government commitments however experienced shortfalls and disbursement and were not always on time. Government commitments on salaries were timely and reliable.

The Government of Ghana has a three-year planning cycle. Therefore resource projections are made for three years. Government is able to make commitments for this period. There has been some difficulties in obtaining commitments from external sources for more than two years; (earmarked and into the Health Fund) from individual health partners.

The future of funding in the health sector will continue as in the past five years. Potential changes to the trend may occur in the middle of the 2nd 5YR PoW when some health partners may move to budget support. This may lead to shortfalls in the overall health budget. However the health sector commitment to the EPI programme as one of the strategies to reduce poverty will ensure that funds are always available for the programme.

5.0 FUTURE RESOURCE REQUIREMENTS AND PROGRAMME FINANCING

5.1 Projections of resource requirements

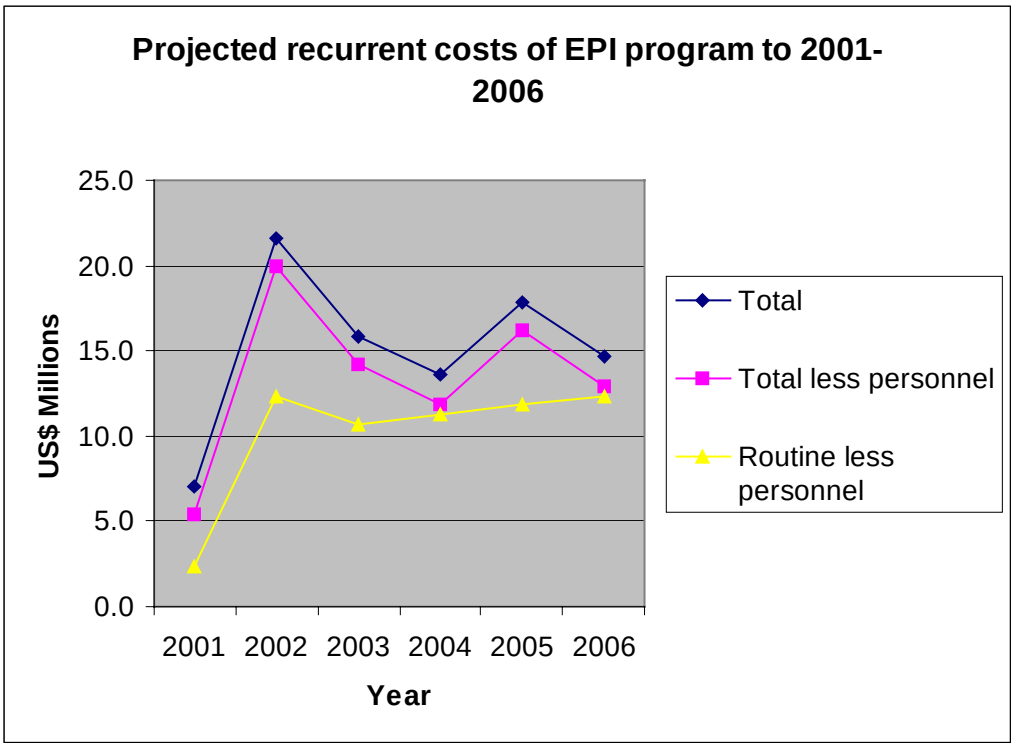
The Multi year plan submitted for the Vaccine Fund Application has been updated[6]. The Plan now have annexes which include better estimates for polio eradication, accelerated measles control, maternal and neonatal tetanus elimination and yellow fever control activities. Other additional activities covered are cost of introduction of new vaccines, increase in immunisation coverage and population figures from the 2000 census. The Ghana Health Service has prepared a document on district cost analysis of the CHPS strategy to cover the current programme of Work[7]

Tables 5.1a and 5.1b summarise cost projections for the years of Vaccine Fund support (2002 – 2006). Table 5.1b provides details on routine and supplementary immunisation costs over the period. Tables 5.2a and 5.2b also provide similar relevant information for the Post Vaccine Fund period (2007 – 2011). Over the period of Vaccine Fund Support, a total amount of $68.5 million will be needed for routine immunisation costs. An additional amount of $19.9 million for accelerated disease control activities. For the period 2007 to 2011, $81.65 million will be needed for the routine programme. In conclusion, an amount of $150.1 million will be needed over the period 2002 to 2011 for the routine programme. Tables 5.1a and 5.2a show detail breakdown of the budget for the Vaccine Fund and Post Vaccine Fund periods respectively. Projected recurrent costs over the period 2001 to 2011 are expected to be stable except for the sharp increase in 2002. (Fig 5.1)

[6] GHS EPI – Ghana, 5 Year Plan of Work (2002 – 2006)

[7] CHPS District Cost Analysis, Technical Report, 2nd Draft, Sory, E. K. et al,Oct 21, 2002

Fig 5.1



Alternative scenarios for resource requirements

The Government of Ghana and Health Partners are certain that the total cost for the routine programme will be fully met for by 2011.

6. SUSTAINABLE FINANCING STRATEGIC PLAN AND INDICATORS

6.1 Immunization Financing

6.1.1 Introduction

Financing of vaccines in the past five years have been provided by Health Partners. Procurement of vaccines in the first three years of the first 5YRPoW (1997 – 1999) was funded from direct donor support through the earmarked funds. Since 2000, the trend has changed. Vaccines are funded from the Health Fund. MoH and UNICEF jointly undertook the process of vaccines procurement. Funds for procurement of vaccines (including syringes) are extra budgetary (not included in BMC allocations and budgets).

Cost of immunisation has five main components: personnel, vaccines and syringes, capital and support services. The programme specific capital costs (cold chain equipment) are usually funded from donor sources. NIDs are funded by direct donor support. The cost of supplementary immunisations are funded by WHO, UNICEF and other partners. Funding for these programmes is relatively secure for the next five years through direct earmarked support.
Estimates of vaccines requirement are made by the Public Health Division based on projected immunisation targets to be achieved. These are then aggregated into regional funding requirement.

With the introduction of the five-in-one (Pentavalent) vaccine, the cost of vaccines for immunisation will increase from one million dollars ($1) to about ten million dollars ($10) annually. The use of GAVI funds will be extended to ten years with increasing contributions from national domestic resources. The GoG will then have to continue the funding of vaccines from there. The following specific strategies have been developed for sustaining the process beyond 2006.

6.2 Strategies and Actions to Mobilise Adequate Resources

The GoG will graduate the funding of vaccines during the period of GAVI support in order to lessen the impact when GAVI funding ends. GAVI funds will be used to fund 85% of vaccine procurement in 2003 and 50% in 2006. The GoG and Health Partners will mobilise funds to support the procurement of vaccines from a 15% of annual estimates in 2003 to 100% in 2011. The post vaccine period will be difficult to project but specific strategies will be developed for advocacy and dialogue with health partners to make commitments of support for the post vaccine period. It is expected that GAVI partners will advocate for a reduction in the price of the pentavalent vaccine to ease the impact on the national budget
Table 6.2 and Fig 6.1 outlines a plan to provide funds for new under used vaccines from GAVI to the Government of Ghana and its development partners. The actual amount to be paid will be determined by the prevailing prices.

Funds for financing the GoG component of immunisation vaccines for the period as stated above will be from budgetary support, HIPC funds and extra funding from both GoG and Health Partners through advocacy and dialogue. The table shows yearly funding levels. The key tools to achieve the level of funding for vaccines lies in advocacy and dialogue with specific indicative costs and targets. Subsequently the commitments of Government and Health Partners as stated in section seven will be closely monitored.

A policy for earmarking specific budgetary support to fund vaccines will be developed to ensure vaccine security. This discussion is ongoing not only for vaccines but for priority interventions that are key to the MoH and especially as set in the Health Sector Poverty Reduction Strategy

Paper. This discussion is necessary should Health Partners decide to move to budgetary support and reduce direct donor support to MDAs.

The health sector will receive part of the HIPC funds. These funds are expected to flow for three years ending 2004. One million dollars each year will be earmarked to support central procurement of vaccines. Nominal increases in budget allocation to districts (especially those in the four deprived regions) will support this initiative. Regions will be required to set aside some amount of budget funds to support national efforts on vaccine procurement. This strategy though will contribute insignificantly to the total fund required, will create local initiative and responsibility for districts to contribute directly to support immunisation.

On the part of Health Partners, their contribution to the health fund will be discussed to ensure increase allocation to support the procurement of vaccines. The evidence for immunisation as a key component of poverty reduction will be strengthened to put up a strong case through advocacy.
The exemption scheme is expected to cover children under-five years. However the under fives' are catered for under the provision of funds for vaccines and therefore not part of the funds set aside for exemptions.

Financing Strategy

In view of the fact that SWAp partners contribute to support the MTEF budget, we have not distinguished between SWAp funds and GoG funds. As described in the earlier sections of this document, the main financial sustainability issue that will have to be addressed is the financing of the new vaccines after GAVI period ends. This will be addressed through the mobilisation of extra resources.

The basis of the financing strategy is the assumption that the Government of Ghana will work towards meeting the commitment to the health sector. The Abuja Declaration requires that the Government of Ghana contribution to the health sector be increased from the present level to 15% by 2006.

Table 6.1 shows the gradual projected resource shift to meet this objective.

	2002	2003	2004	2005	2006	2007
% Health share	8%	11%	12%	13%	14%	15%

Note: Government total budget includes funds from development partners and those accruing from the HIPC initiative.

Discussions will be held with the Ministry of Finance to ensure that the target of allocating 15% of the national discretionary budget to health is adhered as agreed upon in the Abuja Declaration. The expected increases in the budget ceiling to the sector will ensure adequate funding of the national immunisation programme. The Ministry of Health expects that the budget allocation for 2003 will at least be 12% of the national budget. . The remaining sustainability issues relate to programme efficiency, increase in MoH share to sub national levels and timely disbursement of funds to the health sector and from the MoH to sub national levels. As such, the scenarios have been developed on these assumptions. The two cost elements to be sustained are the pentavalent and yellow fever vaccines. Our strategy is to gradually phase out GAVI support in ten years.

The main sources of funds that will be explored in the first instance are GoG, Health Fund (SWAp) and the HIPC Funds (Poverty Reduction Funds). We expect an inflow of 1,000,000 US

dollars from the annual HIPC funds to health to be used to support vaccine procurement. The first phase of the PRSP is for three years.

The other source of funds is the Health Fund. The SWAp arrangement provides our SWAp partners to support the MoH PoW as a whole and not choose and pick programmes. The strategy is to include all immunisation cost in the PoW and make a case for increase support in their contribution to support our PoW, which will increase due to the uptake of the new vaccine. The GoG is committed to targets set in the GPRS. The MoH has incorporated these targets into its 5YRPow. Fund will be set-aside at the national level to procure drugs.

6.3 Strategies and actions to increase the Reliability of Resources

The future of how funds will flow from Health Partners to the health sector is under discussion. There is the intention for some major partners to adopt national budget support. If this should happen, GoG will have to commit itself to improving the reliability of funds disbursement to the health sector. The converse is for health partners to continue disbursement direct to the health sector.

The main strategy is advocacy and dialogue with the MoF at the highest level between the Ministers of Health and Finance and health partners. As part of the management arrangements to ensure timely disbursement of funds from MoF to MoH, a memorandum of understanding will be developed on the modalities for full and timely disbursement of funds from Government. MoH will also adopt retrospective financing of the vaccines to ensure vaccines are available on time each year.

6.4 Strategies and actions to increase efficient use of Resources

Existing vaccine wastage of liquid vaccines (OPV, TT) levels are high and need to be brought down. For example, it is expected that decreasing wastage of OPV from 23.8% (2001 rate) to 10% will lead to savings of about $10,000 % of total costs on the annual budget of OPV costs
Two specific strategies will be used to ensure the efficient use of resources.
Training activities with on site supervisory support visits of staff at all levels will be carried out to help health workers improve stock control of vaccines, appropriate use of the vaccine Vial Monitor (VVM) and the revised Multi Dose Vial Policy (MDVP).

Educational materials on VVM and MDVP will be provided to facilitate this process. Regular monthly feedback on district level wastage will be provided to regions. Poor performing districts will be helped with micro-planning activities to identify weak sub districts for additional support.
The immunisation programme has a policy on daily immunisation, this may lead to high wastage in small health facilities, however the programme does not envisage changing this policy as it would lead to an increase in missed opportunities.

Table 6.4 outlines a plan of action to increase efficient use of resources.

Table 6.2: Immunisation Financing Plan

Actions		2002 ($)	2003 ($)	2004 ($)	2005 ($)	2006 ($)	2007 ($)	2008 ($)	2009 ($)	2010 ($)	2011 ($)
Funds Allocated from HIPC			1,000,000	1,000,000							
Cost of Pentavalent & YF vaccines requirement		9,467,073	8,075,947	8,859,073	9,241,854	9,588,078	9,802,951	10,034,263	10,299,231	10,556,711	10,820,637
GAVI funds to be used to procure vaccines		9,467,073	6,864,555	6,664,305	5,545,112	4,794,039	4,411,328	3,511,992	2,574,808	823,423	595,390
Total Vaccine Req-5ys/Balance of GAVI vaccines	45,232,025	35,764,952	28,900,397	22,256,092	16,710,980	11,916,914	7,505,613	3,993,621	1,418,813	595,390	0
% of vaccine required funded from GAVI funds		100	85	75	60	50	45	35	25	8	0
$ value of GoG/Donor/HIPC contribution to procure vaccines		0	1,211,391	2,241,768	3,696,742	4,794,039	5,391,623	6,522,271	7,724,423	9,733,288	10,225,247
% of vaccine requirement funded from non salary recurrent budget (GoG/HF/HIPC)		0	15	25	40	50	55	65	75	92	100

Fig 6.1 **Ghana's Proposed Plan for financing new and under used vaccines 2002 - 2011**

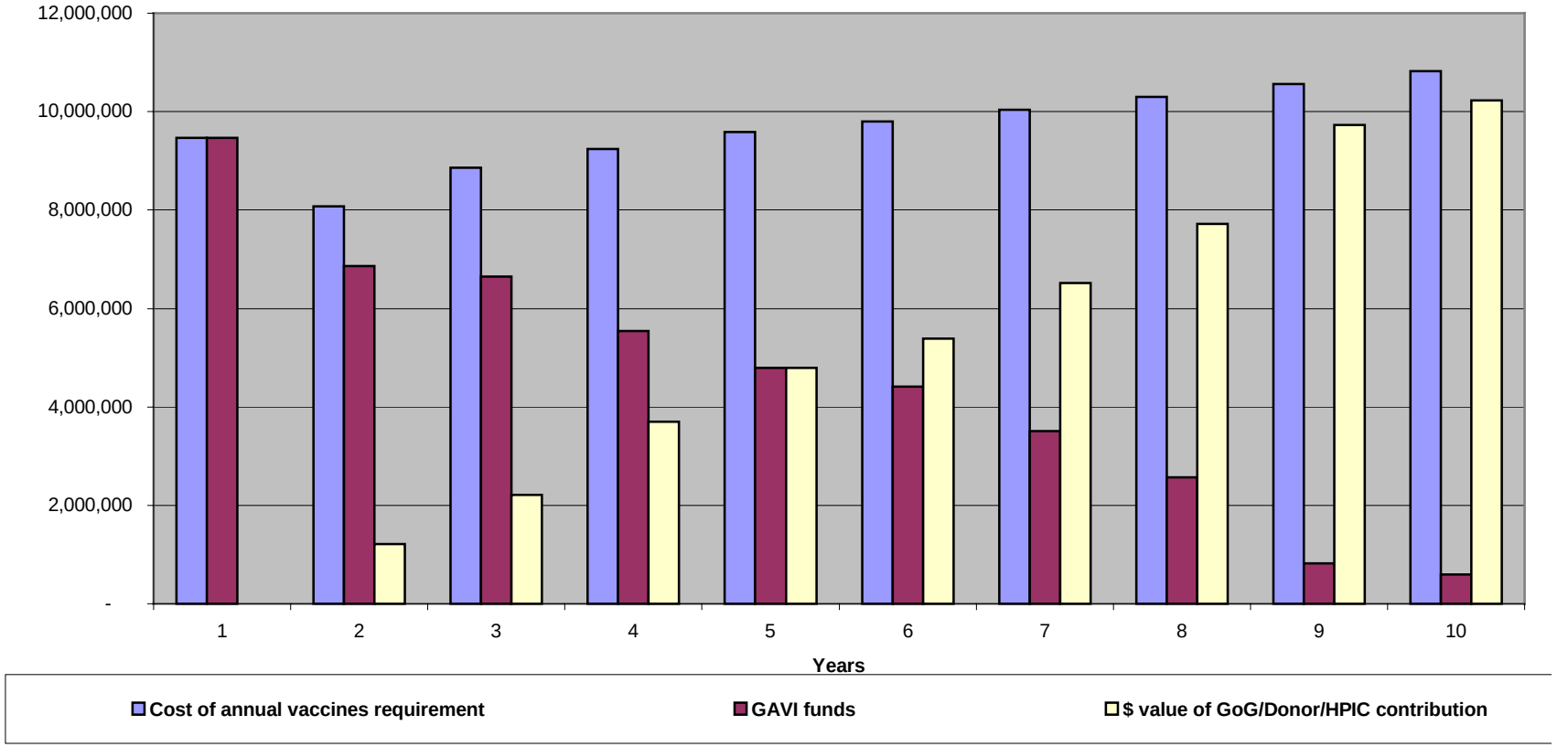


Table 6.4 Strategic Plan

	OBJECTIVES 1 : Increase resource to the health sector			
	Activities	Timeline	Person/Organisation Responsible	Monitoring Indicator
1	Initiate dialogue with MoF on sustainable real increase in health sector share of GDP	Quarterly	MoH	% MoH as share of GDP % SWAp Partners as share of total external financing % Traditional EPI donors as a share of total ext. fin. % MoH to District Level
2	Ensure that immunisation (including) cost of vaccines forms part of the PRS plan and indicators.	Each year	MoH	% share of vaccines to total MoH non wage recurrent
3	Ensure that cost of vaccines are part of the MoH procurement plan each year	Each year	PHD/PPME	Vaccine costs included in procurement plan
4	Develop relevant indicators for advocacy and dialogue with government and health partners	Quarterly	PHD (EPI Manager)	
	OBJECTIVE 2 : Increase fund reliability			
1	Improve on timely disbursement of funds to sub national levels	Quarterly	Financial controller, MoH	% of funds (GoG/HF) disbursed timely
2	Provide up-to-date information and reminders to Government and donors to ensure timely disbursement of funds	Quarterly	Financial Controller, MoH	% of funds received on time from GoG/HF
3	Discuss with donors possibility of pre-financing the health budget (especially early procurement of vaccines)	First quarter each year	Financial Controller, MoH/GHS (PPME)	Availability of funds for procurement of vaccine for proceeding year
	OBJECTIVE 3 : Improve programme efficiency			
1	Reduce vaccine wastage levels		PHD (EPI Manager)	% reduction in vaccine wastage by antigen
2	Strengthen capacity (training) at sub national levels to enhance efficiency in management of vaccines	Annually	PHD-GHS (EPI Manager)	% of health staff trained
3	Increase supervision from national and regional levels	Quarterly	RDHS/PHD-EPI Manager)	% of districts visited

Table 6.4

7.0 STAKEHOLDER COMMENTS

The FSP was presented to the Inter-Agency Co-ordination Committee (ICC) of the Expanded Programme on Immunisation on 19th September 2002. Present were representatives from WHO, UNICEF, Rotary, The Dutch Government and the Ghana Health Service.

Present were representatives from:

The Ghana Health Service
WHO
UNICEF
GTZ
Rotary
JICA

Some of the comments made were:

- A cost benefit analysis study should be done to strengthen the basis for the introduction of the new vaccines. (The Ghana Health Service has requested for technical assistance from WHO for the cost benefit analysis study. It is expected to be done before the end of 2002).

- Audio-visual materials should be developed on injection safety and new EPI policies e.g. Multi-Dose Vial Policy and the Vaccine Vial Monitor. Training should also be conducted on vaccine management and Injection safety for all facility level staff to ensure that wastage is kept within WHO/Unicef guidelines.

- District vaccine budgets should be reflected in the Ghana Health Service budget. The HIPC funds allocated for vaccine procurement will then be taken from the district vaccine estimates.

- The Ministry of Health should address the issue of the late release of funds from the Ministry of Finance

- A system should be put into place to ring fence funds for vaccine procurement to ensure continuous availability of funds.

The FSP was again presented to the Health Partners (Sector Wide Approach) meeting held on 3rd October 2002. Present were representatives from:
WHO
UNICEF
DFID
DANIDA
USAID
GTZ
The World Bank
JICA
UNAIDS
Also present were the Chief Director and the Director of Policy Planning, Monitoring and Evaluation for the Minister of Health, The Director and Deputy Director General of the Ghana Health Service, Director PPME, and head of Budget Planning, GHS

Comments from stake-holders:
The Plan was generally well received by partners. None disagreed with the Ghana Health Service on the principle of the need to introduce the new vaccine. The Deputy Director General of the Ghana Health Service, Dr Sam Adjei, made a general comment about using the principle of the EPI FSP to apply to the health sector as a whole. He said that the first five-year Programme of Work attempted to do that but did not provide such detail work.

The European Union felt that the creation of a Vaccine Account is contrary to the spirit to SWAp. The FSP team responded by saying that the creation of the Vaccine Account is intended to secure funds for vaccine procurement, which is supposed to be released during the third quarter for the following year. World Bank responded that they welcome flexibility of allocation and they are always ready to release funds whenever it is needed.

DfiD wanted to know whether the cost of the pentavalent vaccine would come down since more countries are using the vaccine.
Unicef responded by saying that that the cost of the pentavalent vaccine is a global issue. Currently there is a group working on it at the global level. There are relatively few countries using the new vaccine. The costs may reduce when more countries start using it.
DfiD also commented on concerns that the fund reliability cannot be ensured under direct budget support. They said that directly funding government activities would ensure that funds are available for release to the health sector among others. The partners who are supporting the budget directly will monitor selected indicators from the social sector (education, health etc.,) and base release of funds to government on those indicators. The European Union representative also sought to assure the Ministry of Health that direct budget support will ensure timely availability of funds for health sector activities.

In conclusion the Ministry of Health and the Ghana Health Service together with its partners have put in place mechanisms to ensure availability of funds for the health sector. The Expanded Programme on Immunisation is one of the key programme areas. The programme is sustainable under the current five-year programme of work. The added cost of the introduction of the new vaccine will be gradually borne by GoG/Partners contributions until 2011.It is expected that a reduction in price of the pentavalent vaccine will make full support by government and local partners possible. The biggest challenge the programme has to deal with is the consequences of Partners shifting to direct budget support and the late release of funds to the health sector.