



**EXPANDED PROGRAMME ON IMMUNISATION  
COMPREHENSIVE MULT-YEAR PLAN  
(2012-2016)**



**MASERU, KINGDOM OF LESOTHO**

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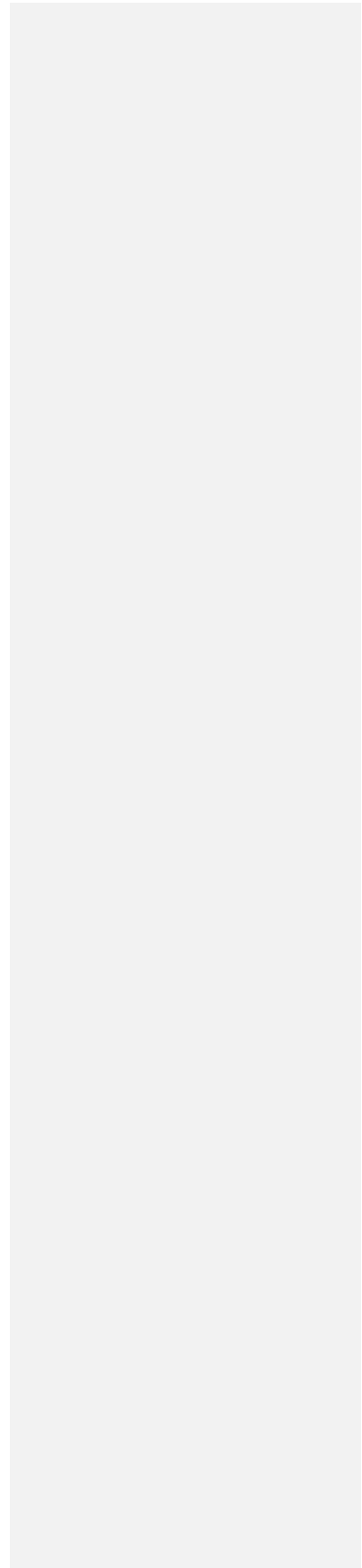
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## 1 INTRODUCTION

### 1.1 Country Profile

The Kingdom of Lesotho is a mountainous country totally enclosed by the Republic of South Africa. The land area of Lesotho is approximately 30 35 km<sup>2</sup> of which less than 10% is arable. The western Lowlands and Foothills, ranging from roughly 1500 to 2000 meters above sea level occupy about one quarter of the total area of Lesotho. Seven of the ten major districts are found in this area and they have the majority of the population and the best agricultural land. The eastern mountains, the highest point of which is almost 3500 meters, are more sparsely populated.

The population of Lesotho is estimated at 1,876,633 million and there has been a decline in the intercensal annual growth from 1.5% recorded during the 1986-1996 period to 0.08% during 1996-2006. The population decreased from 1.9 million in 2010 as shown in Table 1.1 below. The annual population growth rate was 1.5% per annum during the 1986-2006 periods (BOS, 2006 in DHS 2009).

**Table1. 1. Basic Demographic indicators**

Selected demographic data for Lesotho			
Indicator	2008	2009	2010
Population (millions)	1,880,661	1,880,661	1,876,633
Inter-censal growth rate (percent)	0.08	0.08	0.08
Density (pop./km <sup>2</sup> )	61	61	61
Percent urban	23.87	24.36	24.84
Percent rural	76.13	75.64	75.16
Crude birth rate	30.69	30.62	30.83
Crude death rate	22.65	22.28	21.99
Total fertility rate	3.44	3.39	3.35
Infant mortality rate (per 1,000 births)	91/1,000 live births	90/1,000 live births	89.46/1,000 live births
<b>Life expectancy (years)</b>			
Male	40.35	40.35	40.54
Female	42.99	43.34	43.70
Source: BOS, 2006 (census reports) in DHS, 2004 DHS Report 2009			

The country is divided into 10 administrative districts. The Health Service Area concept has been absorbed into the District Health Management through decentralization

Lesotho has two official languages, Sesotho and English. It is mainly a country of subsistence farming. The Basotho are predominantly Christian with the main churches being the Roman Catholic, Lesotho Evangelical and Anglican Churches.

## **1.2 Macroeconomic situation**

Lesotho's gross domestic product (GDP) is 9,013 million Maloti with an annual growth rate of 4.4%. The inflation rate is estimated at 4.5% (BOS 2010). Unemployment rate is estimated at 2.7% (BOS 2006). While gross national income per capita stands at 3,824.20 Maloti. Manufacturing contributes 17% of GDP while agriculture contributes 7% of GDP (BOS, DHS 2009, the main instrument of macroeconomic policy in Lesotho is fiscal strategy. The Government actively manages aggregate expenditures and revenues in order to ensure the sustainability of public deficits and debt and to contain aggregate demand.

In terms of monetary policy, the overall objective of the Central Bank of Lesotho (CBL) is to ensure price stability. Within the context of the common monetary area, price stability is attained by maintaining an adequate level of reserves, which underwrite the fixed exchange rate system and reduce domestically generated inflation. The fixed exchange rate regime pegs Lesotho's currency, the loti, at par with the South African rand. Although monetary policy is conducted under the constraints of the CMA agreement, which prevents excessive money creation, to finance fiscal deficits, the CBL has established a policy framework. The operating target is reserve money (i.e. currency in circulation plus bankers deposits); the intermediate target is interest rates, particularly on Government of Lesotho treasury bills; and the ultimate monetary policy target is net foreign assets of the CBL. If interest rates in Lesotho diverged significantly from those prevailing in South Africa, the demand for Rand would outweigh the demand for Loti. Financial resources would leave the country and the resulting loss of reserves would threaten the parity of the currency. Thus, interest rates in Lesotho must move in line with regional rates of interest. In September 2001, the Central Bank moved from the use of direct controls to the indirect instruments of monetary policy. The new system is intended to remove rigidities by introducing market-determined interest rates and allowing the rates to reflect the true scarcity of savings in the economy.

The integrated money and capital markets of the CMA make it imperative that Lesotho, as a small open economy with a fixed exchange rate regime, maintains a sufficient level of reserves, as measured by the gross foreign assets held by commercial banks and the CBL. A favourable reserve position enables Lesotho to honour its foreign financial obligations e.g. financing imports of goods and services, making debt repayments, meeting the foreign exchange demands of travellers and assuring investors of their ability to repatriate profits. A good amount of foreign exchange comes from proceeds from Mohale Dam, inaugurated in 2004 as part of Lesotho Highland Water Project (LHWP) that export water to South Africa. Since 1980, the construction of the Lesotho Highlands Water Project; the growth of the textile industry driven by foreign direct investment and the decline in the number of mineworkers changed the structure of Lesotho economy.

### **1.3 The National Health System**

The government of Lesotho through the Ministry of Health and Social Welfare is committed to providing all its citizens health care through the adoption of PHC of which EPI is a key component.

The health care system operates at three levels, namely, national, district and health centre with 18 hospitals and 128 health centres. At national level, several vertical support programmes provide leadership to lower levels on ministerial goals and missions as well as on development and implementation of policies, protocols and guidelines. Government's efforts on health care is supported and complemented with government funding operational and staff costs and NGOs amongst which is the Christian Health Association of Lesotho (CHAL) which owns about 48% of the country's health facilities.

The Ministry has introduced user-fee policy for provision of medical services at health centre level throughout the country and this continues to be subsidised by the government including CHAL health centres. EPI services however, are provided free of charge. There is a strong private practice and community-based care provider (Traditional healers, traditional birth attendants, NGOs, etc) involvement in the delivery of health care services in Lesotho. This category of providers is involved in EPI services delivery such as routine immunization, surveillance, SIAs and social mobilisation.

#### **The National Health Strategic Plan**

The current national health strategic plan, which covers the period 2004/2005-2010/2011, is coming to an end and it is in the process of appraisal to cover the next 13 years. It is anticipated that the document will be complete by 2011 and updates will be incorporated upon completion and availability of the document.

The health sector policy derives directly from the broad government objectives outlined in the Vision 2020 and PRSP<sup>1</sup>. The goal of the Health and Social Welfare Strategic Plan is to contribute to the attainment of improved health status and quality of life for socio-economic development and this is built on the following premises:

1. Reduction morbidity and mortality
2. Reduction of misery and suffering for the people of Lesotho
3. Reduced inequity in social well being and in access to services
4. Improved socio-economic productivity
5. status and quality of life for socio-economic development. The plan aims to consolidate the health and social welfare systems that guarantee quality health care and provides social protection to the poor, vulnerable and disadvantaged.

The priority areas for the Health Sector include child survival, (which incorporates immunization, nutrition) as well as reproductive and maternal health. The Strategic Plan has three core programme areas namely health services, social welfare services and support services. Then there are 8 direct interventions in health services and 5 in social welfare services, and 10 support interventions.

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<sup>1</sup> Poverty Reduction Strategic Plan and Vision 2020 are two documents that are products of consultative and participatory efforts and they contain plans and strategies aimed at addressing major challenges facing the country and these include improving quality of and access to health services

One of the key interventions in health services is Child Survival and Development. The goal of this intervention is to ensure children's survival and better physical, mental and social development. In order to achieve the objective of optimising the impact of health and related programmes that reduce morbidity, mortality and disability in children, there is a critical need for a fully functioning immunization programme. To underscore this, strengthened immunization services are one of the three key outputs for child survival development.

Table 1.2 Key health and demographic indicators for Lesotho 2010

Indicator	Value	Source
Population	1,876,633	BOS 2010
Infant mortality rate	91/1000	LDHS: 2009
U5 mortality rate	117/1000	LHDS 2009
HIV prevalence	23%	LHDS 2009
Population growth rate	0.87	Health Service Assessment (HSA)
Maternal mortality rate	1,155/100,000	LD HS.2009
Crude birth rate	21..99/1000	2006 Census
Life expectancy	Females: 49. Males : 44	LHDS 2009
Access to health	Urban : 35% Rural : 11%	CWIQ 2002

### Financing Health Care

The health sector is mainly funded by the government for recurrent budget and immunizations form part of this process. Capital expenditure is financed by donors with the amounts determined through collaborative agreement between the Family Health Unit, Ministry of Finance and partners. On average, 68.2%% of the total Health & Social Welfare budget comes from the government while the other 30.4% comes from external sources. The average per capita government funding on health expenditures is USD 54% while as a percentage of GDP total health expenditure is on average 8.2%. In 2009 total health expenditures represent 7.7% of the GDP of the country. Of these health expenditures, 56% was from the Government of Lesotho (GOL), with the remainder from partners, and households. 6%

The existing budgeting systems do not provide sufficient detail to allow for a precise analysis on how the resources allocated to the health sector are used to fund the EPI.

### Transfer of funds for purchase of pneumococcal vaccine

The Ministry of Health and Social Welfare has regularly been budgeting for vaccines in the Recurrent Budget and the budget is increased each year (refer to cMYP section on financing)

In addition, the Government of Lesotho is committed to the process of co-financing the new pneumococcal vaccine beginning in 2012 and under-used vaccine (pentavalent until **2013**) with GAVI, in preparation for total financing of all vaccines in the future (refer to FSP 2004)

GOL has a long standing agreement with partners for procurement of all vaccines, cold chain equipment and injection safety materials, through UNICEF. Therefore similar procedures will be followed in the procurement of pneumococcal vaccine.

## **1.4 The EPI Programme in Lesotho**

The Government of Lesotho (GOL) through the Ministry of Health is committed to providing health care to all citizens through the adoption of PHC of which EPI is a key component. Government's efforts on health care is supported and complemented by partners and NGOs amongst which is the Christian Health Association of Lesotho (CHAL), which owns about 48% of the country's health facilities.

### **1.4.1 Background on EPI in Lesotho**

The Expanded Programme on Immunization in Lesotho was established in 1979 following Alma Ata Declaration of PHC. The programme aims to ensure that vaccines are available to protect population against vaccine preventable diseases notably; Tuberculosis, Diphtheria, Whooping Cough, Tetanus, Polio and Measles, including Hepatitis B, vaccine which was introduced into the programme in 2008 with GAVI support. Although reported vaccine-preventable disease morbidity and mortality is currently low in Lesotho, there are challenges in assessing the true impact of the National EPI. Hib vaccine was introduced in 2008 in a form of pentavalent containing DPT-HepB-Hib. The aim is to introduce other two new vaccines, Rotavirus and Pneumococcal vaccine (PCV13) during this new cMYP term.

There is strong partnership with private practice and community-based care providers (Traditional Healers, Traditional Birth Attendants, community Health Workers, NGOs, etc) in the delivery of health care services in Lesotho including immunization services and social mobilisation.

### **1.4.2 PHC structure**

Maternal and Childhood immunizations are provided through EPI programme, which is a unit of the Child Survival Programme of the MOHSW with the government in charge of procuring traditional vaccines and cold chain including co-financing of underused vaccine; pentavalent. There are six directorates in MOHSW namely, Primary Health Care Directorate, Planning, HIV/AIDS, Human Resource, Clinical Services, Laboratory Services. The Primary Health Care Directorate is composed of four divisions namely, Health Education, Environmental Health, Disease Control and Family Health. EPI is one of the programmes within Family Health Division as a sub program of Child Survival.

### **1.4.3 Staffing pattern**

An EPI manager heads the EPI. There are two cold Chain technicians, one data clerk, National Surveillance Officer and National Logistics Officer. The programme is currently sufficiently staffed.

### **1.4.4 Immunization Services**

The EPI programme in Lesotho has been providing a number of antigens using static and outreach strategies though most of the outreaches are dormant. The immunization schedule is illustrated in Table 1.2.



**Table 1. 3 Lesotho Immunization Schedule**

Antigen	Age given
OPV	At birth
BCG	At birth
Penta 1, OPV1	6 weeks
Penta 2, OPV2	10 weeks
Penta 3, OPV3	14 weeks
Measles 1 <sup>st</sup> dose	9 months
Measles 2 <sup>nd</sup> dose	18months
DT	18 months
Pneumococcal vaccine	6weeks, 10 weeks and 14 weeks
Rotavirus	6 weeks, 10 weeks and 14 weeks

## **1.5 SITUATION ANALYSIS OF THE NATIONAL EPI PROGRAMME**

### **1.5.1 Service Delivery**

An EPI review was conducted in 2006 found that 62% of the health facilities were offering immunization services for one to two days per week and outreach was seldom conducted. In addition, EPI micro plans are not developed in many facilities. Catchment area populations are not known and vaccination coverage is not calculated, analysed and used for action

More recently, in December 2010 a penta PIE was conducted with the following recommendations:

- Finalise comprehensive Multi-Year Plan to include a policy for introduction of pentavalent and other new vaccines as well as financial sustainability
- Conduct training on EPI in general, vaccine management and logistics, cold chain management at all levels
- Consider head count at health facilities of the target population
- Revisit guidelines on staff rotation in health facility to avoid rotating staff too frequently as this affects program performance
- Implement the supermarket approach in all facilities with immediate effect
- Providing regular in-service training on key EPI components to close gaps in knowledge and practice
- The National level should ensure that all EPI tools are updated as soon a possible
- Produce Reference booklet for HCWs on all EPI vaccines and VPDS in Sesotho and English
- National EPI manager and district PHNs/PHC coordinators should be trained in EPI Mid Level Management
- Provide induction training for new HWs prior to placement
- Update in-service training curriculum for health training institutions on new vaccines and current interventions
- National level to develop an EPI Advocacy Communication and Social Mobilisation strategic plan
- National level should provide guidelines, policies, standard tools to collect and analyze data at all levels.
- National level should print and distribute guidelines for monitoring and reporting of AEFIs
- Health facilities should maintain a record of all AEFIs (file investigation forms)

- National level should build capacity for supportive supervision in supervisors at all levels
- National level should develop an integrated supervisory checklist to be used by all supervisors when they conduct supervisory visits
- DHMT level should facilitate the repair and maintenance of cold chain equipment
- National level should conduct vaccine management training for DHMT and facility staff

The 2009 DHS findings reported a similar picture for individual vaccines coverage compared with 2004 figures. The 2009 LDHS reported a decline in immunization coverage for all antigens compared to reflected in the table below:

Table 1.4

Antigen	2004 LHDS	2009 LHDS
BCG	95%	95%
OPV3	76.7%	75%
DPT3	80.4%	84%%
Measles	74.7	75%
TT2+	59.8%	60%

Records of the WHO-UNICEF JRF, indicate similar pattern of immunization performance for DTP3 which has been constantly below the national target of 90% during the years 2008-2010 with a range between -71% and 75%. (refer to table 1.5 below) Lesotho started accessing GAVI support in 2000, and introduced monovalent HepB in 2003 and Pentavalent, in 2008.

Table 1.5 : DTP3 coverage 2008-2010

Year	DTP3 >= 80%	DTP3 50-80%0%	DTP3 <50%
2008	5	5	0
2009	4	4	2
2010	2	8	0

(Source 2008, 2009 and 2009 JRF)

Table 1.6: Annual Targets for Lesotho, 2008-2010

	2008	2009	2010
Births	59642	43,654	56,185
Surviving infants	51876	41,379	50,904
Pregnant women	59642	43,654	56,185
BCG coverage	56065	34,834	73%
OPV3	46829	33,424	69%
DTP3/Pentavalent	46829	32,263	75%
Measles	40467	32,263	67%
TT2+ (Pregnant)	45844	31,205	74%

Source: Lesotho BOS. , WHO/UNICEF JRF 2010 check these figures mane

According to the 2006 census report, there is decrease in birth rate (from 1,5%-0.08% ) and the population of Lesotho stood at 1.876,633 in 2006 with a projected population growth rate of 0.08%

mainly due to the HIV/AIDS epidemic (World Bank, 2006). Due to erroneous birth cohorts used, some targets may be inconsistencies in the actual denominators.

### **1.5.2 Accelerated Disease Control and Disease Surveillance**

AFP surveillance has been in place since 1997 while IDSR was introduced in 2003. The last clinically confirmed wild poliovirus case was detected in 1984 and the last polio national campaign (one round) was conducted in 2010. AFP surveillance reached certification standard level in 2003 and the polio documentation was accepted in 2005.

Measles control plans have been in place since 1999. Measles catch up, and follow up campaigns were conducted in 2000, 2003, 2007 and 2010 respectively. The measles campaigns were combined with polio and targeted 6 months -15 years. .

During the EPI review in 2006, EPI surveillance manuals were not available in some facilities but even when available they were kept in files and not read or used. It was therefore not surprising that many staff did not know the national and district coverage, and disease control goals. In some cases, posters on case definitions and disease surveillance were available but not displayed.

### **1.5.3 Vaccines and Logistics**

The government of Lesotho finances all vaccines except pentavalent, which co-financed through GAVI support until 2013. . Cold chain and injection equipment are further supplied and distributed by GoL.

The 2006 EPI review noted that vaccine and cold chain management were found to be weak areas, especially at sub-national levels. .Unnecessary wastage and lack of wastage monitoring were highlighted. The review also noted the absence of systems to estimate vaccine and logistics needs in many facilities leading to both overstocking and unnecessary stock outs. There were also lack of contingency plans for handling vaccines during periods of electricity power failure and shortage of gas. On cold chain management, the review revealed that preventive maintenance of cold chain equipment was non-existent. This was compounded by the shortage of cold chain equipment in some facilities. To address these challenges, vaccine management assessment was done in 2008 and some of the recommendations included: deployment of national logistician, training of health workers on vaccine management and introduction of vaccine management tool. Furthermore, plans are in place to conduct cold chain assessment and inventory in 2011 to determine functionality of cold chain equipment at district and health centre level and possible replacement where indicated and vaccine management trainings as outlined in table 4D. It is important to further note that cold chain storage capacity is sufficient (300litres) to accommodate traditional, under-used and new vaccine PCV.

### **1.5.4 Advocacy and Social Mobilisation**

The EPI review also found out that a few facilities had functional health centre committees that participate in social mobilisation, routine immunization and disease surveillance. Community health workers were also reported to be functional only in some places. Ironically, IEC materials were found in many facilities. However, advocacy and social mobilisation are generally not well established and therefore do not function well in many facilities. The EPI will develop a national communication plan and support districts with communication and advocacy strategies as outlined in table 4.8

### **1.5.5 Programme Management and Human Resources**

Data management was found to be weak in many facilities. In the 2010 PIE, it was noted that refresher and in-service training for staff were inadequate. GAVI DQA conducted in 2008 also revealed weak data management at all levels of service delivery. As a result the country did not qualify from its ISS award funding.

The national health strategic plan notes seven major challenges that face the health sector, and three of these directly affect EPI:

- Inadequate human resources in skills and number, leading to inefficiencies in health delivery system
- Inefficient human resource management system which is a source of discontent, and high rates of attrition in the country
- Inaccurate and incomplete health information and lack of clarity in the information system which constrains evidence-based decision making

To address human resource capacity, improved management & data collection and use of EPI of data, the EPI will implement a series of trainings and strengthen supervision. A DQS will be rolled out to all districts and support in data management increased. (refer to table 4A)

**Table 2A: Situational analysis by accelerated disease control initiatives, based on previous years' data (2008-2010)**

System components	Suggested indicators	National*		
		2008	2009	2010
Service delivery				
Polio Eradication	<i>OPV3 coverage</i>	79%	74%	70%
	<i>% of districts achieved 50%-80%</i>	50%	40%	80%
	<i>% of districts achieved &lt;=50%</i>	50%	20%	20%
	<i>Non polio AFP rate per 100,000 children under 15 yrs. of age</i>	1.4	2.3	1.7
	<i>Extent: NID/SNID No. of rounds Coverage range</i>	0	0	1 round NID 81.3%
MNT Elimination	<i>TT2+ coverage</i>	ND	71%	74%
	<i>Number of districts reporting &gt; 1case per 1,000 live births</i>	0	0	0
	<i>Was there an SIA? (Y/N)</i>	N	N	N
Measles pre-elimination and control	<i>Measles coverage</i>	70%	69%	66%
	<i>% of districts achieved 50%-80%</i>	To be completed	To be completed	To be completed
	<i>% of districts achieved &lt;=50%</i>	To be completed	To be	To be completed

\* It is useful to include the data source for each data set.

		ed	completed	
	<i>No. of outbreaks reported</i>	0	0	1
	<i>Extent: NID/SNID</i> <i>Age group</i> <i>Coverage</i>	0	0	1 around NID 6months-15 years 90.8%
New vaccines	<i>Hib vaccine introduced(Y/N)</i>	Y	NR	NR
	<i>Pneumococcal vaccine introduced(Y/N)</i>	N	N	N
	<i>Rotavirus vaccine introduced(Y/N)</i>	N	N	N

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**Table 2B: Situational analysis of routine EPI by system components based on previous years' data (2008-2010)**

System components	Suggested indicators	National*		
		2008	2009	2010
Routine Coverage	<i>National DTP3 coverage</i>	78%	71%	75%
	<i>% of districts with &gt; 80% coverage</i>	50%	40%	40%
	<i>% of districts achieved 50%-80%</i>	50%	40%	30%
	<i>% of districts achieved &lt;=50%</i>	0%	20%	30%
	<i>National DPT1-DTP3 dropout rate</i>	7	8	6
	<i>Percentage of districts with dropout rate DTP1-DTP3&gt;10%</i>	To be verified		
New vaccines	<i>National HepB3 coverage</i>	76%	71%	75%

\* It is useful to include the data source for each data set.

Routine Surveillance	<i>% of surveillance reports received at national level from districts compared to number of reports expected</i>	No data	No data	No data
	<i>Quality of surveillance data sufficient? (Y/N)</i>	N	N	N
Cold chain/Logistics	<i>Percentage of districts with adequate number of functional cold chain equipment</i>	No data	No data	No data
Immunization safety and Waste Management	<i>Percentage of districts supplied with adequate (equal or more) number of AD syringes for all routine immunizations</i>	100%	100%	100%
	<i>Percentage of districts supplied with safety boxes</i>	100%	100%	100%
	<i>Percentage of districts with proper sharps waste management systems</i>	100%	100%	100%
Vaccine supply	<i>Was there a stock-out at national level during last year? (Y/N)</i>	No	Y	Y
	<i>If yes, specify duration in months and antigens out of stock</i> BCG DTP OPV	0 0 0	3 months 1 month	4 months 1 month 3 months
Communication	<i>Availability of a plan? (Y/N)</i>	N	N	N
	<i>Percentage of districts which have developed EPI communication plans</i>	0	0	0
	<i>Percentage of caretakers of children &lt; 1yr understanding the importance of routine immunization.</i>	No data	No data	No data
Financial sustainability	<i>What percentage of total routine vaccine spending was financed using Government funds?(including loans and excluding external public financing)</i>	100% of all traditional vaccines are financed by the Government 17% NUV Co-financed with GAVI	100% of all traditional vaccines are financed by the Government 17% NUV Co-financed with GAVI	100% of all traditional vaccines are financed by the Government 17% NUV Co-financed with GAVI

Management planning	<i>Are a series of district indicators collected regularly at national level?(Y/N)</i>	Y	Y	Y
	<i>Percentage of all districts with microplans.</i>	0	0	0
Timeliness (%) completeness (%)	<i>Percentage of districts with complete reports</i>			
	<i>Percentage of districts with reports arriving on time</i>			
Research/studies	<i>Number of vaccine related studies conducted/being conducted</i>	1 (VMA)	1 (DHS)	1 (PIE)
NRA	<i>Number of functions conducted</i>	No data	No data	No data
National ICC	<i>Number of meetings held last year</i>	1	2	4
Human Resources availability	<i>Percentage of sanctioned posts of vaccinators filled</i>	100%	100%	100%
	<i>Percentage of health facilities with at least 1 vaccinator</i>	100%	100%	100%
	<i>Percentage of vaccinators time available for routine EPI</i>	No data	No data	No data
	<i>Number of vaccinators / 10.000 population (tot population/no. hw)</i>	No data	No data	No data
Transport / Mobility	<i>Percentage of districts with a sufficient number of supervisory/EPI field activity vehicles/motorbikes/bicycles in working condition</i>	0	0	0
Waste Management	<i>Availability of a waste management plan</i>	Available	Available	available
	<i>Vaccine wastage monitoring at national level for all vaccines? (Y/N)</i>	N	N	Y
Linking to other Health Interventions	<i>Were immunization services systematically linked with delivery of other interventions (Malaria, Nutrition, Child health etc)?</i>	Y	Y	Y
Programme Efficiency	<i>Timeliness of disbursement of funds to district and service delivery level</i>	60%	60%	60%
School immunization activities	<i>Number of school immunization activities conducted</i>	0	0	0

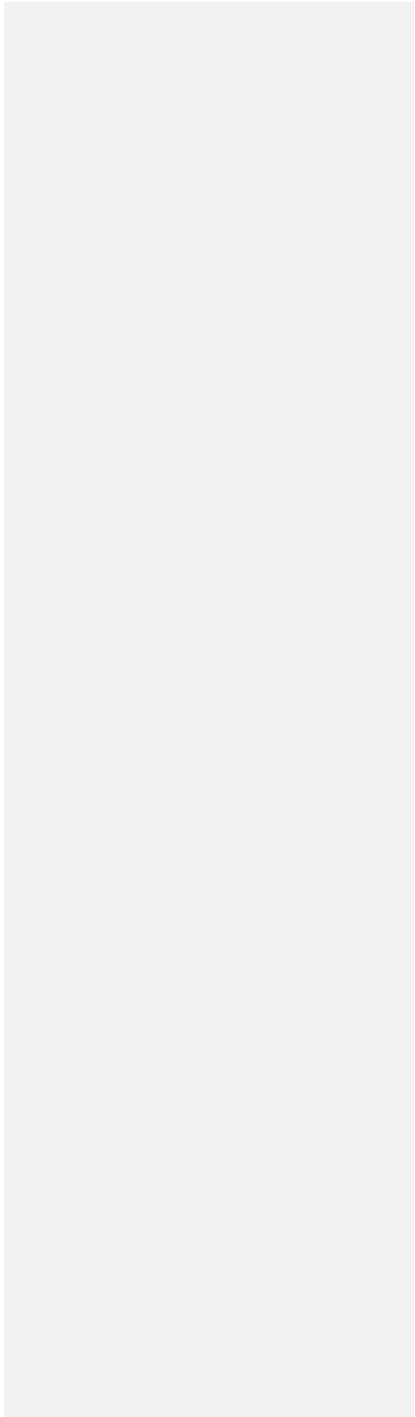


**Table 3 Summary of Strengths and Weakness of the Immunization Programme**

	Strengths	Weaknesses
<b>1. Service Delivery</b>	<ul style="list-style-type: none"> <li>▪ Health facilities open Monday through Friday during 0800 – 1630</li> <li>▪ EPI guidelines available and known by some facilities</li> <li>▪ Staff have good knowledge on vaccines and benefits of vaccination</li> <li>▪ Orderly and neat work areas in many facilities</li> <li>▪ EPI policies not well followed, e.g. MDV</li> </ul>	<ul style="list-style-type: none"> <li>▪ Catchment and target populations not known in many facilities</li> <li>▪ Immunization coverage not calculated in many facilities</li> <li>▪ 62% of health facilities offer immunization services for one to two days only per week</li> <li>▪ Inadequate space for immunization sessions in some health facilities</li> <li>▪ Mothers turned away when they visit health facilities on non-immunization days</li> <li>▪ Outreach not done in some facilities</li> </ul>
<b>2. Accelerated Disease Control and Disease Surveillance</b>	<ul style="list-style-type: none"> <li>▪ Availability of disease surveillance manuals in some health facilities</li> <li>▪ Availability of posters on case definitions and disease surveillance</li> <li>▪ Availability of disease notification and investigation forms for AFP, Measles and NNT available</li> </ul>	<ul style="list-style-type: none"> <li>▪ Some staff not trained on disease surveillance</li> <li>▪ Surveillance manuals not available in some facilities</li> <li>▪ Disease trends not monitored in many facilities</li> <li>▪ Outbreaks not detected because data are not analysed locally</li> </ul>
<b>3. Vaccines and Logistics</b>	<ul style="list-style-type: none"> <li>▪ Nurses and PHNs assigned to look after vaccine fridges</li> <li>▪ Dial thermometers available in most facilities</li> <li>▪ Packing vaccines using the “First In First Out” method</li> <li>▪ Shake test known and practiced by some nurses</li> <li>▪ Timely delivery of ordered vaccines</li> <li>▪ AD syringes used in routine immunization country wide and safe injection practices in many facilities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Vaccine fridges in some facilities not functional</li> <li>▪ Shortages of gas in some facilities</li> <li>▪ No contingency plans for events of power failures and shortages of gas</li> <li>▪ Irregular defrosting of freezers</li> <li>▪ Routine maintenance of fridges not done</li> <li>▪ Irregular monitoring of temperatures</li> <li>▪ Stock outs, over-stocks and under-stocks of vaccines</li> <li>▪ Shake test and VVM not known in many facilities</li> <li>▪ No standard method for estimating vaccines and logistics needs</li> <li>▪ Poor record keeping and discrepancies between physical counts and records in ledger books</li> <li>▪ Vaccine wastage not monitored</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Proper storage of syringes and needles</li> <li>▪ Availability of incinerators (in some health facilities) and Safe disposal of injection waste</li> </ul>	<ul style="list-style-type: none"> <li>▪ Storing medicines and other items in vaccine fridges</li> <li>▪ AEFI surveillance system not in place</li> <li>▪ Lack of incinerators in some facilities</li> </ul>
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Component	Strengths	Weaknesses
<b>4. Advocacy and Social Mobilisation</b>	<ul style="list-style-type: none"> <li>▪ Availability of community health workers</li> <li>▪ Participation of CHWs in routine immunization, NIDs and disease surveillance (in some health facilities)</li> <li>▪ Social mobilisation helps to increase coverage during NIDs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Non-functional health centre committees in many facilities</li> <li>▪ Social mobilisation not done for EPI in some facilities</li> <li>▪ CHWs do not participate in routine immunization and disease surveillance in some facilities</li> <li>▪ Old and outdated IEC materials</li> <li>▪ Myths about vaccines being poisonous and harmful to children's health not countered</li> <li>▪ Health education is centralised</li> <li>▪ Health Education Division not included in EPI planning</li> <li>▪ Lack of transport for social mobilisation</li> <li>▪ Inadequate funds for social mobilisation</li> <li>▪ Defaulter tracking by CHWs mechanism not in place</li> </ul>
<b>5. Programme Management</b>	<ul style="list-style-type: none"> <li>▪ Availability of Nurses and TNAs in many facilities</li> <li>▪ Some staff trained on EPI, Cold Chain and Vaccine Mgt, and Disease Surveillance</li> <li>▪ IMCI collaborates with EPI in some facilities</li> <li>▪ Immunization sessions include other interventions such as growth monitoring</li> <li>▪ Post Exposure Prophylaxis (PEP) for needle stick injuries available</li> <li>▪ EPI policy document available in all health facilities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Shortage of staff and high attrition rates</li> <li>▪ Erratic in-service and refresher training</li> <li>▪ Job descriptions not available</li> <li>▪ Inadequate transport and funds</li> <li>▪ Lack of EPI micro plans in many facilities</li> <li>▪ Weak data management in many facilities; tally sheets entered weekly and only totalled monthly</li> <li>▪ Irregular supportive supervision at all levels</li> </ul>



**Table 4: National objectives and milestones, AFR regional and global goals**

<b>System component</b>	<b>National priorities</b>	<b>NIP Objectives</b>	<b>NIP Milestones</b>	<b>AFRO Regional goals</b>	<b>Order of Priority</b>
<b>Service delivery</b>	<p><b>Pentavalent</b> National Pentavalent3 coverage is below 90% (75%)</p> <p>EPI Microplans not developed at district level</p> <p>Drop out rate not calculated at district level</p>	<p>To achieve at least 90% coverage for pentavalent at national level with at least 80% coverage in all districts (10) by 2016</p> <p>To achieve 100% utilization of district microplans by 2016</p> <p>All districts( 100% ) to calculate drop out rate by using measles as an indicator by 2016</p>	<p><b>2012:</b> 80% coverage national; 50% districts achieve &gt;=80% ; 60 districts calculate dropout rate</p> <p><b>2013:</b> 82% coverage national; 60% districts achieve &gt;=80%; 80% districts calculate dropout rate</p> <p><b>2014:</b> 85% national coverage; 70 districts achieve &gt;=80%</p> <p><b>2014-2016:</b> 100% districts calculate dropout rate</p> <p><b>2015:</b> 87% coverage national; 80% districts achieve &gt;=80%</p> <p><b>2016:</b> &gt;=90% national coverage; 100% districts achieve &gt;=80%</p> <p><b>2012-2016</b> 100% districts use micro-plans</p>	<p>&gt;= 90% penta3,OPV3, MCV1 national level coverage with at least 80% coverage in every district.</p>	<b>1</b>
	<p><b>Polio</b> National OPV coverage below 90% (70%)</p>	<p>To achieve at least 90% coverage for OPV3 at national level with at least 80% coverage in all districts by 2016</p>	<p><b>2012:</b> 75% coverage national; 30% districts achieve &gt;=80%</p> <p><b>2013:</b> 77% coverage national; 40% districts achieve &gt;=80%</p> <p><b>2014:</b> 82% national coverage; 50% districts achieve &gt;=80%</p> <p><b>2015:</b> 85% coverage national; 60% districts achieve &gt;=80%</p> <p><b>2016:</b> &gt;=90% national coverage; 80% districts achieve &gt;=80%</p>	<p>By end-2013 Initial validation of 2012 milestones</p>	<b>1</b>
	<p><b>Measles</b> Routine national measles coverage is below 90% (66%)</p>	<p>To achieve at least 90% Routine coverage for measles at national level with at least 75% coverage in 80% districts by 2016</p>	<p><b>2012:</b> 70% coverage national; 30% districts achieve &gt;=72%</p> <p><b>2013:</b> 72% coverage national; 40% districts achieve &gt;=75%</p> <p><b>2014:</b> 75% national coverage; 50% districts achieve &gt;=75%</p>	<p>&gt; 90% MCV1 national level coverage with at least 80% coverage in every district.</p>	<b>1</b>

System component	National priorities	NIP Objectives	NIP Milestones	AFRO Regional goals	Order of Priority
	2010 Measles NID achieved coverage below pre elimination target ( $\geq 95\%$ ) coverage	To achieve $\geq 95\%$ NID coverage for measles and OPV at national level and $\geq 90\%$ in all districts in 2013	<p><b>2015:</b> 80% coverage national; 60% districts achieve <math>\geq 75\%</math></p> <p><b>2016:</b> <math>\geq 90\%</math> national coverage; 80% districts achieve <math>\geq 80\%</math>:</p> <p><b>2013:</b> 100% districts achieve <math>\geq 90\%</math> NID measles and OPV</p> <p><b>2013:</b> National achieve <math>\geq 95\%</math> coverage measles and OPV NID</p>	<p>Greater than 95% measles SIAs coverage in all districts</p> <p><math>\geq 1</math> suspected measles case investigated with blood specimen in at least 80% districts per year</p>	1
	<b>MNT</b> National TT2+ coverage among pregnant women is below 90% ((74%))	To achieve at least 80% coverage for TT2+ at national level with at least 70% coverage in 80% districts by 2016	<p><b>2012:</b> 77% coverage national; 50% districts achieve <math>\geq 72\%</math></p> <p><b>2013:</b> 80% coverage national; 60% districts achieve <math>\geq 75\%</math></p> <p><b>2014:</b> 83% national coverage; 70% districts achieve <math>\geq 77\%</math></p> <p><b>2015:</b> 85% coverage national; 70% districts achieve <math>\geq 80\%</math></p> <p><b>2016:</b> <math>\geq 90\%</math> national coverage; 80% districts achieve <math>\geq 80\%</math>:</p>		3
	Pneumococcal vaccine introduction	To introduce PCV nationwide by 2012	<p><b>2012:</b> 90% coverage national; 50% districts achieve <math>\geq 80\%</math></p> <p><b>2013:</b> 80% coverage national; 60% districts achieve <math>\geq 80\%</math></p> <p><b>2014:</b> 85% national coverage; 70% districts achieve <math>\geq 80\%</math></p> <p><b>2015:</b> 87% coverage national; 80% districts achieve <math>\geq 80\%</math></p> <p><b>2016:</b> <math>\geq 90\%</math> national coverage; 100% districts achieve <math>\geq 80\%</math></p>		1
	Rotavirus vaccine introduction	To introduce Rotavirus nationwide by 2015	<p><b>2015:</b> 90% coverage national; 50% districts achieve <math>\geq 80\%</math></p>		3

System component	National priorities	NIP Objectives	NIP Milestones	AFRO Regional goals	Order of Priority
			<b>2016:</b> : 90% coverage national; 100% districts achieve >=80%		
	<b>HPV</b> Vaccine piloted in 2 districts	To roll out HPV vaccine to one more district by 2012	<b>2012:</b> 30% districts providing HPV vaccine with 80% coverage		<b>3</b>
	Timeliness and completeness below 50% at district level	To achieve 100% completeness and timeliness of reporting in all districts by 2016	<b>2012:</b> 80% timeliness and completeness national;80% districts achieve 80% timeliness and completeness <b>2013 -2016 :</b> 100% timeliness and completeness national; 100% districts achieve 100% timeliness and completeness		<b>1</b>
	Weak data management lack of analysis and utilization of data at district and health facility level	To build capacity on data management, analysis and utilization at district and health facility level by 2016	<b>2012:</b> 50% districts analyse data for action <b>2013:</b> 60% districts analyse data for action <b>2014:</b> 70% districts analyse data for action <b>2015:</b> 80% districts analyse data for action <b>2016:</b> 90% districts analyse data for action		<b>1</b>
<b>Vaccine supply, quality and logistics</b>	AD syringes used in all health facilities	To sustain utilization of AD syringes in all health facilities by 2016 and beyond	<b>2012-2016:</b> AD syringes and safety boxes distributed to and used in all (100%) health facilities	By the end of 2008, all immunization injections are administered safely.	<b>1</b>
	Stock outs /overstocking Experienced at all levels	To introduce vaccine management guidelines and vaccine stock management tools in all health facilities by 2012	<b>2012:</b> 50% districts utilize vaccine management guidelines and vaccine stock management tools <b>2013:</b> 60% districts utilize vaccine management guidelines and vaccine stock management tools <b>2014:</b> 70% districts utilize vaccine management guidelines and vaccine stock management tools <b>2015:</b> 80% districts utilize vaccine management guidelines and vaccine stock management tools <b>2016:</b> 100% districts utilize vaccine management guidelines and vaccine stock management tools		<b>1</b>
	Vaccine wastage not	To establish vaccine	<b>2012:</b> 50% districts monitor vaccine wastage		<b>1</b>

System component	National priorities	NIP Objectives	NIP Milestones	AFRO Regional goals	Order of Priority
	monitored at district level	wastage monitoring at all district by 2016	<b>2013:</b> 60% districts monitor vaccine wastage <b>2014:</b> 70% districts monitor vaccine wastage <b>2015:</b> 80% districts monitor vaccine wastage <b>2016:</b> 100% districts monitor vaccine wastage		
	Database of functional cold chain equipment not available at all levels	<p>To provide all health facilities with functional cold chain equipment by 2016</p> <p>To achieve 100% districts utilizing cold chain maintenance policy by 2016</p>	<b>2012:</b> 50% districts with functional cold chain equipment and cold chain maintenance plan in place <b>2013:</b> 60% districts with functional cold chain equipment and cold chain maintenance plan in place <b>2014:</b> 70% districts with functional cold chain equipment and cold chain maintenance plan in place <b>2015:</b> 80% districts with functional cold chain equipment and cold chain maintenance plan in place <b>2016:</b> 100% districts with functional cold chain equipment and cold chain maintenance plan in place		2
<b>Waste Management</b>	Inadequate waste management at health facility level	To achieve 50% districts Adhering to waste management guideline/policy by 2016	<b>2012:</b> 50% districts using waste management policy <b>2013:</b> 60% districts using waste management policy <b>2014:</b> 70% districts using waste management policy <b>2015:</b> 80% districts using waste management policy <b>2016:</b> 100% districts using waste management policy		1
<b>Surveillance</b>	<p>VPDs surveillance indicators not maintained in 50% districts</p> <p>Hib disease sentinel surveillance performance below 50% at national</p> <p>Timeliness and</p>	<p>To attain and sustain at least 80% of surveillance indicators for target diseases by 2016</p> <p>To achieve at least 80% Hib disease surveillance performance by 2016</p> <p>To achieve at least 85%</p>	<p><b>2012 and beyond:</b> Non-AFP rate of 2/100,000 national; 80% districts investigate at least one measles case with blood;</p> <p><b>2012:</b> 60% performance for Hib surveillance with 10% increment yearly up to 2016</p> <p><b>2012:</b> 50% districts timeliness and completeness of</p>		1

System component	National priorities	NIP Objectives	NIP Milestones	AFRO Regional goals	Order of Priority
	<p>completeness of reporting to national level by districts is 30%</p> <p>AEFIs not monitored at district and health centre levels</p>	<p>timeliness and completeness of reporting by districts to national level by 2016</p> <p>To introduce AEFI surveillance in all health facilities by 2013</p>	<p>reporting</p> <p><b>2013:</b> 60% districts timeliness and completeness of reporting</p> <p><b>2014:</b> 70% districts timeliness and completeness of reporting</p> <p><b>2015:</b> 80% districts timeliness and completeness of reporting</p> <p><b>2016:</b> 85% districts timeliness and completeness of reporting and regular feedback provided to lower levels</p> <p><b>2012:</b> 50% districts monitor AEFIs and report</p> <p><b>2013:</b> 60% districts monitor AEFIs and report.</p> <p><b>2014:</b> 70% districts monitor AEFIs and report.</p> <p><b>2015:</b> 80% districts monitor AEFIs and report.</p> <p><b>2016:</b>95% districts monitor AEFIs and report.</p>		
<b>Advocacy and Communications</b>	<p>Communication and Social Mobilization Plan not available at all levels of health Care Delivery</p>	<p>To increase support for immunization activities by 2016 through visibility in all areas (media, political, communities, partners etc.)</p> <p>To create demand for immunization services by 2013</p> <p>Adopt and disseminate IEC materials on routine immunization and disease surveillance by 2016</p>	<p><b>2012:</b> National communication plan, including new vaccine introduction developed</p> <p><b>2012:</b> 50% districts have Communication Strategic Plan developed ; IEC materials developed for 100% districts</p> <p><b>2013-2016:</b> 100% districts have Communication Strategic Plans, utilize IEC materials; EPI immunization messages covered in local media</p>		<b>1</b>
<b>Management and Planning</b>	<p>Inadequate capacity of HWs to provide immunization services including EPI programme management at all levels</p>	<p>To equip health workers at all levels with skills and knowledge on EPI issues by 2016</p>	<p><b>2012:</b> MLM training (ToT) national and cascaded to all health care delivery levels</p> <p>2013-2016 : Improved provision of immunization services in 100% districts</p>		<b>1</b>



<b>System component</b>	<b>National priorities</b>	<b>NIP Objectives</b>	<b>NIP Milestones</b>	<b>AFRO Regional goals</b>	<b>Order of Priority</b>
	Irregular technical supportive supervision at all levels	To conduct supportive supervision quarterly to districts and monthly to health facilities and community level and provide written feedback by 2012 and beyond.	<b>2012:</b> Supervisory checklist and supervision schedules developed and implemented <b>2013-2016:</b> Supportive supervision ongoing		<b>1</b>
		To maintain and sustain support from ICC on EPI issues by 2016 and beyond	<b>2012-2016</b> and beyond :EPI programme receives support on all EPI issues.		<b>2</b>
<b>Programme Efficiency</b>	Late disbursement of funds to districts	To achieve 100% timeliness of disbursement of funds to districts quarterly by 2016	<b>2012-2016</b> and beyond: 100% districts receive funds timely 1 <sup>st</sup> week of every quarter		<b>1</b>
<b>Financial Sustainability</b>	High commitment by the Government in funding EPI Vaccines (100% funding)	To increase government budget to ensure coverage of new vaccines by 2016	<b>2012-2016:</b> 100% traditional vaccines paid for by the Government <b>2012-17% govt contribution for PCV and penta</b> <b>2013 : 100%</b> Government contribution for pentavalent <b>2013:</b> 20% govt contribution for <b>PCV</b> <b>2014: 25% govt contribution for PCV</b> <b>2015: rotavirus</b> <b>2016: 30% govt contribution for PCV</b>		<b>1</b>
<b>Research / Studies</b>	Lack of evidence based information on immunizations to guide programme implementation	To conduct operational research to inform EPI implementation status in the area of immunization coverage by 2013	<b>2012:</b> operational research conducted <b>2013-2014:</b> recommendations from operational research implemented		<b>1</b>

**Table 5A: Service delivery and Programme Management**

National Objective	Strategy	Key Activities
Service delivery and Programme Management		
To achieve at least 90% coverage for all antigens at national level with at least 80% coverage in all districts by 2016	<b>Implementing RED/C approach/outreach services /CHDs</b>	<b>Develop and use district micro-plans:</b> -establish catchment area target population (Conduct head count of all und in every village) -calculate resources required, -identify vaccination sites by strategy conduct monthly outreach services -Identify and support low performing districts -compile monthly reports
	<b>Supplemental immunization activities</b>	Conduct integrated measles/OPV SIAs as needed
	<b>Implementing Supermarket Approach in immunizations</b>	Conduct monitoring in all districts to ensure provision of immunizations on daily basis -Screen every child for vaccination eligibility coming in contact with the health worker and vaccinate if eligible -Village Health workers to identify eligible children during community growth monitoring services and refer for vaccination
	<b>Ensure defaulter tracking</b>	Train CHWs on tracing of immunization defaulters
		Monitor districts to ensure that are supporting defaulter tracing using under 5 clinic register by village health workers
	<b>Advocate for increase in Budget for vaccine procurement</b>	Hold high level meetings with senior management both from MoH and Finance Ministries e.g ICC meetings
To equip health workers at all levels with skills and knowledge on EPI issues by 2016	<b>Capacity building/training on key areas of EPI</b>	Train health workers on MLM , RED refresher and VPDs surveillance
	<b>Developing guidelines</b>	Adapt, produce and distribute SOPs to all health facilities
	<b>Strengthening data management /introducing data management tool</b>	Conduct national DQS and roll out the tool to districts
		Train health workers on data management and introduce district vaccine & data management tool (DVTMT) Use of wall EPI coverage monitoring chart in all health facilities
To conduct supportive supervision quarterly to districts and monthly to	<b>Supportive supervision</b>	conduct supportive supervision quarterly to districts and monthly to health facilities

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health facilities and provide written feedback by 2012		Conduct regular EPI review meeting with DPHNs and participate in district monthly PHC meeting and provide feedback
		Develop and maintain integrated 'supervisory visits' checklist at district and health centre level and provide feedback
		Monitor districts to ensure understanding and utilization of the DVDMT
To introduce new vaccines ; Pneumo by 2012, Rota by 2015 and HPV deployment to three districts by 2012	<b>Ensure pneumo vaccine and rota vaccine introduction into routine immunization schedule</b>	Follow up on application, advocate and mobilize resources for introduction
		distribute guidelines with key messages to be given during every health education before vaccination and monitor their use
		Conduct surveillance of adverse events following immunizations on new vaccines
		Conduct post introduction evaluation for pneumo
	Ensure HPV introduction IN 3 districts	Roll out HPV introduction i one additional district
		Advocate and mobilize resources for possible introduction in additional districts
	<b>Advocate for increase in Budget for vaccine procurement and apply for NVS</b>	Hold meetings with ICC members Develop a proposal for new vaccines and submit to GAVI Prepare for introduction of new vaccines

**Table 5B: Advocacy and Communications**

National Objective	Strategy	Key Activities
To increase support for immunization activities by 2016	Developing EPI advocacy, communication and social mobilization strategic plan	Establish a National Communication Committee including members from community, Partners, etc
		Hold regular media briefings/ meetings, develop, print and distribute relevant IEC materials including multimedia mix Develop a national and sitrict communication plan
	Advocacy meetings	Conduct advocacy meeting with community council delegates to share the agenda of MOHSW, Conduct sensitization of Community councils on immunizations
		Develop concept note on Immunization issues and messages for parliamentarians and Community Councils
		Build the capacity of district teams to support regular meeting with health centre committees including community health workers

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**Table 5C: Surveillance**

<b>National Objective</b>	<b>Strategy</b>	<b>Key Activities</b>
To attain and sustain at least 80% of surveillance indicators for target diseases by 2016	Adapt of AFRO surveillance guidelines	Review, print and distribute guidelines to all health facilities
	Capacity building	Train and refresh health workers on surveillance
		Conduct routine active surveillance for AFP and measles
	Introducing community surveillance	Conduct sensitization sessions with community health workers, community leaders including community counsellor
To introduce AEFI surveillance in all health facilities by 2016 ( include in the situation analysis and objectives)	Capacity building	Adapt case definition guidelines and AEFI reporting forms
		distribute AEFI tools and guidelines
		Conduct training on AEFI
		Support districts to sensitize communities on disease surveillance
To achieve at least 85% timeliness and completeness of surveillance reporting at national by 2016	Capacity building	Conduct data management training
		Distribute data monitoring tools
		Conduct supportive supervision
		Hold data harmonization meetings
		Provide feedback to lower levels
To achieve at least 80% surveillance performance for hib disease by 2016	Capacity building	Train health workers on Hib surveillance
		Provide required equipment to laboratories participating in hib surveillance

**Table 5D: Vaccine supply, quality and logistics**

<b>National Objective</b>	<b>Strategy</b>	<b>Key Activities</b>
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<p>1. To introduce vaccine management guidelines and vaccine stock management tools in all health facilities by 2012</p> <p>. To introduce/establish vaccine wastage rates at all district by 2016</p>	<p>Capacity building</p> <p>Monitoring vaccine wastage</p>	<p>Draft vaccine management guidelines</p> <p>Build capacity on data management, analysis and utilization at district and health facility level</p> <p>Produce and disseminate guidelines on vaccine management</p> <p>Implement guidelines and tools on vaccine stock management tools in all health facilities</p> <p>Establish and use vaccine wastage monitoring at all district</p>
<p>To ensure that there are no stock outs of vaccines at all levels by 2012</p>	<p>Developing guidelines for vaccine stock management</p>	<p>Prepare and follow distribution plan</p>
	<p>Ensuring maintenance of cold chain equipment</p>	<p>Conduct regular vaccine management assessment (3 yearly) in all districts</p> <p>Conduct cold chain assessment and inventory</p>
<p>To ensure that all districts have functional Cold Chain equipment at all times by 2012</p>	<p>Conducting Cold Chain Inventory</p>	<p>Train cold chain Assistants in all districts</p>
	<p>Capacity Building</p>	<p>Prepare and implement maintenance plan for all health facilities</p>
	<p>Developing preventive maintenance policy</p>	<p>Conduct regular cold chain inventory (2 yearly) and replace old equipment</p>
		<p>Conduct supportive supervision</p>
<p>To establish national capacity for regulation of vaccine and quality control by 2013</p>	<p>Policy discussions and consultations</p>	<p>Define the roles of NRA in regard to EPI Programme</p>
		<p>Follow up on the establishment of NRA</p>
<p><b>Waste management</b></p> <p>To achieve 800% districts Adhering to waste management guideline/policy by 2016</p>	<p>Developing waste management plan</p>	<p>Produce and disseminate waste management plan to all health facilities</p>
	<p>Capacity building</p>	<p>Conduct training for health workers on waste management</p>
		<p>Conduct supportive supervision</p>

### Annex 1: Using the GIVS framework as a checklist

GIVS strategies	Key activities	Activity included in MYP			
		Y	N	Not applicable	New activity needed
<b>Strategic Area One: Protecting more people in a changing world</b>					
Strategy 1: Commit and plan to reach everyone	Strengthen human resources and financial planning	√			
	Protect persons outside the infant age group	√			
	Improve data analysis and problem solving	√			
	Sustain high vaccination coverage where it has been achieved	√			
	Include supplemental immunization activities	√			
Strategy 2: Stimulate community demand for immunization	Assess the existing communication gaps in reaching all communities	√			
	Engage community members and non-governmental organizations	√			
	Develop communication and social mobilization plan	√			
	Match the demand	√			
Strategy 3: Reinforce efforts to reach the unreached in every district	Micro-planning at the district or local level to reach the unreached	√			
	Reduce drop-outs	√			
	Strengthen the managerial skills	√			
	Timely funding, logistic support and supplies	√			
Strategy 4: Enhance injection and immunization safety	Procure vaccines from sources that meet internationally recognized quality standards	√			
	Ensure safe storage and transport of biological products under prescribed conditions	√			

GIVS strategies	Key activities	Activity included in MYP			
		Y	N	Not applicable	New activity needed
<b>Strategic Area One: Protecting more people in a changing world</b>					
	Introduce, sustain and monitor safe injection practices	√			
	Establish surveillance and response to adverse events following immunization	√			
Strategy 5: Strengthen and sustain cold chain and logistics	Conducting accurate demand forecasting activities	√			
	Building capacity for stock management	√			
	Effective planning and monitoring of cold chain storage capacity	√			
	Firm management system of transportation and communication equipment				√
Strategy 6: Learn from experience	Regular immunization programme reviews	√			
	Operations research and evaluation	√			
	Model disease and economic burden as well as the impact	√			



GIVS strategies	Key activities	Activity included in MYP?			
		Y	N	Not applicable	New activity needed
<b>Strategic Area Two: Introducing new vaccines and technologies</b>					
Strategy 7: Enhance country capacity to set policies and priorities through informed decision-making	Determine disease burden, as well as the feasibility, cost effectiveness of new vaccines and technologies	√			
	Conduct surveillance, monitor coverage and evaluate the impact of new products	√			
Strategy 8: Ensure effective and sustainable introduction of new vaccines and technologies	Integrate the introduction of each new vaccines into countries' multi-year plans and include a financial analysis	√			
	Information and communication materials	√			
	Surveillance of adverse events	√			
	Surveillance of diseases prevented by new vaccines and strengthen laboratory	√			
Strategy 9: Ensure effective supply of new vaccines and technologies to and within countries	Long-term vaccine demand forecasting	√			
	Long term procurement with adequate financing	√			
Strategy 10: Promote vaccine research and development for diseases of public health importance	Local evidence to influence and prioritize public and private investments in new vaccines and technologies		√		
	Engage local public health authorities and research communities in defining research agendas		√		
	Strengthen the capacity to undertake the research and development of new vaccines		√		

GIVS strategies	Key activities	Activity included in MYP?			
		Y	N	Not applicable	New activity needed
<b>Strategic Area Three: Linking immunization to other interventions</b>					
Strategy 11: Assess and select appropriate interventions for integration	Assess the national and regional public health priorities and potential impact of joint interventions with a priority focus on Child Survival	√			
	Develop and field-test potential joint interventions		√		
	Tailor integrated packages of interventions to local needs	√			
	Monitoring and evaluating the efficiency, effectiveness and impact of combined interventions		√		
Strategy 12: Establish and optimize synergies	Plan joint interventions at national and district levels	√			
	Special emphasis should be placed on outreach and mobile teams	√			
	Monitor and evaluate impacts of combined interventions	√			
Strategy 13: Make synergies sustainable	Establish joint management, financing and monitoring and evaluation functions	√			
	Pool resources needed to cover operational and other cost	√			
	Quality information to secure sustained community support	√			
	Advocate for further synergy and explore additional linkages	√			

GIVS Strategies	Key Activities	Activity included in MYP?			
		Y	N	Not applicable	New activity needed
<b>Strategic Area Four: Immunization in the health systems context</b>					
Strategies 14: Improve human resources management	Provide sufficient, adequately paid and trained human resources	√			
	Supportive supervision	√			
	Inventory of human resources needs, engage non-governmental organizations and private sector in the delivery of immunization	√			
	Motivate health workers	√			
Strategy 15: Strengthen immunization programmes within health sector reform	Document factors of success and failures		√		
	Collective efforts to shape sector-wide policies		√		
	Use the experiences gained in health sector reform		√		
	Preserve the central role of immunization in the context of health sector reform		√		
Strategy 16: Strengthen coverage monitoring and conduct case-based surveillance to guide immunization programs	Expand the existing polio and measles surveillance system	√			
	Build an evidence base of country experience	√			
	Monitoring of district performance at national level	√			
Strategy 17: Strengthen laboratory capacity through the	Expand the existing polio and measles lab. network to include other VPDs	√			

GIVS Strategies	Key Activities	Activity included in MYP?			
Strategic Area Four: Immunization in the health systems context		Y	N	Not applicable	New activity needed
creation of laboratory networks	Provide countries with needed training, equipment and quality control procedures	√			

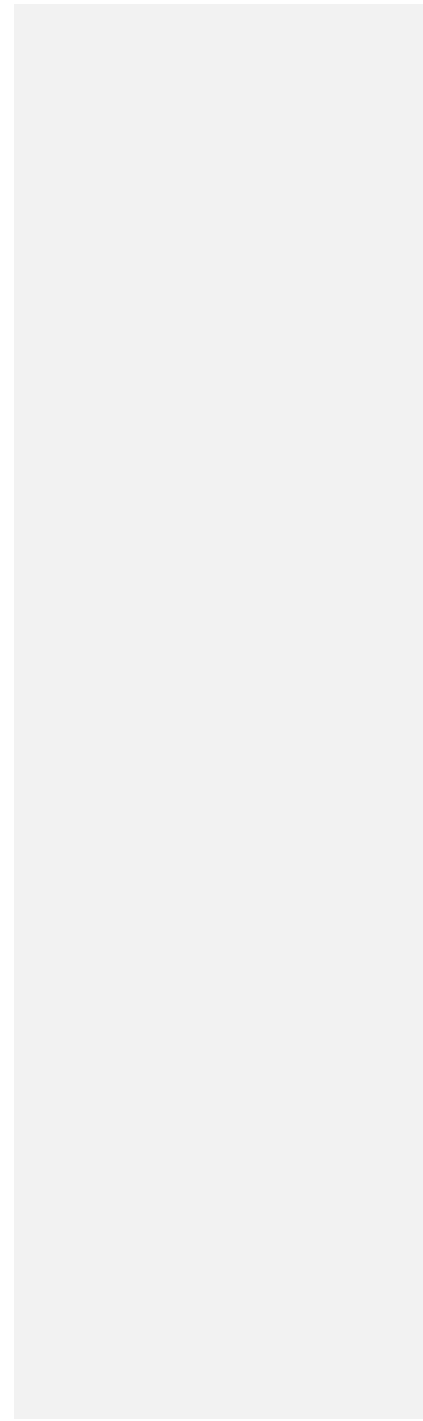
GIVS Strategies	Key Activities	Activity included in MYP?			
		Y	N	Not applicable	New activity needed
<b>Strategic Area Four: Immunization in the health systems context</b>					
Strategy 18: Strengthen data management, analysis, interpretation, use and exchange at all levels	Improve data management through regular training, monitoring and feedback at the local level	√			
	Develop enhanced tools (e.g. computer software) for monitoring vaccine coverage, vaccine and logistics management, disease surveillance	√			
	Regularly review district indicators of performance	√			
	Use surveillance and monitoring data to advocate for improved access to and quality of immunization	√			
Strategy 19: Provide access to immunization in complex humanitarian emergencies	Rapid situation assessment of complex emergencies		√		
	Incorporate immunization services in emergency preparedness plans and activities		√		
	Re-establish immunization services in populations affected by complex emergencies		√		
	Include VPDs in integrated surveillance and monitoring systems set up in complex emergencies		√		

GIVS Strategies	Key activities	Activity included in MYP?			
		Y	N	Not applicable	New activity needed
<b>Strategic Area Five: Immunizing in a context of global interdependence</b>					
Strategy 20: Ensure reliable global supply of high quality, affordable vaccines	Long term forecasting for existing and new vaccines, improving vaccine management skills	√			
	National self reliance in quality assurance and regulatory oversight	√			
	Promote quality and affordable vaccine production by vaccine manufacturers in developing and developed countries				
Strategy 21: Ensure adequate and sustainable financing of national immunization systems	Strengthen national capacity for financial planning	√			
	Commit increased and sustained national budget allocations for vaccines	√			
	Encourage local and district level contribution to health services and immunization programmes	√			
	Coordinate immunization financing through the ICCs	√			
Strategy 22: Define and recognize the roles, responsibilities between partners	Develop and actively participate in regional and national partnership bodies	√			
Strategy 23: Improve communication and enhance information dissemination	Consider communication and social mobilization to be an integral part of immunization planning	√			
Strategy 24: Use vaccines in global epidemic preparedness					

Table 6: Timeline of activities

Component and key activities	Year				
	2012	2013	2014	2015	2016
<b>1. Service Delivery</b>					
Develop district microplans	X	X	X	X	X
Adapt and disseminate RED Guidelines	X				
Identify low performing Districts	X	X			
Conduct initial and refresher trainings of health workers on EPI including disease surveillance	X	X	X	X	X
Re-establish community registers		X			
Orientate community health workers on immunizations and defaulter tracking	X	X	X	X	X
Link implementation of routine immunization services with the communities	X	X	X	X	X
Develop guidelines for ANC clinics to monitor TT vaccination	X	X			
Conduct monitoring to all districts to ensure provision of immunizations on all days of the week	X	X	X	X	X
Re-establish outreach sites	X	X	X	X	X
Conduct regular outreach services in hard to reach areas	X	X	X	X	X
Dialogue with IMCI and Reproductive Health programmes	X	X	X	X	X
Advocate for joint planning at national level	X	X	X	X	X
Conduct supplemental immunization activities		X			X
Follow up with GAVI on pneumococcal containing vaccine	X				
Introduce pneumococcal containing vaccine	X				
Provide HPV vaccine in three districts and advocate for roll out into other districts	X	X	X	X	X
<b>2. Disease Surveillance and Accelerated Disease Control</b>					
Conduct active AFP surveillance	X	X	X	X	X
Conduct routine surveillance for measles, NNT and other priority diseases	X	X	X	X	X
Conduct data management training	X	X	X	X	X
train district health workers on the new data monitoring tools (DVDMT)	X	X	X	X	X
Supportive supervision	X	X	X	X	X
Adapt case definitions, guidelines and reporting forms	X	X	X	X	X
Train health workers on AEFI	X	X	X	X	X
Implement AEFI surveillance	X	X	X	X	X

Strengthen polio laboratory containment activities	X	X	X	X	X
Implement measles follow up campaigns	X				X
Validate MNT elimination	X	X	X	X	X





Component and key activities	Year				
	2012	2013	2014	2015	2016
<b>3. Vaccines and Logistics</b>					
Advocacy meetings with pharmacy dept on NRA	X				
Establish and define roles of NRA	X				
Conduct vaccine management assessment			X		X
Produce guidelines on vaccine/logistics management	X	X	X	X	X
Disseminate guidelines to all levels	X	X	X	X	X
Forecast and order vaccines	X	X	X	X	X
Establish current vaccine wastage rates	X				
Implement vaccine wastage monitoring		X	X	X	X
Conduct regular cold chain inventory			X		X
Mobilise resources and procure new equipment		X			
Designate cold chain technicians	X	X	X	X	X
Prepare maintenance plans for all facilities	X	X	X	X	X
Forecast logistics requirements at all level	X	X	X	X	X
Prepare distribution plan	X	X	X	X	X
procure pneumococcal vaccine	X	X	X	X	X
<b>4. Advocacy, Social Mobilisation and Communication</b>					
Develop a national and district communication plan	X	X			
Disseminate communication plan		X	X	X	X
Communication included in micro plans	X	X	X	X	X
Train health workers on communication	X	X	X	X	X
Dialogue with communities on health centre committees	X	X			
Revitalise health centre committees	X	X			
Review and update existing materials	X		X		X
Print and disseminate IEC materials	X	X		X	X

Component and key activities	Year				
	2012	2013	2014	2015	2016
<b>5. Programme Management</b>					
Identify shortfalls in staffing levels	X	X	X	X	X
Advocate for recruitment of required staff	X	X	X	X	X
Conduct refresher training on RED Approach	X	X	X	X	X
Conduct MLM training and cascade to lower levels	X		X		
Train staff on vaccine and cold chain management	X		X		
Train staff on disease surveillance (incl. laboratory staff)	X		X		
Conduct refresher training of staff on data management	X	X	X	X	X
Roll out DQS to districts	X	X	X	X	X
Conduct quarterly supportive supervision and provide written feedback	X	X	X	X	X
Advocate for provision of additional transport	X	X	X	X	X
Introduce Pneumococcal vaccine		X			
Strengthen laboratory capacity for surveillance of new vaccines	X	X	X	X	X
Conduct surveillance for new vaccines	X	X	X	X	X
Increase government annual contribution to routine vaccine costs	X	X	X	X	X
Recruit additional members of the ICC	X	X	X	X	X
Hold quarterly ICC meetings	X	X	X	X	X
Mobilise resources for RED	X	X	X	X	X
Mobilise resources from local business houses for EPI	X	X	X	X	X
Apply for HSS support from GAVI	X				

### 3 COSTING AND FINANCING OF MULTI-YEAR PLAN 2012-2016

#### 5.1 Costing and Financing Methodology

The costing of this Comprehensive Multi Year plan for Lesotho is based on the priorities set out in the programmatic section of the plan (section 3). Based on the findings of the recent PIE in December 2010, a situational analysis was conducted identifying the strengths and weaknesses of the programme, leading to the setting of national objective and priorities for the next five years. A new health sector strategic plan is the planning process. Therefore, national objectives and priorities are still linked with those of the old plan, which expires in 2011. The costing was conducted using the standard cMYP costing tool version 2.5. The Financial Sustainability Plan (FSP) of Lesotho produced in December 2004 was reviewed and used as the main reference document. The FSP has also been used to fill data gaps where they exist in completing the cMYP costing model. The cMYP planning team found it difficult to obtain up-to-date macroeconomic data. Therefore, the basic macroeconomic data used in the plan came from different sources such as National Health Accounts websites. Some national documents such as Poverty Reduction Strategy Paper (PRSP), Medium-Term Expenditure Framework (MTEF), and Demographic and Health Survey (DHS) were also used as references.

The FSP was extensively used to provide baseline data on expenditure on cold chain, transport and personnel. Coverage and wastage targets for 2012-2016 came from Annual progress report WHO-UNICEF Joint Reporting Forms (JRF) and estimates given by the EPI Manager. The team also took advantage of the knowledge of the EPI structure by the EPI Manager filling information gaps on coverage and wastage targets, vaccine management, cold chain, logistics and distribution, SIAs management and in some cases prices and costs. Since EPI is one of several health services provided at the health facilities, and the fact that EPI does not add any incremental cost to the building use, no emphasis was placed in getting accurate data for shared building costs.

Standard programme inputs such as vaccines, injection materials and cold chain equipment were costed using UNICEF prices. This is because; virtually all the EPI supplies in Lesotho are purchased through UNICEF supply division. Operational costs for routine and supplementary immunization activities were based on past expenditure. SIAs costs for measles in 2013 are based on information provided on previous measles SIAs in 2010. The staff cost was based on the integrated government pay scale available in the 2010 National budget and the allowances were obtained from a circular issued by government to partners on recommended rates of allowances for treks and day-trips such as outreach services.

Although the FSP served as the main source of data for this exercise, the difference in costs between FSP and cMYP could be explained by changes in priorities and prices. The financing information on EPI was obtained from past expenditures on EPI by UNICEF, WHO, JICA, MTEF and the government of Lesotho.

The future costing and financing for the EPI programme (2012-2016) are in line with the National Health Strategic Plan and the PRSP of Lesotho and are aligned with the budgeting cycle which runs from 1<sup>st</sup> April to 31<sup>st</sup> March the following year. The MTEF for Lesotho expired in 2008, and plans are on course for development of the next one. MTEF provides a sectoral framework into which costing and financing estimates are elaborated on a three year roll-on basis. The MOHSW has been identified as one of the institutions for piloting the MTEF.

The future cMYP costing is based on the following assumptions:

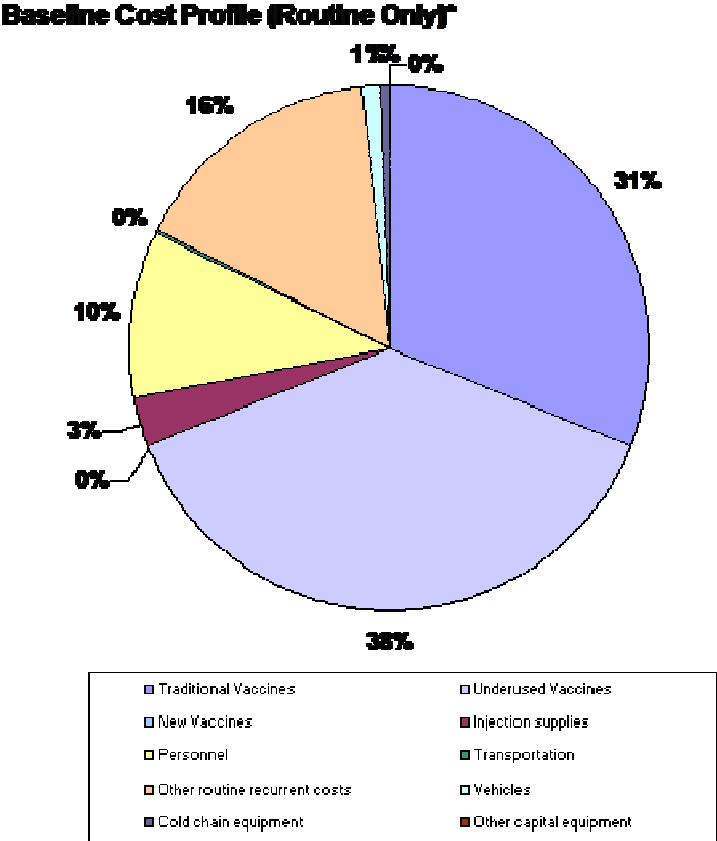
- Increase coverage for traditional and under-used vaccines
- Reduce vaccine wastage rates and dropouts
- Introduction of Pneumococcal vaccine in 2012

### **Cost profile**

The Government of Lesotho through the Ministry of Health and Social Welfare (MOHSW) has long recognised the effectiveness of EPI expenditure as a preventative intervention. Although EPI is a very small component of the total health expenditure, it has benefited from uninterrupted support from both within and outside the government since 1979. However, in the light of the high demand on their limited resources, the Government of Lesotho is heavily dependent on donor support for most of their expenditure including health expenditure. Nonetheless, almost all the recurrent personnel are paid from the government coffers. This includes payment of salaries, transport, and cold chain maintenance. Government also pay the salaries of the staff and related cost of the second biggest health care provider in Lesotho, Christian Health Association of Lesotho (CHAL).

The cost profile of the EPI programme in 2010 showed that the total expenditure on immunization was \$943,706. All these costs were with respect to routine immunization and this excludes integrated measles campaign which took place in the year. The major cost drivers of the routine immunization component of the programme were new vaccines (38%), traditional vaccines (31%) and other routine recurrent costs (16%) such as , social mobilisation, and personnel. The 2010 costs translated into \$0.5 per capita and \$25 per DPT fully immunised child. The detail breakdown of the cost showed that around 15% of the cost was used to purchase injection supplies and for personnel costs. The cost profile is presented in Figure 5.1 and Table 5.1.

Figure 5. 1 Baseline Cost (Routine Only)

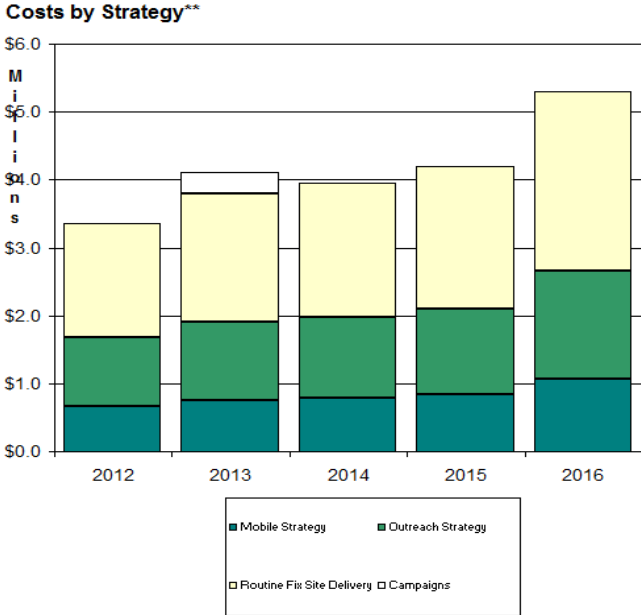


**Table 5. 1 Programme Cost Resource requirement for 2012-2016**

Baseline Indicators	2010
Total Immunization Expenditures	\$943,706
Campaign	
Routine Immunization only	\$943,706
per capita	\$0.5
per DTP3 child	\$24.7
% Vaccines and supplies	71.9%
% Government funding	59.1%
% Total health expenditures	1.0%
% Gov. health expenditures	1.7%
% GDP	0.07%
Total Shared Costs	
% Shared health systems cost	
TOTAL	\$943,706

The types of immunization strategies in Lesotho are Routine fixed, mobile and outreach. The detail costs of the three strategies from 2012-2016 are indicated in Figure 5.2.

**Figure 5. 2 Costs by Strategy**



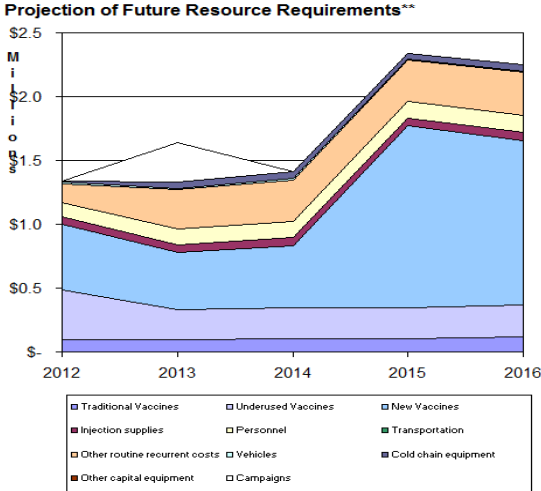
The Government of Lesotho will strive to achieve the Global Immunization Vision and Strategy (GIVS) targets as set out by GAVI. Therefore, the future resource requirement of the immunization programme is based on current objectives of the programme, elaborated in programmatic section of the plan. The resource requirements for this new cMYP are likely to rise above the baseline level but following similar trends. Based on the assumptions, approximately \$8.4 million (excluding shared personnel costs) will be required to cover the routine vaccination needs of the programme for the planning period 2012-2016. This translates into approximately \$1.7 million per annum. The details of these costs can be found in Table 5.2 and Figure 5.3.



**Table 5.2 Resource Requirements, Financing and Gaps**

	Costs	Future Cost Projections					Total 2012 - 2016
	2010	2012	2013	2014	2015	2016	
	US\$	US\$	US\$	US\$	US\$	US\$	
Vaccines (routine vaccines only)	\$649,727	\$999,930	\$781,977	\$831,789	\$1,771,333	\$1,654,330	\$6,039,359
Traditional	\$293,508	\$93,423	\$97,486	\$103,709	\$104,049	\$114,523	\$513,190
Underused	\$356,219	\$388,489	\$230,508	\$241,764	\$238,168	\$251,239	\$1,350,169
New	\$0	\$518,018	\$453,983	\$486,316	\$1,429,115	\$1,288,568	\$4,176,000
Injection supplies	\$28,329	\$56,562	\$59,381	\$62,614	\$62,232	\$66,816	\$307,605
Personnel	\$98,424	\$109,781	\$121,552	\$123,983	\$126,463	\$128,992	\$610,770
Salaries of full-time NIP health workers (immunization specific)		\$50,424	\$54,701	\$59,128	\$60,311	\$61,517	\$62,747
Per-diems for outreach vaccinators/mobile teams	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Per-diems for supervision and monitoring	\$48,000	\$55,080	\$62,424	\$63,672	\$64,946	\$66,245	\$312,367
Transportation	\$946	\$1,040	\$1,144	\$2,517	\$1,384	\$1,523	\$7,609
Fix site strategy (incl. vaccine distribution)	\$525	\$578	\$636	\$1,398	\$769	\$846	\$4,227
Outreach strategy	\$315	\$347	\$381	\$839	\$461	\$508	\$2,536
Mobile strategy	\$105	\$116	\$127	\$280	\$154	\$169	\$845
Maintenance and overhead	\$7,213	\$7,357	\$158,141	\$167,859	\$170,096	\$180,318	\$683,771
Cold chain maintenance and overheads	\$7,213	\$7,357	\$158,141	\$167,859	\$170,096	\$180,318	\$683,771
Maintenance of other capital equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Building overheads (electricity, water...)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Short-term training	\$22,161	\$22,310	\$22,938	\$23,584	\$23,382	\$24,041	\$116,256
IEC/social mobilization	\$27,701	\$27,888	\$28,673	\$29,480	\$29,228	\$30,051	\$145,320
Disease surveillance	\$44,322	\$44,620	\$45,877	\$47,168	\$46,765	\$48,082	\$232,511
Programme management	\$49,862	\$50,198	\$51,611	\$53,065	\$52,610	\$54,092	\$261,575
Other routine recurrent costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Subtotal</b>	<b>\$928,684</b>	<b>\$1,319,684</b>	<b>\$1,271,294</b>	<b>\$1,342,060</b>	<b>\$2,283,494</b>	<b>\$2,188,245</b>	<b>\$8,404,777</b>

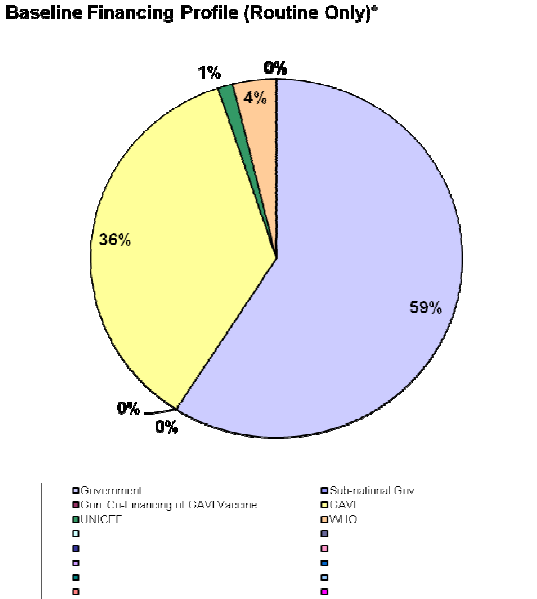
**Figure 5.3 Projection of Future Resource Requirements**



The introduction of pneumococcal vaccine in Lesotho will commence in 2012. The effect of the introduction of pneumococcal vaccine was assessed compared to maintaining the status quo and the details of the findings are presented in Tables 5.2.

The baseline financing indicators have shown government finance around 59% of the immunization costs followed by GAVI at 36....%. The remaining percentage was shared between UNICEF (1%), and WHO (4%) The details are illustrated in Figure 5.4. The bulk of the government expenditure goes towards maintaining staff, conducting the limited outreach services in a very difficult terrain, supports the staff of health organisations such as CHAL, and maintain the cold chain with less emphasis on other programmatic activities. To fill the gap, most of the expenditures by partners were targeted to such specific programmatic interventions. For instance, WHO will mostly pay for expenses related to surveillance, UNICEF for training and social mobilisation,

**Figure 5. 4 Baseline Financing Profile**

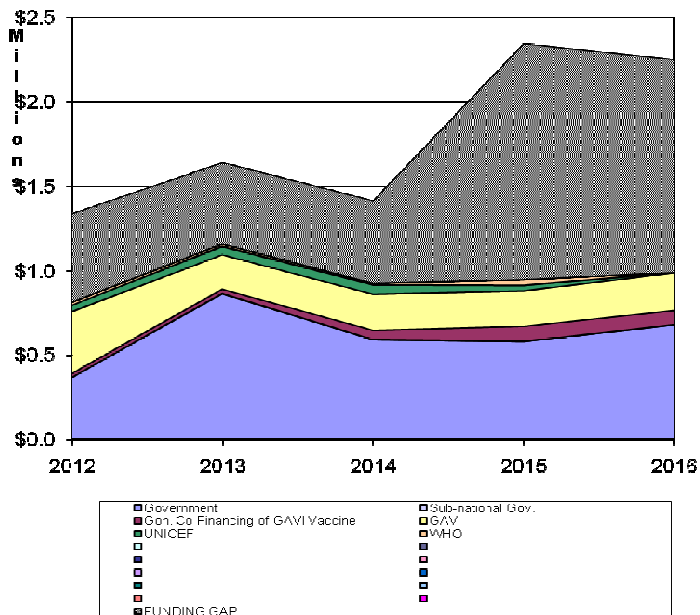


## 5.2 Projected financing from all sources

By considering only secured funding (Figure 5.5 46% (4,1 million) of the resource requirement of the plan over the five-year period is either probable or unmet. That translates into an average of \$821,331 shortfall per annum over five years.

Figure 5. 5

Future Secure Financing and Gaps\*\*

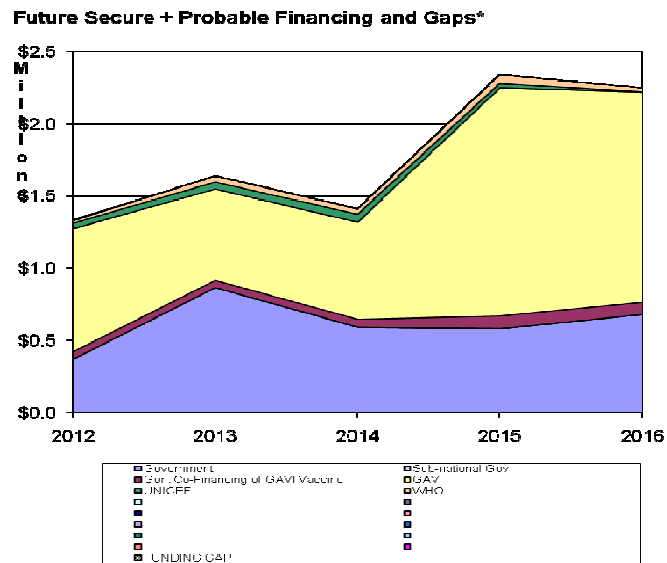


The two highest funding gaps occurred in 2015 and 2016 at 60% and 56% respectively. This could be explained by explained by the introduction of Pneumococcal vaccine in 2012 and another measles SIA scheduled for 2013. The GAVI funding for the proposed introduction of pneumococcal is regarded as probable. When both secure and probable are taken into account, the funding gap reduced to 0%. See Figure 5.6 and Table 5.3). The

funding from GAVI for the pneumococcal vaccine was considered probable and would only become secure when the government of Lesotho take the final decision to introduce the vaccine.. WHO has indicated their willingness to continue their support for surveillance, monitoring, and supervision activities for the duration of the plan. UNICEF has indicated their willingness to continue their support for social mobilization and training.

It is noteworthy that the support from these two important partners to the EPI programme also depends on the availability of funds from their donors, which justified the classification of some of their potential support into both secured and probable categories. The details of the secured and probable funding could be found in Table 5.3 and those for the funding gaps in Table 5.4.

**Figure 5.6**



**Table 5.3 Lesotho cMYP Funding Gaps and Selected Indicators (Immunization Specific Costs) table revised 20 4 2011**

<b>Resource Requirements, Financing and Gaps*</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Avg. 2012 - 2016</b>
<b>Total Resource Requirements</b>	<b>\$1,335,007</b>	<b>\$1,638,622</b>	<b>\$1,410,802</b>	<b>\$2,340,591</b>	<b>\$2,247,798</b>	<b>\$8,972,819</b>
<b>Total Resource Requirements (Routine only)</b>	<b>\$1,335,007</b>	<b>\$1,328,176</b>	<b>\$1,410,802</b>	<b>\$2,340,591</b>	<b>\$2,247,798</b>	<b>\$8,662,373</b>
per capita	\$0.7	\$0.7	\$0.7	\$1.2	\$1.1	\$0.9
per DTP targeted child	\$33.4	\$32.1	\$32.6	\$54.3	\$50.0	\$40.7
<b>Total Secured Financing</b>	<b>\$840,447</b>	<b>\$1,186,946</b>	<b>\$932,937</b>	<b>\$925,367</b>	<b>\$980,464</b>	<b>\$4,866,161</b>
Government	\$367,277	\$864,181	\$590,749	\$580,303	\$679,142	\$3,081,652
Sub-national Gov. Gon. Co-Financing of GAVI	\$55,076	\$60,128	\$73,293	\$83,347	\$100,302	\$372,146
Vaccine	\$363,014	\$200,213	\$205,223	\$196,771	\$201,020	\$1,166,242
GAVI	\$38,000	\$48,441	\$55,522	\$32,473		\$174,436
UNICEF	\$17,080	\$13,983	\$8,150	\$32,473		\$71,686
WHO						
<b>Funding Gap (with secured funds only)</b>	<b>\$494,560</b>	<b>\$451,676</b>	<b>\$477,865</b>	<b>\$1,415,223</b>	<b>\$1,267,334</b>	<b>\$4,106,658</b>
% of Total Needs	37%	28%	34%	60%	56%	46%
<b>Total Probable Financing</b>	<b>\$488,417</b>	<b>\$451,676</b>	<b>\$477,865</b>	<b>\$1,415,224</b>	<b>\$1,267,334</b>	<b>\$4,100,516</b>
Government						
Sub-national Gov. Gon. Co-Financing of GAVI						
Vaccine						

GAVI	\$488,417	\$424,150	\$449,564	\$1,387,165	\$1,238,485	\$3,987,781
UNICEF		\$27,526	\$28,301	\$28,059	\$28,849	\$112,735
WHO						
<b>Funding Gap (with secured &amp; probable funds)</b>	<b>\$6,143</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,142</b>
% of Total Needs	0%	0%	0%	0%	0%	0%

**Table 5.4 Lesotho - Composition of the Funding Gap with secure (Immuzition Specific Only)**

Composition of the funding gap	2012	2013	2014	2015	2016	Avg. 2012 - 2016
Vaccines and injection equipment	\$488,417	\$424,150	\$449,564	\$1,387,165	\$1,238,485	\$3,987,781
Personnel		\$0	\$0		\$0	
Transport						
Activities and other recurrent costs		\$27,526	\$28,301	\$28,059	\$28,849	\$112,735
Logistics (Vehicles, cold chain and other equipment)	\$6,143					\$6,142
Campaigns						
<b>Total Funding Gap*</b>	<b>\$494,560</b>	<b>\$451,676</b>	<b>\$477,865</b>	<b>\$1,415,223</b>	<b>\$1,267,334</b>	<b>\$4,106,658</b>

\* Immunization specific resource requirements, financing and gaps. Shared costs are not included.

### 5.3 Financial sustainability strategies, actions, and indicators

In terms of financial sustainability, efforts have been made to allocate most of the gaps leaving us with a minimal gap. The amount of resources needed for the planning period represents between 1.2% and 1.7% of the total health expenditure. Considering only government health expenditure, the need for EPI will represent between 2.1% and 2.7%.

### 5.4 Opportunities

Opportunities for funding exist at international and national levels. There has been relatively strong international donor support for routine and supplementary immunization activities in Lesotho through multilateral agencies such as GAVI, WHO and UNICEF and other health partners. Donors have in the past offered substantial resources for supplementary immunization activities (SIAs), reflecting their high level of confidence in the programme.

EPI programme receives significant recognition from policymakers, donors and religious bodies such as CHAL. The Government has demonstrated commitment to health through their annual expenditure on health that stands at 56%. This commitment to health and EPI dated back to 1979. This is fairly a higher proportion considering the economic status of the country.

There is an on-going organisational reforms at the MOHSW aims at will streamlining service delivery and bring basic health services closer to the population. The District Health Management Teams (DHMTs) concept has been designed to bring immunization services closer to the beneficiaries. Through DHMTs, it is hoped that the health boundaries will be delineated and in the process increase EPI coverage, control dropouts and monitor service delivery with less cost.

The 2004 FSP also outline preparedness of the Government to take up total financing of vaccines in the future



The physical health infrastructure in Lesotho could be generally regarded as good in most parts of the country and there is ongoing renovations of health centres supported by MCA. This accords EPI the opportunity for provision of immunization services in more fixed sites, to a larger proportion of the population, and plan outreach services closer to the target communities. Cold chain assessment and inventory is planned to be conducted to inform replacement of cold chain equipment.

### **5.5 Threats**

Despite the opportunities in Lesotho for improved EPI financing and efficient service delivery, there exists some threats the government of Lesotho need to overcome for better mobilisation of resources for immunization. The successful implementation of the cMYP depends on how the government and the EPI get around these threats. The recent proliferation of Global Health Initiatives that target specific interventions outside of immunization limits government's ability to secure budgetary support from many traditional donors that will otherwise prefer to channel their funds through these initiatives.

At the national level, the population of Lesotho remains relatively poor, as shown by the low GDP per capita of just \$650. This provides limited ability to mobilise resources domestically. There are a number of cost-effective health and other social interventions competing with immunization for the limited government resources. This is against the backdrop of low total government health expenditure with the attendant negative consequences on immunization financing.

Human resource gaps exist at all levels of the health care delivery system from the central to the implementation level. This situation has been worsened by the high attrition of qualified health workers thereby reducing the absorptive capacity of funds for the programme. Lack of adequate numbers of staff with requisite capacity at the peripheral level places undue pressure on the central level to effectively utilise donor funds. The health decentralisation process can only be effective when some of these key staff is in place.

Most of the units that are supposed to work together within the same health sector work with limited coordination. This leads to wastage of scarce resources through duplication of efforts that could otherwise be combined. There are many opportunities that one could take advantage of in terms of synchronising interventions and gain the most needed synergy as a result.

The mountainous terrain of Lesotho made access to certain areas almost impossible by road thereby leading to high implementation costs. The only means of accessing such places is by using the expensive means of airplanes i.e. Lesotho Flying Doctors (LFDs). This left the outreach services as the single most expensive activity of the programme.

There is a problem of proper financial management at the EPI unit to an extent that, no proper account of funds are easily available. This weak financial management system could erode donor confidence in supporting the programme.

### **5.6 Alternative policy scenarios for financial sustainability**

By working within the financing realities in the country, the Government of Lesotho will explore all possible options to provide the best possible immunization services to the population. The government will consider the programmatic implications, the impact on disease burden and poverty reduction, and the impact towards the achievement of Millennium Development Goal (MDG) 4 of the various options of financial sustainability.

### **5.7 Strategies and actions for financial sustainability**

Within the framework of these opportunities and threats, the strategies recommended are not different from those in the FSP. The three main strategies of the Government of Lesotho to improve the financial sustainability of the programme include:

- (i) Mobilising additional resources for the programme,
- (ii) Improving resource reliability, and
- (iii) Improving programme efficiency.

#### **Mobilising additional resources**

In order to fill the financing gaps, the MOHSW shall seek additional resources from Government by increasing EPI funding directly and through MTEF. Negotiations on increased financing can then be efficiently done, particularly concerning government of Lesotho financing for vaccine purchases.

The EPI shall seek partners to turn in the probable funding to secured ones. There shall be targeted resource mobilisation from specific partners, based on the respective cost category for which funds are required. For example, the funding gaps relating to cold chain shall be discussed with UNICEF, while funding gaps for SIAs shall be taken up with the multilateral partners through which most of the funds are usually channelled. The programme shall engage the traditional SIA partners such as Rotary International, Measles Partnership, UNICEF and WHO for funds at least 1 year prior to the planned measles SIAs in 2013. That will transform the probable funds to secured ones.

The cMYP shall be presented to various partners, including those currently not active in health, and/or EPI. The publicity and advocacy of the programme shall be increased among these potential sponsors with the programme's achievements and financial situation elaborated. This shall ensure that a wider group of partners is aware of the cMYP objectives, strategies, costs and financing gaps for them to make an informed decision on support.

Government shall ensure they continue their support for traditional vaccines. The present support from GAVI guarantees supplies up to the end of 2013 for pentavalent and 2016 for pneumococcal. Additional partners shall be sensitised to support vaccine supplies for 2012-2016. For the pneumococcal vaccine, the application to GAVI shall be completed and submitted once the government takes the final decision to introduce new vaccine in 2012.

Finally, the programme, previously relied on support from WHO and UNICEF for provision of vehicles. It intends to ensure each DHMT has an EPI supported vehicle.

### **5.8 Improving reliability of resources**

The EPI programme gets planned funds from the Government of Lesotho on an annual basis. Therefore, the programme is comfortable with the reliability of its allocated resources from the central government. However, the main challenge it faces is funds from partners, which cannot be committed longer than the lives of their respective plans. Irish Aid, a traditional EPI donor has indicated its intention to re-direct future support to the health sector as a whole. The programme shall seek additional resources, but also seek to have its resources available in a more reliable manner. At present, the programme is only aware of most of its financing for less than 1 year's equivalent of activities. This reliance on ad hoc operational activities dependent on the availability of funds makes long term planning problematic.

One first step towards achieving reliability of funding is to ensure that the budgetary requirements for EPI are included in the new MTEF estimates. A number of partners shall be channelling the bulk of their resources through MTEF. As such, the programme's costing and financing shall be better integrated into the Government of Lesotho financing plan.

The programme shall seek to improve accounting and reporting mechanisms to ensure that partners and Government of Lesotho are always aware of how the resources directed to EPI are utilised. This will lead to transparency and improved donor confidence.

The MOHSW shall endeavour to devolve the financing of health and EPI activities to the peripheral levels (DHTMs) so that available funds reach the intended beneficiaries in the most efficient manner.

The cMYP will be discussed at the Inter-Agency Coordinating Committee (ICC) as well as with individual donors to improve the awareness of the programme and its financing situation in the medium term, thereby giving partners better time to plan their resource commitments in the future.

### **5.9 Improving programme efficiency**

There are a number of areas where the programme shall work to ensure efficiency. Regarding the human resources, the EPI unit at the central level needs to be strengthened with additional personnel as recommended in the cMYP. The unit shall work with the MOHSW to explore better ways to ensure staff retention and motivation.

The EPI programme shall seek to ensure efficient utilisation of its resources with the best possible outcomes. There are a number of issues that lead to inefficiencies within the MOHSW in general and EPI in particular. Low numbers and skills of health workers is a health sector-wide problem, which leads to poor resource management. Inadequately trained personnel coupled with brain drain are key weaknesses that hamper the implementation of health programmes. Therefore, providing staff that could efficiently deliver services is key to the success of the implementation of the cMYP.

High vaccine wastage and poor maintenance of equipment also lead to poor utilisation of limited resources. Therefore, putting in place strategies to work towards limiting these inefficiencies shall free such resources and be a strong advocacy tool to attract additional resources. The present wastage rates shall be reduced through better needs assessment and cold chain improvement.

The EPI programme and the MOHSW shall seek to strengthen the monitoring and evaluation capacity of the programme. At present, monitoring information especially for vaccine receipts, utilisation and wastage are not accurately recorded in a manner that can guide management decision. This shall be done at the central level and replicated at the DHMTs.

Finally, the programme shall seek to rationalise travels for outreach services so that the enormous resources used for such methods of immunization service delivery could be minimised.

#### **5.10 Implementation and follow-up of financial sustainability strategies**

This section looks at the plan of action for the implementation of the financial sustainability activities outlined in the preceding section. The activities, responsible persons and monitoring indicators for the different strategies of achieving financial sustainability are outlined in the Table 5.4. The responsibility for monitoring the implementation rests with ICC. A technical sub-working group formed by the ICC shall follow up on a regular basis, the implementation of the plan. This shall include representation from the EPI (EPI Manager, Surveillance Officer and Logistician), Health Planning Directorate, WHO, UNICEF and Ministry of Finance. Depending on the need and discretion of ICC, an additional member could be co-opted into the group. This group shall select a focal point to oversee the implementation of the plan and coordinate the membership.

A detailed Plan of Action (POA) guiding the work of the team shall be drawn. A report shall be submitted to the Permanent Secretary, MOHSW on quarterly basis. The ICC shall review and monitor progress every quarter and plans for the following quarter. The working group shall meet on a quarterly basis to review progress on expected activities and then report to the ICC.

On an annual basis, the ICC and other stakeholders shall meet to review progress on financial sustainability indicators and plan the financial sustainability strategies and actions for the following year. Outputs from this annual meeting shall form the basis for reporting to the Ministry of Finance. Report shall also be submitted to GAVI on the progress made on financial sustainability as part of the Annual Progress Report.

**Table 7: Activities and indicators for follow up of financial sustainability strategies**

Target	Activity for which resources needed	Person for follow up	Indicators for follow up			
			Indicator	Freq of follow up	Value	
					Baseline	Target
Mobilise additional resources for EPI	Increase from the current level the GOL support to EPI	MOHSW planning Dept/EPI	% of government expenditure on health	Annually	--	8%
			EPI expenditure as proportion of total health expenditure	Annually		8%
	Target additional support for EPI from MTEF	HPD/EPI	EPI recurrent expenditure as a proportion of GOL recurrent expenditure	Annually		8%
		HPD	% of EPI funds funded from MTEF	Annually	62%	80
	Conduct target resource mobilisation from partners for specific EPI needs	UNICEF/WHO	Number of non-traditional EPI partners that are presented the cMYP	Quarterly	-	100%
Present the contents of the cMYP to traditional and non-traditional partners and in the process use it as an advocacy tool for resource mobilisation	ICC	Number of fora utilised to present the cMYP	Bi-Annually	0	20%	
Improve Reliability of resources	Negotiations with specific partners such as WHO, UNICEF and JICA for funding pledges beyond one year	EPI Manager/Family Health Division (FHD)	Number of traditional partners that gave funding commitment beyond one year	Quarterly		50%
	Include the EPI in the MTEF process	HPD/FHD	EPI needs included in the MTEF	Quarterly		By 2012
	Seek supplementary immunization activity support	EPI/WHO/ UNICEF	Proportion of funds mobilised for SIAs	2013	0%	50%
Programme efficiency ensured	Improve the capacity of the health and EPI staff for efficient delivery of service	MoH/EPI	% of EPI staff trained in various aspects of EPI programme delivery	Quarterly		75%
	Reduce vaccine wastage	EPI				
	Improve monitoring and evaluation of the programme	EPI/HPD	Number of districtss with monitoring and evaluation in place	Quarterly		100%
	Update cMYP	EPI Manager	Annual update of cMYP annual plan	Continuous		Annually

**Table 6. 1 Annual work plan for 2012 30 May 2011**

Activity	Indicator	Time Frame	Responsible	Budget	Source of Funds		
					Govt	Partners	Gap
<b>1. Service Delivery</b>							
Advocate for ICC endorsement of RED	ICC endorsement of RED secured	Jan-Marc	FHD/EPI	0			0
Adapt and disseminate RED Guidelines	Adapted RED guidelines in place	Apr-June	EPI	15,000			5,000
Identify low performing districts and provide technical support	Low performing HSAs identified	Jan-Marc	EPI/FHD	0			0
Conduct workshop on RED	RED workshop conducted	Apr-June	EPI	60,000			0
Dialogue with MOH, Bureau of Statistics and HMIS	No. of meetings	Apr-June	EPI/FHD	0			0
Plan for RED implementation in collaboration with communities	No. of health facilities with RED micro plans	Apr-June	EPI	500,000			0
Provide immunizations on all days of the week	No. facilities providing immunizations on all days of the week	Jan-Dec	HSAs				
Re-establish outreach sites	No. of outreach sites established	Jan-Dec	EPI/HSAs	40,000			5,000
Conduct regular outreach services in hard to reach areas	No. of hard to reach areas covered	Jan-Dec	HSAs	350,000			0
Dialogue with IMCI and Reproductive Health programmes	No. of meetings	Jan-Dec	EPI/FHD				
Advocate for joint planning at national level	Joint planning initiated	Jan-Dec	EPI/FHD	0			
Introduce pneumococcal vaccine	Pneumococcal vaccine introduced	September 2012	EPI/FHD/CHAL	100,000			

<b>2. Disease Surveillance and Accelerated Disease Control</b>							
Conduct routine surveillance for measles, NNT and other diseases (Detection of...)	No. of cases reported and investigated	Jan-Dec	EPI	8,160		8,160	0
Print and distribute EPI recording and reporting tools	No. of facilities with monitoring tools	Jan-Dec	EPI	10,000		0	0
Supportive supervision	No. of supervisory visits	Jan-Dec	EPI	510		510	0
Implement AEFI surveillance(cost of outbreak)	AEFI surveillance in place	2012	EPI	2652		2652	0
Strengthen polio laboratory containment activities	Laboratories compliance with WHO containment standards	Jan-Dec	EPI	4,284		4,284	0
<b>3. Vaccines and Logistics</b>							
Advocacy meetings with MOHSW on NRA	No. of meetings	Jan-Dec	EPI/FHD	0			0
Produce guidelines on vaccine/logistics management and distribute to health facilities	Guidelines prepared	Oct-Dec	EPI	3,000		3,000	0
Introduce computer-based vaccine stock monitoring in three districts	Computer based monitoring established	Jan-Dec	EPI	6,000		6,000	0
Forecast and order vaccines	Vaccine forecasting done and orders placed	Jan-Mar	EPI	33,322	33,322		0

Mobilise resources and procure new cold chain equipment	Resources mobilised and new equipment procured	2008	EPI/FHD	13,755		13,755	0
Prepare maintenance plans for all facilities	No. of facilities with maintenance plans	Jan-Jun	EPI/FHD	500	500		0
Forecast logistics requirements at all levels	Logistics forecasting done	Jan-Dec	EPI/Districts	500	500		0
<b>4. Advocacy and Social Mobilisation</b>							
Meet community leaders	No. of meetings	Jan-Dec	HED/Districts	4,000		4,000	0
Dialogue with communities on health centre committees	No. of meetings	Jan-Dec	HED/Districts	1,000		1,000	0
Revitalise health centre committees	No. of health facilities with active health centre committees	Jan-Dec	HED/Districts	4,160		4,160	0
Involve mass media in EPI activities	No. of media announcements on EPI	Jan-Dec		8,160		8,160	
Review and update existing IEC materials	IEC materials updated	Jan-Dec	HED/EPI	6,000		6,000	0
Develop, pre-test and disseminate IEC materials	IEC materials pre-tested	Jan-Dec	EPI/HED	3,060		3,060	0
<b>5. Programme Management</b>							
Identify shortfalls in staffing levels	Staff inventory done	Jan-Mar	FHD	0			0
Advocate for recruitment of required staff	Advocacy done	Jan-Mar	FHD	0			
Purchase office supplies	Purchased	Jan-Dec		5,100	5,100		



**LIST OF APPENDICES**

- 1. Future financing of the complete Multi-Year Plan for Immunization for Lesotho (In US\$)

