REPUBLIC OF ZIMBABWE

ZIMBABWE EXPANDED PROGRAMME ON IMMUNISATION
COMPREHENSIVE MULTI YEAR PLAN
2015-2019

Revised September 2014

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Ministry of Health and Child Care

Contents

EXECUTIVE SUMMARY

This comprehensive Multi Year Plan (cMYP) which covers the period 2015 to 2019 is the culmination of several developments and updates since 2005 when the country first developed the Zimbabwe Financial Sustainability Plan of 2005 to 2009. The first cMYP covered the period 2007 – 2011. During this period, the country went through severe socio-economic challenges which had a crippling effect on the running of the immunization programme. The programme had made tremendous achievements during the first two decades of independence under the auspices of the Primary Health Care concept which the Government of Zimbabwe adopted in 1980. Universal Childhood Immunization Coverage was achieved by 1990. Morbidity and mortality due to vaccine preventable diseases greatly decreased, indeed the last clinical polio case was seen in 1989. The interval of measles outbreaks which used to occur very frequently increased to at least 5 years as the measles vaccination coverage improved.

The socio-economic challenges which began in the late nineties resulted in severe foreign currency shortage which impacted negatively on the programme. The programme could no longer import vaccines and other supplies directly. There was also high attrition of experienced and skilled personnel. All these challenges resulted in the immunization coverage decreasing and in 2009 - 2010; the country was affected by the worst measles outbreak since the beginning of the second millennium.

The Government of Zimbabwe, through the Ministry of Health and Child Care, in partnership with UN Agencies and other development partners is working towards redressing some of these challenges. The current National Health Strategy, 2008 – 2015, calls for universal immunization against vaccine preventable diseases. There have been several reviews of the immunization programme and the recommendations from these reviews were considered in the development of this cMYP.

The Child Survival Strategy (2009 – 2015) reports that pneumonia and diarrhea are the third and fourth leading causes of morbidity and mortality in under-fives contributing to 9% of childhood diseases. Zimbabwe introduced Hib as DTP-HepB-Hib, Pneumococcal Conjugate and Rotavirus Vaccines in 2008, 2012 and 2014 respectively in an effort to reduce the incidence of pneumonia and rotavirus diarrhoea. Human Papilloma Virus Vaccine (HPV) demonstration project was introduced in Beitbridge and Marondera districts in September 2014. The country plans to introduce Measles second dose as Measles Rubella (MR) through a campaign in June 2015 while the Inactivated Polio Vaccine will also be introduced at the same time as part of the polio end game strategy. All new and underutilized vaccines are introduced with support from GAVI. The country has adequate cold chain capacity to accommodate these new vaccines at all levels.

This comprehensive Multi Year Plan (cMYP) presents the strategic goals, objectives as well as the cost and financing implications of the major initiatives required to improve the health of Zimbabweans through a strong and sustainable immunization programme. In line with the Global Vaccine Action Plan (GVAP), this comprehensive multiyear plan 2015 - 2019 will focus on key six guiding principles:

1. Country ownership.
2. Shared responsibility and partnership.
3. Equity.
4. Integration
5. Sustainability.
6. Innovation

ZEPI requires USD256, 601,071 for the period 2015-2019 for both routine and supplementary immunisation activities (SIAs). Programmatic funding requirements will rise significantly in 2016, (USD59, 393,147) when Human Papilloma Virus (HPV) vaccine will be introduced and in 2018 (USD61, 642,997) when SIAs will be held, and will decline in 2019 onward. Major funding gaps are in 2019, 60%, where all vaccine procurement funding from government is probable while the lowest (9%) funding gap in 2016 is because of the secured funding from the Global Alliance for Vaccines and Immunisation (GAVI) who are expected to fund the introduction of HPV vaccine in terms of New Vaccine Support (NVS), Vaccine Introduction Grant (VIG) as well as operational costs associated with the introduction of the new vaccine. The government of Zimbabwe expects to mobilise additional funds in order to address funding gaps. The

Government's demonstrated commitment to the health service, even during this most difficult period, has encouraged partners to support the program. In addition there is a close interaction with UN Inter-country teams that form the backbone of the Inter Agency Coordination Committee (ICC) on EPI. The Ministry of Health and Child Care has successfully applied for GAVI Health Systems Strengthening support and the first tranche was received in the second half of 2013. Despite the socio-economic challenges being faced, the country has started co-financing for the procurement of new vaccines.

CONTEXT FOR THE COMPREHENSIVE MULTI YEAR PLAN

Background

One out of every eleven Zimbabwean children dies each year before their fifth birthday (approximately 35 500 children per year). The country's under-5 mortality rate has been reduced from 84 per 1,000 live births to 75 per 1000 live births (Multiple Indicator Cluster Survey-MICS 2014); and infant mortality reduced from 58 to 55 per 1000 live births. In order to effectively reduce the childhood mortality trends in the country, a child survival strategy outlining the major target killers, key intervention strategies and actions were developed. The Zimbabwe Expanded Programme on Immunization is one of the key interventions aiming at reducing vaccine preventable diseases such as pneumonia, diarrhea and measles which are the third, fourth and fifth leading causes of mortality in children under five years of age respectively.

Geographic and Demographic Situation

Zimbabwe is a landlocked country in central Southern Africa, with a total land area of 390,757 square kilometers and a population density of 33 people per square kilometre. It shares borders with Zambia, Mozambique, South Africa, Botswana, and Namibia. The country's population for 2014 as projected from the 2012 census is estimated to be 13,323,770, of which 3.28 percent are children under 1 year of age and 14% are children under 5 years of age. According to the Zimbabwe Census Report of 2012, the average life expectancy at birth is 58 years. The healthy life expectancy i.e. an estimate of how many years a person might live in good health, was estimated at 39 years. Females have a lower healthy life expectancy of 38 years compared to 40 years for males. The total fertility rate is estimated at 3.8 (Zimbabwe Census Report 2012) which is a slight decrease from 4.1 (ZDHS 2010/11).

Socio – Economic Context

Delivery of quality Maternal and Child Health (MCH) services and improvement in the health status of women and children not only rest with immediate environmental and health systems, but also with socioeconomic factors including the performance of macroeconomic factors which have a bearing on health access, improvement in education levels, women's empowerment and optimization of public financing mechanisms. Since the late 1990s the country's economy, which is mostly agriculture based, began to decline. In subsequent years the country's real economic growth rates declined to negative values estimated at -12.1 percent in 2003 to the lowest rate of -14.1 percent in January 2009, ranking 215th in the world. The negative economic growth resulted in the highest inflation record in the country's story, massive devaluation of the currency, low productive capacity, job losses, food shortages, poverty, massive de-industrialization and general despondency. The hyperinflation officially ended in February 2009 when the country abandoned the local currency for a multi-currency economy based mainly on the United States dollar and the South African rand. The economic decline has had a profound effect on child survival through a strained health delivery system due to shortage of both human and material resources, failing health delivery infrastructure, community inability to pay for health services and general household level food insecurity.

Between 2010 and 2013, the Government of Zimbabwe (GoZ) launched the Three Year Rolling Macroeconomic and Budget Framework, 2010-12 (STERP II), and implemented a five-year strategic development plan, the Zimbabwe 2011-2015 Medium Term Plan (MTP) aimed at stimulating sustainable economic recovery and growth. To guide national development for the period 2013 to 2018, the GoZ crafted a new economic blue print known as the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZimASSET). ZimASSET was crafted to achieve sustainable development and social

equity anchored on indigenization, empowerment and employment creation which will be largely propelled by the judicious exploitation of the country's human and natural resources. The four strategic clusters identified under ZimASSET are: Food Security and Nutrition; Social Services and Poverty Eradication; Infrastructure and Utilities; and Value Addition and Beneficiation (GoZ, 2013).

Current Challenges to Health Service

- **Health Services Structures**

At national level, maternal and child health (MCH) services are coordinated by officers who have different reporting hierarchies, resulting in a fragmented response to MCH needs, that is EPI reports the Curative Directorate while others report to the Preventive. The freezing of posts in the health sector has resulted in many critical posts remaining vacant and this has negatively impacted on the coordination of programmes such as; IMNCI, Reproductive Health, Nutrition, EPI and Malaria Control programmes within the MOHCC.

- **Human Resources**

From the late 1990s there has been a marked increase in the vacancy rates of health professionals in Zimbabwe. This peaked in 2009 when the economic situation in the country deteriorated significantly. According to the Human Resources Department's report in December 2010, the vacancy levels in the public health sector were 87 percent for nursing among others. Massive health professional migration resulted in the decimation of the experienced cadre, leaving those with skills strained to train new cadres well enough to meet the national demands. This has resulted in the loss of quality cadres capable of working with minimum supervision, and inadequately trained cadres at the point of care. The Primary Care Nurses who staff the rural health centers have limited knowledge and skills in EPI. However, the staffing situation has improved from 2010 levels. The Village Health Workers, who provide basic maternal and child health care, are inadequate in number and receive very minimal allowances which do not motivate them.

- **Health Financing and Budgeting**

The MOHCC was allocated US$285 million for the 2010 budget and US$232 million in 2011. The trend has been for budget disbursements to be below 15% of allocation over the years. While in the past the Government of Zimbabwe funded the majority of health related activities with partners filling in the gaps, in recent past decade funding from donors – including bilateral agencies and the United Nations Family - has been critical in the provision of Health Services in Zimbabwe. However, it is important to note that it is difficult to obtain long term funding commitment from these partners. According to the World Health Report of 2009, Zimbabwe's total health expenditure of 2006 was 9.3% of the gross domestic product. General government expenditure on health was 48.3% of the total expenditure on health, with the remainder 51.3% being private expenditure. The external resources accounted for 17.3% of the total expenditure, a significant increase from 1.6% in 2000.

- **Community Challenges in Accessing Health Services**

There are challenges faced by the community in accessing health services including:

- Distance to the clinic; some mothers are walking 30 km to the nearest clinic.
- Financial barriers such as user fees and transport costs
- Shortages of essential medicines and equipment for high quality care
- Acute shortage of human resources.

Monitoring, Evaluation and Health Management Information Systems

Zimbabwe's public health information system is based on the T (Tally) form system which is the main source document for most health data. Data is tallied and compiled at service delivery and summary report submitted to district level. Data is captured at district level and all admitting hospitals through the web based system which is connected to the main server at national level. The web based DHIS2 system

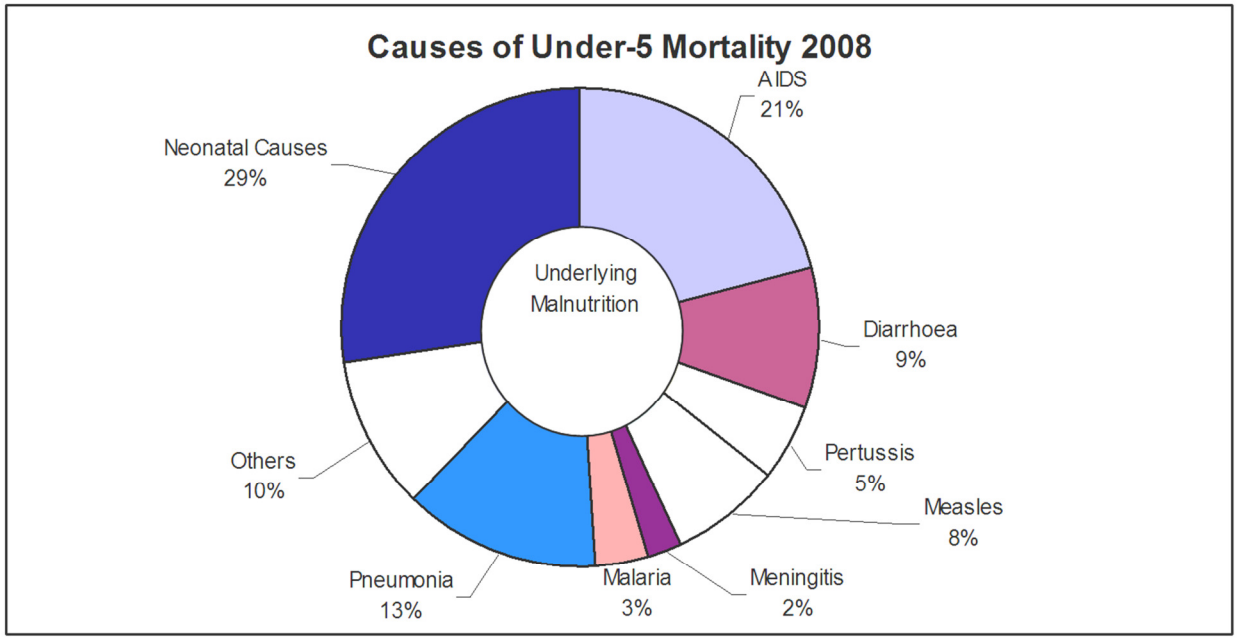
is more efficient than the previous system in that data is now accessible at all levels as soon as it is captured.

SITUATION ANALYSIS

Morbidity and Mortality in Children

According to the Ministry of Health and Child Care's National Health Profile of 2011 nutritional conditions, respiratory conditions, intestinal infections, malaria and HIV related conditions ranked among the top five causes of morbidity in children under-5 years in Zimbabwe. Acute respiratory infections accounted for most outpatient attendances. A significant proportion of children present with pneumonia, often of the severe form. Figure 1 below shows the causes of mortality for children under-5 years in Zimbabwe. Neonatal causes contribute 29% of under-5 deaths. The single leading cause of child mortality in Zimbabwe is HIV and AIDS which contributes 21 percent of deaths. The other major contributions to under-5 mortality are pneumonia, diarrhoea and measles, although HIV and AIDS may also underlie deaths recorded under pneumonia and diarrhoea. Diarrhoea contributes 9% of under-5 mortality. Malnutrition is an underlying factor in most of these deaths. Most of these deaths can be prevented through simple, cost-effective interventions such as immunisation.

Fig 1: Causes of Under-5 Mortality in Zimbabwe



Source: Adapted from the Child Health Epidemiologic Reference Group Lancet Publication May 12, 2010

The Zimbabwe infant mortality rate is estimated at 55 per 1,000 live births. The under-5 mortality rate is estimated at 75 per 1,000 live births (MICS 2014). These figures demonstrate change from the infant mortality rate of 64 per 1 000 live births and 84 per 1 000 live births for under-fives according to the 2012 census. The single leading cause of child mortality in Zimbabwe is HIV and AIDS which contributes 21 percent of deaths. The other major contributions to under-5 mortality are pneumonia, diarrhoea and measles, although HIV and AIDS may also underlie deaths recorded under pneumonia and diarrhoea. Malaria contributes 3% of under-5 mortality. Malnutrition is an underlying factor in most of these deaths.

Service Delivery

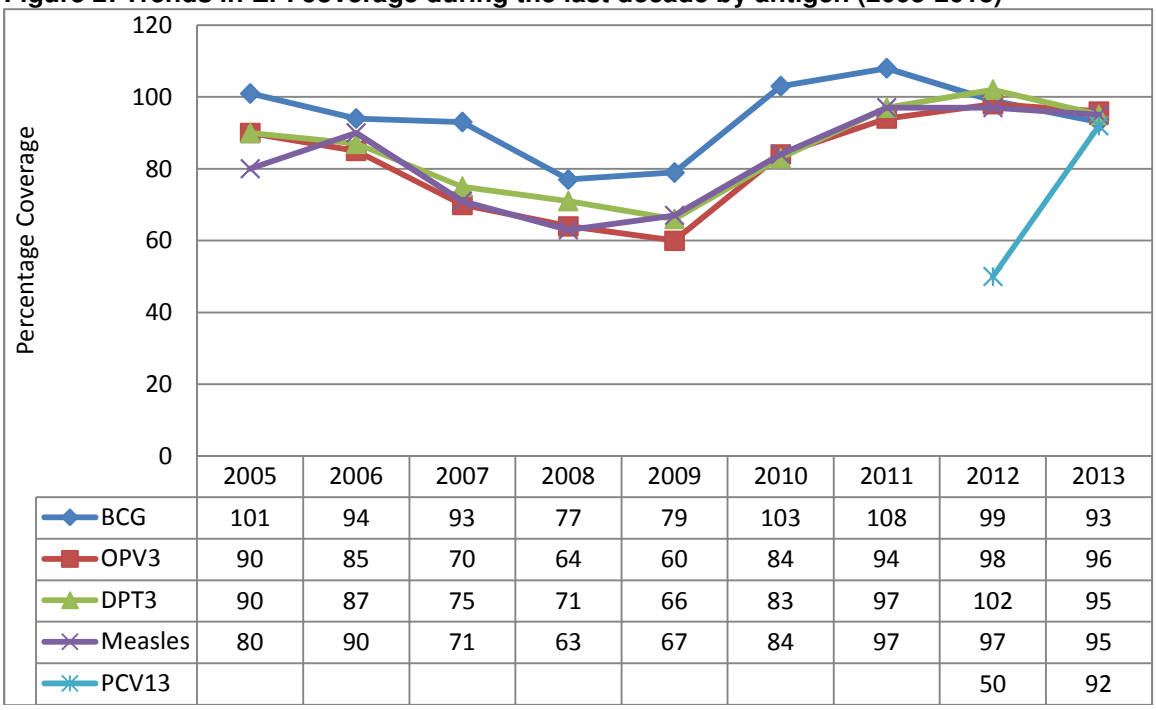
The Government of Zimbabwe, in line with the Primary Health Care strategy of organizing services, aims at ensuring the provision of quality and safe health services that meet the needs of the people through a network of health facilities organized to function on the basis of increasing levels of sophistication.

Patients with more complex health problems are expected to be referred up the referral chain. Each level of care is expected to provide a package of well-defined services provided by appropriately trained health professionals. The public health delivery system consists of four levels of care: primary, secondary, tertiary and central levels.

The primary level incorporates the first point of contact between the people and the formal health sector, the Rural Health Centre or clinic. This is the most peripheral unit of the health delivery system. Rural health centres refer patients to District Hospitals (secondary care facilities). Each district is supposed to have a district hospital and should save a population of approximately 140,000 people. The provincial hospital level provides referral support to district hospitals. There are a limited number of specialists at the provincial and general hospitals. Provincial hospitals refer to Central (Quaternary) Hospitals.

The UNICEF/WHO estimates reported Pentavalent 3 coverage of 95% for the two years 2012 and 2013. Although the country has achieved the regional and global goal of 90% at national level, 11.11% of the districts have not yet attained Pentavalent 3 coverage above 80%.The measles coverage decreased from 97% in 2012 to 95% in 2013. The 2012 high measles coverage may be attributed to the measles campaign that provided more health education to caregivers. The MICS of 2014 reported 69.2% children as fully immunized, an increase from 63% reported in the MIMS 2009/10. Figure 2 below shows the performance trends in the immunization programme 2005 – 2013. The country has trained at least one nurse per facility in Effective Vaccine Management (EVM) and RED strategy between 2012 and 2013. However the training needs to continue as the system keeps on absorbing newly qualified nurses. The EPI Policy Document, Integrated Communication Strategy and Immunisation in Practice modules were reviewed; EPI Policy Implementation Guidelines were developed and all distributed to service delivery level in 2012. Mid-Level Managers need to be trained to enhance their skills in EPI especially in view of the GVAP.

Figure 2: Trends in EPI coverage during the last decade by antigen (2005-2013)



	2005	2006	2007	2008	2009	2010	2011	2012	2013
BCG	101	94	93	77	79	103	108	99	93
OPV3	90	85	70	64	60	84	94	98	96
DPT3	90	87	75	71	66	83	97	102	95
Measles	80	90	71	63	67	84	97	97	95
PCV13								50	92

Source: National Health Information System

Surveillance

Zimbabwe has maintained polio free status since 2005 and has been meeting the non-polio AFP surveillance performance indicators. In 2013, the annualized non polio AFP rate was 4.2 with a stool adequacy rate of 88%. The country met the standard measles surveillance performance indicator of 2 cases per 100,000 population. The country is now in the pre elimination phase for measles and has to meet all the pre elimination targets by 2020. Maternal and neonatal tetanus status was achieved in 2002 and has been maintained ever since. Zimbabwe has sentinel surveillance sites for Hib, PBM, CRS and rotavirus to monitor disease burden and the impact of vaccination. An upward trend has been noted for rubella igm positive cases and as a result the country is planning to introduce Measles Rubella Vaccine starting as a campaign in 2015 and then subsequently continue with the vaccine in routine immunisation. In addition, the country adopted WHO recommendations to introduce Inactivated Polio Vaccine as one of the strategies towards polio end game.

Advocacy and Communication

High level advocacy involving the policy makers in MOHCC and Ministry of Finance and other stakeholders culminated in the country introducing Hib in 2008, Pneumococcal in 2012 and Rotavirus vaccines in 2014. In response to the 2009 – 2010 measles outbreak, consultations were held with the Parliamentary Portfolio on Health, Prime Minister's Office and religious leaders of the population segment that refuses vaccinations (Apostolic Sects). This all culminated into the first ever National Consultative Conference on Child Health with the Apostolic Sects, hosted by the then Prime Minister. This resulted in the Apostolic Sects bringing their children for vaccination during the measles national immunization days' campaign. Dialogue with these sects is continuing in the provinces in which they reside. Social mobilization activities are being conducted at all levels to garner support for the immunization programme from local partners and other stakeholders. During the consultations for the draft national constitution, the communities, including children themselves advocated for immunization to be made mandatory for all children in the constitution. The EPI Integrated Communication Strategy has been reviewed, printed and distributed to all levels.

Vaccine Supply and Logistics

The country procures all its vaccines and supplies through UNICEF with traditional vaccines funding sourced by UNICEF and GAVI funding for new and underutilized vaccines. The government co-finances GAVI procured vaccines. The country conducted a Cold Chain Assessment in 2010 and the results have been used to develop a 5 year National Replacement and Refurbishment Plan 2010/15. UNICEF has procured all the cold chain equipment according to this assessment; hence the country has adequate cold chain capacity at all levels. An Effective Vaccine Management Assessment was conducted in 2012 and a detailed improvement plan was developed. Recommendations from the EVMA are at 75% implementation.

To counter the challenges of power cuts, the country has procured some generators with support from UNICEF and is planning to procure more generators through GAVI/HSS support. Currently the national, all provincial and some district stores have standby generators. In addition, the government has entered into a Public Private Partnership with Econet Wireless (a telecoms service provider) where the later procured one hundred solar direct drive refrigerators for EPI. The company has promised to continue the immunisation program. The GAVI/HSS funding is also to procure more solar refrigerators. The Health Transition Fund procured 107 solar refrigerators and ELMA under the MCHIP program is providing 100 solar refrigerators.

The Central Vaccine Stores building was expanded to accommodate eleven cold rooms with funding from the government of Zimbabwe. The new building has a workshop for refrigerator repairs, store rooms for diluents and spares, four offices and a boardroom. All the ten new cold rooms are installed and functioning. Each of the eleven provinces got one by thirty cubic metre cold room installed and functional.

Program Management

The programme trained health workers on RED strategy but has not been able to mobilize resources for training middle managers in programme management. Quarterly support supervisory visits and review meetings are conducted at national and provincial levels to monitor and evaluate the programme's performance. The country conducted a PCV13 Post Introduction Evaluation where it was noted that an AEFI system was in place, health care worker knowledge is adequate, EPI data management and safe practices were above average, among other things. The 2013 Data Quality Self-Assessment achieved a quality index of 79% falling short by 1% to achieve the minimum standard expected of 80% of a well-functioning system.

The 2012 EVMA showed that, broadly speaking, vaccines and diluents are stored at the correct temperatures, cold and dry storage and transport capacities are sufficient, buildings and cold chain equipment are adequate and appropriate vaccine management policies are adopted and implemented. However, the assessment has revealed systemic weakness in the preventive maintenance of cold chain equipment, in vaccine stock management, and in the distribution of vaccine between each level of the supply chain.

The country is in the process of implementing some of the recommendations to improve the programme's performance.

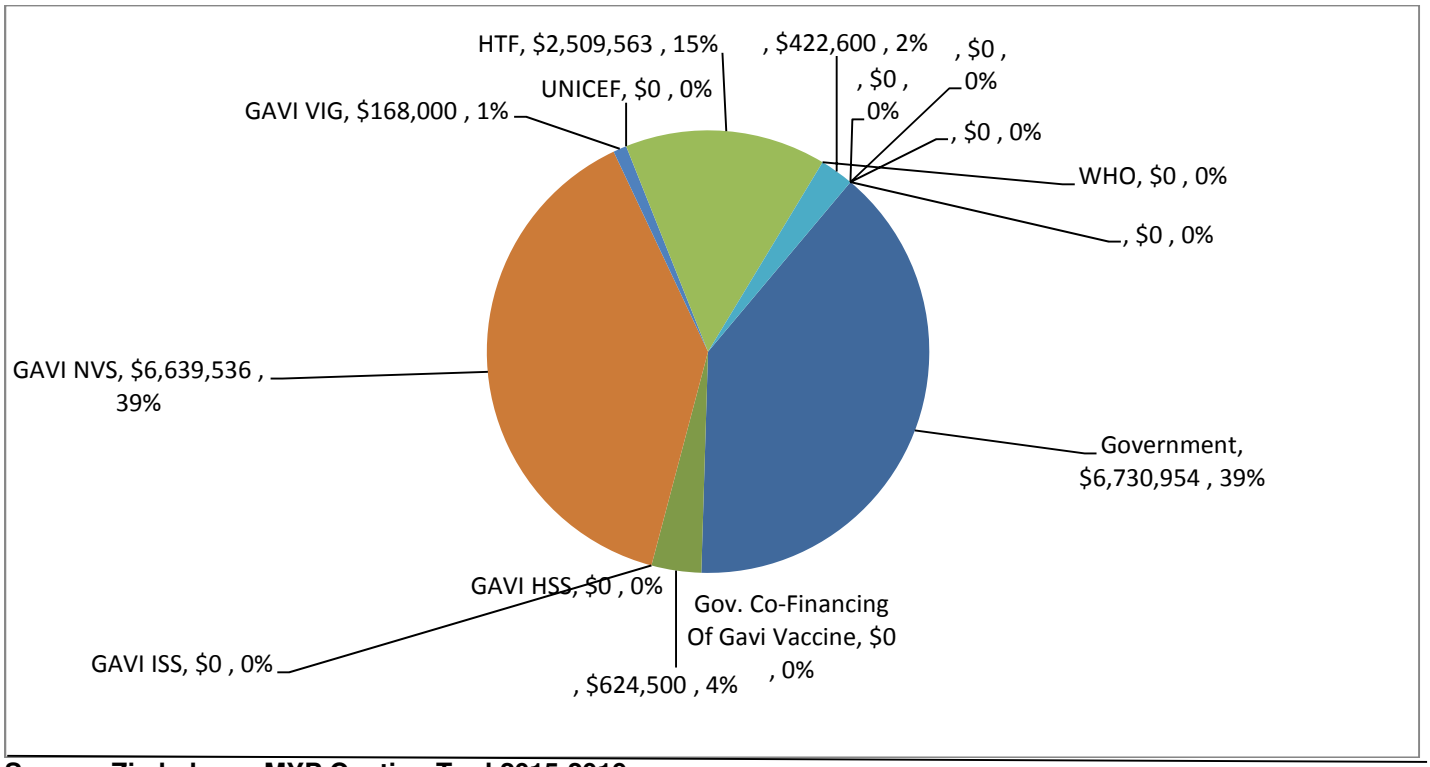
Cost and Financing

The comprehensive multi-year plan (cMYP) costing tool provides the finance requirements and sources of funds for all activities. While the Government of Zimbabwe is committed to the immunization programme as a pillar for child survival, the current economic situation has rendered it unable to fund most of the programmes requirement. Partners such as UNICEF, WHO, GAVI and MCHIP have been supporting the programme. All traditional vaccines are being procured by UNICEF/HTF while GAVI supports new and underutilized vaccines. In addition, GAVI also funds the country's immunisation program through the Immunisation Support Services as well as the current Health Systems Strengthening. Although government is supposed to co-finance the procurement of new and underutilized vaccines, the prevailing economic situation has made it difficult for the government to meet that obligation to GAVI. At present, the country is in co-financing arrears dating back to 2013.

The country hopes that UNICEF/HTF will continue to fund procurement of traditional vaccines until such a time government is able to raise funds for the procurement of vaccines and supplies. Locally, the government will continue to advocate for financial support from both local and international partners to finance immunisation activities. The government mainly supports the program in terms of salaries and allowances for staff as well as infrastructure. Allowances for outreach mainly come from HTF while funds for campaigns are mobilized through WHO and UNICEF.

According to the baseline information available, the Government contributed 39% of the programme requirements in 2013, with GAVI contributing more than 40%, HTF 15%, while WHO, UNICEF and MCHIP contributed the remaining 6%. Figure 3 below shows the baseline financing profile.

Fig 3: Baseline Financing Profile Excluding Campaigns

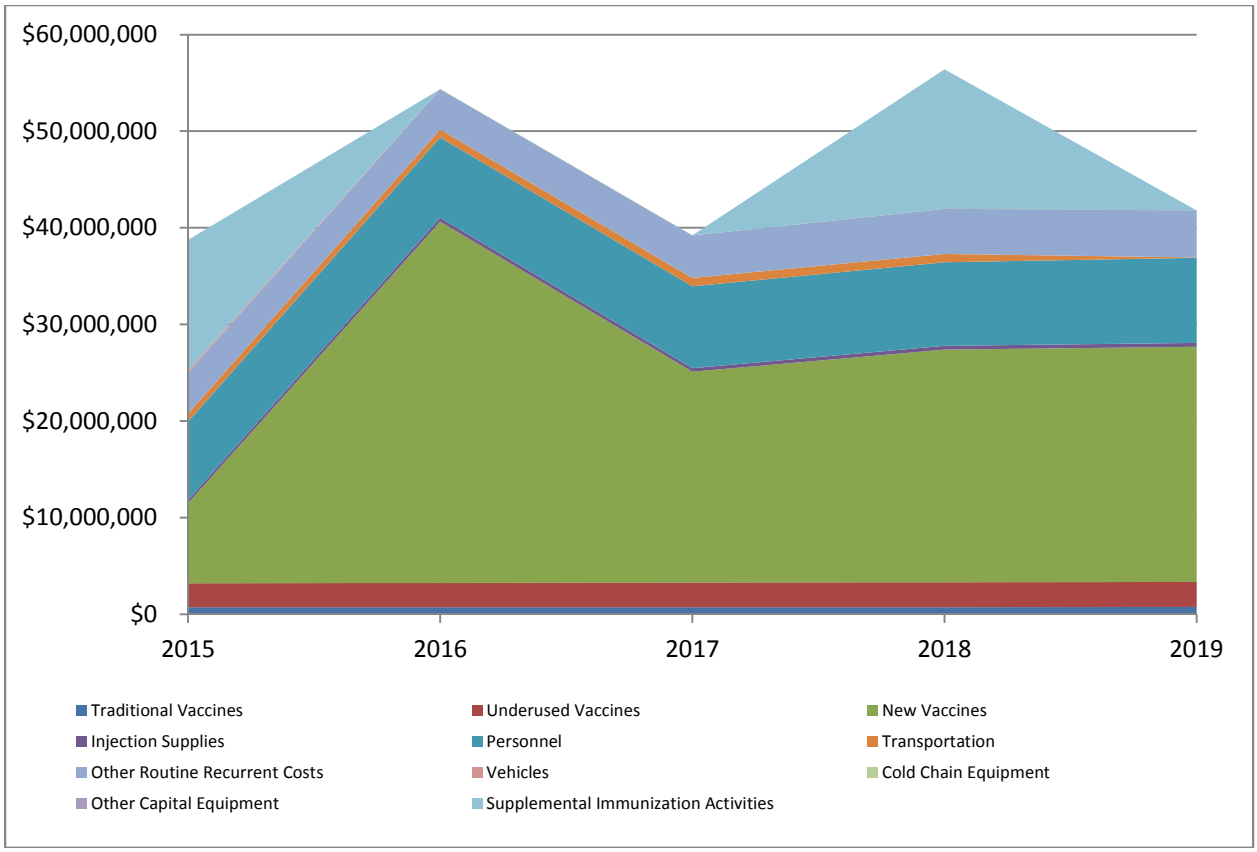


Source: Zimbabwe cMYP Costing Tool 2015-2019

Future Resource Requirements

The cost of introducing new vaccines in 2015 and 2016 will drive the cost of the routine immunization programme from US$23,832,913 in 2013 to US$30,659,221 in 2015 and US$59,393,147 in 2016. The main cost drivers in new vaccine introductions are the Inactivated Polio Vaccine and Measles Second Dose in 2015 and HPV vaccine in 2016. The cost will peak in 2016 when HPV vaccine is introduced. The supplimentary immunisation campaigns in 2015 and 2018 will push up program costs as indicated in the graph below. The graph below depicts the future resource requirements.

Fig 4: Projection of Future Resource Requirements (Shared Costs Excluded)

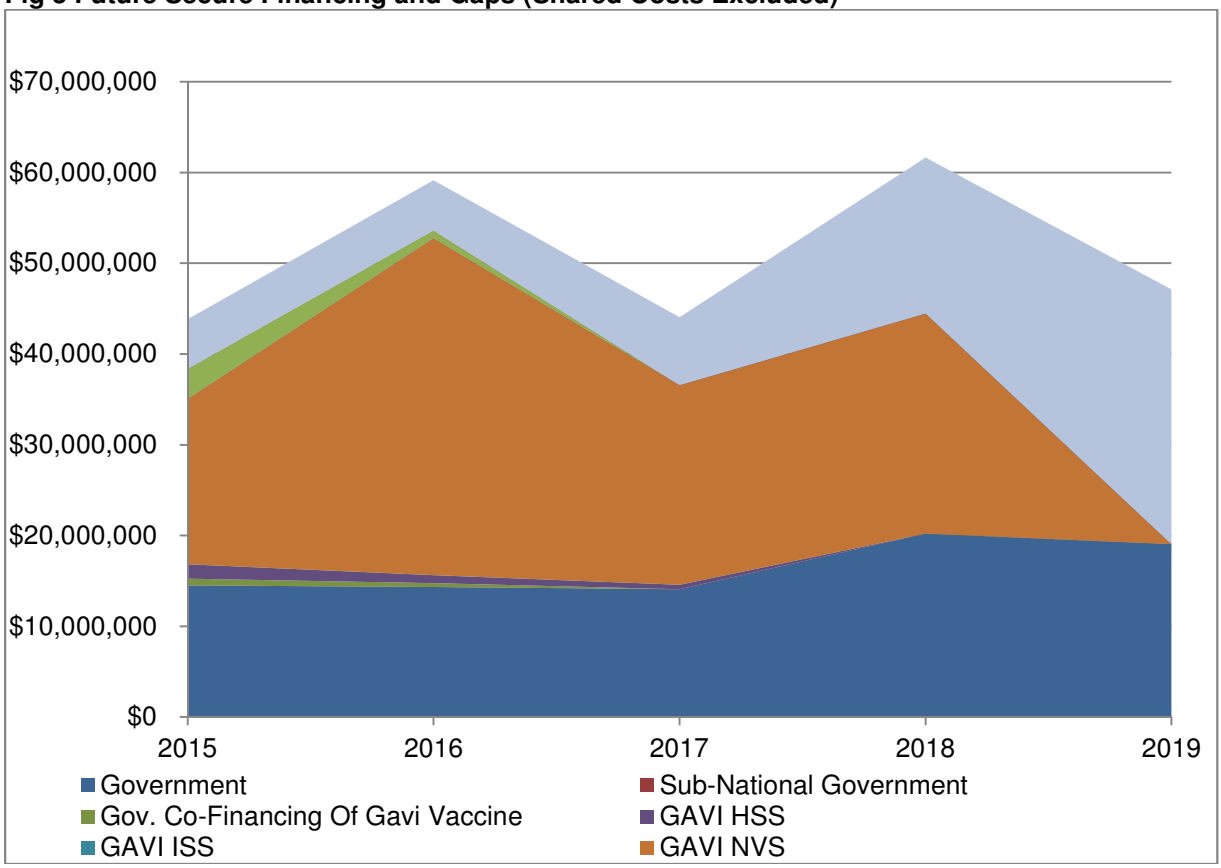


Source: Zimbabwe cMYP Costing Tool 2015-2019

Future Secure and Probable Financing and Gaps

Government funding is secured for all activities except in 2016 when GAVI funding for DTP-HepB-Hib vaccine ends. It is assumed that if GAVI does not extend funding for DTP-HepB-Hib vaccine then the government is to take over in which case the funding is probable.The country also assumes that GAVI funding for other vaccines is secured beyond 2018. The Government of Zimbabwe will mobilize resources within the country for the co-financing requirements. The large funding gap in 2019 is due to probable funding mainly related to new vaccines where GAVI funding is not yet insured. However, fundraising efforts for more resources will continue in order to bridge the gap. It is also expected that the Health Transition Fund, if still operational will be used to address the funding gap. If both secure and probable financing are considered then there are no funding gaps. It is envisaged that the economic situation will improve and Government of Zimbabwe will be able to put more funds in the immunization programme and partners such as UNICEF will continue to mobilize resources for the programme. As the graph below shows the average funding gap for period 2015-2019 when taking into consideration secure financing only is 25% with the lowest being 16% in 2016 and a high of 60% in 2019 where all vaccines have probable funding.

Fig 5 Future Secure Financing and Gaps (Shared Costs Excluded)



Source: Zimbabwe cMYP Costing Tool 2015-2019

PROGRAM CHARACTERISTICS, OBJECTIVES AND STRATEGIES

The Government of Zimbabwe through the Ministry of Health and Child Care is committed to the Immunization programme as a pillar for child survival and improvement of child health. The main objective of EPI is to reduce morbidity and mortality from vaccine preventable childhood diseases. New vaccines will be introduced as necessary. The ZEPI has the following broad objectives:

1. Protect more children and women of child bearing age with safe vaccines
2. Accelerate the reduction of morbidity and mortality from vaccine preventable diseases
3. Introduce new and under – utilized vaccines
4. Strengthen EPI surveillance, health information and data management
5. Integrate EPI with other interventions
6. Strengthen advocacy and communication

Protecting more children and women of child bearing age with safe vaccines

The 2013 immunization coverage stands at 95% (DTP-HepB-Hib 3) and 89% of the districts achieved at least 80% DTP-HepB-Hib 3 coverage. The country plans to reach more children and women of child bearing age with vaccines by strengthening the routine immunization. The outreach services that have been revitalized through implementation of the RED strategy will continue throughout the lifespan of this plan. Ward Health Teams will be revived to link the services with the communities. Efforts will be made to reduce the high dropout rate through tracking of defaulters by the Village Health Workers and integrating the services and other interventions.

Accelerating reduction of morbidity and mortality from vaccine preventable diseases

Zimbabwe achieved elimination status for maternal and neonatal tetanus in 2000; is in the pre elimination phase for measles and achieved polio free certification status. The country has plans to maintain the elimination status for maternal and neonatal tetanus and the polio free certification status. Supplementary immunization activities (SIA) for measles will be conducted in 2012 and 2015 to ensure that children under five get a second dose in order to increase their immunity, these SIAs will be integrated with polio and vitamin A supplementation.

Introducing new vaccines

Zimbabwe joins other countries in the world in introducing new vaccines in order to reduce morbidity and mortality in under-fives. The country introduced pneumococcal vaccine in august 2012 and plans to introduce rotavirus and HPV demonstration project in two districts in 2012 and 2013 respectively.

Strengthening EPI Surveillance, Health Information and Data Management

The country has been achieving the standard surveillance performance indicators for AFP and measles; these will continue to be strengthened until all provinces achieve the set performance indicators. The quality of surveillance data will be improved through training of health workers and reinforced during supportive supervision.

Integration of EPI with other interventions

Zimbabwe practices supermarket approach and it is easy to integrate with other interventions to provide holistic care to the child and also maximize use of resources. The programme has already integrated with vitamin A supplementation and plans are underway to integrate with the Early Infant Diagnosis (HIV and AIDS) and the Community Management of Acute Malnutrition.

Strengthening Advocacy and Communication

The EPI Communication Strategy has been reviewed and these are going to be printed and distributed to all health facilities. The strategy guides all the advocacy and communication activities at all levels. The community will be mobilized to accept the new vaccines and demand immunization services.

Table 1A: Situational Analysis by Accelerated Disease Control Initiatives

Disease Control Initiative	Suggested indicators	National status[a]		
		2011	2012	2013
Polio Eradication	OPV3 coverage	102%	98%	96%
	Non-polio AFP rate per 100,000 children under 15 years of age	3.4	3.2	4.6
	Number of rounds of national and sub national immunization days	0	1	0
MNT	TT2+ coverage	66%	17%	56%
	% target population protected at birth from neonatal tetanus	65%	49%	80%
	Was there an SIA? (Y/N)	N	Y	N
	Neonatal deaths reported and investigated	9	6	5
	Delivery at Facility Rate	85%	88%	79.6%
Measles & Rubella	Measles / MR vaccination coverage (1 dose)	100%	97%	95%
	Number of lab confirmed rubella cases	447	17	132
	Geographic extent National Immunization Day Measles	N/A	National	N/A
	Age group	N/A	9-59 months	N/A
	Coverage	N/A	103%	N/A
	Total Measles Cases (Lab/Clinical/epidemiological)	0	0	0
	Total Rubella Cases (Lab/Clinical/epidemiological)	447	80	130
Yellow fever	YF coverage	N/A	N/A	N/A
	Number and percentage of districts reporting > 1 suspected case	N/A	N/A	N/A
	Was a preventive campaign conducted? (Y/N)	N/A	N/A	N/A
Epidemic Meningitis	Meningococcal A Coverage	N/A	N/A	N/A

Table 1B: Situational Analysis of Routine EPI by Immunisation System Components

System Components	Suggested indicators	RESULTS		
		2011	2012	2013
1. SERVICE DELIVERY				
Immunization Coverage	Official Coverage Estimates % DTP3	100%	100%	100%
	Official Coverage Estimates % Measles	100%	100%	100%
	Other Official Coverage Estimates as per Immunization Schedule OPV3 WHO/UNICEF Estimates	93%	95%	95%
	Most Recent Survey Coverage % DTP3	N/A	N/A	N/A
	% Fully Immunized Child	65%	ND	69.2%
Immunization Demand	% Drop Out DTP1 – DTP3	6%	6%	7%
Immunization Equity	% gap in DTP3 between highest and lowest socio economic quintiles	No data	No data	No data
	Number of districts with DTP3 coverage > 80%	35	55	56
	Number of high risk communities identified for accelerated routine immunization programming	12 461 in nine districts	24 655 in six districts	52 507 in seven districts
Integration	% Services provided at fixed facilities	100%	100%	100%
	Guidelines on Outreach health service package developed	Y	Y	Y
New Vaccines Introduction	No. of new vaccines introduced into the routine schedule in the last plan period	0	1	0
	Pentavalent Coverage	93%	102%	95%
	Rotavirus Coverage	N/A	N/A	N/A
System Components	Suggested indicators	RESULTS		
		2011	2012	2013
2. PROGRAMME MANAGEMENT				
Law & Regulation	What numbers of functions are conducted by the NRA?	6	6	6
	Is there legislation or other administrative order establishing a line item for vaccines?	Y	Y	Y
	Is there a legislation identifying source of public revenue for immunization financing?	Y	Y	Y
Policy	Has the national immunization policy been updated?	Y		

Planning	Does the country have an annual work plan for immunization funded through Ministry of Health budgeting processes?	Y	Y	Y
	What is the number of districts with an annual micro-plan for immunization?	62	62	63
Coordination	What were the Number of ICC (or equivalent) meetings held last year at which routine immunization was discussed?	2	3	2
	What were the Number of NITAG (or equivalent) meetings held last year?			1
Advocacy	How many presentations on immunization performance, expenditures, were made to parliament?	0	0	0
System Components	**Suggested indicators**	**RESULTS**		
		2011	**2012**	**2013**
3. HUMAN RESOURCES MANAGEMENT				
HR Numbers	No. of health workers/vaccinators per 10,000 population	1,6	1,5	1,8
	% vaccinator posts currently vacant	15%	15%	12%
Capacity Building	No. of health workers & managers trained in immunization services through MLM or IIP training per year;	1685	1600	3200
	% of health workers trained in immunization in the last two years (data from PIE and EPI reviews);		100%	100%
	Curriculum review for pre-service medical and nursing immunization education conducted			Y
Supervision	Average no. of central supervision visits to each District level Per year	4	4	4
System Components	**Suggested indicators**	**RESULTS**		
		2011	**2012**	**2013**
4. COSTING AND FINANCING				
Financial sustainability	What percentage of total routine vaccine spending was financed using government funds? (including loans and excluding external public financing)	0%	0%	0%
	What % of immunization resources are being met by the domestic health budget (as identified in the annual budget plan) (cMYP 2013)			35
	Government expenditures on routine immunization per surviving infant (JRF 6700)			USD11
	Are sub-national immunization budgets and expenditures monitored and reported at national level?	Y	Y	Y

System Components	**Suggested indicators**	**RESULTS**		
		2011	**2012**	**2013**
5. VACCINE SUPPLY, QUALITY & LOGISTICS				
Transport / Mobility	Percentage of districts with a sufficient number of supervisory/EPI field activity vehicles /motorbikes/bicycles in working condition	100	80	70
Vaccine supply	Was there a stock-out at national level during the last year?	N	N	Y
	If yes, specify duration in months	N/A	N/A	1 week
	If yes, specify which antigen(s)			DTP
Cold chain/Logistics	% of districts with adequate numbers of appropriate and functional cold chain equipment	ND	94% (EVMA 2012)	100%
	What was the year of last inventory assessment for all cold chain, transport and waste management equipment (or EVM)		EVMA	
	No. PHC facilities with > 80% score for all indicators on the last EVM assessment		71%	
	% Districts with Availability of a cold chain replacement plan	100%	100%	100%
Waste disposal	Availability of a waste management policy and plan	N	Y	Y
System Components	**Suggested indicators**	**RESULTS**		
		2011	**2012**	**2013**
6. SURVEILLANCE & REPORTING				
Routine surveillance	Percentage of surveillance reports received at national level from districts compared to number of reports expected	100%	100%	100%
	AFP detection rate/100,000 population under 15 year of age	87%	89%	89%
	% of suspected measles cases for which a laboratory test was conducted	100%	100%	100%
	Number of neonatal deaths for which a follow up investigation was conducted	9	6	5
	Sentinel Surveillance for Rotavirus establish	Y	Y	Y
	Sentinel Surveillance for meningitis (Hib/PCV) established	Y	Y	Y
	% of suspected meningitis cases tested for Hib/pneumococcal disease according to standard protocol	100%	100%	100%
Coverage Monitoring	% gap in match between DTP3 survey coverage and officially reported figures	N/A	N/A	N/A

Immunization safety	% of districts that have been supplied with adequate (equal or more) number of AD syringes for all routine immunizations	100%	100%	100%
Adverse Events	National AEFI System is Active with a designated national committee	Y	Y	Y
	Number of serious AEFI cases reported and investigated	0	13	6
System Components	**Suggested indicators**	**RESULTS**		
		2011	**2012**	**2013**
7. DEMAND GENERATION AND COMMUNICATION				
Communication Strategy	Availability of a routine immunization communication plan	Y	Y	Y
Research	Year of last study on community knowledge, attitudes and practices in relation to immunization		Post NIDS EPI Coverage Survey	
Demand	% of outreach services held as planned	No data	No data	No data
	High risk plan for disadvantaged communities	Y	Y	Y
School Immunization Activities				
Age	**Antigens provided**	**Coverage 2011**	**Coverage 2012**	**Coverage 2013**
		N	**N**	**N**

TABLE 2: OBJECTIVES AND MILESTONES

Immunization Services	Current Performance	Objectives	Milestones	Order of priority
Service Delivery -Routine Immunization				
Polio Eradication	82% of provinces met polio free certification standard	Increase proportion of provinces meeting polio free certification standard from 82% in 2013 to 100% by 2016	90% in 2014 95% in 2015 100% by 2016	**1**
MNT Elimination	100% elimination status	Maintaining elimination status (at <1 MNT case per 1000 live births per district)	100% in 2014 100% in 2015 100% in 2016	**1**
MR	87% of the districts had measles coverage at ≥95%	Increase % of districts with 95% SIAs coverage from 87% in 2012 to above 95% in 2015	95% MR coverage in 2015	**1**
DTP-HepB-Hib	71% of the districts had ≥90% DTP-HepB-Hib3 coverage	Increase proportion districts with 90% Penta3 coverage from 71% in 2013 to 80% by 2016	75% in 2015 80% in 2016	**1**
Program Management	Location of EPI program in Curative Division	To advocate for transfer of EPI to Preventive Services by 2016	Initiate dialogue by 2015 Achieve transfer by 2016	**2**
Human Resources Management	Inadequate EPI Human Resources at Head Office	To increase EPI staffing levels to optimum levels	Unfreeze five posts by 2015 Create four new posts by 2016	**2**
Costing and Financing	Inadequate budgetary allocation to EPI	Lobby for an increased budgetary allocation to meet co-financing obligations beyond 2016	Double increase in allocation by 2015 Adequate (x4) Govt. allocation by 2016	**1**
Vaccine Supply, Quality & Logistics	Vaccine stock outs at service delivery level	To reduce proportion of HF with vaccines stock outs from 25% in 2013 to zero by 2016	15% by 2015 0 % by 2016	**1**
Surveillance and Reporting	Quality of EPI surveillance data inadequate	Improve EPI data quality management by 2016	Desk review by 2015	**1**
Demand Generation & Communication	Demand for EPI services for the hard to reach is below	Increase demand creation to 95% by 2016	Increase demand to 90% by 2015 Increased	1

	50%		demand to 95% by 2016	

TABLE 3: STRATEGIES AND ACTIVITIES

Immunization Services	Objectives	Strategies	Main Activities
Service Delivery -Routine Immunization			
Polio Eradication	82% of provinces met polio free certification standard	1.Introduce IPV 2.Surveillance 3.Capacity building 4.Community sensitization 5.Support and supervision	1. Training 2.Sensitisation and review meetings 3. Active search 4.Strengthen support and supervision
MNT Elimination	100% elimination status	1.Sustain current investment levels 2.Increase institutional deliveries	1.Promote safe delivery 2.Monitor protection at birth 3.Advocacy Communication and Social Mobilisation community sensitization 4.Investigate all neonatal deaths
Measles Rubella	87% of the districts had measles coverage at ≥95%	1.Conduct Measles Rubella SIAs Campaigns 2.Introduce Measles Second Dose (MSD) into routine as MR 3.Continued surveillance	1.Planning and training meetings 2.Advocacy Communication and Social Mobilisation 3.Coordination& review meetings 4.Support & Supervision 5.M & E 6.Post Coverage Survey
DTP-HepB-Hib	71% of the districts had ≥90% DTP-HepB-Hib3 coverage	1.Implementing RED 2.Integrating EPI with other Child Survival interventions 3.Enhancing partnerships 4.Engaging CSOs	1.Outreach services 2.Advocacy Communication and Social Mobilisation 3.Procure 31 multipurpose vehicles for outreach services 4. Quarterly review meetings
Program Management	Location of EPI program in Curative Division	Internal Advocacy supported by bilateral partners like UNICEF, WHO, MCHIP etc.	1.Develop justification paper for expanded EPI unit 2.Utilize scheduled meetings to build momentum 3.Advocacy by bilateral partners to Top Management Team
Human Resources Management	Inadequate EPI Human Resources at head office	Internal Advocacy coupled with bilateral partners' support	1.Develop justification paper 2.Lobby for unfreeze of posts 3.Lobby for partner support to convince TMT on need for additional HRH in EPI program
Costing and Financing	Inadequate budgetary allocation to EPI	1.Advocacy through Parliamentary Portfolio Committee on Health 2.Resource mobilization	1. Develop and annual EPI budget estimates. 2.Develop comprehensive EPI work plan based on needs 3.Share plans with key stakeholders e.g. Civil Society and respective EPI committees like ICC 4. Appraise Parliamentary Portfolio Committee on Health

Vaccine Supply, Quality & Logistics	Vaccine stock outs at service delivery level	1.Capacity building 2.Scheduled vaccine deliveries 3.Strengthen Effective Vaccine Management	1.Training in vaccine management 2.Procurement of vaccine delivery vans 3.EVMA 4.Procure 31 standby generators and 104 solar refrigerators 4.Supportive supervisions 5.Review meetings
Surveillance and Reporting	Quality of EPI surveillance data inadequate	1.Strengthen capacity building 2.Provision of data collection tools	1.Conduct DQS (assessment) 2.Training (DHIS2.0) 3.Avail data collection tools 4.Procure IT equipment for national and subnational data 5.Conduct Operational Research on EPI performance
Demand Generation & Communication	Demand for EPI services for the hard to reach is below 50%	1.Strengthening program communication 2.Capacity building on IPC among health workers 3.Engagement of CBOs, influential leaders and media	1.Conduct KABP on vaccine hesitancy by 2015 2.Dialogue 3.IPC training 4.Training of CBOs and sensitization of influential leaders and media

TABLE 4: TIMELINES

Immunization Services	**Objectives**	**Strategies**	**Activities**	**Timeline**				
Service Delivery -Routine Immunization				**2015**	**2016**	**2017**	**2018**	**2019**
Polio Eradication	82% of provinces met polio free certification standards	1.Introduce IPV 2.Surveillance 3.Capacity building 4.Community sensitization 5.Support and supervision	1. Training 2.Sensitisation and review meetings 3. Active search 4.Strengthen support and supervision	**X**	**X**	**X**	**X**	**X**
MNT Elimination	100% elimination status	1.Sustain current investment levels 2.Increase institutional deliveries	1.Promote safe delivery 2.Monitor protection at birth 3.Advocacy Communication and Social Mobilisation 4.Investigate all neonatal deaths	**X**	**X**	**X**	**X**	**X**

MR	87% of the districts had measles coverage at ≥95%	1.Conduct Measles Rubella SIAs Campaigns 2.Introduce Measles Second Dose (MSD) into routine as MR 3.Continued surveillance	1.Planning and training meetings 2.Advocacy Communication and Social Mobilisation 3.Coordination& review meetings 4.Support & Supervision 5.Monitoring & Evaluation 6.Post evaluation meetings	**x**	**x**	**x**	**x**	**x**
DTP-HepB-Hib	71% of the districts had ≥90% DTP-HepB-Hib3 coverage	1.Implementing RED 2.Integrating EPI with other Child Survival interventions 3.Enhancing partnerships 4.Engaging CSOs	1.Outreach services 2.Advocacy Communication and Social Mobilisation: Training communities 3.Procure 31 multipurpose vehicles for outreach services	**x**	**x**	**x**	**x**	**x**
Program Management	Location of EPI program in Curative Division	Internal Advocacy supported by bilateral partners like UNICEF, WHO and MCHIP.	1.Develop justification paper for expanded EPI unit 2.Utilize scheduled meetings to build momentum 3.Advocacy by bilateral partners to Top Management Team	**x**				
Human Resources Management	Inadequate EPI Human Resources at Head Office	Internal Advocacy coupled with bilateral partners' support	1.Develop justification paper 2.Lobby for unfreeze of posts 3.Lobby for partner support to convince TMT on need for additional HRH in EPI program	**x**				
Costing and Financing	Inadequate budgetary allocation to EPI	1.Advocacy through Parliamentary Portfolio Committee on Health 2.Resource mobilization	1. Develop annual EPI budget estimates. 2.Develop comprehensive EPI work plan based on needs 3.Share plans with key stakeholders e.g. Civil Society and respective EPI committees like ICC 4. Appraise	**x**	**x**	**x**	**x**	**x**

			Parliamentary Portfolio Committee on Health					
Vaccine Supply, Quality & Logistics	Vaccine stock outs at service delivery level	1.Forecasting 2.Capacity building 3.Scheduled vaccine deliveries	1.Training in vaccine management 2.Procurement of vaccine delivery vans 3.EVMA 4.Procure 31 standby generators and 104 solar refrigerators 4.Supportive supervisions 5.Review meetings	**X**	**X**	**X**	**X**	**X**
Surveillance and Reporting	Quality of EPI surveillance data inadequate	1.Strengthen capacity building 2.Provision of data collection tools	1.Conduct DQS (assessment) 2.Training (DHIS2.0) 3.Avail data collection tools 4.Procure IT equipment for national and subnational data 5.Conduct Operational Research on EPI performance	**X**	**X**	**X**	**X**	**X**
Demand Generation & Communication	Demand for EPI services for the hard to reach is below 50%	1.Strengthening program communication 2.Capacity building HW's IPC 3.Engagement of CBOs, influential leaders and media	1.Conduct KABP on vaccine hesitancy by 2015 2.Dialogue 3.IPC training 4.Training of CBOs and sensitization of influential leaders and media 5. Carryout community dialogues on EPI and other health services in hard to reach communities	**X**	**X**	**X**	**X**	**X**