Government of Malawi

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Comprehensive EPI Multi-Year Plan 2006-10

Malawi

Expanded Programme on Immunisation
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Malawi

Expanded Programme on Immunisation

Ministry of Health

Comprehensive EPI Multi-Year Plan

2006-10

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Abbreviations

AD	Autodisable syringes
AEFI	Adverse Events Following Immunisation
AFP	Acute Flaccid Paralysis
AFRO	WHO Regional Office for Africa
ARCC	African Region Certification Commission
BCG	Bacilli Calmette Guerin
CHAM	Christian Health Association of Malawi.
CHSU	Community Health Sciences Unit
CSF	Cerebrospinal Fluid
DFID	Department for International Development.
DHMT	District Health Management Team.
DHO	District Health Officer
DHS	Demographic Health Survey.
DPT	Diphtheria Pertussis and Tetanus vaccine
EHP	Essential Health Package.
EPI	Expanded Programme on Immunization.
GAVI	Global Alliance for Vaccines and Immunizations
GDP	Gross Domestic Product.
Hib	Haemophilus influenza type b
HIV	Human Immuno-Deficiency Virus.
HSA	Health Surveillance Assistant.
IEC	Information Education and Communication
IgM	Immunoglobulin type M
IMCI	Integrated Management of Childhood Illnesses.
IMR	Infant Mortality Rate.
JICA	Japan International Cooperation Agency
KFW	Germany Development Bank
MCH	Maternal and Child Health.
MDG	Millennium Development Goals
MK	Malawi Kwacha.
MMR	Maternal Mortality Rate.
MoH	Ministry of Health.
NCC	National Certification Committee
NGO	Non-Governmental Organization.
NIDs	National Immunisation Days
NNT	Neonatal tetanus
NPEC	National Polio Expert Committee
NSO	National Statistics Office.
OPD	Out-Patient Department.
OPV	Oral polio Vaccine
PEI	Polio Eradication Initiative
RED	Reaching Every District Approach
SIAs	Supplemental Immunisation Activities
SMC	Suspected Measles Case
SNIDs	Sub-national Immunisation Days
SWAp	Sector Wide Approach.

TA	Traditional Authority
TT	Tetanus Toxoid vaccine
UCI	Universal Childhood Immunization
UNICEF	United Nations Children's Fund
UNHCR	United Nations High Commissioner for Refugees
USAID	United States Agency for International Development.
WHO	World Health Organization.

Executive Summary

The Expanded Programme on Immunization in Malawi is part of the Essential Health Care Package. Its overall goal is to increase access to immunisation services, provide effective and potent vaccines and increase demand for the services in order to reduce infant morbidity and mortality rates due to vaccine preventable diseases.

Malawi has made substantial progress in sustaining high routine immunisation coverage through existing health service delivery structures and quality National Immunisation Days for measles and polio. The country has also achieved a polio free status, measles and neonatal tetanus elimination phase. The main challenge is how sustain the achievements made so far while EPI integrating with other child health interventions and reach the children who need the services most.

This document presents an EPI comprehensive plan for 5 years, highlighting the national goals, objectives, and strategies derived from a situational analysis. The analysis was done using the MoH Joint Programme of Work, 2003 EPI Review for Malawi, administrative EPI data and annual EPI reports. These reviews highlighted the strengths and some of the weaknesses in the programme such as high immunisation drop out rates, unsatisfactory supervision, inadequate knowledge and skills regarding EPI management systems; inconsistent distribution of supplies which resulted in vaccine stock outs in some facilities and limited integrated interventions on child health activities.

The strategic planning was carried out by immunization system components rather than by targeted disease or initiative. Major areas of focus include provision of services to hard-to-reach areas, introduction of new vaccines, integrated interventions aimed at reducing child morbidity and mortality and taking immunisation beyond the traditional infant group. The EPI Multi-Year Plan 2006-10 document represents the country's main strategy to achieve the fourth Millennium Development Goal.

The success of the programme largely depends on adequate financing for all proposed activities to be undertaken during the planning period. It will be the responsibility of the EPI through the interagency Coordinating Committee to ensure that the programme gets adequate financial and material support both locally and internationally.

With the advent of the SWAp basket financing, many of the program sources of financing are now channelling their support through this mechanism, leading to a reduction in the overall number of program funders, and an increase in funding from the SWAp basket. For the SWAp funds, the program will have to continue advocating for additional resources from this source, given its impact on overall sector objectives.

The program will, as part of its regular monitoring process, monitor the trends in financing, to ensure it is moving towards improved financial sustainability by reducing its financing gaps, and converting more probable financing to secure financing.

1.0 Background Information

1.1 Geography

Malawi is a land locked country in East Central Africa. It lies south of the equator and covers an area of about 118,500 square kilometers. It is bordered by Tanzania to the North, Zambia to the west and Mozambique to the east, south and southeast. A quarter of the surface area is covered by Lake Malawi.

The country is divided into three geographical regions, northern, central and southern regions with a total of 26 districts. Within each district there are local administrative divisions known as Traditional Authorities (TAs), which are headed by chiefs. The smallest administrative unit is a village headed by a village headman.

1.2 Demography

The country's population for 2005 was projected at 12,341,170. Five percent (617,059) of the population is under one year; 48% (5,923,762) is under 15 years of age. Eighty-six percent (10,613,406) of the population lives in the rural areas. About 80% (9,872,294) of the total population has access to formal health care services. The literacy rate for females is 48.6% and 72.1% for males. For vital health statistics of Malawi see Table 1.

Table 1: Vital Statistics for Malawi

Statistic	Indicator
Annual Growth Rate	1.9%
Crude Birth Rate	41.2 per 1000
Crude Death Rate	14.1 per 1000
Total Fertility Rate	6.0 children per woman
Infant Mortality Rate	76 per 1000 live births
Under-five Mortality Rate	133 per 1000 live births
Maternal Mortality Rate	940 per 100, 000 live births
Male Life Expectancy at birth	37 years
Female Life Expectancy at birth	39 years

Source: DHS 2004

1.3 Socio-economic Status

Malawi is one of the poorest countries in the world with GNI per capita (US $160). The country still suffers from serious inequities in the distribution of income, with over sixty percent of the population living below the absolute poverty line. The country is also currently undergoing economic transformation, following a period of huge fiscal deficit, large current account imbalance, rapid inflation, and a fluctuating GDP.

Malawi's economy is agriculture-based, both in terms of subsistence activity and the formal sector. The formal sector is dominated by the export of tobacco, which has suffered from uncompetitive production, high export tariffs and declining world demand. Consequently, Malawi's economic growth is significantly below the 5-6% required to deliver widespread welfare gains to the population. Aggregate growth is declining towards negligible levels; the low levels and slow growth of economic activity prevents both individuals and households from lifting themselves out of poverty, and constrains the Malawi government's ability to deliver services that could reduce poverty.

The government budget is highly reliant on donor support. Domestic revenue generation is unlikely to improve in the near future due to the low tax base and small formal sector, reduced trade tariffs inline with SADC trade harmonization and overall weak economic performance.

2.0 Health Care Delivery Systems

2.1 Health services

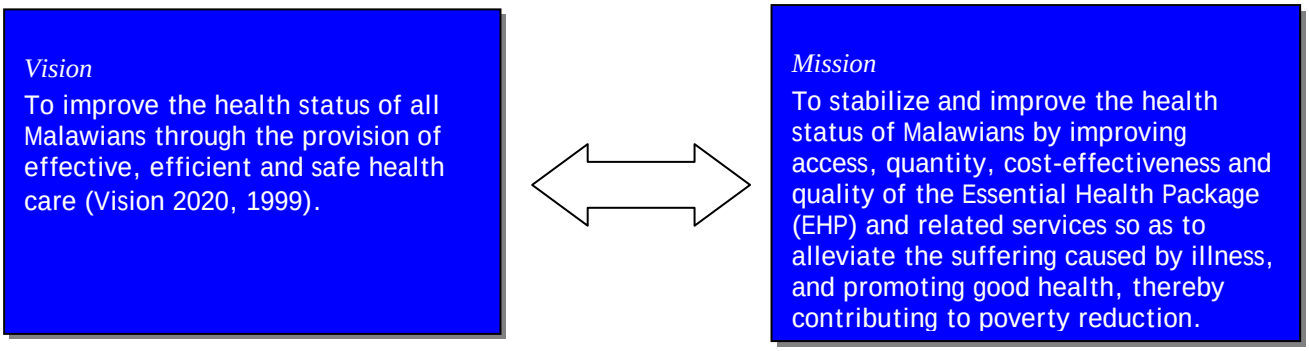
The Ministry of Health offers a wide variety of health services accounting for 60% of the facilities. The Christian Hospital Association of Malawi (CHAM) provides 37% of the health care services while private institutions provide 3%. The government assists CHAM by providing it with an annual grant that covers local staff salaries. CHAM facilities charge user fees for treatment, with the exception of the growth monitoring, immunization, and community-based preventive services including treatment of specific communicable diseases such as TB and Leprosy.

At primary level, services are delivered through rural hospitals, health centres, health posts, outreach clinics and community initiatives such as Drug Revolving Funds. District and CHAM hospitals provide secondary level health care services although some have specialist functions. The secondary level mainly functions to back up the activities of the primary level. Tertiary level hospitals (central hospitals) provide specialized services and secondary level health care where they are no district hospitals. Immunization services are offered at all levels.

2.2 Policy of the Ministry of Health

The policy of the Ministry of Health is to raise the level of health status of all Malawians through the development of a health delivery system capable of promoting health, preventing, reducing disease burden, protecting life, and fostering the general well-being and increased productivity, and reducing the occurrence of premature death.

The following is the vision and mission statement for the ministry of health:



Malawi Government has made a policy to decentralize health services to District Assemblies as the local governance structures. The new Government Policy on decentralization is aimed at devolving administrative authority to the district level. Government agencies at district and local levels will become one administrative unit, through the process of institutional integration, manpower absorption, composite budgeting and provision of funds.

District Assemblies will assume decision-making responsibility at district level. This will necessitate direct budgetary allocation to the districts thus making District Health Management Teams (DHMTs) in turn to be accountable to the District Assemblies for decisions on financial planning and expenditures. The introduction of accountable and earmarked health grants to the District Assemblies will allow for some sector coherence although it may be difficult to immediately improve financial management. The development of standards, norms and accreditation systems based on the Essential Health Package (EHP) make it easy for the District Assemblies to be made accountable for the quantity and quality of services they provide. This arrangement also makes it easy to maintain some national consistency in the quality of care across District Assemblies. The introduction and implementation of the EHP is thus a convenient modality for such accountability to be achieved.

2.3 Sector Wide Approach (SWAp)

The Sector-Wide Approach (SWAps) arose from the May 2000 Consultative Group (CG) meetings between the government and development partners. The SWAp has established several joint processes in terms of planning, funding and procurement and monitoring and review, and has adopted a single plan of action for the sector as a whole to implement. A broad range of stakeholders including development partners and NGOs has been brought onboard to implement this plan, with the overall process being driven by government.

The SWAp has considerable efficiency and equity gains for Malawi's health service. Efficiency will increase as the transaction costs of utilizing and monitoring various sources of financial support fall, and joint planning ensures that duplication of service provision is minimized. Equity will improve as stakeholder coordination and resource allocation become systematic.

There will be some short-term risks to vertical service delivery structures, such as the immunization programme, as the SWAp develops. There will have to be a careful process of change management

to ensure that individual MOH "success stories" (such as the EPI programme) are not eroded as the overall health system improves its performance. In the longer term, the improved efficiency and equity of health sector support, combined with the prospect of a greater totality of resources, will benefit immunization services, as it will the overall health system.

2.4 Essential Health Package (EHP)

The Malawi EHP focuses on those conditions and service gaps that disproportionately affect the health of the poor and disadvantaged populations. The government has made a policy decision that the EHP services will be provided free of charge at the point delivery. This is in line with the Malawi Poverty Reduction Strategy Paper. Because the government of Malawi is experiencing a mismatch between health resources, health needs and demands for health care, it has become necessary to provide only a limited but effective range of priority services that the country can afford rather than provide all services, which at the end of the day are of poor quality.

The EHP consists of a group of cost-effective and proven interventions which are combined and delivered together so as to reduce the cost to patients. This type of packaging of health services combines those services that can be delivered within the same facility and using the same level of technology. EHP is orientated around 11 conditions (vaccine preventable diseases, acute respiratory infection, malaria, adverse maternal/neonatal outcomes, tuberculosis, acute diarrhoea diseases, sexually transmitted infections including HIV/AIDs, schistosomiasis, nutritional deficiencies, common eye, ear and skin condition and common injuries) that predominantly affect the rural poor. The majority of these conditions are preventable and communicable diseases, and thus non-treatment incurs societal costs, as well as costs to the individual. To effectively standardize services, and move them closer to the client, the EHP envisages a massive expansion of the community level of health delivery; with for example one Health Surveillance Assistant (HSA) per 1,000 of the population, and for limited drug disbursement to occur at this level.

2.5 Human Resources

The coverage and quality of health services has been adversely affected by shortages of staff the facility level. It has been estimated that vacancies on established posts are up to 50% at some institutions. Whilst public health facilities are highly regarded, traditional healers often play a significant role in many peoples' lives, especially those communities who live very far from health facilities. Some of the main challenges facing the sector are ensuring that adequate numbers of the various health workers are trained and how to ensure retention of all its trained workers.

3.0 Situational Analysis

3.1 The Expanded Programme on Immunization

The Malawi Expanded Programme on Immunization (EPI) was officially launched in 1979 and is integrated within the Preventive Health Services network as part of the Essential Health Package (EHP) and though presently runs as a vertical programme.

3.2 Programme Structure

At the central level, the programme is managed by the EPI Manager and assisted by a logistics Officer, Data Officer and Vaccine Stores Officer/Cold Chain Officer. The Regional EPI Officers in the North and South are responsible for coordinating EPI activities in their respective regions and assisted by the Regional Cold Chain Technicians. In each district there are two EPI Coordinators assisted by Cold Chain Technicians who are responsible for control and allocation of supplies to health facilities. At health centre level, all health workers participate in EPI activities. Immunization activities are carried out along with growth monitoring, nutrition and antenatal care throughout the country.

3.3 Routine Immunisation

The programme currently offers measles, DPT-HepB+Hib, Polio, BCG and TT vaccines. Vitamin A supplementation is also administered alongside immunization services. Traditionally, the programme has been heavily dependent on collaborating partners and donors for procurement of vaccines, cold chain supplies and other logistics. These partners include UNICEF, WHO, GAVI, KFW, DFID, JICA, and Rotary International among others. All these organizations support Sector Wide Approach (SWAp) that has been introduced in Malawi.

In January 2002, Malawi introduced Hepatitis B and *Haemophilus influenzae* type b (Hib) vaccine into its routine immunization programme, in a pentavalent formulation (DPT-HepB+Hib) with support from the Global Alliance of Vaccines and Immunizations (GAVI) for a period of five years. The government of Malawi has agreed with GAVI to bridge the financing of new vaccine in the second phase of GAVI support with an annual contribution of 20%. The Ministry of Health is to submit its application to GAVI Secretariat for Immunization Strengthening Support (ISS) and Health Systems Support (HSS).

3.3.1 Routine Immunisation Strategies and Schedule

Measles, DPT-HepB+Hib, OPV and BCG vaccines are given to children under one year of age and tetanus toxoid vaccine to pregnant women and women of child bearing age (Table 2). Vitamin A capsules are routinely administered to children from 6 months up to 59 months at an interval of 6 months as well as postnatal mothers within two weeks of delivery. These immunization services are presently delivered in about 710 static clinics and 3,096 outreach clinics.

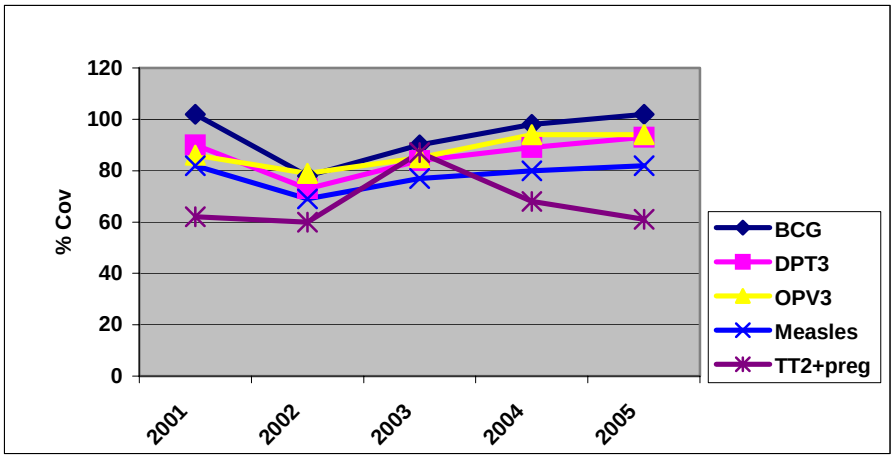
Table 2: Malawi Immunization and Vitamin A Supplementation Schedule

Age	Vaccine
At birth or first contact	BCG
At birth up to 2 weeks	OPV '0'
At 6 weeks	OPV 1 and DPT-HepB+Hib 1
At 10 weeks	OPV 2 and DPT-HepB+Hib 2
At 14 weeks	OPV 3 and DPT-HepB+Hib 3
At 9 months	Measles
First contact (15-45 yrs and Pregnant women)	TT 1
At 4 weeks after TT1	TT 2
At 6 months after TT2	TT 3
At 1 yr after TT3	TT 4
At 1 yr after TT 4	TT 5
At 6 months and every 6 months up to 59 months	Vitamin A (children)
Within two weeks of delivery	Vitamin A (post natal mothers)

3.3.2 Routine Immunization Coverage

High routine immunization coverage for all childhood immunizations has been sustained since 2001 (table 4). The drop in immunization coverage in the year 2002 is considered to be due to change of target population from 4% to 5% for under ones, and changing of reporting system of Health Information Management System (HIMS) which led to loss of some coverage data. The EPI programme reverted back to vertical reporting system. Tetanus Toxoid (TT) vaccination coverage in pregnant women has however been maintained between 60-70%. Malawi introduced the new vaccine DPT-HepB+Hib in 2002 and the coverage for DPT3 from 2002 to 2005 is for DPT-HepB+Hib3

Figure 1 Routine Immunization Coverage for Malawi: 2001- 2005



3.4 Reaching Every District (RED) Approach

The Ministry of Health and its partners are looking at innovations to improve routine EPI activities with the effort to meet the fourth millennium development goal (MDG). National and Regional EPI staff underwent training on RED Approach organized by WHO in December 2003. Micro-planning tools with emphasis at health centre levels were reviewed and some modifications were made. Malawi started implementing RED activities in 2005 in eight districts with DPT-HepB+Hib3 and measles coverage <80%. RED Approach training cascaded to District Health Management Teams (DHMT) and Health centre staff. Districts trained in RED approach were Chitipa, Mzimba, Kasungu, Ntchisi, Nkhotakota, Salima, Lilongwe, and Chiradzulu.

Integrated implementation of child health interventions

3.5 Populations at risk of missing immunisation services

Some religious groups for example Zion and Apostolic sects do not allow their members to have vaccination. The location of these religious groups are scattered all over the country and are a minority. Refugees and migrants in some parts of the country pose a potential threat for vaccine preventable disease outbreaks since their immunization status may not be known. There are also groups of people residing in hard to reach areas some of these are identified and planned for special strategies (Table 3).

Table 3: Areas identified with children at risk of missing routine immunisations

Group	Size of group	Location of group	Action taken to improve coverage
Refugees	Total pop: 1,900 U/1: 95	Luwani (Mwanza)	Health centres were established at Luwani and Dzaleka by UNHCR and supervised by District Health Officer. All new arrivals at the camp are reported to the health facility. There are village health committees at each camp. Immunization services are provided by Ministry of Health routinely
	Total pop: 9,773 U/1: 489	Dzaleka (Dowa)	
Other migrants	No data	Urban areas (Lilongwe, Mzuzu, Blantyre, Zomba)	They use existing health facilities
Religious groups (Zion, Apostolic)	No data	Scattered	Use of traditional and political leaders to persuade to take children for vaccinations

Hard to reach groups	No data	e.g. Kabuwa in Mzimba, Nyachikadza Swamps in Nsanje, Chisi island on Lake Chilwa Some forest and game reserve areas	Use of speed boats for outreach clinics Strengthening of transport mechanism

3.6 Supplemental Immunization Activities (SIAs)

3.6.1 National Polio Immunization and Vitamin A Supplementation Days

Malawi conducted the first Polio National Immunization Days (NIDs) in 1996, as an effort to contribute to the global goal of polio eradication initiative. This was followed by other NIDs in 1997 and Sub-National Immunization Days (SNIDs) in 1999. Vitamin A supplementation was administered in 1996 NIDs and 1999 SNIDs. Table 4 shows immunization and vitamin A coverage.

Table 4 Polio and Vitamin A NIDs Coverage

Year	Target Pop	Polio				Target Pop.	Vitamin A			
		Round 1		Round 2			Round 1		Round 2	
		Doses	Cov. %	Doses	Cov %		Doses	Cov %	Doses	Cov %
1996	2,040,152	1,348,799	66	1,566,308	78	1,916,262	1,177,693	61	1,368,406	71%
1997	1,858,338	1,773,964	96	2,032,513	109					
1999 SNIDs	397,809	417,101	104	426,995	107	350,783	377,192	107	356,120	101

3.6.2 National Measles Immunization and Vitamin A Campaigns

In 1998, the strategy of providing a "second opportunity" through supplemental immunization was adopted and a nation-wide catch-up campaign targeting children from 9 months to 15 years was successfully conducted achieving coverage over 90%. This resulted in a remarkable reduction in measles incidence, and thus case-based surveillance was instituted in 1999. Sub –national Immunisation Days (SNIDs) were done in 1999 in urban areas of Mzuzu, Lilongwe, Blantyre and Zomba.

A nationwide follow-up campaign targeting children 9 to 59 months was conducted in 2002, with coverage over 95 %. A second follow-up national Measles Supplemental Immunisation Activities was conducted in September 2005 targeting 9 to 59 month old children (Table 5).

Table 5: Measles NIDS and Vitamin A Supplementation Coverage

YEAR	Measles Coverage			Vitamin A Coverage		
	Target Pop	Doses given	% Cov	Target Pop	Doses Given	% Cov
1998 NIDs	4,179,229	4,747.452	114	1,609,075	1,892,714	118
1999 SNIDs	156,154	153,073	98	156,154	153,496	98
2002 SIAs	1,585,207	1,908,645	120	1,585,207	1,843,948	116
2005 SIAs	1,851,176	2,118,950	114	1,851,176	2,029,220	110

3.7 Disease Surveillance

From community level, Health Surveillance Assistants (HSAs) facilitate case detection, specimen collection and transportation of specimens to health centres. At health centre level there are trained focal persons who are charged with surveillance activities. These are supervised by District MCH Coordinators. Case detection and reporting is done at community, health centres, district hospitals and central hospitals. Case investigation including stool collection is carried out by the health unit focal point. As soon as a case is detected, communication is made to the district, region and national level. Transport is arranged at regional level to collect specimens and deliver to the EPI Unit that in turn sends

- AFP stool specimens to WHO accredited laboratory in Harare, Zimbabwe.
- Measles blood specimens to Kamuzu Central Hospital Measles laboratory.

The EPI programme has adopted the integrated approach to surveillance activities regarding the three priority conditions: measles, NNT and AFP.

3.7.1 AFP Surveillance

Malawi has made substantial progress towards polio eradication, with improved OPV coverage, quality National Immunisation Days (NIDs) in 1998 and 1999, and strengthened routine surveillance activities. The last clinically confirmed case of polio was reported in 1992. Stool specimens are sent to the WHO accredited laboratory in Harare, Zimbabwe.

Malawi has maintained certification quality surveillance by detecting at least one case of AFP per 100,000 populations of children under fifteen and collecting at least 80% stool specimens within 14 days of onset of paralysis (Table 6). African Region Certification Commission (ARCC) accepted Malawi's Polio documentation on polio free status in October 2005.

In order to increase AFP surveillance sensitivity, WHO has revised the target upward to 2 AFP cases per 100,000 under fifteen years population due to resurgence of wild poliovirus in other African countries. Accordingly, health worker briefings on detection, investigation, and reporting of AFP cases are ongoing. At each admitting health facility, a focal person has been assigned to check in the admission registers for AFP on a weekly basis.

Table 6: AFP surveillance performance in Malawi from 2000

Year	Expected Number of non-polio AFP cases	Total AFP cases reported	No of confirmed polio cases	Total non-polio cases reported	Non-polio AFP rate*	AFP cases with adequate stool samples %
2005	55	72	0	72	1.3	**83**
2004	54	76	0	76	1.4	88
2003	52	67	0	67	1.2	91
2002	51	70	0	70	1.3	84
2001	50	67	0	67	1.3	88
2000	49	103	0	103	2.1	83

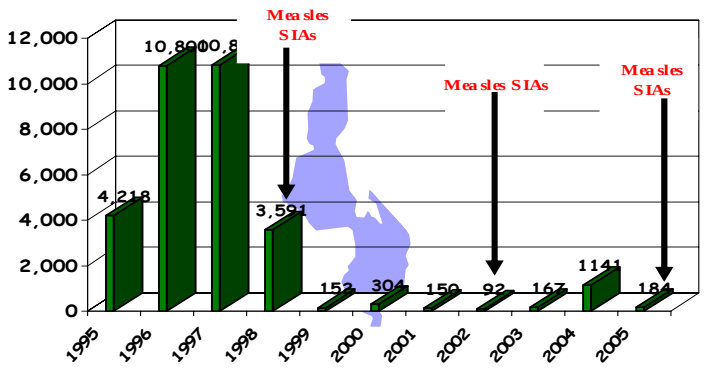
*Based on 1 case per 100,000 population aged less than 15 years

3.7.2 Measles Surveillance

Malawi set itself a goal of measles elimination by the year 2003. In the early 1990s, Malawi was experiencing significantly high morbidity and mortality due to measles (fig 2). A decline in measles incidence has been observed after the 1998 catch up campaign. In 1999, case based surveillance was introduced. Malawi is in the elimination phase and the 2005 measles case detection rate was 1.5 per 100,000 population.

3.7.3 Neonatal Tetanus Surveillance

Figure 2 .Reported Measles cases by year, 1995-2005, Malawi.

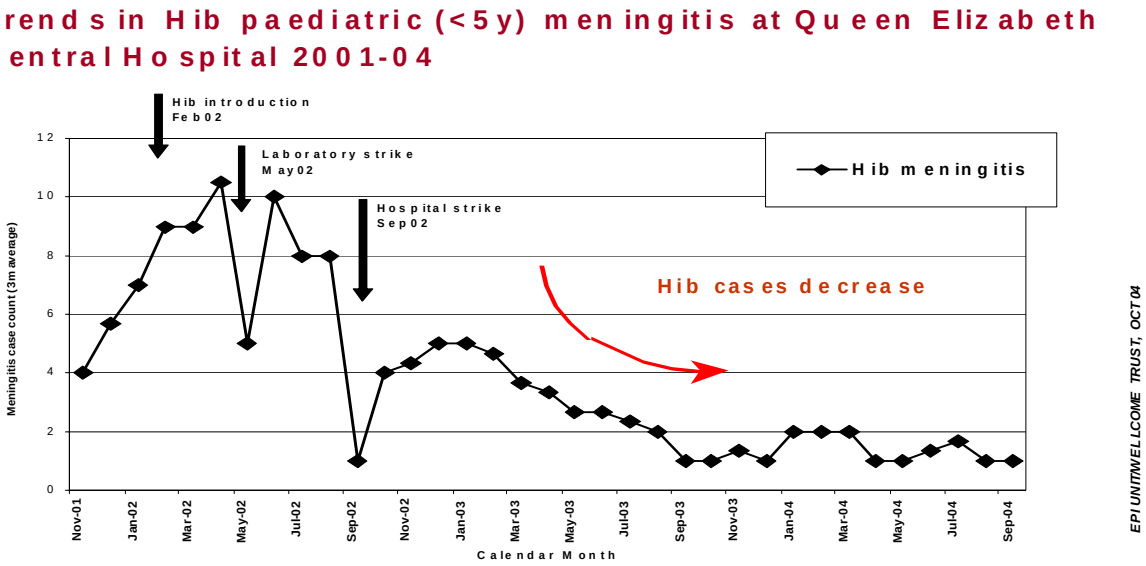


Malawi achieved neonatal tetanus (NNT) elimination status in 2002 through Lot Quality Assurance assessment (LQA) and this has been maintained. In 2004 eight cases of NNT were reported, representing an incidence rate of 0.02/1,000 live births and in 2005, six cases of NNT were reported; representing an incidence rate of about 0.01/1,000 live births. Training of health workers in detection, investigation and reporting of any single case of NNT using investigation form is ongoing. All neonatal deaths with unknown cause were investigated within 48 hours of notification.

3.7.4 Haemophilus influenzae type b (Hib) Surveillance

The Paediatric Bacterial Meningitis - *Haemophilus influenzae* (PBM-Hib) surveillance site, located at Queen Elizabeth Central Hospital (QECH) was established in November 2001 to monitor trends in Hib meningitis among under five children presenting with meningitis in order to assess the impact of the pentavalent vaccine.

Figure 3:



Surveillance data have shown that Hib meningitis trends have decreased dramatically in post introduction era of pentavalent vaccine (Refer fig. 3) In 2005, seven cases of *Haemophilus influenzae* type B meningitis were reported where as in 2004, 14 cases were reported in under five children at the sentinel site.

3.8 Epidemic Preparedness and Disease Outbreak Response

3.8.1 Measles Outbreaks

The country experienced sporadic measles outbreaks from November 2003 to December 2004 and a total of 1141 cases were reported. Outbreak response was conducted in affected areas but the outbreak continued spreading. In response to the outbreak a national follow up campaign scheduled

for 2006 was done in 2005 targeting children aged 9 to 59 months with coverage of 114 %. Vitamin A was also administered during the campaign with coverage of 110 %.

3.8.2 Polio

In order to rapidly detect and respond to polio outbreak, Malawi has a Polio Preparedness Plan. The objective of the plan is to detect wild poliovirus importation early and mount an appropriate containment of the wild poliovirus. Health workers are briefed on detection, investigation and reporting of AFP cases. In each admitting health facility, there is a trained disease surveillance focal point who reviews all hospital admission registers weekly. Each single case of AFP is considered as potential polio outbreak.

3.8.3 Neonatal Tetanus

Health workers are trained in detection, investigation and reporting of any single case of NNT using a standard case investigation form. All neonatal deaths with unknown cause are investigated within 48 hours. Upon clinical confirmation of an NNT case, supplemental immunization activity is carried out to all women of childbearing age living in the affected and surrounding areas regardless of their TT immunization status.

3.9 Trends of Morbidity and Mortality for EPI Target Diseases

In general there has been a decline in the incidence of all EPI target diseases in Malawi namely polio, measles, and neonatal tetanus (Table 7). This is partly attributable to high population immunity as a result of high routine immunisation coverage over a period of time.

Table 7 Trends of Morbidity and Mortality for Measles, Polio and NNT: 2001 - 2005

DISEASE	Measles		Polio		NNT	
	Suspected Cases	Deaths	Cases	Deaths	Cases	Deaths
2001	150	0	0	0	15	15
2002	92	0	0	0	7	7
2003	167	0	0	0	7	7
2004	1,141	32	0	0	8	8
2005	184	0	0	0	6	6

3.10 Data management and EPI Reporting System

Routine immunisation and disease surveillance data are reported on a monthly basis except AFP data, which are reported on a weekly basis. Reports are sent from health facilities to districts where the information is consolidated and sent to EPI Unit and Health Management Information System Unit using existing report forms. Each district monitors completeness and timeliness of all the reports received from every reporting unit within the district. Both the district and health center report forms analyse immunization coverage, vaccine wastage rate and disease surveillance data. Periodically, surveys are conducted to ascertain the validity of the administrative data.

Surveillance data is used in designing and formulating programme plan of action as well as identification of weaknesses and strengths at various stages of implementation of EPI services in the country. Feedback to the districts is given through:

- Monthly active search
- Quarterly supportive supervisory using checklist
- EPI quarterly evaluation meetings
- Annual review meetings with District MCH Coordinators.

3.11 Vaccine Quality, Supply and Utilization

3.11.1 Vaccine Procurement and Distribution

The EPI Unit does forecasting and ordering of vaccines and supplies while procurement is done through UNICEF. All traditional vaccines were being funded by various donors such as UNICEF, KFW, DFID, Rotary International, JICA and DPT-HepB+Hib vaccine is funded by GAVI.

Currently there is no National Regularly Authority (NRA) that is responsible for monitoring quality and safety of vaccines that arrive in the country. However, there is a Pharmacy, Medicines and Poisons Board (PMPB) that is anticipated to take the roles of NRA and will therefore be involved in vaccine quality and safety issues in the near future.

The distribution of the vaccines is done on a quarterly basis to regional vaccine stores. District Health Offices collect vaccines from regional vaccine stores and distribute monthly to health facilities.

There have been no vaccine stock-outs at national level since 2001 except in some health facilities due to irrational distribution.

3.11.2 Utilization of vaccines

Malawi introduced vaccine wastage surveillance in 2004 in 80 selected sentinel sites. The study also included 8 storage facilities (districts) and two regional vaccine stores in Mzuzu and Blantyre. The results show that wastage rate for DPT-HepB+Hib was 4% as opposed to 10% indicative wastage rate estimated by GAVI.

The vaccine wastage surveillance system is to be extended to all health facility by integrating it into routine reporting. Current reporting forms will be modified to accommodate parameters in the study report forms.

3.12 Cold Chain

3.12.1 The National Vaccine Store

A National Vaccine Storeroom is located in Lilongwe and has two chambers for storing vaccines. The cold room has a capacity of 43 cubic metre gross and a 17 cubic metre gross freezer room. Both are fitted with twin refrigeration units, continuous chart recorders and a temperature alarm system that requires maintenance. There is a 50 KWA standby generator with automatic changeover.

The two chamber cold room and freezer room were constructed before the introduction of the new vaccine, DPT-HepB-Hib vaccine which is very much bulkier than the old multi-dose DPT presentation. As a consequence of this, there have been times when both the cold room and the freezer room are overloaded despite the current changed delivery system. Addition cold room and freezer room are therefore needed at national level.

In addition to vaccines, the National Store stocks syringes and safety boxes supplied under the GAVI bundling policy and those procured by other donors. It also stocks cold chain spare parts.

The regional vaccine store in Blantyre in the south is served with a small cold room, refrigerators and freezers whose capacity is not adequate for the population it is serving. The vaccine storeroom in Mzuzu in the northern region is similarly not adequate. Refrigerators and deep freezers are being used for storing vaccine. Currently, districts from central region collect vaccines and other supplies from the national vaccine store. There is need to construct a regional vaccine storeroom for central region.

3.12.2 Cold Chain Equipment

The programme refurbished its cold chain equipment with funds from JICA and DFID in 2001. Most health centers were then supplied with new refrigerators and these are due for replacement. The source of energy for deep freezers and refrigerators varies from electricity, gas, kerosene and solar (see Table 8). Most of the districts in the southern region use gas due to its proximity to a gas plant in Blantyre.

Table 8 Percentage of Source of energy for refrigerators by region as of December 2005

Region	Total Fridges	Kerosene		Gas		Electricity		Solar Energy	
		No.	%	No.	%	No.	%	No.	%
1. North	199	127	64	1	1	63	32	8	4
2. Centre	443	61	14	117	26	203	46	62	14
3. South	772	5	0.6	217	28	495	64	55	7
National	1414	193	14	335	24	761	54	141	10

3.13 Transport

From 2001 to 2005, KFW, JICA and DFID have donated vehicles, motorcycles and bicycles to all the districts in country through UNICEF. These operate in a pool system within the district. The motorcycles are also used for supervisory visits, distribution of vaccines and accessing outreach clinics. Bicycles are mostly used for outreach clinics. UNICEF donated boats for two districts, Nkhata Bay and Zomba. The District Health Officers (DHOs) are responsible for maintenance of vehicles, motorcycles and bicycles. Due to poor rood infrastructure in some districts contributing to wear and tear and inequitable distribution of the vehicles across the country, the need for regular replacement for the vehicles cannot be overemphasized.

3.14 Surveys and Assessments

3.14.1: Effective Vaccine Store Management Assessment

An Effective Vaccine Store Management Assessment conducted in 2003 found the following:

Management Weaknesses

1. The current delivery schedule for both vaccines and bundled injection is causing excessive overloading of the available cold chain equipment and dry goods warehousing
2. There are failures of stock control and stock management which mean that the stock records do not accurately reflect physical counts
3. Overstocking of the dry goods means that effective stock control and EEFO management of syringes is extremely difficult

Significant issues affecting Buildings and Equipment

1. Temperature excursions in the cold room and freezer room appear to have been unacceptably severe for a significant portion of the review
2. There is need for additional cold room capacity
3. There is need for additional dry goods warehousing
4. The existing cold room and freezer room should be fitted with a voltage regulator/surge protector

5. Freezer-sensitive vaccine in the Central regional Store is being exposed to unnecessary risk because ice-lined refrigerators are not fitted with the vaccine storage baskets that are supplied with the equipment

3.14.2 Injection Safety and Health Care Waste Management

3.14.2.1 Injection Safety

A comprehensive injection safety assessment in Malawi was conducted by WHO/UNICEF in 2002 and major weaknesses were noted on safe injection practices and waste management. The assessment looked at injection safety issues both in preventive and curative services.

Main findings of Injection Safety Assessment

Weaknesses

Injection Safety

- Inadequate infection control practices
- Overfilling of safety boxes
- Placing of needles in unsafe containers
- Unsafe storage of full safety boxes or other containers

Waste Management

- Inadequate sharps waste treatment facilities
- Organisation and health care waste collection are deficient
- Inadequate financial resources allocated to health care waste management
- Lack of public awareness about risk associated with health care waste
- Private providers not involved in health care waste management

The EPI programme adopted the new policy of using autodisable syringes in routine and supplemental vaccination in 2002. Following the assessment on safe injection, a comprehensive safe injection policy and Strategic Plan has been developed and put in place and covers the following areas:

- Implementation frameworks which look at improving institutional and legal framework;
- Training and capacity building which looks at improving health care skills at all levels;
- Behaviour change intervention which looks at achieving safe injection practices, preventing injection overuse and raising public awareness on injection safety;
- Equipment and supplies which looks at protecting health workers from unsafe injections, providing sterile injection equipment and ensuring that injection safety equipment is available in all health facilities at all times;
- Sharps waste disposal, which looks at integrating sharps waste management into a comprehensive national health care waste management.

3.14.2.2 Health Care Waste management

The Ministry of Health has in addition to safe injection policy, also developed a health care waste management policy and Strategic Plan with the following key areas:

- Institutional and legal framework
- Capacity building
- Information, Education and Communication.
- Appropriate technology of health care waste management
- Waste storage
- Waste transportation.
- Health care waste minimization and re-use.
- Public private partnership

The disposal of autodisable syringes in EPI programme is done by incineration at health facilities where incinerators are available. At health facilities where incinerators are not available and at outreach clinics, safety boxes are burnt on spot and the remains thrown in a designated pit latrine. Most district hospital and health facilities do not have incinerators or functioning incinerators. This poses a big challenge in view of the amount of waste generated through the immunization programme with the introduction of AD syringes.

3.15 EPI Comprehensive Review 2003

In 2003 a comprehensive EPI review was conducted to identify the achievements and constraints facing the EPI programme and come up with recommendations for effective programme management. The main areas reviewed were EPI service delivery, disease surveillance, information education and communication, and vaccination coverage.

While the assessment noted some achievements over the past three years, there were some weaknesses as follows:

- Service delivery
    - Vaccination tallying was done before the child is vaccinated in some facilities.
    - Poor documentation of vitamin A supplementation for post-natal mothers.
    - Booking system for vaccinations resulted into high missed opportunities in some health centers
- Institutional and human capacity most prominently at peripheral level.
    - In some health facilities, there was lack of compliance to national policy of checking for BCG scar and following recommended immunization schedule

The review recommended the following:

- Institutional and human capacity be strengthened in particular at health centre levels.
- Refresher courses on EPI be conducted periodically in order to improve knowledge and skills of health workers.

- District Health Management Teams should ensure that vaccines, injection materials and fuel for refrigerators are distributed timely to all health centres and that supervisory visits are conducted regularly to health centres.
- Health workers should be reminded to adhere to stipulated EPI policies.
- All health facilities should analyze immunization data against vaccine used during that period.

3.16 EPI Communication

Currently there is no document that outlines communication strategies for EPI routine and supplemental activities. For routine immunization there is no permanent committee, unlike in the supplemental immunization activities (SIAs) where committees to oversee issues such as material production conduct preparatory activities. These committees cease operations with the cessation of the supplemental immunization activities.

3.16.1 Advocacy

The Interagency Coordinating Committee (ICC) on EPI comprises MOH, WHO, UNICEF, JICA, DFID, Norwegian Embassy and USAID. The ICC is the major organ responsible for EPI resource mobilization in addition to resources made available for activities funded through the SWAp. Various leaders such as political, traditional, religious, etc were advocated to about the SIAs and eventually some of them were involved in message formation and dissemination. At lower, partnerships exist with other government sectors and the civil society.

3.16.2 Social mobilization

Communities are mobilized to participate in EPI activities using community health workers and traditional institutions such as Village Health Committees and volunteers. Health programmes aired on the radio and TV include *Dokotala wapa wailesi*, *Umoyo*, *Umoyo wa Mtundu Wathu*, *Dziwani za TB*, *Uku Ndiko Kudya*, and others.

3.16.3 Programme communication

Communication materials for routine immunisation, surveillance and supplemental activities are available in health facilities in form of posters, leaflet, fact sheets, manuals, training guides and immunization schedule charts. In addition drama shows, traditional dances and health talks are used to disseminate EPI messages.

3.16.4 Other partners working in EPI communication

Several partners have been working closely with EPI in health communications. Examples include the print and electronic media; NGOs who are conducting health related activities, traditional and political leaders, faith-based communities, and other extension workers in various government departments.

The print media is inconsistent in its coverage of health issues, as they depend on sponsors and

editorial interests. The print media in Malawi usually uses English as a medium of communication, which is a disadvantage to most Malawians since the majority cannot read and/or understand English.

The other problem is that the papers are circulated only in urban and peri-urban areas. The majority of Malawians cannot afford to buy the papers. The only paper that is circulated widely free of charge in the rural areas is *Boma Lathu*, which is published by the Department of Information. This one covers mainly developmental issues and sometimes health issues in vernacular. However, due to problems in funding there are difficulties sometimes in distribution of the paper to rural areas. However there is inadequate data in EPI health communications activities in the country.

4.0 Implementation of the EPI Comprehensive MYP 2006-2010

4.1 The National Health Strategic Plan and the cMYP

The National Health Strategic Plan, referred to as a joint Programme of Work (POW) for the Health Sector Wide Approach, was developed through a consultative process and consolidation of the work programs from the various programs and central Ministry of Health (MoH) departments in 2004. This POW follows the fourth National Health Plan 1999-2004 and covers a six-year period, July 2004 – June 2010. The MoH has adopted the Sector Wide Approach to health development as the overarching strategy for the implementation of the POW.

The POW outlines the strategic direction the health sector is following to operationalise different program areas, including immunization. The prevention and treatment of Vaccine Preventable Diseases is outlined as the first key intervention for the sector to implement during this time period.

This Comprehensive Multi Year Plan is a further elaboration of this intervention. In here, the sector details out, for the time period of the overall strategic plan,

1. The interventions, and activities the sector will focus on with regard to actualizing its strategy regarding Vaccine Preventable Diseases from 2006 to 2010, the last year of the Joint Program of Work
2. The resource implications of these interventions, and activities for the health sector
3. Sources of financing for the interventions, with resource gaps

The cMYP will therefore guide the activities, and investment decisions in immunization activities of Government, and immunization partners over the remaining years of the Joint Program of Work. It acts as the sector-fundable document for immunization related activities. The actual implementation will be elaborated in the annual implementation plans for the sector. These detail actual activities to be carried out for the respective immunization interventions outlined in this cMYP, within the framework of the overall expected resource envelope for the respective year. Immunization activities in this plan shall be elaborated in line with implementing the interventions as outlined in this cMYP. Each Annual implementation Plan shall be a ‘slice’ of this cMYP. The period for these plans is outlined in Table 9.

Table 9 Period Covered by Joint Programme of Work, cMYP and Annual Implementation Plan

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Joint Program of Work						
Immunization cMYP						
Annual Implementation Plan	**AIP 1**	**AIP 2**	**AIP 3**	**AIP 4**	**AIP 5**	**AIP 6**

4.2 The EPI Programme in the Ministry of Health

The EPI programme falls within the Directorate of Preventive Health Services of MoH. The programme has developed a programme-specific strategic plan based on the priorities referred to in the POW. The planning was further guided by evidence gathered through various assessments and programme reviews over the last three years. This process has been enriched by a financial analysis and costing of the plan to apportion available funds and highlight funding gaps. Covering the period 2006-2010, the comprehensive EPI multi-year plan focuses on the main components of the immunization systems with key strategies and activities aimed at addressing national priorities identified by MoH and supplemented by a thorough programme-based situation analysis. In each of the next five years beginning with 2006, annual EPI Plans will be derived from this strategic plan.

4.3 Programme Goal

The overall focus of the immunization activities is to actualize the intervention to prevent Vaccine Preventable Diseases, as outlined in the Joint Program of Work. This is elaborated in the program goal, which is to increase access to immunisation services, provide effective and potent vaccines and increase demand for the services in order to reduce infant morbidity and mortality rates due to vaccine preventable diseases.

4.4 Programme Objectives

- To fully immunize infants against childhood immunisable diseases before attaining the age of 12 months
- To vaccinate all pregnant women and women of childbearing with at least two doses of tetanus toxoid vaccine
- To sustain high community awareness on the importance of completing the immunization schedule

4.5 Strategic Areas

The 2006-2010 Comprehensive EPI Plan shall be implemented within the framework of Global Immunization Vision and Strategies (GIVS) in the four main strategic areas namely:

i) Protecting more people
ii) Introducing new vaccines and technologies
iii) Integrating immunization, other linked health interventions, and surveillance in the health systems context
iv) Immunizing in a context of global interdependence

Activities for the above areas have been outlined within the immunization system components summarized as:

i) Service Delivery
ii) Vaccine Supply, Quality and Logistics
iii) Disease Surveillance
iv) Advocacy, Social Mobilization and Communication
v) Programme Management

4.6 Targets

Each component of the system has a set of planned activities with different targets for each year up to 2010. These targets have been outlined in tables 9 and 10 that are to be accomplished in order to achieve the objectives.

4.7 Governance and Partnerships

The Joint POW will be implemented on the basis of the SWAp guided and governed by a code of conduct and Memorandum of Understanding amongst the stakeholders. The implementation of the POW will be guided through Annual Work Plans, which are based on activities outlined in the District Implementation Plans (DIPs) and Annual Work Programs for Central MoH Departments. The cMYP will be used to develop Annual Work Programmes for EPI.

Coordination of partners is done through the Inter-agency Coordination Committee (ICC). The ICC is chaired by MoH and comprises WHO, UNICEF, DFID, NORAD, JICA and USAID, and meets quarterly. Recently the SWAp Secretariat was incorporated into the ICC.

The ICC was briefed about the development of the cMYP and monitored progress on its development. Both the ICC and the SWAp Secretariat will be monitoring the implementation of the plan on an annual basis. In addition, the ICC is particularly competent to play an advocacy role in the implementation of the plan.

4.8 Monitoring and Evaluation

The monitoring and evaluation framework for cMYP will be based on annual joint reviews involving all the stakeholders of the plan. A monitoring framework will be developed and implemented, accompanied by a set of indicators to monitor the performance of the cMYP. An evaluation will be done at expiry of the cMYP in 2010.

5.0 The Immunization System Components

5.1 Service Delivery

In the next five years, the programme will endeavor to sustain the gains made over the years by providing quality immunization services. In Malawi, a significant proportion of the immunizations take place in outreach clinics and the programme will ensure that the outreach strategy is sustained and where need arise, new outreach clinics will be opened in some health facilities. In hard to reach areas, catch up campaigns will be proposed and planned locally. The current population at risk that is scattered in refugee camps and other places all over deserve a special attention and immunization campaigns will be conducted if justifiable.

Capacity building is one component that has to be strengthened at all levels. Health workers trainings on MLM and RED will be conducted to improve their managerial skills that will in turn impact on issues such as reduction on drop-out rate, safe injection and waste management, missed opportunities etc.

5.2 Vaccine Supply, Quality and Logistics

The EPI programme will ensure that adequate vaccines bundled with injection materials are procured through WHO/UNICEF approved mechanisms. Through ICC and SWAp, procurement of vaccines and other logistics will be prioritized to avoid disruption of the services. The current storage capacities for both vaccines and dry store materials at national and regional vaccine stores will be expanded to be in line with the growing population. It is also planned to introduce computerized stock management system in the three regional vaccine storerooms to improve management of vaccines and injection materials and this will require procurement of computers and accessories. The programme will conduct re-assessment of the national vaccine store for effective vaccine store management in the first quarter of 2007.

At district and health centre levels, trainings will be conducted to improve on record keeping. The current reporting forms will be reviewed to incorporate the vaccine wastage surveillance system that is currently being done in selected sentinel sites and routinely reported.

Replacement of transport and refrigerators will be another focus in the 2006-2010 plan. As most of the outreach clinics are accessed by bicycles, in this planning period, the programme will ensure that new bicycles and spare-parts are procured and distributed to health facilities. The programme will therefore advocate for more adequate resources in order to achieve its obligation.

Injection safety and waste management will be strengthened through the continued use of AD syringes in both routine and supplemental immunization services and proper disposal of injection materials. Health workers will from time to time receive training on safe injection and waste management. Although the programme introduced routine reporting of AEFI cases in 2002, it will strengthen the system through training of health workers involved in immunization services. Since health care waste management has to be tackled in a broader perspective, the EPI will compliment efforts made by the MoH and other stakeholders by providing incinerators to some health facilities through funding from HSS.

5.3 Disease Surveillance

The strides made in disease surveillance over the years have had significant impact in the history of EPI in the country. Malawi used to experience high morbidity and mortality rates due to measles before the 1998 national measles vaccination campaign that was successfully conducted with >95% coverage achieved by all districts. This led to closure of measles admission wards in all district hospitals.

Although the country was certified to have eliminated NNT and achieved polio-free status, the EPI Programme will in the next five years strive to sustain the gains that have been attained in order to improve and maintain the current status in an integrated manner to maximize the resources.

Trainings for health workers will continue to be conducted to improve knowledge and skills of health workers in disease surveillance. Aggressive search for AFP cases will be encouraged in order to achieve the detection rate of two cases per 100,000 populations of under fifteen years and ensure that stool adequacy is achieved by all districts. The National Polio Expert Committee will ensure that all AFP cases that have reached 90 days of onset of paralysis are reviewed. National SIAs will be conducted periodically when need arises. Disease outbreak responses will also be conducted in affected areas to disrupt the transmission of the disease.

In the next five years, the EPI Programme will expand the Hib surveillance sites to Lilongwe and later Mzuzu central hospitals.

5.4 Advocacy, Social Mobilization and Communication

Advocacy, social mobilization and communication is very crucial in EPI services. Through ICC and SWAp, the programme will lobby for more resources for effective implementation of the planned activities. Advocacy meetings will be conducted with District Assemblies, District Health Management Teams and other stakeholders for more EPI resource mobilization at district levels.

Key EPI messages will be developed and disseminated through print and electronic media. Other channels such as drama and community meetings will be encouraged and strengthened. Traditional Birth Attendants, Traditional Healers and other community-based agents will continue being briefed on disease surveillance and immunization in general.

The quarterly EPI newsletter will be revived in 2006 and distributed to all health facilities and pre-service health institutions. In addition, posters, leaflets and fact sheets will also be developed.

5.5 Programme Management

The EPI programme will endeavor to mobilize adequate resources for implementation of the activities. It will ensure that all gaps and challenges noted in the past years are addressed.

Monitoring and Evaluation will be strengthened at all levels of Programme implementation. District and health centres will be encouraged to analyze the immunization and disease surveillance data on monthly basis and take action on identified gaps. Monitoring tools may be reviewed to incorporate any new changes. Annual review meetings will be conducted with districts and regional EPI staff to assess the immunization and disease surveillance data and status of implementation of activities. Periodic surveys will be conducted in collaboration with partners.

The programme will ensure that supportive supervision is conducted regularly and that district micro-plans are followed-up. It will also ensure that EPI policies are reviewed to incorporate any new developments in the EPI.

The programme will apply for Immunization Strengthening System (ISS) and Health System Strengthening (HSS) and submit to GAVI for approval in the 2006. The Ministry of Health and GAVI have agreed to bridge the financing of DPT-HepB+Hib in the next five years.

A wide consultation by the Ministry of Health and partners will be made on the introduction of new vaccines such as rotavirus, pneumococcal in the next five years.

National Priorities based on Situation Analysis

The priorities have been listed according to systems component; more details are shown in Tables 10 to 16.

1. High routine immunisation coverage
2. High quality disease surveillance
3. Monitoring of EPI performance
4. Capacity building among health workers
5. No stock outs for vaccines and injection materials
6. Enhance national immunization advocacy and communications
7. Strengthen Safe injection disposal
8. Replacement and maintenance of cold chain equipment
9. Improvement of storage capacity for dry stores
10. Replacement and maintenance of transport
11. Introduction of new vaccines

Table 10 National Priorities based on Situational Analysis

Description of national priorities	National objectives based on national priority	Milestones	Order of Priority
1 High routine immunisation coverage	Sustain high routine immunisation coverage beyond 2010	**2006:** 95% national coverage and at least 82% in every district **2007:** 96% national coverage and at least 85% in every district **2008:** 96% national coverage and at least 88% in every district **2009:** 97% national coverage and at least 88% in every district **2010:** 98% national coverage and at least 90% in every district	**1**
	Strengthen outreach services to cover hard to reach areas. Beyond 2010	**2006 -2010 reduced outreach clinic cancellation**	
	Integrated implementation of child health interventions	**2006-2010 childhood interventions provided in an integrated manner**	
2.High quality disease surveillance	Sustain high quality AFP surveillance through 2010	**2006:** Non polio AFP rate of at least 2/100,000 <15 population **2007:** Non polio AFP rate of at least 2/100,000 <15 population **2008:** Non polio AFP rate of at least 2/100,000 <15 population **2009:** Non polio AFP rate of at least 2/100,000 <15 population **2010:** Non polio AFP rate of at least 2/100,000 <15 population	**2**

Description of national priorities	National objectives based on national priority	Milestones	Order of Priority
High quality disease surveillance	Sustain Measles elimination status through 2010	**2006:** 80 % of the districts reporting at least one investigated case per year **2007:** 85 % of the districts reporting at least one investigated case per year **2008:** 90 % of the districts reporting at least one investigated case per year **2009:** 95 % of the districts reporting at least one investigated case per year **2010:** 98 % of the districts reporting at least one investigated case per year	
	Sustain NNT elimination status through 2010	**2006-2010:** <1 case per 1,000 live births each district each year	
	Sustain Hib surveillance	**2006-2010: Hib surveillance sustained**	
3.Monitoring of EPI performance	Conduct supportive supervisory visits to districts through 2010	**2006-2010:** At least 2 supervisory visits conducted per district per year	**3**
	Conduct quarterly /biannual review meetings with district teams beyond 2010	**2006-2010:** Meetings conducted every quarter	
	Produce quarterly EPI bulletin beyond 2010	**2006-10:** bulletin produced every quarter	
	Improve record keeping and documentation by 2006	**2006:** All health facilities have improved EPI records in place.	

Description of national priorities	National objectives based on national priority	Milestones	Order of Priority
4 Capacity building among health workers	Train health workers on EPI delivery systems by 2007	**2006: -**1,000 health workers trained on MLM -2,000 in RED -150 cold chain technicians refreshed **2007:** 1,000 health workers trained in MLM	**4**
5 No stock outs for vaccines and injection materials	No stock outs of vaccines and injection materils nationally	**2006-2010**: 100% districts with no stock outs	**5**
6 Enhance national immunization advocacy and communications	Finalise and implement annual communication plans	**2006-2010:** Annual communication plan developed each year	**6**
7. Strengthen Safe injection disposal	All AD syringes disposed of safely	**2007:** Contribute **25**% of incinerators in districts hospitals that have non-functional incinerators	**7**
8. Replacement and maintenance of cold chain equipment	All cold chain equipment maintained and old equipment replaced	**2006: 25**% of the refrigerators replaced **2007: 50**% of the refrigerators replaced **2008: 75**% of the refrigerators replaced **2010: 100**% of the refrigerators replaced **2008:** National vaccine storerooms expanded and 3 regional vaccine storeroom constructed.	**8**
9. Improvement of storage capacity for dry stores	Storage capacity for dry store warehouse improved	**2008:** National warehouse and 3 regional warehouses constructed.	
10 Replacement and maintenance of transport	All EPI transport equipment replaced and maintained	**2006-2010:** All non functional EPI transport replaced	**9**
11 Introduction of new vaccines	Introduce new vaccines by 2010	**2010:** New vaccines introduced	**10**

Table 11 National Objectives Based on Global and Regional Goals

Global goals (Until 2010)	Regional goals (Until 2010)	National objectives based on global and regional goals	Targets
Immunization Coverage By 2010 or sooner all countries will have routine immunization coverage at 90% nationally with at least 80% coverage in every district	By 2010 or sooner all countries will have routine immunization coverage at 90% nationally with at least 80% coverage in every district	By 2010 Malawi will have routine immunization coverage at 98% nationally with at least 90% coverage in every district	**2006:** 95% national coverage and at least 82% in every district **2007:** 96% national coverage and at least 85% in every district **2008:** 96% national coverage and at least 88% in every district **2009:** 97% national coverage and at least 88% in every district **2010:** 98% national coverage and at least 90% in every district
		By 2010, 80% of the district will have drop out rate of <10%	**2006:** 40% of the districts with drop out rates of ≤10% **2007: 49**% of the districts with drop out rates of ≤10% **2008:** 58% of the districts with drop out rates of ≤10% **2009:** 70% of the districts with drop out rates of ≤10% **2010:** 80% of the districts with drop out rates of ≤10%

Global goals (Until 2010)	Regional goals (Until 2010)	National objectives based on global and regional goals	Targets
Polio By 2005, the world will be certified polio-free	By 2005, the region will be certified polio-free	Maintain polio free status up to and beyond 2010	**2006-2010:** Polio free status sustained
Measles[2] 90% reduction in infant mortality by 2010 compared to 2000	Measles elimination in all countries of the region by 2010.	Sustain Measles elimination status up to 2010	**2006:** 80 % of the districts reporting at least one investigated case per year **2007:** 85 % of the districts reporting at least one investigated case per year **2008:** 90 % of the districts reporting at least one investigated case per year **2009:** 95 % of the districts reporting at least one investigated case per year **2010:** 98 % of the districts reporting at least one investigated case per year
NT Elimination in every district by 2005	NT Elimination in every district by 2005	Sustain NNT elimination status up to 2010 and beyond	**2006-2010:** <1 case per 1,000 live births each district each year
		By 2010, Malawi will introduce new vaccines	**2010: New** vaccine introduced
Safe Injection 8. By the end of 2003, all countries would use only autodisable syringes for immunization.		Malawi will sustain the use of autodisable syringes for all injectable immunizations up to and beyond 2010	2006-2010: Use of AD syringes in routine and supplemental immunization in all health facilities maintained

Planning strategies and activities for System Components

Table 12 Service Delivery

Objective	Strategy	Key Activities
Sustain high routine Immunization	Strengthen immunization services	Open new clinics where necessary
		Distribute bundled vaccines
		Sustain existing outreach clinics
		Conduct catch-up campaigns in hard to reach areas.
		Monitor drop out rates
		Manage and report AEFIs
	RED strategy	Establish national database of district indicators
		Train health workers on RED approach
		Screening clients at all contact
		Defaulter tracing using village registers
Integrated implementation of child health interventions	Integration of services	Conduct integrated supervisory visits Conduct integrated clinic services on childhood interventions
Strengthen outreach services to cover hard to reach areas	Improve logistic management	Ensure availability of logistics (motor vehicles, motor cycles, bicycles, vaccines and injection materials
Sustain NNT elimination	Improve TT coverage	Vaccinate pregnant women and women of child bearing age with TT
Sustain measles elimination	Measles SIAs	Conduct measles SIAs
Sustain high quality AFP surveillance	Polio SIAs	Conduct polio SIAs

Table 13 Disease Surveillance

Objective *(1)*	**Strategy** *(2)*	**Key Activities** *(3)*
Sustain high quality AFP surveillance	Training	Conduct district based disease surveillance briefings on AFP, measles and NNT for health workers
		Orientation of VHCs and traditional healers on AFP and measles
	Prioritization of surveillance sites	Conduct polio outbreak response
		Review of AFP cases
		Conduct NPEC meetings
		Conduct NCC meetings
		Update laboratory inventory by NTF
	Outbreak response	Transportation of stool specimens
		Conduct AFP active search
Sustain Measles elimination status	Improve surveillance	Use available data of monthly suspected measles cases to identify areas that have circulation of measles virus
		Carry out case investigation and intensify laboratory diagnosis of suspected measles cases.
	Outbreak response	Procure laboratory supplies e.g. reagents
		Transportation of blood specimens
		Conduct active search for suspected measles cases
		Conduct measles outbreak response
Sustain NNT elimination	Risk assessment	Identification of high risk district/ areas
	Intensification of NNT surveillance	Investigation of Neonatal deaths with unknown causes
		Sensitization of TBAs on NNT
		Intensify active search NNT cases
		Line listing of NNT cases.
	Outbreak response	Conduct NNT outbreak response

Table 14 Vaccine Supply, Quality and Logistics

Objective	Strategy	Key Activities
Strengthen vaccines and logistics management	Vaccine forecasting and procurement	Forecast , procure and distribute vaccines and injection materials
	Vaccine management monitoring	Monitor vaccine and injection materials stock
	Training	Train health workers on vaccine and logistics management
	Vaccine wastage surveillance	Monitor vaccine wastage
Improve record keeping and documentation	Training	Train health workers on documentation and record keeping
	Procurement of office equipment	Procure computers and accessories
		Procure photocopier machines, fax machines and LCD projectors
All cold chain equipment maintained and old equipment replaced	Procurement of cold chain equipment and spare parts	Procure cold chain equipment and spare parts.
All EPI transport equipment replaced and maintained	Strengthen EPI transport system	Procure vehicles, motorcycles and bicycles
		Procure spare parts for bicycles.
All cold chain equipment maintained and old equipment replaced	Construction of vaccine store rooms	Construct national vaccine store
		Construct 3 regional vaccine stores
Improve storage capacity for dry store warehouse	Construction of warehouse rooms	Construct a national warehouse
		Construct 3 regional warehouses.
Improve health care waste management	Construction of incinerators	Construct incinerators in some district hospitals

Table 15 Advocacy, Social Mobilization and Communication

Objective *(1)*	**Strategy** *(2)*	**Key Activities** *(3)*
Finalise and implement annual communication plans		
Sustain high routine immunisation until and beyond 2010 Reduce immunisation drop out rate Sustain high quality AFP surveillance Sustain Measles elimination status	Social mobillization	1. Produce EPI bulletin
		2. Hold regularly meetings with DHMTs on prioritisation of EPI services.
		3. Develop key messages and IEC materials on EPI.
		4. Conduct ICC meetings
	Use of existing structures within the community	5. Sensitisation of communities on the importance of completing immunisation
		6. Conduct social mobilisation activities on immunisation and surveillance through public rallies
		7. Drama performances
		8. Airing of radio & TV messages
		9. Discussions with local leaders on scheduling and sustaining outreach services
		10. Hold press conferences & press releases
		11. Conduct meetings with NGOs on EPI activities
		12. Conduct VHC, Traditional healers briefings on AFP and measles
		13. Immunization defaulter tracing through joint planning with the community
	Advocacy meetings	14. 14. Meetings with local assemblies, VHCs and CBDs on EPI activities
		15. 15. Advocate for prioritisation of EPI services in District Implementation Plans
Sustain NNT elimination	Disease surveillance briefings	16. Sensitisation of health workers on NNT surveillance through briefings and training
		17. Conduct briefings for TBAs on NNT
	Outbreak response	18. Conduct NNT outbreak response

Table 16 Programme Management

Objective *(1)*	**Strategy** *(2)*	**Key Activities** *(3)*
Sustain high quality AFP surveillance Sustain high routine immunisation until and beyond 2010 Sustain Measles elimination status Sustain NNT elimination	Monitoring and evaluation	Data monitoring, analysis and timely reporting on surveillance & routine immunisation
		Conduct supportive supervision
		Conduct regular review meetings
		Conduct periodic EPI surveys
		Conduct vaccine management assessment
		Conduct data quality assessment
	EPI Policy	Compile EPI policy booklet
Improve record keeping and documentation	Training on data management	Train health workers on data management
Introduce 2nd dose of measles vaccine	Feasibility study	Technical review on the feasibility of measles 2nd dose
Introduction of new vaccines	Disease burden study Training	Technical review on feasibility of introduction of new vaccines
		Train health workers on EPI activities
Train health workers on EPI delivery systems	Training	MLM trainings
		Health worker trainings/briefings
		RED strategy trainings
		Defaulter tracing
		Supervisory follow up priority districts

6.0 Cost, budget and Financing for the cMYP

The success of the programme largely depends on adequate financing for all proposed activities to be undertaken during the planning period. It will be the responsibility of the EPI through the Ministry of Health to ensure that the programme gets adequate financial and material support both locally and internationally.

In this section, we review the cost implications of the proposed program activities, and relate these to the known available financing for respective cost categories of the program to derive information relating to financing gaps. Also proposed are strategies and interventions the program needs to carry out, to improve its financial viability.

6.1 Methodology for costing the cMYP

The cMYP includes a series of interventions, which have associated activities, and inputs needed to actualize. These are illustrated in the Table 17 below.

Table 17 cMYP Interventions. Activities and Inputs

System Components	Inputs	Activities
1. Service delivery	Human resources/salaries, outreach per-diems, fuel for transport, operational cost of campaigns…	Training, workshops…
2. Advocacy and communication	IEC materials (posters…)	Social mobilization, IEC, developing advocacy and communication plan
3. Surveillance	Surveillance equipment	Surveillance activities (sentinel sites, outbreak investigation…)
4. Vaccine, supply, quality and logistics	Vaccines, AD syringes, safety boxes, other injection supplies, cold chain equipment, vehicles, spare parts, incinerators….	Monitoring, vaccine stock management activities
5. Programme management	Computers, office supplies…	Meetings, planning, research, data management, EPI reviews, cold chain assessment…

These activities and inputs are what are costed. The costs for the program are derived in a variety of costing methodologies, depending on the interventions planned. These include:

- The ingredient approach, based on the product of unit prices, and quantities needed each year, adjusted for the proportion of time used for immunization. This is used for costing inputs such as vaccines, personnel, vehicles, cold chain equipment, etc
- Rules of thumb, which are based on immunization practice, such as a percentage of fuel costs as representative of maintenance costs for vehicles. This is used for deriving costs for injection supplies, and maintenance of equipment, and vehicles
- Past spending, where lump sum past expenditure is used to estimate future expenditure. For example, past cost/child for specific campaigns, training activities.

These different approaches are all brought together in a pre-designed cMYP excel costing tool. This derives costs based on the following components:

- Vaccines and injection supplies
- Personnel costs (EPI specific and shared)
- Vehicles, and transport costs
- Cold chain equipment, maintenance and overheads
- Operational costs for campaigns
- Program activities, other recurrent costs and surveillance
- Other equipment needs and capital costs
- Overhead costs

6.2 Macroeconomic information

For purposes of placing the costing and financing information within the wider financing framework, some macroeconomic information was included. This information is detailed in the Table 18 below.

Table 18 Macro economic trends in Malawi, 2006 – 2010

	2005	2006	2007	2008	2009	2010
	$	$	$	$	$	$
GDP per capita	310	326	342	359	377	396
Total health expenditures (THE) per capita	12.0	12.0	13.0	14.0	15.0	17.0
	(%)	(%)	(%)	(%)	(%)	(%)
Government health expenditures (GHE%THE)	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%

The GDP is estimated to increase at 5% per annum.

6.3 Vaccines and injection equipment

Costs are a function of the unit prices for individual vaccines, with quantities determined by the target population, adjusted for by coverage and wastage objectives. Prices are based on UNICEF prices, as supplied by the UNICEF Supply Division. Target populations for different antigens, coverage, and wastage objectives have been expounded on in earlier chapters.

6.4 Personnel costs (EPI specific and shared)

As with vaccines and injection equipment, cost estimates are based on unit expenditure on different personnel cadres working in EPI at the different levels of the system, and numbers of personnel, adjusted for by time spent on EPI-related activities. In addition, costs, and time spent on supervision, and outreach activities were included for the different cadres at the different levels of the system. Unit expenditures are based on Government gross wages. Time spent on EPI was estimated by a panel of experts, made up of operational staff at national, and sub national levels. Quantities available and needed in the life time of the cMYP were included.

6.5 Vehicles, and transport costs

The costs for vehicles were derived in the same manner as personnel. Additional maintenance costs were estimated as represented by 15% of fuel expenditure. Quantities available and needed in the life time of the cMYP were included.

6.6 Cold chain equipment, maintenance and overheads

Costs were derived as with personnel and vaccines. Quantities available and needed in the life time of the cMYP were included.

6.7 Operational costs for campaigns

These were based on operational costs for past campaigns, with the cost per child derived.

6.8 Program activities, other recurrent costs and surveillance

Costs for program activities were also derived based on the past trends in expenditure, with future estimates for costs based on these, modified where necessary. Costs are illustrated in Table 19.

Table 19 Programme Activities with Recurrent Costs

	Expenditure	Future Budget Needs				
Program Activities and Other Recurrent Costs	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
	$	**$**	**$**	**$**	**$**	**$**
Social Mobilization, Advocacy, and Communication Activities						
Social Mobilization, Advocacy, and Communication Activities	56,339	242,295	150,000	150,000	150,000	150,000
Training and Workshops						
Training activities	219,447	265,000	265,000	265,000	265,000	265,000
Program Management						
Meetings	234,648	300,000	300,000	300,000	300,000	300,000
Surveillance and Monitoring	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Detection and Notification						
Active surveillance	34,702	102,500	120,000	120,000	120,000	120,000
Case and outbreak verification and investigation						
Dispatch of specimens to the lab	6,064	7,500	7,500	7,500	7,500	7,500
Fuel for AFP specimens	5,000	10,000	10,000	10,000	10,000	10,000
Data Management						
Internet connection & telephone bills	1,370	1,400	1,500	1,500	1,500	1,500
Telephone bills	9,800	10,000	10,000	10,000	10,000	10,000
Laboratory						
Lab containment activities for AFP	5,420	8,000	8,000	8,500	8,500	8,500
Supportive Activities						
Evaluation and planning	44,000	85,000	85,000	85,000	85,000	85,000

Social mobilization costs for 2006 are based on the social mobilization plan, with estimates for future years adjusted for the reduction in start-up activities.
Costs for trainings meetings and surveillance activities are based on the 2005 expenditures, with future costs estimated with an adjustment factor to cater for activities not included in 2005.

6.9 Other equipment needs and capital costs

Additional costs for equipment not reflected above, such as office computers LCD's, etc were included, and costed using the same methodology as with other equipment above.

6.10 Overhead costs

These too were included in the estimates, based on past expenditure trends.

6.11 Costs for Immunization activities during the period for the cMYP

Costs for the different cMYP components are presented in Table 20.

Table 20 Costs for cMYP components, 2006 - 2010

	Future Resource Requirements					
	2006	2007	2008	2009	2010	Total 2006 – 2010
MYP Components	**US$**	**US$**	**US$**	**US$**	**US$**	**US$**
Vaccine Supply and Logistics	**10,068,530**	**10,617,706**	**9,129,109**	**9,983,502**	**9,385,605**	**49,184,452**
Service Delivery	**8,027,123**	**8,398,361**	**8,608,057**	**10,183,889**	**8,437,642**	**43,655,072**
Advocacy and Communication	**247,141**	**156,060**	**159,181**	**162,365**	**165,612**	**890,359**
Monitoring and Disease Surveillance	**228,888**	**251,777**	**257,343**	**262,490**	**267,740**	**1,268,237**
Programme Management	**306,000**	**312,120**	**382,035**	**324,730**	**331,224**	**1,656,109**
Grand Total	**18,877,682**	**19,736,025**	**18,535,725**	**20,916,975**	**18,587,822**	**96,654,229**

The program cost driver during the period of the cMYP is vaccine supply and logistics, contributing half the total costs.

These costs are further broken down by cost categories, as illustrated in Table 21.

Table 21 Costs for different program cost categories, 2006 - 2010

	Expenditures	Future Resource Requirements				
Cost Category	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Routine Recurrent Cost	**US$**	**US$**	**US$**	**US$**	**US$**	**US$**
Vaccines (routine vaccines only)	$7,884,661	$9,568,274	$7,928,573	$8,032,105	$8,213,906	$8,408,154
Traditional vaccines	$830,403	$683,660	$728,849	$772,813	$816,687	$870,388
New and underused vaccines	$7,054,258	$8,884,614	$7,199,724	$7,259,292	$7,397,218	$7,537,766
Injection supplies	$401,942	$492,076	$527,936	$565,969	$597,634	$626,170
Personnel	$390,558	$398,369	$406,337	$414,463	$422,753	$431,208
Salaries of full-time NIP health workers	$127,668	$130,221	$132,826	$135,482	$138,192	$140,956
Per-diems for outreach vaccinators/mobile teams						
Per-diems for supervision and monitoring	$262,890	$268,148	$273,511	$278,981	$284,561	$290,252
Transportation	$23,800	$24,276	$24,846	$25,343	$25,849	$89
Fixed site and vaccine delivery	$22,123	$22,565	$23,095	$23,557	$24,028	$83
Outreach activities	$1,677	$1,711	$1,751	$1,786	$1,822	$6
Maintenance and overhead	$566,015	$577,744	$799,911	$857,637	$985,016	$400,382
Cold chain maintenance and overheads	$557,140	$568,283	$773,458	$822,339	$939,134	$353,307
Maintenance of other capital equipment	$8,875	$9,461	$26,452	$35,298	$45,882	$47,075
Building overheads (electricity, water…)						
Short-term training	$219,447	$270,300	$275,706	$281,220	$286,845	$292,581
IEC/social mobilization	$56,339	$247,141	$156,060	$159,181	$162,365	$165,612
Disease surveillance	$106,356	$228,888	$251,777	$257,343	$262,490	$267,740
Programme management	$234,648	$306,000	$312,120	$382,035	$324,730	$331,224
Subtotal Recurrent Costs	**$9,883,767**	**$12,113,068**	**$10,683,264**	**$10,975,296**	**$11,281,586**	**$10,923,160**
Routine Capital Cost						
Vehicles			$31,212			
Cold chain equipment		$20	$2,093,572	$517,504	$820,193	$335,272
Other capital equipment	$2,900	$8,160	$36,414	$13,530	$15,695	$16,009
Subtotal Capital Costs	**$2,900**	**$8,180**	**$2,161,198**	**$531,035**	**$835,889**	**$351,281**
Campaigns						
Polio						
Vaccines						
Other operational costs						
Measles	$1,285,863				$1,629,518	
Vaccines and supplies	$467,408				$336,074	
Other operational costs	$818,455				$1,293,445	

	Expenditures	Future Resource Requirements				
Cost Category	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Subtotal Campaign Costs	**$1,285,863**				**$1,629,518**	
Other Costs						
Shared personnel costs	$2,941,837	$3,000,674	$3,060,688	$3,121,901	$3,184,339	$3,248,026
Shared transportation costs	$3,682,118	$3,755,760	$3,830,875	$3,907,493	$3,985,642	$4,065,355
Subtotal Optional	**$6,623,955**	**$6,756,434**	**$6,891,563**	**$7,029,394**	**$7,169,982**	**$7,313,381**
GRAND TOTAL	**$17,796,485**	**$18,877,682**	**$19,736,025**	**$18,535,725**	**$20,916,975**	**$18,587,822**
Routine (Fixed Delivery)	**$15,812,479**	**$18,022,392**	**$18,981,467**	**$17,760,553**	**$18,490,665**	**$17,817,979**
Routine (Outreach Activities)	**$698,143**	**$855,290**	**$754,558**	**$775,172**	**$796,792**	**$769,843**
Campaigns	**$1,285,863**				**$1,629,518**	

The program costs are largely driven by the routine recurrent program, representing over 50% of the total costs. Shared costs represent under 30% of the total program costs. In the year when there is a measles campaign, costs due to the campaign represent approximately 5% of the total program costs.

Additionally, the cost associated with the routine fixed service delivery represents the key cost-driving strategy for service delivery during this period. This is in spite of the fact that the bulk of immunizations are carried out through outreaches. This is because it is comparatively cheaper to immunize through the outreaches as opposed to the fixed sites, though less sustainable.

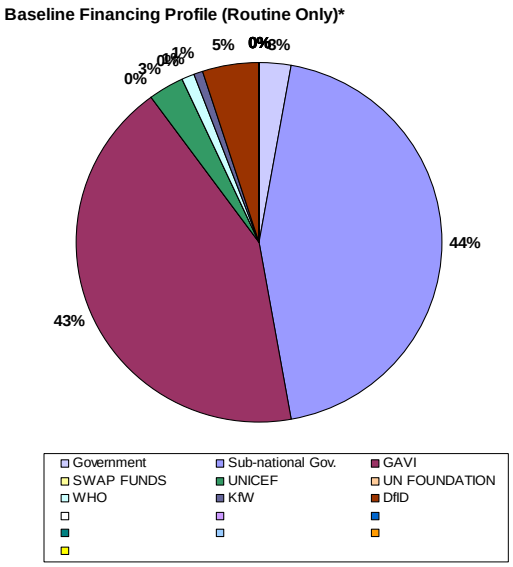
6.12 Financing for the program

The trends in program financing are presented in this section. Based on the program cost categories, past, and future financing available for the respective cost areas was derived from partners. Recognised partners supporting the program are:

- Government
- Sub national Government
- GAVI
- SWAP FUNDS
- UNICEF
- UN FOUNDATION
- WHO
- KFW
- DFID

The breakdown of financing for the routine program expenditure in 2005 is illustrated in the Figure 4.

Figure 4 Breakdown of Financing for Routine Programme



The major source of financing for the routine program is the sub national Government, through which funding for the bulk of shared costs is channelled. This is followed by financing from GAVI, the bulk of which is new vaccines support, and DFID that supported traditional vaccine purchases in this year (2005).

With the advent of the SWAp basket financing, many of the program sources of financing are now channelling their support through this mechanism, leading to a reduction in the overall number of program funders, and an increase in funding from the SWAp basket.

Regarding the cMYP activities, the status of financing is highlighted in Table 22.

Table 22 Financing status for the cMYP, 2006 – 2010

Resource Requirements, Financing and Gaps*	2006	2007	2008	2009	2010
Total Resource Requirements	**$12,121,248**	**$12,844,462**	**$11,506,331**	**$13,746,993**	**$11,274,441**
Total Resource Requirements (Routine only)	**$12,121,248**	**$12,844,462**	**$11,506,331**	**$12,117,475**	**$11,274,441**
per capita	$1.0	$1.1	$1.0	$1.0	$0.9
per DTP targeted child	$23.9	$24.6	$21.3	$21.6	$19.7
% Vaccines and supplies	83%	66%	75%	73%	80%

Resource Requirements, Financing and Gaps*	2006	2007	2008	2009	2010
Total Financing (Secured)	**$10,656,882**	**$8,992,752**	**$578,158**	**$534,653**	**$519,344**
Government	$469,958	$496,244	$578,158	$534,653	$519,344
GAVI	$8,130,652	$6,463,691	$0	$0	$0
SWAP FUNDS	$1,929,698	$1,992,817	$0	$0	$0
UNICEF	$68,414 200	$0	$0	$0	$0
UN FOUNDATION	$0	$0	$0	$0	$0
WHO	$58,160	$40,000	$0	$0	$0
KfW	$0	$0	$0	$0	$0
DfID	$0	$0	$0	$0	$0
Funding Gap	**$1,464,366**	**$3,851,710**	**$10,928,173**	**$13,212,341**	**$10,755,097**
% of Total Needs	12%	30%	95%	96%	
Total Financing (Not Secured / Probable)	**$381,000**	**$484,414**	**$8,521,519**	**$8,703,320**	**$8,897,568**
Government	$0	$0	$0	$0	$0
GAVI	$0	$0	$6,259,292	$6,397,218	$6,537,766
SWAP FUNDS	$0	$0	$1,772,813	$1,816,687	$1,870,388
UNICEF	$90,000	$183,414	$158,414	$158,414	$158,414
UN FOUNDATION	$0	$0	$0	$0	$0
WHO	$291,000	$301,000	$331,000	$331,000	$331,000
KfW	$0	$0	$0	$0	$0
DfID	$0	$0	$0	$0	$0
Funding Gap	**$1,083,366**	**$3,367,296**	**$2,406,654**	**$4,509,021**	**$1,857,529**
% of Total Needs	9%	26%	21%	33%	16%

We see a significant reduction in the availability of secured finances for the program, particularly after 2007, where the financing gap increases from 30% to 95% of the total routine program costs. A large amount of the resources are then classified as probable, as agreements on their availability are not completed. These include resources from GAVI, WHO, UNCEF, and SWAp funds.

Regarding the composition of the funding gap, based on the secured resources, the operational program activities driven in 2006, while the logistics do so in 2007, as a result of significant investment planned then in the cold chain, and other capital investments. After 2007, the funding gap is driven by the vaccines and injection equipment (see Table 23 (a))

Table 23(a) Composition of the funding gap with secured resources

Composition of the funding gap	2006	2007	2008	2009	2010
Vaccines and injection equipment	$0	$0	$8,598,074	$8,811,540	$9,034,324
Personnel	$0	$73,511	$78,981	$84,561	$90,252
Transport	$0	$0	$0	$0	$0
Activities and other recurrent costs	$706,329	$877,132	$980,214	$1,110,964	$539,371
Logistics (Vehicles, cold chain and other equipment)	$20	$2,161,198	$531,035	$835,889	$351,281
Campaigns	$0	$0	$0	$1,629,518	$0
Total Funding Gap*	**$706,349**	**$3,111,841**	**$10,188,304**	**$12,472,472**	**$10,015,228**

On the other hand, when the probable resources are included, then the funding gap in 2006 and 2007 is still driven by operational program activities, and cold chain investments respectively. The contribution by vaccines and injection equipment to the gap reduces significantly in 2008 onwards (see Table 23 (b)).

Table 23(b) Composition of the funding gap with secured resources

Composition of the funding gap	2006	2007	2008	2009	2010
Vaccines and injection equipment	$0	$0	$565,969	$597,634	$626,170
Personnel	$0	$38,511	$78,981	$84,561	$90,252
Transport	$0	$0	$0	$0	$0
Activities and other recurrent costs	$325,329	$427,718	$490,800	$621,550	$49,957
Logistics (Vehicles, cold chain and other equipment)	$20	$2,161,198	$531,035	$835,889	$351,281
Campaigns	$0	$0	$0	$1,629,518	$0
Total Funding Gap*	**$325,349**	**$2,627,427**	**$1,666,785**	**$3,769,152**	**$1,117,660**

6.13 Interventions to improve the financial viability of the program

In light of the above information, we see that:

- The bulk of the funding gap for the program could be reduced if the probable resources are secured, and

- Some additional resources will be needed to support program investments in the immunization system, and operations.

6.13.1 Securing probable resources

These are resources from GAVI, WHO, UNICEF and SWAp funds

The GAVI probable resources reflect the expected contribution from GAVI bridge financing for the new vaccine, to supplement the Government contribution annually. The country negotiations for this will have to be completed in 2006, to enable re-classification as secured resources

WHO and UNICEF funding is assumed to remain at present levels. To secure this, the program will have to participate with these multi laterals when they are developing their respective programs of work for the coming years.

For the SWAp funds, the program will have to continue advocating for additional resources from this source, given its impact on overall sector objectives. The program has to ensure the Government commitment of at least US$ 1 million annually for vaccines is maintained.

6.13.2 Securing additional resources

Additional resources are needed by the program to ensure it is able to implement its strategic objectives as outlined in this plan. As seen in the table above, additional funding will focus on the interventions in the respective system components where the funding gaps exist, for the respective years. These additional funds will focus on 2 main sources:

a) Additional funding from the SWAp. This needs:

   i. Technical analyses on the impact of additional financing on morbidity and mortality

   ii. Policy papers on the public health, and economic impact of improved financing for immunization

b) Guided proposals for additional funding through GAVI phase 2, for Immunization Systems Strengthening, and Health Systems Strengthening. These proposals would focus on mobilising resources to close these identified gaps.

The program will, as part of its regular monitoring process, monitor the trends in financing, to ensure it is moving towards improved financial sustainability by reducing its financing gaps, and converting more probable financing to secure financing. Indicators for financial sustainability the program will use will include:

- % of funding gap to total program needs for period of cMYP (65% is baseline; target of 30%)

- % total program costs financed by in country sources of financing(57% baseline, target of 70%)

- % of total program costs financed by Government (47% baseline, target of 60%)

Table 24 Gantt chart for Implementation of Activities

Component and Key Activities	Year				
	2006	2007	2008	2009	2010
1. Service Delivery					
1. Open new clinics where necessary	**X**	X	X	X	X
2. Distribute bundled vaccines	X	X	X	X	X
3. Sustain existing outreach clinics	X	X	X	X	X
4. Conduct catch-up campaigns in hard to reach areas.	X	X	X	X	X
5. Monitor drop out rates	X	X	X	X	X
6. Manage and report AEFIs	X	X	X	X	X
7. Establish national database of district indicators		X			
8. Train Health workers on RED approach	X	X	X	X	X
9. Screening clients at all contact	X	X	X	X	X
10. Defaulter tracing using village registers	X	X	X	X	X
11. Conduct integrated supervisory visits	X	X	X	X	X
12. Conduct integrated clinic services on childhood interventions	X	X	X	X	X
13. Vaccinate pregnant women and women of child bearing age with TT	X	X	X	X	X
14. Conduct national measles SIAs				X	
15. Conduct polio SIAs			X		
2. Disease Surveillance and Accelerated Disease Control					
16. Conduct district based disease surveillance briefings on AFP, measles and NNT for health workers	X	X	X	X	X
17. Orientation of VHCs and traditional healers on AFP and Measles	X	X	X	X	X
18. Review of AFP cases	X	X	X	X	X
19. Conduct NNT outbreak response	X	X	X	X	X
20. Conduct measles outbreak response	X	X	X	X	X

Component and Key Activities	Year				
	2006	2007	2008	2009	2010
21. Conduct NPEC meetings	X	X	X	X	X
22. Conduct NCC meetings	X	X	X	X	X
23. Update laboratory inventory by NTF	X	X	X	X	X
24. Transportation of stool and blood specimens	X	X	X	X	X
25. Procurement of Laboratory supplies e.g. reagents	X	X	X	X	X
26. Active search for AFP, suspected measles and NNT cases	X	X	X	X	X
27. Sensitization of TBAs on NNT	X	X	X	X	X
28. Line listing of AFP, measles and NNT cases	X	X	X	X	X
Vaccine Supply, Quality and Logistics					
1. Forecast and procure vaccines and injection materials	X	X	X	X	X
2. Monitor vaccine and injection materials stock	X	X	X	X	X
3. Train Health workers on vaccines and logistics management	X	X	X	X	X
4. Monitor vaccine wastage	X	X	X	X	X
5. Train health workers on documentation and record keeping	X	X	X	X	X
6. Procure computers and accessories	X	X	X	X	X
7. Procure photocopier machines, fax machines and LCD projectors	X	X	X	X	X
8. Procure cold chain equipment and spare parts	X	X	X	X	X
9. Procure vehicles, motorcycles and bicycles	X	X	X	X	X
10. Procure spare parts for bicycles.	X	X	X	X	X
11. Construct national vaccine store		X			
12. Construct 3 regional vaccine stores		X			
13. Construct a national warehouse	X				
14. Construct 3 regional warehouses		X	X		
15. Construct incinerators in some district hospitals		X	X	X	X
4. Advocacy, Social Mobilisation and Communication					

Component and Key Activities	Year				
	2006	2007	2008	2009	2010
29. Produce EPI Bulletin	X	X	X	X	X
30. Advocate for prioritisation of EPI services in District Implementation Plans	X	X	X	X	X
31. Develop key messages and IEC materials on EPI.	X		X		X
32. Conduct ICC meetings	X	X	X	X	X
33. Sensitisation of communities on the importance of completing immunisation	X	X	X	X	X
34. Conduct social mobilisation activities on immunisation and surveillance through public rallies	X	X	X	X	X
35. Drama performances	X	X	X	X	X
36. Airing of radio & TV messages	X	X	X	X	X
37. Discussions with local leaders on scheduling and sustaining outreach services	X	X	X	X	X
38. Hold press conferences & press releases	X	X	X	X	X
39. Immunisation defaulter tracing through joint planning with the community	X	X	X	X	X
40. Conduct meetings with NGOs on EPI	X	X	X	X	X
41. Conduct VHC, CBDs, local assemblies briefings on EPI activities	X	X	X	X	X
5. Programme Management and Partnerships					
42. MLM trainings	X	X	X	X	X
43. Data monitoring, analysis and timely reporting on surveillance & routine immunisation	X	X	X	X	X
44. Conduct regular review meetings	X	X	X	X	X
45. Conduct periodic EPI surveys			X		
46. Compile EPI policy booklet		X			
47. Train health workers on data management	X	X	X	X	X
48. Technical review on the feasibility of measles 2nd dose and			X	X	X

Component and Key Activities	Year				
	2006	2007	2008	2009	2010
new vaccines					
49. H/worker trainings on EPI activities	X	X	X	X	X
50. Vaccine Management Assessment		X			
51. Conduct Data Quality Assessment					X

Table 25 Using the GIVS framework as a checklist

GIVS strategies	Key activities	Activity included in MYP			
Strategic Area One: Protecting more people in a changing world		**Y**	**N**	**Not applicable**	**New activity needed**
Strategy 1: Use a combination of strategies to reach everyone targeted for immunization	National commitment to ongoing immunization services through policy and strategy development that also includes human resources and financial planning	Partial			
	Formulate and implement comprehensive multi-year national strategic plans and annual workplan based on data analysis and problem solving	y			
	Sustain high vaccination coverage, where it has been achieved	y			
	National strategies to immunize children who were not immunized during infancy	y			
	Where and when appropriate, include supplementary immunization activities as an integral part of the national plans	y			
Strategy 2: Increase community demand for immunization	Engage community members, NGOs and interest groups in immunization advocacy and implementation;	y			
	Assess the existing communication gaps in reaching all communities and develop and implement a communication and social mobilization plan	y			

GIVS strategies	Key activities	Activity included in MYP			
Strategic Area One: Protecting more people in a changing world		**Y**	**N**	**Not applicable**	**New activity needed**
	Provide regular, reliable, and safe immunization services that match demand	y			
Strategy 3: Ensure that the unreached are reached in every district at least four times a year	Micro-planning at the district or local level	y			
	Reduce the number of immunization drop-outs (incomplete vaccination) through improved management	y			
	Develop and update supervisory mechanisms and tools	y			
	Provide timely funding, logistic support and supplies for programme implementation	y			
Strategy 4: Vaccinate beyond the traditional target group	Define target populations and age groups for vaccination appropriate to the national situation	y			
	Assess the cost-effectiveness of strategies		N		
Strategy 5: Improve vaccine, immunization and injection safety Strategy 5: Improve vaccine, immunization and injection safety	Procure vaccines only from sources that meet internationally recognized quality standards	y			
	Ensure long-term forecasting for existing and new vaccines by improving vaccine management skills	y			
	National self-reliance in quality assurance and regulatory oversight		N		
	Introduce, sustain and monitor safe injection practices, including the use of autodisable (AD) syringes and other safe methods of vaccine administration	y			
	surveillance and response to adverse events following immunization	y			
	Be responsive to potential vaccine safety issues and address these urgently		N		

GIVS strategies	Key activities	Activity included in MYP			
Strategic Area One: Protecting more people in a changing world		**Y**	**N**	**Not applicable**	**New activity needed**
Strategy 6: Improve and strengthen vaccine management systems	Accurate demand forecasting at national and district levels to ensure the uninterrupted supply of assured quality vaccines, AD syringes and safety boxes	y			
	Build capacity for effective vaccine management through training, supervision and the development of information systems	y			
	Increase access and coverage through a "safe chain" approach which includes taking vaccines beyond the cold chain, using a VVM-based vaccine management system	y			
	Move towards coordinated and sector-wide financing and management for transportation and communications	y			
Strategy 7: Evaluate and strengthen the immunization programme.	Regular immunization programme evaluations at local, district and national levels and provide feedback on performance	y			
	Perform operations research and evaluation of “what works” to improve the delivery of immunization and to make systems more effective, efficient and equitable	y			

Annex 1 Summary of the Strengths and Weaknesses of the EPI

Component	Strengths	Weaknesses
1. Service Delivery	1. Immunization coverage has been sustained above 80%. 2. Introduction of DPT-HepB+Hib pentavalent vaccine. 3. Use of AD syringes in all health facilities 4. Successful implementation of a second measles follow up and vitamin A supplementation campaign	1. In few cases tallying/recording of vaccinations was done before the child was vaccinated in some health facilities. 2. In some health facilities, there was lack of compliance to national policy of checking for BCG scar and following recommended immunization schedule. 3. Poor documentation of vitamin A supplementation for post-natal mothers. 4. Booking system for vaccinations resulted into missed opportunities in some health centers.
2. Vaccine Supply, Quality and Logistics	1. Rehabilitation and procurement of cold chain equipment, vehicles, motorcycles and bicycles. 2. Funding and procurement for vaccines, injection materials and equipment has been adequate and timely 3. At national level there was no stock out for vaccine and injection material since 2001. 4. Construction of the new national vaccine storeroom and dry store warehouse. 5. Installation of containers for dry stores materials in regions	1. Inconsistent distribution of mixing syringes and vaccines from some districts to health centres led to short term stock outs. 2. In some cases, vehicles are not readily available for EPI services due to the pool transport system 3. There were mismatching quantities of vaccines for DPT-HepB and Hib, measles and BCG with corresponding diluents in some facilities. 4. Inadequate storage capacity for dry stores at national, zonal and district levelsvaccine storerooms. 5. Some cold chain equipment have stayed more than 5 years resulting in frequent breakdowns 6. Old fleet of vehicles, motorcycles and bicycles result in frequent breakdown.

Summary of the Strengths and Weaknesses of the EPI

Component	Strengths	Weaknesses
3. Vaccine Supply, Quality and Logistics cont.		7. There are failures of stock control and stock management in some health facilities which means that the stock records do not accurately reflect physical counts 8. Overstocking of the dry goods means that effective stock control and EEFO management of syringes is extremely difficult at national, zonal and district levels 9. Inadequate sharps waste treatment facilities

Summary of the Strengths and Weaknesses of the EPI cont.

Component	Strengths	Weaknesses
3. Disease Surveillance	1. Establishment of Hib Sentinel Surveillance Site at Queen Elizabeth Central Hospital 2. Sustenance of quality AFP surveillance activities and achievement of polio free status 3. Measles case-based surveillance 4. Sustained elimination of neonatal tetanus	1. Some health facilities do not stock enough line listing forms 2. Active search in some priority areas is not aggressively done. 3. Limited knowledge on disease surveillance among some health workers 4. Limited community participation in disease surveillance
5. Advocacy, Social Mobilisation and Communication	1. Active Interagency Coordinating Committee (ICC) 2. Political commitment 3. High awareness on immunization services 4. Structures exist in the community that can be used for communication in immunization services	1. Limited community participation 2. Weak inter-personal communication between some health worker and mothers 3. Lack of public awareness about risk associated with health care waste 4. Other channels of communication are largely confined to urban areas

Summary of the Strengths and Weaknesses of the EPI cont.

Component	Strengths	Weaknesses
5. Programme Management	1. Programme considered as a priority intervention	1. Supervision at all levels was unsatisfactory 2. Knowledge and skills regarding EPI management systems were inadequate. 3. Inadequate human resources 4. Irregular feedback to lower facilities on surveillance performance 6. Limited integrated implementation of childhood interventions.

INTERAGENCY COORDINATING COMMITTEE (ICC) MEETING ON 7TH MARCH 2006 AT WHO CONFERENCE ROOM

MINUTE 03/06/2 MEMBERS PRESENT

- WHO-WR , Dr Moeti
- MOH-Director, Dr H. Somanje
- EPI Programme manager, Mrs A. Katsulukuta
- DFID-Mr Chris Phiri
- USAID- Catherine Chiphazi
- EPI-Mr M.J.M. Valle
- UNICEF-Mr Henry Mdebwe
- WHO-Dr Richard Banda
- EPI-Mr G.Z. Chirwa

MINUTE 03/06/2 APPOLOGY

Norwegian Embassy sent an apology for not participating. The Programme Manager also apologized for not sending an invitation to JICA. She further stated that it was an oversight.

MINUTE 03/06/3 WELCOME REMARKS

The chair person asked members to introduce themselves. He later welcomed members and asked them to participate fully as usual. The new WR was welcomed and thanked for sparing time to come and participate. He also welcomed a new member from USAID, Mrs. Chiphazi. He further said that this was a long awaited meeting because of the measles SIAs. He apologized to members for starting the meeting late. He asked members to quickly look at the agenda which included:

- Feedback on measles SIAs
- Outcome on the polio documentation report
- Update on GAVI issues
- EPI Managers' meeting for Southern Block
- Any other business

MINUTE 03/06/4 FEEDBACK ON MEASLES SIAs

The chairperson asked the EPI programme manage to give feedback on measles SIAs.

Minute 03/06/4/1 Coverage Results

The EPI Programme Manager informed members that measles SIAs was successful with coverage of 115% for measles and 111% for Vitamin A. She further stated that following this campaign measles cases gradually dropped.

Minute 03/06/4/2 Funding

The EPI Programme Manager said funding for the measles SIAs was sourced from SWAp-US$1,163,670.00 and Measles partnership through UNICEF and WHO-US$436,190.00. The total cost of the campaign was US$1,599,860.00, and the cost of vaccinating a child was US$0.75. She also indicated that money from SWAp was

accessed without problems. The director discussed with the PS and funds were released as required, and US$730,000.00 was released for vaccines.

Minute 03/06/4/3 Vaccines and Supplies
The EPI Manager also said that orders of vaccines and supplies through UNICEF came in time. She further indicated that no stock out of vaccines and other supplies were experienced because the estimation was based on a higher target population.

It was learnt that initially the supply of cotton wool was a problem because the Internal Procurement Committee (IPC) system was slow to facility the purchase of the supply locally. The Director of Preventive Health Services came in strongly to enable the purchase of the supply.

It was also learnt that an assumption was made that pairs of scissors were available in the facilities considering the number of previous campaigns conducted; hence it was not planned for. This resulted in no supply of scissors in the sites.

Minute 03/06/4/4 Target
Members were informed that the target was changed; initially it was from 6 months to 59 months and was changed to 9 months to 59 months. The change was made in order not to confuse the public since during routine EPI services measles is given at 9 months.

Minute 03/06/4/5 Supervision
It was reported that supervisors at national level appreciated the type of partnership which was there during the measles SIAs.

Minute 03/06/4/6 Problem Makers
It was also reported that the MCH coordinators, who give problems during routine, were the ones giving problems during the SIAs. The WR posed a question what should be done to those problem makers. In response, it was indicated that the DHOs appoints them, and it was suggested that an attempt should be made to discuss with the DHOs.
It was further elaborated that previously DHOs and MCH coordinators were called to a meeting, and from those meetings DHOs learnt the experiences from other DHOs.

Minute 03/06/4/7 SWAp Funding
The WR said SWAp raised more money from donors, and did extremely well. There is need to support vertical programmes. She further said that there is need to do advocacy for SWAp mechanism to allow for unseen circumstances so that issues of emergencies are catered for.
It was also pointed out that the ministry should put up a case with donors that the money put in basket is not enough. It was reiterated that common basket at treasury will prove a problem; money meant for the Ministry of Health can go to the other ministries. It was therefore, suggested that someone should be appointed to oversee this.

Minute 03/06/4/8 Forecasting

It was felt that there is need to improve forecasting at district level. Distribution to health centres is problematic, more vaccine going to areas where there is less population.

Minute 03/06/4/9 Post Evaluation Survey (PES)
Members felt that it was important to do the post evaluation survey after conducting SIAs. However, they reiterated that timing was not appropriate. Members agreed that the PES should be planned together with the campaign next time, and the approach should be discussed.

Minute 03/06/4/10 Quality assurance
Members felt that there was need to improve districts which are performing badly. High risk areas should be targeted. In this regard members suggested that the quality assurance survey should be conducted.

Minute 03/06/4/11 Some Encountered Problems
The programme Manager informed members that some of the problems encountered included the following:

- The strike which was organized by the civil servants wanted to disrupt the campaign; however the Ministry of Health took a bold step to let the campaign proceed as planned.
- The process of getting the letter from OPC was a problem.
- SWAp meeting coincided with the SIAs

MINUTE 03/06/5 OUTCOME OF THE POLIO DOCUMENTATION REPORT
It was reported that the polio documentation report for Malawi was presented and accepted by the ARCC. The meeting took place in Zambia. It was further reported that the task force should continue meeting and sending updates to ARCC.
Members were also informed that WHO has increased the detection rate from 1 to 2 per 100,000 of under fifteen population. The rate of 1 is for certification and 2 for operational. It was also learnt that the NCC would meet the following day.

MINUTE 03/06/6 UPDATE ON GAVI ISSUES

Minute 03/06/6/1 Phase One Support for Malawi
Members learnt that phase 1 support of 5 years for Malawi ends 2006. Discussions were made on co-financing, and Malawi agreed to contribute 20% towards the purchase of pentavalent vaccine.

Minute 03/06/6/2 Malawi's Contribution
Members were informed that in 2005, Malawi contributed US$1m. Members also learnt that an assumption was to the effect that:

- 1st price will drop, but went up
- 2nd economy will grow by 6%, but went down
- 3rd donor support will treble, but it did not.

Members also learnt that Malawi had pledged to contribute $1m per year. GAVI accepted and there are still going to be discussions between GAVI and countries.

Minute 03/06/6/3 Immunization Systems Strengthening (ISS) and Health Systems Strengthening (HSS)
Members were briefed on the ISS which is more for EPI and the HSS which is broader. They also agreed that there is need to develop the ISS and HSS proposal to GAVI which will require ICC approval and support. It was also indicated that the development of HSS should not be left to planning Unit alone; leaving it only to planning, some things will not be included. It is therefore, necessary for EPI to pioneer the development of the HSS.

Minute 03/06/6/4 GAVI Board Member
It was reported that GAVI has incorporated Malawi to be a member of GAVI board. The chairman commended Malawi for reaching that level.

Minute 03/06/6/5 Measles Second Dose
It was agreed that the introduction of the measles second dose be given ample time. There is need for more information, more time for exploration and consultation. It was agreed that WHO should give technical support on this subject. It was also learnt that GAVI will be able to fund the measles second dose.

MINUTE 03/06/7 EPI MANAGERS MEETING FOR SOUTERN BLOCK

Minute 03/06/7/1 Dates and Venue of the Meeting
Members were informed that the EPI Managers' meeting for Southern Block will take place from 20th to 24th March 2006 at Capital Hotel in Lilongwe, Malawi. It was learnt that the first 2 days were a preamble for the WHO focal point persons and the last 3 days for the main Programme Managers' meeting.

Minute 03/06/7/2 Participation
Members were informed that about 80 international participants from 14 countries will participate. These included the EPI Programme Manager, Social Mobilization Officer, Logistics Officer, WHO and UNICEF focal point persons. It was suggested that Malawi should increase the number of participants because it was hosting. It was indicated that it was not yet agreed on the logistics.

Minute 03/06/7/3 Opening
Members recommended that the Minister of Health should open the meeting. The chairman thanked WHO for considering Malawi to host the function.

MINUTE 03/06/8 ANY OTHER USINESS

Minute 03/06/8/1 ICC in the Context of SWAp
Members wanted to know what would become of the ICC in view of SWAp. Members were enlightened that discussions are underway on the matter not only ICC but also other existing committees. It was further stated that an attempt by SWAp committee to come up with few committees was done three weeks ago.

Minute 03/06/8/2 Consultancy Commissioned by DFID
Mr Chris Phiri from DFID informed members that DFID commissioned the consultancy to look at the support given through UNICEF, lessons learnt, future of EPI and Malaria in the context of SWAp early April.

Minute 03/06/8/3 Farewell for Mr Henry Mdebwe from UNICEF
Mr Henry Mdebwe bid farewell to the members. He informed them that he would be leaving for Afghanistan on 22nd March for a new appointment for 2 years. He further said that Mr. Ketema or someone else will be attending ICC meetings. He also said that the advert has been put in the paper for his replacement. The chairman responded by saying that it was pleasing to have a member going abroad to assist Afghanistan. He wished him success in his contribution to global efforts.

Minute 03/06/8/4 Comprehensive Multi-year Plan (cMYP)
Members were informed that the cMYP was developed and is awaiting the WHO consultants to assist in the costing.

MINUTE 03/06/9 DATE OF NEXT MEETING
Members agreed that the date of the next meeting be 6th June, 2006 at 9.00 AM at the WHO conference room.

MINUTE 03/06/10 CLOSING
The chairman thanked also members for their active participation and he wished them good success.

Dr Habib Somanje **Geoffrey Z. Chirwa**
CHAIRMAN **SECRETARY**