Islamic Republic of Afghanistan
Ministry of Public Health

[Comprehensive Multi- Year Plan (cMYP) for National Immunization Program (NIP)]

2011-2015

Drafted

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ANNEXES

ADB	Asian Development Bank
AEFI	Adverse Events Following Immunization
AFP	Acute Flaccid Paralysis
ANDS	Afghan National Development Strategy
BHC	Basic Health Center
BPHS	Basic Package of Health Services
CBAW	Child-bearing age women
CGHN	Consultative Group on Health and Nutrition
CHC	Comprehensive Health Center
cMYP	Comprehensive Multi-year plan
DH	District Hospital
DQA	Data Quality Audit
DQS	Data Quality Self-Assessment
EC	European Commission
EPI	Expanded Program on Immunization
FSP	Financial Sustainability Plan
GAVI	Global Alliance for Vaccine and Immunization
GCMU	Grants and Contracts Management Unit
GDP	Gross Domestic Product
GDPM/PHC	General Director of Preventive Medicine & PHC
GDPP	General Director of Policy & Planning
GIVS	Global Immunization Vision and Strategy
GoA	Government of Afghanistan
Hep B	Hepatitis B
ICC	Interagency Immunization Coordination Committee
IEC	Information Education and Communication
IMR	Infant mortality rate
JICA	Japan International Cooperation Agency
MDG	Millennium Development Goals
MMRC	Measles Mortality Reduction Campaign
MNT	Maternal and Neonatal Tetanus
MNTE	Maternal & Neonatal Tetanus Elimination
MoF	Ministry of Finance
MSH	Management Science for Health (international NGO)
MYPoA	Multi-year plan of action
NDB	National Development Budget
NDF	National Development Framework
NEM	National EPI Manager
NGO	Non-governmental organization
NHCC	National Health Coordinating Committee
NHP	National Health Policy
NIDs	National Immunization Days
NIP	National Immunization Program
NNT	Neonatal Tetanus
NTCC	National Technical Coordination Committee
PEI	Polio Eradication Initiative
PEMT	Provincial EPI Management Team
PHCC	Provincial Health Coordinating Committee
PICC	Provincial Interagency coordination committee
PPAs	Performance Based Partnership Agreements
REMT	Regional EPI Management Team
SIAs	Supplementary Immunization Activities
U5MR	Under age 5 years, mortality rate
UNICEF	United Nations Children Fund
USAID	United States Agency for International Development
VPDs	Vaccine Preventable Diseases
WB	World Bank
WHO	World Health Organization

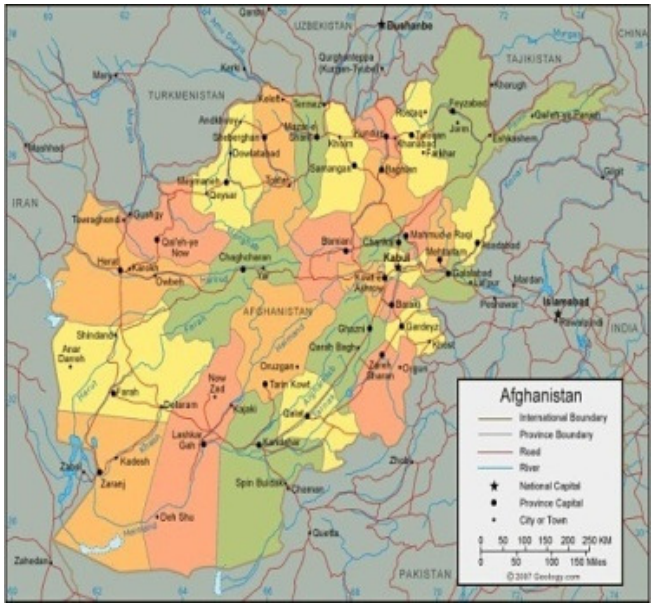
A1. Introduction:

This is a comprehensive multi-year plan (cMYP) for the Afghanistan's Expanded Programme on Immunization for the period 2011-2015. It had been developed in an broad process where senior EPI personnel at national and provinces, planning and fiance directorates staff of MOPH, Ministry of finance and Economy, NGOs and partners such as WHO and UNICEF were fully involved. WHO/EMRO supported and facilitated a 3-day training workshop on development of cMYP for all concerned ministries and agencies in March, 2010.

This plan corresponds with the next health planning cycle. Although the previous cMYP covers the year 2010, the EPI programme requires a plan that is valid for a longer period of time to strengthen routine immunization program and facilitate the application to GAVI for New and Under used vaccines window of support (NUVS).

The cMYP was formulated following a detailed situation analysis of the national immunization programme, the political and economic situation and all were guided by the national immunization policy and in line with strategic plan of the Ministry of Public Health of Afghanistan. It was also developed in line with the Global Immunization Visionand Strategies (GIVS).

Socio-economic situation



A2. Geo-political situation: Afghanistan with 647,500 sq km is landlocked and mountainous country, with plains in the north and southwest. The climate by region and tends to change quite rapidly. Large parts of the country are dry, and fresh water supplies are limited. Afghanistan has a continental climate with very harsh winters and hot summers. Tajikistan, Turkmenistan and Uzbekistan border Afghanistan to the north, Iran to the west, Pakistan to the south and the People's Republic of China to the east. Since the late 1970s Afghanistan has experienced a continuous state of civil war punctuated by foreign occupations in the forms of the 1979 Soviet invasion and the October 2001 US-led invasion that overthrew the Taliban government. In December 2001, the United Nations Security Council authorized the creation of an International Security Assistance Force (ISAF) to help maintain security. Afghanistan is a country at a unique nexus point where numerous Indo-European civilizations have interacted and often fought, and was an important site of early historical activity.

A3. Population size and Demographic Characteristics

Table N0 1

Based on the census done in 1979, the UN estimated total population of Afghanistan is reported to be 28,055,270. The estimated 3 millions afghans living in Iran and Pakistan may be or may not be included into the total population. The rural population represents 75% of the the total population. About 50% of the population are less than 15 years of age. Based on household survey done by JHP in 2006, the Infant, Child and Maternal Mortality Rates are (table 1) *(Sources: UN DATA and Household Survey by JH University, India, 2006).*

Total population(2009)	28,055, 270
% Under 15 (2008)	50
Population distribution % rural (2008)	78
Life expectancy at birth (2007)	46
Infant Mortality Rate per 1000 (2006)	129
Under -5 mortality rate per 1000 (2006)	191
Maternal mortality rate per 100 000 live births (2006)	1600

A4. Economic Situation

Table N0 2

Afghanistan, with a per-capita income of less than US$ 428, is among the least developed countries in the world with 70% of the population living in extreme poverty and health vulnerability. The social indicators, which were low even before the 1979 Soviet invasion, rank at or near the bottom among developing countries, preventing the fulfillment of rights to health, education, food and housing. Since the fall of the Taliban almost five years ago, important progress has been achieved in all sectors, but much remains to be done in order to reach a significantly strengthened social infrastructure, realize the rights to survival, livelihood, protection and participation, and reach the Millennium Development Goals (MDGs). (source: www.who.int/nha).

		Year
GDP per capita US$ exchange rate	428	2007
Total expenditure on health (per capita) US$ exchange rate	29	2007
Government expenditure on health (per capita) US$ exchange rate	10	2007
Total expenditure on health of % of GDP	8.1	2007
General government expenditure on health as % of total health expenditure	33.2	2007
Out-of-pocket expenditure as % of total health expenditure	60.2	2007
General government expenditure on health as % of total government expenditure	5.5	2007
Ministry of health budget as % of government budget	5.3	2007

A5. Administrative Division

The adminstrative division in Afghansitan has changed from 31 provinces in 2001to 34 and from 329 Districts in 2001 to about 400 Districts in 2008 and the situation is in contiuous change every year responding to political, economical and cultural needs. The EPI consider 239 districts adding the immunization data of separated areas as the new districts to the orgininal districts.

There is an uneven distribution of financial resources and manpower between different provinces and between rural and urban settings. The constantly changing Districts has created a major challenge to the national immunization programme since the increasing number of Districts every

year required extra trained human resources and financial and logistic support which are essentially limited.

Section B: Health System & Health Priorities

B1. History of Multi-Year Plan for Immunization Program

Afghanistan was approved for GAVI vaccine fund support in 2001. The GAVI actual investment support was started in 2003. Up to 2008 this support has been approved for US$ 15,520,929, including five rewards based on 2003, 2004, and 2005, 2007 and 2008 achievements, GAVI injection safety support and fund for pre-introduction activities for the new vaccines.
In November 2000, Afghanistan submitted the first national Multi-Year Plan of Action (MYPoA) for EPI for 2001 to 2005. The MYPoA 2001-2005 served as a national operational plan for immunization system development and immunization service delivery and also to meet the condition for accessing the Global Alliance for Vaccine and Immunization (GAVI) grant for Immunization System Strengthening and Injection Safety. In spite of many obstacles familiar to post crisis countries, most of the objectives of the MYPoA 2001-2005 have been accomplished with the support of GAVI, partners and international donors.

The cMYP 2006-2010 had been developed in 2006 and updated in the beginning of 2007 and aligned to be valid throughout current MOPH budgetary cycle of the Afghan calendar year 1388-1389, i.e. 21 March 2009 up to 20 March 2010. However as the EPI reporting is undertaken on calendar year basis, the activities in the plan are therefore included till end 2010. This second cMYP was different from the first MYPoA. EPI functions are implemented in close coordination and collaboration with other relevant departments of the Ministry of Public Health, partners such as WHO and UNICEF as well as new implementing partners in the field. As an operational plan for meeting the commitment made by MoPH and GoA to the people of Afghanistan and to global and regional goals. Specifically, this MYPoA attempts to operationalize the Global Immunization Vision and Strategy (GIVS) and fulfill the Afghan nation's global and regional obligations for disease control.

The cMYP (2011-2015) was developed based on the detailed situation analysis of the immunization program and in consultation with MoF, MoE and Financial Directorate of MOPH and after delibrated discussions with senior staff of MOPH planning department and EPI planning team together with full involvement of key partners namely WHO and UNICEF . Priorities and major objectives were set in the EPI review and planning workshops at provincial and national levels with the participation of all 34 provincial EPI management teams and the representatives of the BPHS implementing NGOs. The new cMYP takes the previous Five-Year Plan 2006-2010 forward, particularly what was stated for the 2010. In addition to the emerging new challanges, the remaining problems from the preceding planning years are carried into the new cMYP (2011-2011). The annual plan of actions with integrated and consolidated activities will be developed on the basis of this cMYP for each of the years 2011 through 2015. The new cMYP is regarded as a moving forward tool that needs to be revised on an annual basis in light of new developments in the field and/or possible changes in financial contributions from both the international donors and Government of Afghanistan. This cMYP (2011-2015) for immunization program is in line with

the MOPH strategic plan and MDG4 which is explicit about the place of immunization in improving health outcomes.

B2. Health Achievements & Current Challenges

Afghanistan has taken a devastating toll during more than the past two decades with the human and socio-economic indicators still hovering near the bottom of international indices. Human resources (HR) in health have been decimated, leaving behind scarce qualified health professionals, who are predominantly male where it is more difficult to employ qualified female staff in districts/remote areas. Life expectancy at birth (LEB) is 47 years for Afghan men and 45 years for women, slightly more than half that of the wealthiest countries of the world. The country suffers greatly from very high levels of Infant Mortality Rate (IMR) at 129/1000 live births, Under 5 Mortality Rate (U5MR) at 191/1000 live births and the Maternal Mortality Ratio (MMR) is estimated at 1600 for every 100,000 live births, the highest in the world except Sierra Leone.

Over the last five years, the Ministry of Public Health (MoPH) has been rehabilitated and empowered to become an engine of change in health policy and strategy, harnessing the development partners through strong coordination mechanisms and bringing technical competence and evidence-based decision making to the forefront. MoPH has focused on improving health service delivery and has developed a standard Basic Package of Health Services (BPHS) with the vision of providing basic health services to the entire population. Through the commitment of three major donors – WB, USAID, and EC – NGOs have been contracted to implement BPHS by establishing and/or maintaining services through Basic Health Centers (BHCs), Comprehensive Health Centers (CHCs) and District Hospitals; and in 2006 the contracted coverage was about 82% of the Afghan territory.

To date, the implementation of health care services has made a demonstrable difference. The recently conducted Afghanistan Health Survey (AHS) in 2006 (1385) shows a 25% reduction in the U5MR over 2001 (1380) levels (from 165 to 129 deaths of children under one year of age per 1000 live births) and in child mortality (from 257 to 191 deaths of children before the age of five years old per 1000 live births). These estimates provide evidence that infant and child mortality has decreased in Afghanistan in recent years. Childhood vaccination coverage has also improved Impressive increases have also been documented for RH, with more women receiving pre-natal care, more deliveries being assisted by professional health care providers, and more families using modern contraceptive methods to determine the size of their families.

Despite the progress that has been made to date in the health and nutrition sector, many problems and challenges remain. These include:

- Inadequate financing for many of the key programs
- Reliance on external sources of funding
- Inadequately trained health workers
- Lack of qualified female health workers in rural areas

- Dispersed population, geographical barriers and lack of transportation infrastructure, which increases the difficulty of extending the reach of health services to under-served populations
- Low levels of utilization for certain health services, especially preventive services
- Variable levels of service quality
- Insecurity in some provinces, making it difficult for program implementation, recruitment and retention of staff, expansion of service coverage and monitoring by the provincial and central levels
- Lack of effective financial protection mechanisms for poor households to receive the care they need without experiencing financial distress
- Lack of mechanisms for effective regulation of for-profit private sector clinics and pharmacies

B3. National Health Policy and Strategy & MDGs

The Ministry of Public Health (MoPH) has made significant progress in charting the direction of the health sector for the medium term period. A national health policy and strategy has been put into effect, aiming at building institutional capacities and strengthening human resources to provide health services using the basic package of health services (BPHS), the essential package of hospital services (EPHS) and the establishment of prevention and promotion programs. The goal is particularly to reduce morbidity and mortality by improving maternal and reproductive health and child health care.
The bulk of health care is contracted out to nongovernmental organizations (NGOs). NGOs provide the bulk of primary health services in Afghanistan through. A contracting out mechanism is managed and overseen by the MoPH. The MoPH in addition to providing the remaining care, particularly focuses on: monitoring, evaluation and coordination of the delivery of BPHS by NGOs and donors inputs.

The key policy and strategy is for the MOPH to maintain and strengthen its stewardship role for the Health Sector. The MOPH will focus on the Leadership at all levels in policy formulation and translating policies into concrete actions to ensure that actions are geared toward attaining the specified goals, conducting monitoring and evaluation of the implementation of health care services in order to ensure quality, equity and efficiency of the health system, coordinating the contributions of all national and international agencies involved in the Health and Nutrition Sector, upholding standards and mapping services to avoid duplication and gaps, decentralization of appropriate responsibility and managerial autonomy to the provincial level and developing legislation and regulations and ensuring that health laws and regulations are adhered to in the public and private sectors.

Following have been the priorities set out by the national health authorities in co-ordination and agreement with international development partners**:**

- To reduce maternal and newborn mortality
- To reduce under-five mortality and improve child health
- To reduce the incidence of communicable diseases
- To reduce malnutrition
- To develop the health system in an equitable and sustainable manner

The goals of the MoPH are to achieve the following by the year 2015:

- The Basic Package of Health services will be available to more than 90% of the population
- The maternal mortality ration will be reduced by 15% compared to 2006
- The under-five year mortality rate will be reduced by 20% compared to 2006
- Infant mortality will be reduced by 20% compared to 2006
- Increased immunization coverage with three doses of DPT vaccine to 90%
- Increased immunization coverage with measles vaccine to 90%
- Achieve and sustain polio eradication
- Increased case detection of new infectious Tuberculosis (TB) cases
- Reduction of malaria incidence
- Maintained low HIV sero-prevalence rate in the general population

Afghanistan signed up to the Millennium Declaration only in 2004. Due to the long period of war, the country has not only a late entrance on its way to achieving the MDGs, but currently suffers from additional problems that slow down the process of development in the health sector, such as the insufficient number of qualified health staff especially female, insecurity in some areas, and limited financial resources. Instead of changing the ultimate targets, the government of Afghanistan decided to extend the period for achieving the MDGs with updated targets up to 2020 and to use baseline data from 2003, since data from the time during the conflict are not available

Table N03: Health MDGs and the revised target for 2015 and 2020[1]

MDG	2003 level	2006 level[2]	Target 2015	Target 2020
Reduce child mortality by2/3	Under-5 mortality rate: 230/1,000 live births	U5 MR = 210	Under- 5 mortality rate: 115/1,000 live births	Under- 5 mortality rate: 77/1,000 live births
	Infant mortality rate: 140/1,000 live births	IMR = 130	Infant mortality rate: 70/1,000 live births	Infant mortality rate: 47/1,000 live births
	Proportion of 1-year-old children immunized against measles: 60%		Proportion of 1-year-old children immunized against measles: 90%	Proportion of 1-year-old children immunized against measles: 90%
Reduce maternal mortality by 3/4	Maternal mortality ratio: 1600/100,000 live birth		Maternal mortality ratio: 800/ 100,000 live births	Maternal mortality ratio: 400/100,000 live births
	Proportion of births attended by skilled personnel: 14.3%		Proportion of births attended by skilled personnel: 50% 50% of the need for family planning of women is met	Proportion of births attended by skilled personnel: 75%
Combat HIV/AIDS, malaria and other diseases	Malaria: 18% of population in high-risk areas use bed nets		Malaria: 80% of the population in high-risk areas use bed nets Tuberculosis: 70% of TB cases will be detected and 85% of TB cases will be successfully treated w/ DOTS HIV/AIDS: Of population aged 15-49, <0.5% are HIV positive and >50% have knowledge of HIV/AIDS. 100% of blood is screened for	

[1] Islamic Republic of Afghanistan. Islamic Republic of Afgh. Afghanistan's Millennium Development Goals, Report 2005, Vision 2020.

[2] Best estimates of social indicators for children in Afghanistan, 1990-2005. UNICEF, May 2006. p. 44

			HIV/AIDS and STDs 60% of known drug users will be under treatment	

B5. Position of EPI in MOPH Primary Health Care

Afghanistan implements the Expanded Program on Immunization (EPI) in majority of the districts.
The EPI in the country has a three-tier management system. At the national level, EPI comes under the Preventive Medicine & PHC Directorate together with other programs. At the provincial level, EPI service is integrated into the public health system under the leadership of the provincial health directorate. There are provincial EPI management teams in each province comprised of provincial EPI managers, supervisors, cold chain technicians and supportive staff.
At the district level, the District Public Health Officer manages EPI activities. Efforts are going on to establish District Health Management Teams to coordinate all health care services at district level.
As immunization is one of the important components of BPHS, the planning, staffing, equipping, training, and supervising of immunization at the service level, including fixed center, outreach, and mobile strategies, is now under the responsibility of the contracted NGO implementing BPHS and partly under the responsibility of MOPH. Under the direct supervision of DG of Preventive Medicine & PHC, The National EPI Management Team is responsible EPI management which includes policy making and standard setting, planning, co-ordination, information collection and sharing, collaboration with other partners, quality assurance, monitoring and evaluation; financing including identification of long-term funding sources; strengthening human and institutional resources; management of EPI vaccines and supplies, advocacy and communication, disease surveillance and partly delivery of immunization services.

B6. Health Financing

There are currently three primary sources of funding for the health sector in Afghanistan:

- External funding (USAID, EC, WB, JICA, UN, GAVI, Others)
- Public funding (government)
- Private funding

External assistance to the health sector has increased over two-fold during 2003 -2006. There is tendency to stabilize external assistance.

External assistance to the health sector in Afghanistan 2003-2009
Table N0 4

2003	2004	2005	2006	2007	2008	2009
$ 94 348 998	**$ 138 381 333**	**$ 165 498 663**	**$ 198 788 622**	**$ 220 689 481**	**$ 223 537 026**	**$222,000,000**

The 1385 (April 2006-March 2007) approved National Budget for the Islamic Republic of Afghanistan[3] amounted to US$ 2,205 million, financing both Operating Budget and Development Budget (investment projects such as infrastructure construction, development projects in health, education and agriculture, security and rule of law).

The operating budget is funded by the government's revenue and external resources that are earmarked for specific program such as the Afghanistan Reconstruction Trust Fund (ARTF). The

ARTF represents an attempt to give the government more control over the allocation of funds to development priorities. If funds go into the government's account, this contribution is considered as *'Core Budget'*.
The GAVI actual investment support was started in 2003. Up to 2008 this support has been approved for US$ 15,520,929 including five rewards based on 2003, 2004, and 2005 and 2007 and 2008 achievements, GAVI injection safety support and fund for pre-introduction activities for the new vaccines.
While the health sector mainly depends on external support, with the improvement of the situation and the recovery of the government capacity, GoA is expected to increase its contribution to health sector support.

Section C: EPI Situation Analysis 2006-2010

C1. EPI Situation

Recent years have seen improvement of overall national immunization coverage, including the newly introduced vaccines (Hepatitis B and and Hib). An improved computerized recording/reporting tool enabling assessment of "timely" immunization by one year of age as well as vaccine management indicators has been introduced, and there is generally complete and regular reporting of data.
Disease surveillance is improving, with clear and up-to-date national guidelines, case- based reporting for priority diseases and the introduction of computerized surveillance data management.
The supply management system is working well, with no stock-outs in the last 12 months, and important progress has been made at the national vaccine store since it was assessed in 2007.
Strategies and most policies are in place for routine immunization activities, and are in progress for disease elimination and control objectives- polio eradication, measles and MNT elimination.

While overall immunization coverage is improving, there are still 40 out of 329 districts reporting less than 50% coverage with DPT3 (2009), many of which have high drop-out also. Between 15-25% of population have no access to immunization services. Sustainable financing of outreach sessions is still a problem in many districts with underserved populations, and there in some places there is a very poor quality of physical infrastructure. Surveillance system performance indicators are not monitored enough, AEFI guidelines are not yet fully implemented, and there is poor waste management (burning/burying of used syringes/needles in safety boxes) at many health facilities. There are also significant communications challenges and shortage of human resource facing the immunization program.

C2. Routine Immunization of Children

according to the following national schedule, the EPI trying hard to complete vaccination of children before their first birth day.

Table N05

Vaccine	immunization schedule (2009)					
	Birth	6 weeks	10 weeks	14 weeks	9 months	18 months
BCG	✓					

OPV	✓	✓	✓	✓		
DTP-HepB-Hib		✓	✓	✓		
MCV1					✓	
OPV4					✓	
MCV2						✓
PCV10/Rota (planned 2011-2012)						

TT Vaccination schedule for Pregnant Women

Based on National Immunization policy, tetanus vaccination is given to all pregnant women. In addition to routine vaccination conducted in the health facilities, maternal and neonatal tetanus (MNT) campaigns are conducted in high risk districts targeting all women of child-bearing age (15-45 years).

Table N06

Tetanus vaccination schedule (2009) for pregnant women

Dose	Schedule	Dose	Schedule
TT1	At first contact	TT4	After one year
TT2	After one month	TT5	After one year
TT3	After six months		

The overall performance of the national immunization program (NIP) conducted through the provincial and regional review workshops with the participation of EPI managers at all levels, UNICEF, WHO and NGOs.
An overall performance of the national immunization program (NIP) was appraised through the recent Immunization Programme Management Review Workshop conducted by the MOPH, WHO, UNICEF, and NGOs together with national partners in February 2010 at national level. According to the review report strategies and most policies are in general well in place for routine immunization activities, and are in progress for disease eradication (polio) and elimination (measles and MNTE) elimination. Based on the in-depth situation analysis, the new cMYP (2011 – 2015) was developed in discussions and deliberations of senior

MOPH, MoF, MoE and EPI and planning staff together with full involvement of key partners namely UNICEF and WHO. Priorities and major objectives were set with participation and consultations of representatives of EPI staff at subnational levels as well. The plan takes the previous EPI Five-Year Plan 2006-2010 forward, especially what was stated for the last year 2010.
A detailed overview of performance indicators of the routine EPI services in Afghanistan is provided in the following table :

For Accelerated Disease Control Activities **Table N07**

Component	Suggested Indicators	National Status			
		2006	2007	2008	2009
Polio	OPV3 coverage	77	83	85	83
	Non-Polio AFP rate per 100,000 children under 15 years of age	6.2	6.8	8.2	8.4
	Extent : NID/SNID Number of rounds	NID=5 SNID=5	NID=4 SNID=4 Mop up=2	NID=4 SNID=8 Mop up=3	NID=6 SNID=4
	Coverage range	90 -95%	90-95%	90-95%	90 - 95%
MNT	TT2 + coverage	54	60	65	68
	Number of districts reporting > 1 case per 1000 live births	0 (total cases reported – 33)	0 (total re-ported cases-44	0 (total reported cases- 12)	Total re-ported cases -19
	Was there an SIA? (Y/N)	Y	N	N	Y
Measles	Measles coverage (%)	68	70	75	76
	Number of outbreaks reported	16	21	29	33
	Extent : NID/SNID Age group Coverage	MMRC (9-59m) 109%	N	N	MMRC (9-36m) 110% (PCA-89%)

For Routine EPI System Components **Table N08**

Component	Suggested Indicators	National Status			
		2006	2007	2008	2009

Routine Coverage	DPT3 coverage	77	83	85	83
	% of districts with > 80% coverage (%)	49	55	58	56
	National DPT1-DPT3 drop - out rate	37	11	12	11
	Percentage of districts with drop -out rate DPT1 – DPT3 > 10	63	50	48	46
	MCV2	26	35	38	40
New and Underused Vaccines	Hep B3 coverage (Tetravalent)	77	83	85	83
	Hib Vaccine (Pentavalent)	0	0	0	83
Introduction of Pneumococcal and Rota virus vaccine (planned 2011 and 2013	# of new vaccines (Pneumococcal and Rota) introduced into EPI	0	0	0	0
Routine Surveillance	% of surveillance reports received at national level from districts compared to number of reports expected	AFP 100%, Measles/NNT (64%)	AFP 100%, Measles/NNT (100%)	AFP 100% Measles/NNT100%	AFP 100% Measles/NNT100%
Cold Chain/ Logistics	Percentage of districts with adequate numbers of functional cold chain equipment	87%	100%	98%	98%
Immunization Safety	Percentage of districts that have been supplied with adequate (equal or more) number of AD syringes for all routine immunizations	100	100	100	100
Vaccine Supply	Was there a stock-out at National level during last year?	No	No	No	No
	If yes, specify duration in months				
	If yes, specify which antigen/s				
Communication	Availability of annual action plan	Y	Y	Y	Y
	Mass media plan	Yes	Yes	N0	No
	IEC Materials printed and distributed	Yes	Yes	No	Yes
	# of community mobilizes trained	0	0	0	0

	Routine immunization communication strategies developed	No	No	No	No
	Special events for routine EPI	Yes	Yes	Yes	Yes
	KAP assessment undertaken	No	No	Yes	No
Financial Sustainability	What percentage of total routine vaccine spending was financed using government funds? (including loans and excluding external public financing)	0	0	10% ($448,000)for (Hib vaccine	10% for Hib vaccine cost ($383,500)
	Total government expenditure on Immunization	**?**	**?**	**$1,102,024**	**$ 1,562,595,**
	Total government expenditure on co-financing of vaccine	Figures?		$448,000	$383,500
Linking to other health interventions	Were immunization services systematically linked with delivery of other interventions (malaria, nutrition, child health) established	Maternal & Child health	Maternal & Child health	Maternal & Child health	Maternal & Child health
Vit A Supplementation,Deworming drugs, Distribution of Insecticide bed nets (IBN),and Zinc	Vitamin A supplementation integrated with 2 round of polio NIDs for children 6 months to 59 months	NIDs	NIDs	NIDs	NIDs
Human resources availability	No. of health workers / vaccinators per 10,000 population	0.84/ 10000	About 1/10000	About 1/10000	About 1/10000
Management Planning	Are series of district indicators collected regularly at national level? (Y/N)	Y	Y	Y	Y
	# of EPI routine supervision conducted	Data not available 1/year/HF	Data not available 1/year/HF	Data not available 1/year/HF	Data not available 1/year/HF
NRA	Number of functions conducted	NA	NA	NA	NA
ICC	Number of meetings held last year	4	4	4	3
	Availability of a waste management plan	N	N	N	N
	Timeliness of disbursements of funds to district and service delivery level.	**ND**	**ND**	**ND**	**ND**

C3. Summary of EPI Achievements during 2006-2010

Despite the problems, Afghanistan has witnessed remarkable achievements through the previous cMYP (2006-2010) period, but still there are areas that need improvements.

The following are what had been done to achieve the objectives of the previous plan:

1. DTP3/Penta 3 administrative coverage was increased in 2008 to 85% and with slight decrease in 2009 (83%). Due to different factors, the target of achieving 90% coverage with all antigens nationally and at least 80% coverage with all routine immunizations in every district could not be achieved during the 2006-2010 cMYP.

2. Polio Eradication has remained a top priority in the country. At least four rounds of Polio SIA are being conducted each year – two in the spring and two in the fall - with coverage over 90-95%. Vitamin A is given with the second round twice a year. From 63 confirmed polio cases in year 1999, there was a steady decline to 04 cases in year 2004 and localization of virus circulation in the southern part of the country. In 2006, 2007 and 2008, 2009 the 31, 17, 32 and 38 confirmed polio cases were reported respectively. The challenge to improve and maintain the quality of campaigns is becoming an increasingly difficult task in southern part of the country due to insecurity.

3. The objective of measles elimination was partially achieved where catch up and regular periodic follow up campaigns were conducted and measles case-base surveillance with lab-support is well established. Although small outbreaks of measles mainly among the children over 5 years are taking place, but not death cases reported during the past 3 years.

4. Maternal and Neonatal Tetanus elimination is close to the objectives. For elemintating Maternal and neonatal tetanus more works need to be done to reach and verify elimination status.
5. The EPI program has achieved 100% safe injections, but with the support of UNICEF and GAVI.

6. There was "no stock-out" for vaccine and immunization supplies during the cMYP (2006-2010)
7. There is need for more works for enhancing national capacity to manage EPI service delivery network, fully linking immunization with other maternal and child health interventions creating demand for immunization services among the population and ensuring financial sustainability of immunization program.

8. The objective of introducing Hepatitis B vaccine in 2006 and and Hib Vaccine in 2009 in combined forms of Tetravalent and Pentavalent had achieved. Both vaccines were introduced in 2006 and in 2009 into the national immunization program of the country.
9. In the area of routine Vitamin A supplementation; this was well covered during National Immunization Days (NIDs) for under 5 children with a coverage of 100%. Plans yet to be developed for routine Vit A supplementation to the target group after cessiation of NIDs.

C4. Achievements of the Global Immunization Vision and Strategy

Some progress has been made in regard to GIVS is summarized as follow:

1. Protecting more people in a changing world: there was clear increase in DPT3 vaccination coverage from 31% in 2001 to 85% by end of 2008. There is significant increase in BCG, measles and TT2+ coverage. Mealses follow up campagins with its

high coverage provided a second opportunity for children in the age group 9 months to 5 yrs. TT SIAs conducted nationally covering all women of childbearing age.

2. The Hep-B and Hib vaccines successfuly introdueced into national immunization program.
3. Intergarting immunization and linked interventions in the health system context: during the previous cMYP, Integrated Management of Child Health and Nutrition Initiative campagins were conducted by MOPH in collaboration with UNICEF. It included interventions namely health care services to the children and women Deworming, Vitamin A supplementation, measles, OPV and health education messages.
4. Immunizing in a context of global interdependence: The national Immunization programme has formulated in 2009 its National Immunization Technical Advisory Group (NITAG) which is working on recommendation of Rotavirus and Pneumococcal vaccines introduction in EPI**.**

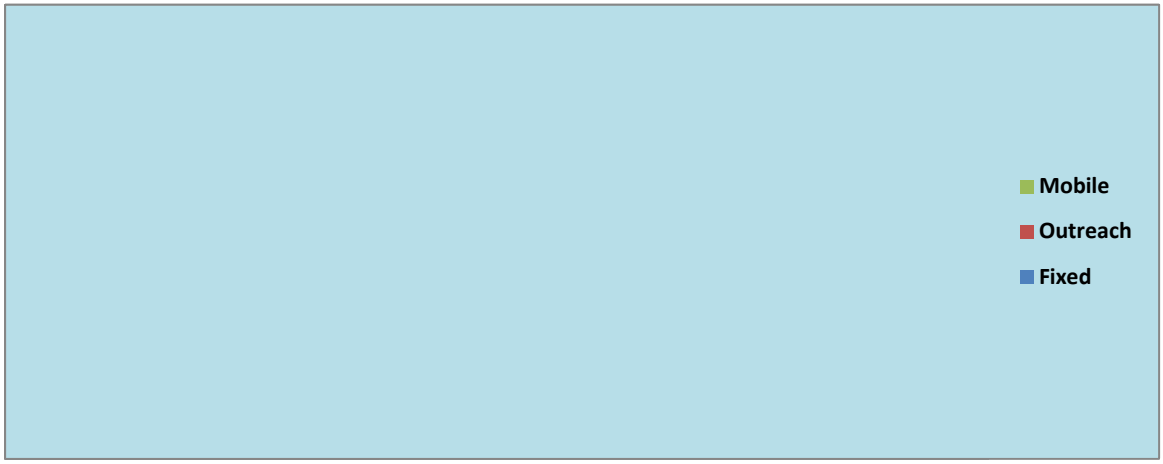
C5. Service Delivery

Afghanistan implements the Expanded Program on Immunization (EPI) in majority of the districts.

Afghanistan is a country in crisis and due to the ongoing conflict in some parts of south, east, south-east and western regions; around half of the population in these areas have poor access to immunization services. Despite the conflict and insecurity in certain areas, Afghanistan has witnessed a slight increase in infant immunization coverage (DPT3 – 85%) in 2008. In spite of this achievement, around 200,000 children less than one year in the country did not receive routine childhood vaccines. Totally, 1250 EPI fixed centers are functional in all over the country providing immunization services in the health facilities, and the immunization health workers are performing outreach and mobiles activities. In addition, immunization services have been included into health sub-centers and mobile health teams functions established in different parts of the country and with the support of GAVI HSS fund.

Considering the political, economical, geographical and other problems and barriers in the country, there are slight changes in delivery of immunization services strategies and the majority of the children and women receive vaccines through outreach and mobile strategies:

Figure1

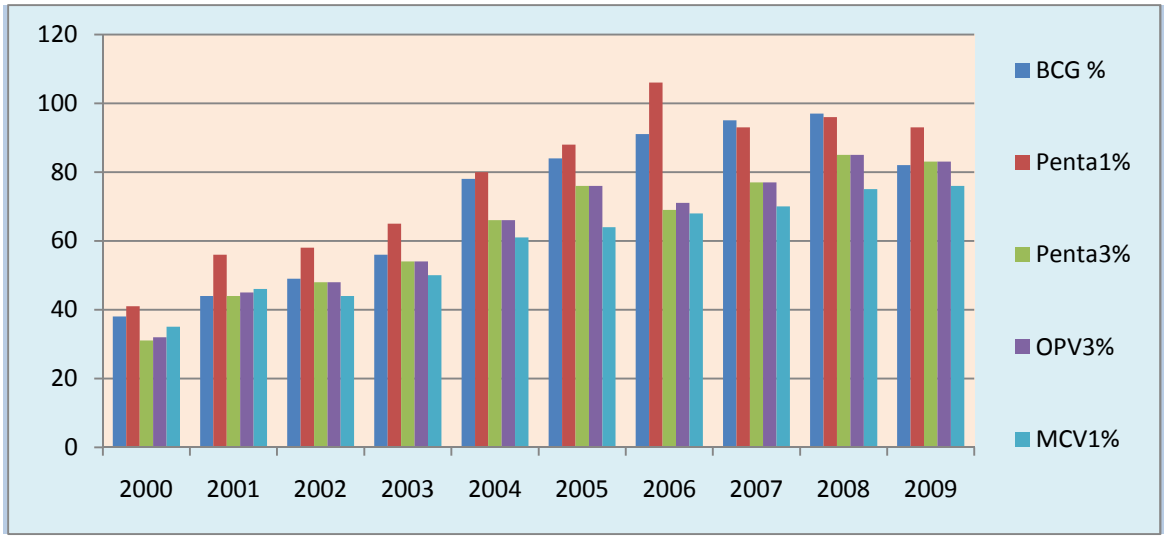


C6. Routine Immunization Coverage

The reported coverage of BCG, DPT, MCV1 and OPV over the period of 2000 -2009 is shown in figure 2. The TT 2 + coverage among pregnant women was 54%, 60% and 65% , 68 in 2006,

2007, 2008 and 2009 respectively. The coverage of routine immunization, though increasing steadily since 2000 (see Figure-2), has not yet reached the level to prevent outbreaks of disease. The introduction of tetravalent DPT-HepB vaccine in a phased approach from July to November 2006 caused some disruption of the reporting as children who received DPT3-HepB1 were recorded as DPT-HepB1 and the number receiving DPT3 was lost. The pentavalent vaccine (DPT-HepB-Hib) was introduced in January 2009.

Figure 2



In line with achieving the WHO EMRO regional objective of reaching all districts with ≥80% DTP3 coverage, the number of districts achieving this objective has increased as shown in the following table (Annual EPI Reports):

Table N09

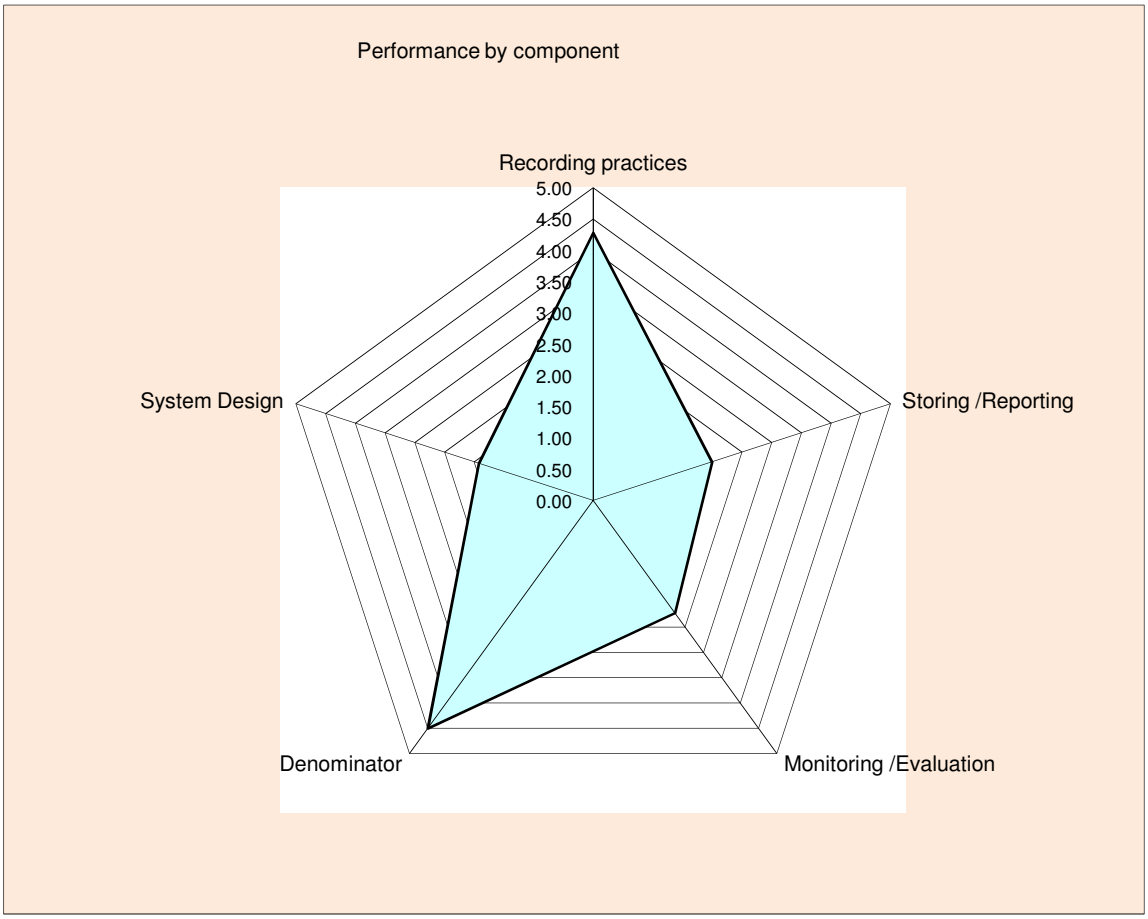
Increase in DTP3 coverage in accessible Districts from 2006 to 2009

	Number of Districts with coverage ≥ 80%	Number of Districts with coverage 50-79%	Number of Districts with coverage < 50%	Total # of Districts
2006	**161 (48.9%)**	**103 (31%)**	**58 (17.6%)**	**329 (%)**
2007	**180 (54.7%)**	**87 (26.4%)**	**53 (16%)**	**329 (%)**
2008	**191 (58%)**	**99 (30%)**	**30 (9%)**	**329 (%)**
2009	**185 (56%)**	**97 (29.4%)**	38 **(11.5%)**	**329 (%)**

This achievement has been supported by the improved information system for immunization data which was verified by passing the Data Qualtiy Audit (DQA) in 2002 with a verification factor (VF) of 0.91 and

a quality of the system index (QSI) of 95%. Although there is some progress in number of districts achieving more than 80%, but there is still wide variation between and with in provinces regarding coverage and drop out rates, this may impose a considerable challenge for the programme to deal with it during the next 5 years**.**

Data Quality Audit, 2002 Figure 3



C7. Accelerated Disease Control Initiatives

Situational analysis by accelerated disease control initiatives in Afghanistan: ***Table N0 10***

Compo-nent	Suggested indicators	National*			
		2006	2007	2008	2009

* Data source WHO/UNICEF joint report for routine EPI 2005, 2006 data and SIA reports for SIA data

Polio	National OPV3/DPT3 coverage	69%	83%	85%	83%
	Non-polio AFP rate per 100, 000 children under 15 yrs. of age	5.99	6.45%	7.50%	7.50%
	No. of confirmed polio cases	31	17	31	38
	No. of rounds NIDs	5	4	6	6
	Coverage range of NIDs	90-99%	90-98%	90-95%	90-95%
	No. of rounds SNIDs	5	4	4	6
	Coverage range of SNIDs	90-99%	90-95%	90-95%	90-95%
	No. of rounds mop-ups	0	0	0	2
	Coverage range of mop-ups	0	0	0	100%
MNT	TT2 coverage (pregnant women)	54%	60%	65%	68%
	Number of districts reporting > 1 case per 1,000 live births OR with no reporting system	33 reported cases	44 reported cases	12reported cases	19 Reported cases
	Was there an SIA (Y/N)	Yes	yes	N0	Yes
Measles	Measles coverage	68%	70%	75%	76%
	No. of outbreaks reported	2	44	>50	33
	Measles SIA (Y/N)	Yes	N0	N0	Yes
	Age group covered in Measles SIA	9-59	N/A	N/A	9-36m
	Coverage of Measles SIA	95%	N/A	N/A	89% (PCA)

C8. Polio Eradication Program

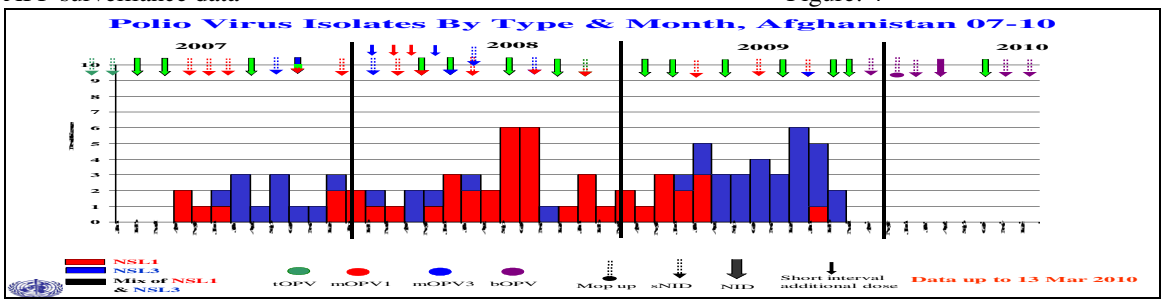
Polio Eradication has remained a top priority in the country. At least four rounds of Polio SIA are being conducted each year – two in the spring and two in the fall - with cove age over 90-95%.

Vitamin A is given with the second round twice a year. From 63 confirmed Polio cases in year 1999, there was a steady decline to 04 cases in year 2004 and localization of virus circulation in the southern part of the country. In 2006, 2007 and 2008, 2009 the 31, 17, 32 and 38 confirmed polio cases were reported respectively. The challenge to improve and maintain the quality of campaigns is becoming an increasingly difficult task in southern part of the country due to insecurity.

It is highly supported by WHO, UNICEF and donors community. The two main components of the program are the acute flaccid paralysis (AFP) surveillance system and supplementary immunization (SIAs) campaigns. The campaigns are conducted either to boost the immunity of the children or to stop the poliovirus circulation. The AFP surveillance performance indicators have reached the standard level since 2001. As seen in the following graph, the number of OPV received by the non-polio AFP cases, the immunity level among children showed very good progress during the last four years in polio free zones but and the proportion of children less than

59 months who received 4 OPV doses was above 80% since 2008 and 2009. There is discrepancy in number of doses of OPV among the confirmed polio cases.
The polio eradication program is supported by an accredited poliovirus laboratory. The lab has obtained the WHO accreditation since 2000.

AFP surveillance data Figure: 4

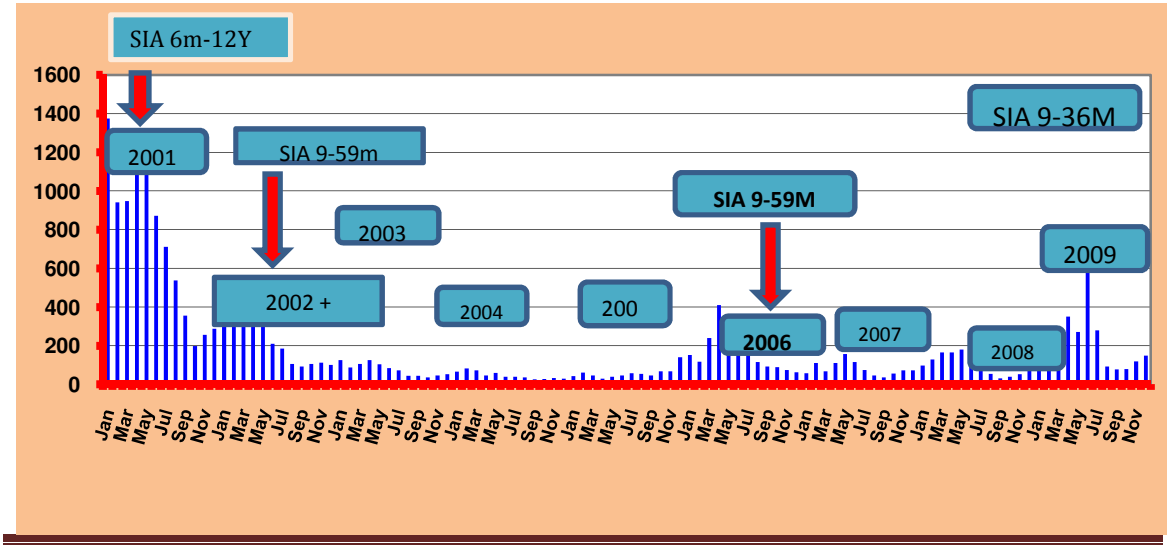


AFP surveillance data

C9. Measles elimination

Prior to the introduction of measles vaccine in the Expanded Program on Immunization, measles was a leading cause of childhood morbidity and mortality in Afghanistan. In 2000, WHO estimated that 30,000 – 35,000 measles deaths occurred among children less than 5 years of age. With poor nutritional status of children and limited access to basic services it is supposed that the measles deaths could be even higher than this. Due to low routine coverage and accumulation of susceptible children, the country experienced outbreaks of measles in 2005 and 2006, 2007, 2008 2009. Until the routine measles coverage of second dose is over 80%, the country will need to provide measles vaccine through supplementary immunization activities (SIA) about every three years in order to prevent large outbreaks from occurring. Considering the burden of the disease, Afghanistan national immunization program conducted two successive rounds of measles catch-up and follow up immunization campaigns in year 2001-2002 (for children 6 months to 12 years old) and 2003 (for children 9 months to 5 years old), in 2006 -2007 (for children 9-59 months) and in 2009 (for children 9-36 months) . These series of campaigns have had a substantial impact on the reduction of measles morbidity as illustrated in the figure below:

Reported Measles Cases by Month
Afghanistan 01-09 **Figure: 5**



Afghanistan is moving towards the 2nd step in eliminating measles (case based surveillance) as all EMRO countries. Measles case - base surveillance was established and implemented in all districts/provinces with the laboratory support as an integral part for establishing effective measles surveillance.
With the help of laboratory analyses, data is generated to identify population at risk and supports in monitoring and evaluating program activities, and guide policy decisions.
In 2007, 2008 and 2009 the surveillance was strengthened and most of the surveillance indicators were met the standards requirement (>80%) and the virus was isolated from a circulating point of an outbreak in eastern province and it was D4.

C10. Maternal and Neonatal Tetanus

Tetanus is one of the important causes of maternal and neonatal deaths in the country. The NNT baseline survey that was conducted (2004) in 3 provinces of Afghanistan revealed that the number of NNT cases/deaths per 1000 live births was ranging from 4.8 to 8.9.

Available data shows that more than 80% of the deliveries are taking place at home, assisted by un-skilled people. Also the coverage of TT vaccination with two or more doses among pregnant women through routine immunization from 54% in 2006 improved to 68% in 2009. Neonatal tetanus has remained a major public health probem in Afghanistan and its elimination is a challenge.
Considering the risk and deadliness of NNT and aspiring to achieve the global goal of Maternal and Neonatal Tetanus Elimination, three rounds of TT vaccination campaign were conducted in year 2003 in 12 districts as pilot and two rounds of the campaign in remaining 317 districts in year 2004. The number of recorded cases dropped dramatically from 95 in 2004 to 33 in 2006, 40 cases in 2007 and 12 case in 2008, 19 cases. Elimination of maternal and neonatal tetanus is one of the MOPH priorities. In 2008, a joint WHO/UNICEF mission assisted MOPH in analysis of data for identification of high, intermediate, low and no risk districts. The plan of action was developed to conduct TT SIAs in all the risky districts. Based on the recommendation of WHO/UNICEF joint mission, the 2009 TT SIA conducted in 120 high and medium risk districts and the remaining 160 districts will be covered in 2010.
MoPH is also trying to increase access of women to maternal and child care by expansion of basic package of health services (BPHS) and improving Emergency Obstetric Care (EmOC) by strengthening community midwifery training network and through a community based approach, but still it is too early to expect any immediate impact of these interventions on elimination of MNT and sustaining the recent achievements.

NNT Surveillance was incorporated in AFP surveillance system in year 1999. The surveillance data is actively used to monitor the progress of the interventions. NNT follow-up survey should also be conducted in order to find out the impact of the intervention and to validate the elimination.

C11. Accelerated Child Survival Initiative

The National Child and Adolescent Health Policy of May 2009 sets out a goal for MOPH of reducing infant and under 5 mortality further to less than 100,000 deaths per year by the year 2015. The National Child Survival Committee was established in 2009 to meet twice a year to review progress and direct action for achievement of this goal of further infant and under 5 mortality reductions by 2015 and in line with MDGs.

During the previous cMYP (2006 - 2010) and with the support of UNICEF and WHO, the MOPH together with NGOs have been providing health care services to the children living in remote and difficult- to -access areas together with immunization services. Additionally, the child survival program includes Vitamin A supplementation, Deworming, bed net distribution, and services to the mothers.

C12. VPDs Surveillance & data management

To measure the impact of immunization services and burden of diseases and taking appropriate control action and decision for introduction of new vaccines, the MOPH emphasizes on strengthening of surveillance of vaccine-preventable disease such as AFP, Measles, NNT, Rotavirus and Meningitis.

At present, information on health and disease indicators, including Vaccine Preventable Diseases (VPDs), is collected by several different systems (EPI, HMIS, DEWS, AFP) without clear coordination or integration.

The lab-based surveillance of Rotavirus and Meningitis was established in late 2007 with the technical and financial support of WHO. During 2008, out of 1383 cases of AFP detected, 31 were positive for polio, and in 2009 38 polio confirmed cases were detected. Out of 4000 case of measles reported in 2009, 1227 were confirmed for measles.
The number of recorded cases dropped from 95 in 2004 to 33 in 2006, 40 cases in 2007 and 12 case in 2008, 19 cases. Out of 605 specimens collected from the patients with gastroenteritis, 341were positive for Rotavirus in 2009. For the first time in the country, 12 cases of whooping cough were laboratory confirmed. And 6 cases of Hib positive meningitis were confirmed by lab from 124 samples tested. The measles genotype (D4) was confirmed for the first time by reference laboratory.
The lab-based Rotavirus and Meningitis surveillance is established in six hospitals with cross-checking of the samples in central public health laboratory. WHO continues providing support to MOPH in running of bacterial meningitis and rotavirus surveillance including laboratory and epidemiology training by network experts, provision of reagents, supplies and equipments, regional quality assurance and quality control, data management and monitoring through follow-up visits and on-site training. The GAVI ISS fund is used as payment of small amount of incentive for encouraging hospital surveillance staff to work overnight. The national manuals on vaccine preventable diseases outbreaks and response were developed with the support of WHO and passed by EPI Task Force Committee.

C13. Other EPI Components
C13.1 New Vaccines

Hepatitis B virus infection is an important public health problem in Afghanistan. The available evidence, based on blood donor screening data and community surveys, shows that about 7% of the general population have chronic HBV infection in Afghanistan - about 1.7 million persons. It is estimated that, of Afghan children born every year, 11,000 would die prematurely of HBV-induced liver disease and about 14000 die of Haemophilus influenza without these valuable vaccines. During the previous 5-year plan, Afghanistan EPI had successfully inroduced hepatitis B vaccine in 2006 in a phase wise manner. In January 2009 the DTP-HepB,Hib combination vaccine (Penta valent vaccine) had been introduced nation-wide.

In line with WHO EMRO immunization goals and in anticipation of the new effective vaccines to be included into national immunization program, Afghanistan has started lab-base surveillance of Rotavirus, Pneumcoccal pneumonia and Meningitis in late 2007 to estimate the burden of diseases under the surveillance. The data available by the end of December 2009 shows >50% as proportion of rota virus cases out of the total reported gastroentritis cases. The data generated from pneumococcal pneumonia and Meningitis surveillance are under analysis. Afghanistan has planned to apply for GAVI support for introducing Pneumo and Roavirus vaccine into NEPI in 2011 and 2013. The NITAG established in 2009 will have important role in recommending introduction of the new vaccines.

C13.2 Immunization Safety

With the support from GAVI and UNICEF, Ministry of Public Health of Afghanistan has introduced Auto Destruct (AD) syringes for immunization purposes as well as safety boxes for the collection and disposal of used injection. AD syringes and safety boxes are distributed bundled with the vaccines to all health facilities, and are used in almost all centers. All health centers burn safety boxes either in the general waste disposal area or in drums and bury the remains. All health service staff is guided to follow this burn & bury procedure for health care waste disposal.

Safety of immunization and surveillance of adverse events following immunization (AEFI) is a matter of concern of MOPH. A system to routinely report adverse events following immunizations (AEFI) has been established in all provinces, but does not functional well. AEFI are reported during routine & campaigns activities. The notification depends on the occurrence of the event not daily or weekly and there is no zero report. The guideline for AEFI is in place and almost all the EPI staff were trained on.

No serious AEFI reported during the previous cMYP.Only two death cases reported from a province and the cause was smog-suffocation as investigated.

C13.3 Training and Capacity Building

In remote and difficult areas of Afghanistan the performance of immunization is hampered by the shortage of qualified and experienced immunization health workers.
Human resource problems such as inappropriate employment of staff by NGOs, high staff turnover, low pay and poor supportive supervision is challenging issue for delivery of immunization services. To meet the need of population, the NEPI has planned to conduct initial training courses for 350 new vaccinators during 2008 - 2010 using GAVI ISS fund. Of the planned number of new vaccinators, 120 new immunization health workers were selected from the remote areas and were trained for three months during 2008.
To strengthen the quality of vaccine and cold chain management at national and regional levels, the 9 cold chain officers were recruited by national EPI office and were trained on vaccine and cold chain management with the support of WHO and UNICEF

In order to raise the technical capacity of EPI staff, training guidelines and manuals were prepared/updated during the previous cMYP and accommodated with all the new techniques and information concerning the introduction of new vaccines (Hep.B and Penta valent vaccines). The WHO Manuals " Immunization in Pracrice" was translated into National Language and around

3000 EPI staff were trained on different aspects of immunization program including VPD surveillnace.

Many training courses had been conducted in 2006 – 2010 for EPI operations officers at all levels and the vaccinators at the immunzation delivery sites. All training material and regisration documents were updated twice before the introduction of Hepatitis B and Hib vaccines and will be revised before the introduction of new vaccine/s.

C13.4 Micro- planning

To strengthen the capacity of EPI managers, supervisors and vaccinators in EPI health facility/district micro- planning based of RED strategies the training course with practical sessions held for almost all EPI staff throughout the previous cMYP using GAVI ISS fund and with the technical and financial support of WHO, UNICEF and NGOs.

The microplans of all accessible districts had been prepared since 2000 and annually updated by the District operation officers together with vaccinators. These microplans are the basis of the annual plans at provincial and national levels.

C13.5 Human Resources Management

Insufficient salary levels especially for service providers and poor incentives is a major issue in human resources management causing a high turnover and brain drain to other more financially rewarding posts. To reduce the negative impact, the isssue raised in many official forums including ICC meetings, the result produced was to little.

The National EPI staff are paid from GAVI ISS fund according to National Salary Scale, the provincial EPI management teams are paid by government and the majority of vaccinators are paid by NGOs. The last group's income does not suffice even the immediate needs of their families. This is an acute problem that seriousely affect and will have more negative affect on the immunization services if the MOPH will not take serious step to solve this problem.

C13.6 Costing and Financing

Donors such as World Bank, EU, USAID are supporting NGOs through MOPH in contracting out Basic Package of Health Services (BPHS)and Essential Package of Hospital Services (EPHS) which include immunization as one of the components.

WHO, UNICEF, ICRC and some some major NGOs are the EPI partners. WHO and UNICEF provide technical and financial support to the programme for routine services as well as for the supplementary immunization activities. WHO's support includes deployment of international and national experts at different locations and co-coordinators at both national and provincial levels. WHO further supports the AFP surveillance network, NIDs for polio eradication, supportive training, social mobilization and other routine and supplementary activities. UNICEF provides vaccines bundled with AD syringes and safety boxes for routine and campaign use. The Fund further supports polio NIDs, as well as MNT and other routine EPI activities (e.g. social mobilization and cold chain). ICRC and some NGOs are providing immunization services.

Afganistan received GAVI vaccine fund support for strengthening immunization, injection safety, pre-introduction activities for the new vaccines and four rewards since 2003. GAVI support was used for strengthening routine immunization program/activities, procurement of cold chain equipment, building infrastructures, vehicles, advocay and communication and it supported the phased introduction of new hepatitis B vaccine starting in 2006 and DTP_HepB-Hib in 2009 as well. Due to the complicated government administrative procedures, the NEPI could not fully and adeuately use GAVI supported fund during the previous cMYP. To some extent, the Government is responsible for payment of the permanent EPI staff at national, provincial, district, health levels, and supporting the programme with health infrastructure and since 2009 co-financed the cost of pentavalent vaccine.

C13.7 Advocacy and Communication

The NEPI role in IEC and social mobilization was limited in production of few radio/TV spots and some banners and leaflets. As planned, the NEPI could not develop effective strategies on EPI IEC and community awareness. Instead, the HSS cell in MOPH played important role in developing effective strategies for community mobilization and community awareness through contracting out with six national and international Radio/TV stations regularly broadcasting information on the importance of immunization. The HSS cell in MOPH together with IEC department developed TV/Radio spots that are regularly disseminate on National and Private Radio/TV stations. In addition, the HSS cell developed and printed around one million posters on immunization and distributed throughout the country.

During the previous planning period several workshops were conducted for training of social mobilization focal persons at national and provincial levels focusing mainly on polio eradication. The workshop concluded to certain recommendations some of which centered around evaluation of reasons that prevent mothers from coming to the vaccination centres through appropriate Knowledge, Attitude and Practice (KAP) studies and to work out communication plans for each province where the polio virus is circulating. The planning of the education & social mobilization activities at District level is one of the compomnents of the routine mico-plan that need serious actions.

C13.8 Supplies, Cold Chain and Logistics

Cold Chain: the national, regional and provincial cold stores had completed in 2006. The programme had added 10 new walk in cold rooms to the national and regional cold sores to accommodate new vaccines. During the previous cMYP, the programme started the rehabilitation of the cold chain in the provinces resulting in an improvement of cold chain functionality. The cold chain system is well function at all levels.

The central vaccine store in Kabul comprises of 6 walk-in cold rooms, 5 of which operate at +4°C , and 1 operate at –20°C giving a combined installed capacity of some 100 cubic meters. The central store provides adequate storage space for present and future needs for all infants vaccines as well as for potential booster doses. It is estimated that the capacity will be adequate for all supplementary immunization activities for the next 5 years. In addition to 16 cold rooms/freezer

rooms, during the past 5 years, 7new cold rooms have been installed in the regions. All regional level cold rooms are of a standard design, and have a storage capacity of some 12 cubic meters each.

The central cold store was certified under the WHO-Unicef Effective Vaccine Store Management Initiative (EVSMI) to be the 3rd store world wide that received this certificate.

The GAVI ISS fund used for procurement of a number of Ice lined Refrigerators, Ice Pack Freezers, RCW50 Refrigerators to meet the need of the program including SIAs for five years. Additionally UNICEF provided around 400 RCW50 refrigerators for expansion and replacement of used refrigerators.
The skills and knowledge of national cold chain staffs has significantly improved enabling them to install all the new cold rooms at national and regional levels before arrival of Pentavalent vaccine. Totally, the cold chain capacity reached 97m3 including national, regional and provincial VSFs. Recently, national EPI procured 2 freezer rooms, 308 RCW50 Refrigerators, 500 cold boxes, 6000 Vaccine carriers and spare parts for refrigerators using GAVI ISS fund. The GAVI ISS fund was also used for construction of 4 buildings for accommodation of provincial EPI Management Teams, procurement of 4 vehicles and 10 sets of computers, maintenance of cold chain equipment, and other capital equipment.

Vaccine Wastage: reducing vaccine wastage is one of the important agendas of NEPI and staffs at all levels are responsible to closely monitor and report it. Health facility monthly reports contain basic information to calculate this indicator. Supervisors check the vaccine wastage during their visits and, the importance of reducing wastage rates is emphasised in programme planning at all EPI levels. The open vial policy is known and in use for OPV and TT. Pentavalent vaccine has helped alot in vaccinating children as soon as they present themselves to health facilities and wastage was kept just below 5%.

C13.9 SWOT analysis of EPI program

The comprehensive EPI review workshops in the presence of UNICEF, WHO and NGOs were conducted at provincial, regional and national levels during 2009 and 1st quarter of 2010 in Afghanistan. The teams examined the following immunization program components:

1. Management, Coordination and Service Delivery;
2. Immunization Strategies, Policies
3. Immunization Coverage and Monitoring;
4. Disease surveillance
5. Immunization Quality and Safety
6. Advocacy and Communication
7. Disease eradication and elimination

The detailed description of the findings for each component based on the SWOT analyses and corresponding recommendations are:

Figure: 6 1.SWOT analysis for Management, Coordination and Service Delivery

Internal		External	
Strengths	**Weaknesses**	**Opportunities**	**Threats**
➢ Reasonably strong EPI program management at national, regional and provincial levels with dedicated health staff. ➢ ICC is providing an important support to the EPI program ➢ Training courses on the different components of EPI including VPD surveillance have been regularly conducted targeting regional and district level health staff. ➢ Overall vaccine & supply management and distribution is adequate ➢ Generally there is a good availability of guidelines, registers, modules and forms at all levels ➢ A functioning network of 1500 fixed immunization sites ➢ Successful introduction of new vaccines into the schedule	➢ Shortage of human resources in remote districts/health facilities ➢ Low performing districts face difficulties in ensuring vaccinators availability and their motivation ➢ Skills and practices at primary health care level are not up to required level, because of high staff turnover/changes ➢ Poor quality of the infrastructure in some districts and health facilities, with poorly maintained building ➢ High dependence on outreach and mobile activities ➢ Insufficient transport for EPI activities at District level ➢ Around 12% of the districts have both problems of access and utilization	➢ The current high dedication of Managerial staff contributes towards the strength of the EPI program ➢ Strong partnership and for immunization program. ➢ Immunization Week that will be advocated by WHO will be a good opportunity to focus on low performing districts. ➢ Integration of EPI with health posts, sub-centers, IMCI ➢ Global interdependence and support to immunization program	➢ Reform in Health Sector and continuous changes are a potential threat for EPI ➢ Unstable government /MOPH structure ➢ Human resources issue in low performing districts, with a lack of vaccinators a hamper the proper implementation of EPI ➢ Poor government contribution and dependence on external resources ➢ Ongoing conflict in some parts of the country ➢ Government lengthy administrative procedures and delay in transferring fund to the peripheral level
2. SWOT analysis of Immunization strategies and policies			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
➢). Immunization policies and schedules are currently well in place ➢ Procurement of quality-assured vaccines through UNICEF Supply Division ➢ Diseases eradication, elimination strategies are in progress (polio measles, MNT	➢ Vulnerable and underserved population are still not fully covered (low performing districts, remote area, displaced people, nomads) ➢ NGOs are not fully following the national immunization policies and strategies	➢ The maturity of the program and the partnership will help in refining specific strategies for underserved population.	➢ Continuous misunderstanding of some NGOs in following EPI strategies negatively affected the EPI coverage
3. SWOT analysis for Immunization Coverage and Monitoring			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
➢ Improvement in <1 overall national coverage since 2003. ➢ Improved recording/reporting tool ➢ Regular and complete reporting to provinces and national ➢ DPT drop-out is decreasing.	➢ Coverage: Number of districts <80% DPT3 by 1 year is still significant ➢ Certain provinces have low coverage in most districts. ➢ Overall DPT1-DPT3 dropout not improv-	➢ Highly educated EPI staff at national and provincial levels ➢ Better availability of data for data management ➢ Supportive environment for local specific coverage analysis and	➢ Staffs brain drain as NGOs and private sector opportunities grow is growing

➢ "Missed Opportunities" indicators being calculated.	ing enough. ➢ Not enough analysis of EPI data at health facility and district levels ➢ Problems with late immunization (<2) ➢ Low MCV2 coverage	improvement ➢ Availability of computers at provincial levels ➢ Strong partners (WHO, UNICEF support) in data management	
4.SWOT Analysis for Disease surveillance			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
➢ Availability of up-to-date national guidelines including standardized case-definitions, reporting forms and procedures ➢ Case-based reporting for priority diseases (measles) ➢ Development of computerized data management at national level and to be expanded to the provinces ➢ Introduction of laboratory confirmation for measles and rubella at the national level. ➢ Trainings on surveillance conducted for all staff involved in measles/NNT ➢ Presence of sensitive AFP surveillance system ➢ Establishment of Rota virus and bacterial meningitis surveillance	➢ Limited use of surveillance data for program management and impact evaluation. ➢ Limited awareness of recent guidelines at the facility level ➢ Limited and irregular feedback from upper levels throughout the system. ➢ Poor monitoring (with the exception of AFP surveillance) ➢ Little data analysis below national level. ➢ In some instances, incomplete investigation and response to reported cases/outbreaks. ➢ Rapid turnover of medical staff working in sentinel sites ➢ Weak awareness of medical professionals about reporting AEFI	➢ WHO technical support. ➢ The rotavirus, pneumococcal and meningitis surveillance study initiated by MOPH in 2007help to estimate the contribution of the burden of these illnesses among children in Afghanistan, which will provide information for programmatic purposes and decision making with regard to the need for the introduction of the new vaccination ➢ Presence of regional/global network for Bacterial Meningitis/Rota surveillance systems.	➢ Lack of funding by government for strengthening disease surveillance system
5. SWOT analysis for Immunization Quality and Safety			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
➢ Good injection safety and vaccine management supplies, practice and records at national level and most regions, provinces, districts and health facilities ➢ No vaccine or injection supply stock-outs or cold chain breakdowns in last 12 months. ➢ Good progress at national cold store following EVSM evaluation. ➢ Good overall improvement in vaccine utilization and reduction in wastage.	Safe Immunization Practices and AEFI: ➢ AEFI guidelines not yet fully implemented ➢ Poor healthcare waste management (burning/burying) at many health facilities ➢ Vaccine Management Issues: - No NRA - Some provinces making much less progress on improving vaccine utilization ➢ Aging cold chain equipments	➢ GAVI ISS fund ➢ Technical support from EPI partners	➢ Continuous war and plundering of cold chain equipment stealing of cold chain equipment

➢ Procurement of vaccines through UNICEF Supply Division.	➢ Inadequate supply of spare part		

6. SWOT analysis for advocacy and communication

Strengths	Weaknesses	Opportunities	Threats
➢ A record of diversity of communication activities (press-conference, TV/radio spots, printed IEC materials over the last five years ➢ Distributed IEC materials (booklets, posters) are available at all service delivery points. ➢ High level of political commitment	➢ Lack of a comprehensive approach to EPI advocacy and communication ➢ Low financial/non-financial motivation of staff is affecting NIP communication critically ➢ Capacities in AEFI management and especially communication are in adequate, mostly at the facility level	➢ Wide spread presence of NGOs and Civil societies at community level. ➢ Trained Community Health workers ➢ Availability of popular international and national radio broadcast and ➢ Advancing communication network in the country	➢ Continuous war and public access to AEFI information

C13.11. Disease elimination/eradication Initiatives (Polio, Measles, and MNT)

7. SWOT analysis of disease eradication and elimination

	Strengths	Weaknesses	Opportunities	Threats
Polio Eradication Initiative **Measles Elimination** **MNT Elimination**	➢ Strong partners support ➢ Availability of SIAs with dedicated mass of health workers and volunteers all over the country. ➢ Availability of International and National experts ➢ Accumulated national and international experience.	➢ Continuation of indigenous polio virus in about 80% of areas of the country and presences of pockets of susceptible children ➢ Poor documentation of outbreaks (Measles, Neonatal tetanus) ➢ Donors' fatigue	➢ Government commitment ➢ High community demand for vaccination and community acceptance to additional doses	➢ Presence of endemic polio virus in the country ➢ Threat of transmission of polio virus from neighboring country ➢ Ongoing war in certain parts of the country

C13.12. Problems/Remaining challenges

- ❖ Insecurity is a key problem in preventing access to the children in south, south-east and some areas in the western and eastern parts of the country.
- ❖ Poor monitoring and supportive supervision that need to be strengthened.
- ❖ Poor monitoring of stakeholders (NGOs) immunization performance require strong coordination and cooperation between NEPI and implementing NGOs
- ❖ Weak management capacity of the NGOs implementing BPHS.
- ❖ Shortage of trained immunization health workers especially in rural and remote areas of the country
- ❖ Low level of payment to immunization health workers
- ❖ Geographical constraints, long winter in certain parts of the country, and bad road conditions

- Poor implementation of HF/District micro-plans by NGOs.
- Shortage of transport means for timely monitoring and supervision
- Discrepancy between different sources of population data
- Government beauerocracy

C13.13. Future challenges

- Polio eradication, Introduction of new vaccines, improving surveillance of targeted diseases and achieving global/regional disease eradication and elimination are the main challenges in future.

Section D: The Comprehensive Multi-Year Plan of National Immunization Program [2011-2015]

In line with the National Health Policy, Mission and Objectives, the Priorities of National EPI for the planned period 2011-2015 are as follows:

D1.Vision: Provide equitable access for children and women of childbearing age (CBA) to existing and new vaccines, and other interventions that lead to reduction of morbidity and mortality of women and children in Afghanistan.

D2.Mission: To achieve and sustain at least 9o% coverage for all antigens nationally and at least 80% coverage in each district in order to reduce maternal and child morbidity, disability and deaths due to vaccine preventable diseases.

D3. Program Objectives and mile stones

By the end of 2015;

1. To achieve and sustain 90% coverage nationally and at least 80% coverage with all routine antigens in every district.
2. To achieve polio eradication goal, sustain and reach certification of polio eradication
3. To achieve and maintain Measles elimination.
4. To attain Elimination of Maternal and Neonatal Tetanus
5. To strengthen VPDs/AEFI Surveillance System
6. To expand lab-base surveillance of diseases prevented by new vaccines
7. To ensure that National Vaccine and Immunization Logistic Management system provides safe and adequate vaccines and immunization supplies and adequate funding
8. To enhance managerial capacity of national Immunization program
9. To work toward ensuring financial sustainability of immunization program
10. To reduce morbidity and mortality by introducing Pneumococcal and Rota virus vaccines

D4. National Immunization Program (NIP) strategies and key activities, 2011-2015

The following problems have been identified based on the situational analysis and national priorities with corresponding objectives and milestones have been defined as shown below:

Figure: 7

Description of problems & national priorities	Objectives	Milestones	Regional /Global goals	Order of Priority

- Low DPT3 coverage (12% with < 80% coverage and 38 districts < 50% coverage - Poor access to and utilization of immunization services in certain provinces/districts (12% of the districts). - Low coverage in the hard-to-reach area	To increase and sustain DPT3 (Penta) coverage to 90% nationally and at least 80% in every district by strengthening both access to and utilization of immunization services in low performing provinces/ districts and hard-to-reach areas	**2011**: 10 % of low performing districts and hard-to-reach areas will achieve at least 80% DPT3 coverage **2012:** 30% of low performing districts and hard-to-reach areas will achieve and sustain at least 80% DPT3 coverage **2013**:50% of low performing districts and hard-to-reach areas will achieve and sustain at least 80% DPT3 coverage **2014**: 75 % of low performing districts and hard-to-reach areas will achieve and sustain at least 80% DPT3 coverage **2015:** 90% of low performing districts and hard-to-reach areas will achieve and sustain at least 80% DPT3 coverage	By 2010 or sooner all countries will have routine immunization coverage at 90% nationally and with at least 80% in every district	1
Program management weaknesses resulting in poor evidence-based decision, inadequate coordination, poor advocacy and communication	To strengthen national capacity to manage and coordinate program effectively	Evidence-base decision **2011**: 70% of Program Management Officers (PMOs) trained on immunization problem-solving methods & use of evidence/data for decisions **2012:** 950% of Program Management Officers (PMOs) trained on immunization problem-solving methods & use of evidence/data for decisions **2013:** 85% of EPI Program Management Officers developed capacity to conduct effective supportive supervision **2014:** 95% of Program Management Officers acquired capacity of efficient collaboration and coordination with stakeholders **2015:** 85% of PMOs be proficient to conduct operational research **Advocacy and communication**: **2011:** 100% of PMOs trained on national immunization communication policy and strategies 2012: 100% of PMOs trained on advocacy and communication 2013: 50% of PMOs trained on KAP study 2014: 70 on KAP study 2015: 85% on KAP study		1
Low coverage of routine vaccination coverage	To achieve and sustain 90% coverage of all routine vaccination (BCG, Penta3, MCV1, TT2+) coverage nationally and 80% coverage in every district	2011: 80% coverage of all routine vaccines (Penta3 -85%) 2012: 82% coverage of all routine vaccines (Penta3-87%) 2013: 85% coverage of all routine vaccines (Penta3-89%) 2014: 87% coverage of all routine vaccines (Penta3 -90%) 2015: 90% coverage of all routine	By 2010 or sooner all countries will have routine immunization coverage at 90% nationally with in	1

		vaccines **(Penta3-90%)**	every district	
-Weaknesses in surveillance of VPDs (reporting problems - timeliness and completeness) - Incidence of measles is high -Weak AEFI surveillance	To strengthen an action oriented surveillance system for EPI diseases in order to achieve and maintain >80% of all surveillance indicators	Involvement of health facility officers in VPDs/AEFI/Community surveillance: 2011:30%, 2012:60% 2013:70% 2014:80% 2015:90%	Ensure capacity for surveillance and monitoring. All countries will have developed the capacity at all levels to conduct case-based surveillance of vaccine preventable diseases, supported by laboratory confirmation where necessary, in order to measure vaccine coverage accurately and use these data appropriately	2
-Lack of proper information on vaccine value, quality and safety among health care workers staff and public -High vaccine wastage rate	Immunization program will ensure the safety of vaccination through strengthening and sustaining of control system at each step from procurement to the point of use	Reduction of vaccine wastage rate <10% by 2015 2011 onwards: Sustain "No stock out	Ensuring the quality of immunization services for sustained program performance and to keep the public confidence · Ensuring the safety of immunization is part of guaranteeing the quality of immunization services	2
Introduction of new vaccines (Pneumococcal and Rota virus vaccines).	To reduce infant and child morbidity and mortality caused by Rota virus gastroenteritis and S. pneumonia	2011: NITAG recommendation for introduction of Pneumo and Rota Vaccines 2012:Rota virus vaccine introduction in NIP in January 2012 2013: Pneumococcal vaccine introduction in NIP in January 2013 2014: Coverage of both new vaccines third dose equal Penta3 (90%) 2015: Immunization coverage of both new vaccines are the same as Penta3 (90% Nationally, and at least 80% in every district)	SEGE recommended global use of Rota and PCV vaccines	1

Strengthen surveillance of diseases targeted by the new vaccines.	To strengthen lab-base surveillance of diseases targeted by the new vaccines in the selected sentinel sites.	2011: 60% surveillance indicators 2011: 80% 2012: 80% 2013: 90% 2014: 100% 2015: 100%	Achieve regional targets of BMS and Rota virus surveillance Network	3
Global/Regional disease eradication and elimination goals	To eradicate indigenous polio virus from the country	2011: stop circulation of wild polio virus 2012: Stop circulation of wild polio virus 2013: sustain eradication status 2014: sustain eradication 2015: sustain eradication and achieve polio free certification	Polio eradication by 2015	1
	To achieve and maintain Measles elimination.	2011: 40% of outbreaks have < 10 cases per outbreak 2012:60% outbreaks have <10 cases per outbreak. 2013: 80% of outbreaks have <10 cases per outbreak 2014: Measles incidence will be reduced by 80% compared to baseline year 2015: Indigenous virus transmission has been stopped and measles elimination target reached	Measles elimination by 2015	1
	To achieve and maintain MNT elimination.	2011: 65% of high risk districts eliminating MNT (>1/1000LB) 2012: 75% of high risk districts eliminating MNT (>1/1000LB) 2013: 85% of high risk districts eliminating MNT (>1/1000LB) 2014: 95% of high risk districts elimination MNT (>1/1000LB) 2015: 100%dDistricts eliminating MNT	NNT elimination	2

D4. Program strategies and key activities, 2011-2015

Strategies and key activities necessary to achieve the abovementioned objectives are listed in the sequence of the 10 national objectives and developed in the below table. A timeline for their implementation over the next five years is being developed annuall.

Figure 8

Objective	*Strategy*	*Activities*	*Indicators*
1. To achieve and sustain 90% coverage nationally and at least 80% coverage with all routine antigens in every dis-	**Implement RED strategies:** 1. Planning and management of resources	✓ Revise district micro-planning guideline and tools ✓ Re-schedule/revise district micro-plans ✓ Training of staff on district micro-planning at various levels ✓ Mobilize sufficient fund for adequate payment of EPI service providers	✓ Proportion of under one year children vaccinated with the third dose of Pentavalent and MCV1and pregnant women with TT2+

trict.	2. Sustaining outreach services	✓ Provision of vaccines, cold chain, transport, staff per-diems immunization recording/reporting materials	✓ #(%) of outreach sessions conducted /planned/year
	3. Supportive supervision	✓ Adapt/develop guideline on supportive supervision ✓ Revise supervisory checklist ✓ Train EPI operation staff on supportive supervision ✓ Conduct joint supervision with other health department/stakeholders ✓ Conduct Data Quality Self assessment (DQS) and use data for actions	✓ #(%) of supervisory visits conducted/planned/year
	4. Monitoring for action	✓ Provide guidelines and forms for data collection ✓ Analysis of data and provide regular feedback ✓ Strengthen information sharing mechanism ✓ Conduct RED evaluation ✓ Conduct EPI coverage survey ✓ Conduct external evaluation of immunization program	
	5. Improving communication & linking with community	✓ Adapt/develop comprehensive communication policy and strategies for immunization program ✓ Conduct regular advocacy activities in communities ✓ Strengthen communication partnership with civil societies/community groups ✓ Development of Information, Education, Communication (IEC) materials ✓ Organize annual vaccination week campaigns ✓ Improve inter-personal communication at service delivery level. ✓ Conduct study to identify barriers to immunization and to identify immunization communication needs ✓ Design and implement an immunization communication plan ✓ Review training material and update/include as necessary interpersonal communication and community mobilization in training packages of vaccinators and managers ✓ Train immunization service providers and managers on interpersonal communication and community mobilization ✓ Conduct special communication campaigns in link with special service delivery events like outreach and other SIAs ✓ Develop mechanism and materials to facilitate organization of sessions on benefit of immunization in formal (from primary schools to universities) and non-formal learning events (functional literacy and vocational training)	#(%) of villages have access to immunization services
	6. Linking with other health interventions	✓ Strengthen appropriate mechanism for coordination of EPI interventions with other child health programs ✓ Develop policy, tools and operational procedures for integrated approach and provide services as a package to ensure convergence of interventions on women and children. ✓ Link EPI service delivery to MCH services at health facilities to make it a one stop service package. ✓ Evaluate the process and impact of integrated approa ✓ Develop/implement integrated logistics, monitoring, supervision, recording and reporting tools ✓ Conduct Sustainable outreach Services in hard to reach	

		and underserved areas based on individual community needs, service and resources availability ✓ Implement national policy to involve private sector in provision of immunization services in hard to reach and un-served areas.	
	7. Reduce drop-out rate	✓ Strengthening defaulter tracing system ✓ Reduce missed opportunities	
2. To achieve polio eradication goal & sustain eradication status and achieve certification of polio eradication	1.High quality SIAs (all indicators> 95%)	✓ Revise/update Polio Operation guidelines ✓ Revise Micro-plans at all levels ✓ Conduct high quality NIDs/SNIDs/Mopping up campaigns with more than 95% coverage in all clusters/districts ✓ Conduct focused group discussions for developing specific strategic plan district with security concern and where still there is polio virus circulation	✓ # of Polio cases ✓ > 95% OPV coverage rate by finger marking during SIAs ✓ % of districts with >95% coverage ✓ % of districts with all clusters >95% coverage
	2. Strengthened AFP surveillance	✓ Conduct high quality active surveillance ✓ Receive zero reports with 90% or more completeness and timeliness ✓ Complete all documentation required for certification ✓ Strengthened community-base AFP reporting ✓ Continue producing quarterly AFP bulletin ✓ Conduct annual refresher training courses for central, regional, provincial and district AFP surveillance officers /focal points ✓ Conduct annual external AFP surveillance assessment	
3. To achieve and maintain Measles elimination	1. Provide second opportunity for measles vaccination for < 5yrs children	✓ Update measles SIA operational guidelines as necessary ✓ Conduct susceptibility analysis for identification of accumulated susceptible groups before each follow up SIA ✓ Conduct measles follow up campaigns integrating with TT/OPV ✓ Conduct advocacy for fund raising for measles SIA ✓ Carry out post campaign assessment ✓ Improve MCV1 and MCV2 coverage through routine immunization	✓ # (%) children vaccinated based on PCA ✓ >90% of children received measles immunization ✓ Rate of confirmed measles cases/1000000 population ✓ Achieve and sustain all Lab indicators>80$
	2. Strengthen measles case-based surveillance	✓ Coordinate measles surveillance with all stakeholders ✓ Conduct Quarterly Measles surveillance review ✓ Support national measles lab ✓ Conduct weekly measles surveillance committee meetings ✓ Conduct annual assessment of lab for accreditation ✓ Send samples to RRL for identification of circulating genotype ✓ Revise guideline for control of measles outbreaks ✓ Prepare contingency plan for timely response to measles outbreaks ✓ Investigate all out breaks and collect 5 specimens from each outbreak ✓ Provide recording/reporting materials for measles surveillance ✓ Send serum specimens to RRL for QC Provide basic and refresher training for surveillance officer/focal persons	
4.To attain elimination of Maternal and Neonatal Tetanus (MNT)	1.TT routine vaccination of pregnant women 2. High quality SIAs in high risk districts	✓ Increase routine TT2+ (see objective1) ✓ Introduce use of Protection At Birth (PAB) ✓ Revise/Update SIAs manuals ✓ Revise micro-plans at all levels ✓ Conduct integrated TT SIAs in all high risk Districts ✓ Conduct quarterly MNT surveillance review meetings ✓ Update MNT case-base surveillance guideline	TT2+ >80% (PCA) Rate of <1/1000LB

	3. Strengthen integrated MNT surveillance with AFP 4. Establish Community Based MNT Surveillance	✓ Refresher training for AFP surveillance personnel on NNT reporting and investigation ✓ Develop guideline for community -base surveillance ✓ Train of AFP personnel on MNT reporting and investigation ✓ Involve community health workers in reporting NNT cases ✓ Training of community health workers and midwives	
5.To strengthen VPDs /AEFI Surveillance system	Strengthen capacity for improving quality of VPDs surveillance	✓ Establish a unified/integrated system of VPD surveillance system in the country ✓ Adapt/develop manuals on integrated VPD surveillance ✓ Training of surveillance officers (EPI,DEWS,AFP) ✓ Distribution of surveillance Manuals ✓ Maximize utilization of existing AFP surveillance staff ✓ Involve DHOs in VPDs surveillance ✓ Conduct Basic and refresher training for DHOs and focal persons at reporting sites ✓ Training of lab staff on Rotavirus, meningitis and pneumococcal surveillance ✓ Refresher training of surveillance officers on AEFI ✓ Conduct quarterly and annual review workshops	Achieve performance indicators according to elimination/eradication targets/estimating burden of diseases for new vaccines
6.To expand lab-base surveillance of diseases prevented by new vaccines	Strengthening surveillance of diseases prevented by new vaccines into VPDs surveillance	✓ Expand lab-base (hospitals) surveillance ✓ Revise manuals/SOPs, print and distribute ✓ Provide lab equipment, reagents, recording/reporting materials ✓ Training of lab and surveillance staff ✓ Provide basic and refresher training for surveillance officers/focal persons ✓ Conduct regular monitoring ✓ Conduct annual surveillance review meeting	
7. To ensure that National Vaccine and Immunization Logistic Management system provides safe and adequate vaccines and immunization supplies and adequate funding	Strengthen cold chain/vaccine/logistic management system at all level of immunization program	✓ Update the national cold chain inventory/management system ✓ Carry out nation—wide cold chain assessment ✓ Revise national standards for cold chain equipment and supplies. ✓ Develop cold chain replacement and expansion plan ✓ Carry out annual self assessment of national and regional Vaccine Storage Facilities (VSF) to ensure that the facilities meet the Effective Vaccine Management criteria ✓ Procure and replace 10% cold chain equipment annually ✓ Procure cold chain equipment for 10% cold chain expansion annually ✓ Expand dry storage capacity of NSF ✓ Update vaccine management standard operation procedures (SOP) ✓ Develop annual plans including needs forecast, supplies distribution, equipment and building maintenance and supervision plans for the national and regional VSFs ✓ Provide operational support to the vaccine logistic network including transport, fuel, travel cost, salary/incentive according to the agreed annual plans (Plus incentive) ✓ Introduce VSSM, at national and provincial VSFs	-Proportion of national and regional VSF that meet the Effective Vaccine management criteria -% regional and National VSF getting adequate resources (> 80% of planned) by item -Proportion of national, regional and provincial VSF following National Vaccine Management Standard Operation Procedures (SOP) -% of provincial stores reporting stock out of vaccines -% of provincial stores reporting stock outs of immunization supplies -% of provincial stores reporting stock outs of cold chain spares -%of government financial contribution in

		✓ Strengthen vaccine wastage monitoring system, monitor regularly and take actions to reduce vaccine wastage. ✓ Make sure that the vaccines are procured bundled ✓ Conduct competency based training of Cold Chain Technicians, Supervisor and PEMT manager on the cold chain inventory system, cold chain equipment handling, maintenance, basic repairs, use of planning and supervision tools and vaccine management SOPs. ✓ Procure pick-ups (Toyota hilux) for provincial EPI teams/VSF, one each for 54 provinces and replacement for 5 provinces each year ✓ To maintain "no stock-out status"	EPI
8.To enhance managerial capacity of national Immunization program	Strengthening role of ICC	✓ Revise ICC mandate ✓ Add new influential members to ICC ✓ Conduct regular quarterly meetings	7
	Enhance /strengthen capacity/ competency of national EPI staff on evidence- based management of the program	Train National, provincial and district levels EPIO /DHOs on different aspects of Immunization Problem to be able to: ✓ Train staff on Problem Solving Approaches ✓ Conduct an EPI coverage survey to establish baselines of all indicators and to track progress ✓ Carry out data quality self assessment ✓ Carry out an EPI program review ✓ Monitor EPI main indicators regularly and use data for action ✓ Conduct Drop-out rate assessment and take actions to address high drop-out rate ✓ Revise district micro-planning tools with involving partners and communities ✓ Conduct District micro-planning exercise in all districts ✓ Use district micro- plans to determine need and type of the services centers and outreach ✓ Improve national database of district indicators ✓ Strengthen and expand supportive supervisory system ✓ Conduct operational research ✓ Review/update & reinforce national EPI policies & standards as necessary ✓ Conduct training needs assessment ✓ Adopt Mid-level ✓ Adopt "Immunization in practice" for training of immunization service providers ✓ Conduct National annual EPI planning and review workshops ✓ Recruit and maintain level of technical and managerial expertise ✓ Review FSP and cMYP annually and update as necessary ✓ Develop vaccine self reliance initiative plan for Afghanistan ✓ Conduct periodic EPI Task Force meetings to review technical and operational aspect of the cMYP implementation ✓ Conduct periodic ICC meetings and in those meetings review progress of cMYP implementation	# (%)/quality of input, process, output, outcome and impact indicators/ targets met
	2. Building strong partnerships with stakeholders (	✓ Establish coordination and information sharing mechanisms with partners and MOPH departments ✓ Use of District Public Health Department personnel in immunization activities	#(%) of DHOs involved # of MOU

		✓ Develop MOU with civil society organizations to promote vaccination coverage	
9.To work toward ensuring financial sustainability of immunization program	Exert all efforts towards mobilization of resources and financial sustainability of the program	✓ Advocate with government authorities to secure funding for co-financing/purchase of new vaccines ✓ Mobilize the government to increase its share in Operational cost of the program annually ✓ Conduct regular follow-up meetings with concerned financial departments in MoH and MoF ✓ Advocate for mobilizing donors' resources ✓ Mobilize and involve new national and international donors ✓ Prepare and submit appropriate funding proposals Conduct national resource mobilization workshop	
10.To reduce morbidity and mortality by introducing Pneumococcal and Rota virus vaccines	Introduction of new vaccines (Rota virus vaccine and PCV13 or 23)	✓ Submit application for GAVI fund support for introduction of the new vaccines ✓ Ensure government co-financing for new vaccines ✓ Revision of training material and guidelines including AEFI ✓ Update immunization registers and records ✓ Develop, print and distribute IEC materials and organize social mobilization/sensitization campaigns ✓ Training of EPI staff ✓ Conduct Post Introduction Evaluation (PIE) ✓ Continue surveillance of Rotavirus and Pneumonia	#(%) of input, process, output, outcome and impact indicators

D5. Costing and Financial Analysis of cMYP 2011-2015

D5.1. Introduction and Background

The previous comprehensive Multi-year Plan (cMYP) for Afghanistan was drafted in 2006.. It was updated in early 2007 for the period of 2007-2010, corresponding to Afghan years 1386, 1387, 1388[4]. The cMYP addresses the four strategic areas identified in the Global Immunization Vision and Strategy for 2006-2015. The costing and financing of the plan has been undertaken through use of the cMYP costing and financing tool developed by WHO.

The demographic indicators (Table 1) and corresponding population projection has been made as per data in use by the EPI Afghanistan. Please note that the IMR, growth rate and population are slightly different than the other health sector figures mentioned above. However, the health sector figures are still being debated within the Ministry and differ between departments, while NEPI has found that the figures used below provide a good basis for planning with no vaccine stock outs.

The EPI Afghanistan had been providing six classical antigens since its beginning in early 1980s. With the GAVI support Hepatitis B vaccine in the form of Tetravalent Vaccine (DPT-Hep B) was introduced in the EPI Schedule in mid 2006 and the Hib vaccine in the form of Pentavalent was introduced in January 2009 replacing tetravalent vaccine.

[4] Afghan year begins on 21st March.

Table N011	Baseline	Future Years				
Routine Immunization	**2009**	**2011**	**2012**	**2013**	**2014**	**2015**
Population (% growth)	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
Births (% total population)	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%
Infant Mortality Rate (per 1,000 live births)	129	129	129	129	19	129
Pregnant women (as a factor of births)	1.0	1.0	1.0	1.0	1.0	1.0
Childbearing age women (CBAW) (% of total population)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%

Table N012	2009	2011	2012	2013	2014	2015
Population	28,055,270	29,418,083	30,124,117	30,847,096	31,587,426	32,345,524
Births	1,346,653	1,412,068	1,445,958	1,480,661	1,516,196	1,552,585
Surviving Infants	1,172,935	1,229,911	1,259,429	1,289,655	1,487,389	1,352,302
Fully Immunized Children (proxy)	973,536	1,045,425	1,095,703	1,147,793	1,338,650	1,217,072
Pregnant women	1,346,653	1,412,068	1,445,958	1,480,661	1,516,196	1,552,585
CBA women	5,611,054	5,883,617	6,024,823	6,169,419	6,317,485	6,469,105

D5.2 Salient Features of the Costing of the cMYP:

1. Since the information regarding the past costing by GoA and different partners was not exactly according to the budget lines of the cMYP tool, estimation has been often made. However care has been taken to reach the overall figure of financing by GoA and different partners to be as near as possible the available figures.
2. The future needs are estimated according to the cMYP, which aims at reaching 90% coverage with routine EPI antigens country wide by 2015 and at least 80% coverage in each district by the same period.
3. The average useful life for the transport has been considered as 10 years while for the cold chain equipment, it has been estimated as 7 years.
4. During the plan period all the components of the program will be strengthened particularly human resource and logistics.
    a. Human Resources: 125 District health coordinators and 16 Regional EPI trainers are recruited in 2007 and 2008. in addition to 240 vaccinators, 120 of whom are recruited in 2008.
    b. Cold Chain: as planned, 10 new walk-in cold rooms were purchased and installed for accommodation of Pentavalent vaccine. Additional cold chain equipment including spares will be procured to replenish the old one and to establish new EPI static centers.
5. The GOA contribution to the EPI budget increases gradually through out the plan period. From 2009 onwards it also starts contributing towards the salary and perdiem of the outreach workers which traditionally had been funded by the donors.
6. The likely contribution of the key EPI partners (UNICEF, WHO) has been maintained around the level of their contribution in 2009.
7. There is already a balance of appx US$ 3 million of GAVI ISS funds with GOA from Phase2. These are considered as secure funding during the plan period. In addition to these funds appx US$ 1.4 million funds are expected under GAVI ISS.

D5.3 Costing and Financing Analysis for 2009:

In 2009 the total immunization expenditure was $38,593,958 Million[5]. This included Out of the total immunization specific expenditure of US $ 38,593,958 an amount of $16,712,221 was spent on campaigns and an amount of $21,881,737 was spent on routine immunization activities. The campaigns in 2009 included 6 rounds of Polio NIDs and 5 rounds of Polio SNIDs besides a combined campaign of Measles and MNT targeting 9 month to 36 month children for Measles and CBWs.

The cost per DPT3 child was US $ 22.5 The per capita expenditure on routine immunization is estimated to be US $ 0.8 (**Table N013**)

Table N013

Baseline Indicators	2009
Total Immunization Expenditures	$38,593,958
Campaigns	$16,712,221
Routine Immunization only	$21,881,737
per capita	$0.8
per DTP3 child	$22.5
% Vaccines and supplies	14.0%
% National funding	5.3%
% Total health expenditures	1.9%
% Gov. health expenditures	7.9%
% GDP	0.16%
Total Shared Costs	$960
% Shared health systems cost	0%
TOTAL	$38,594,918

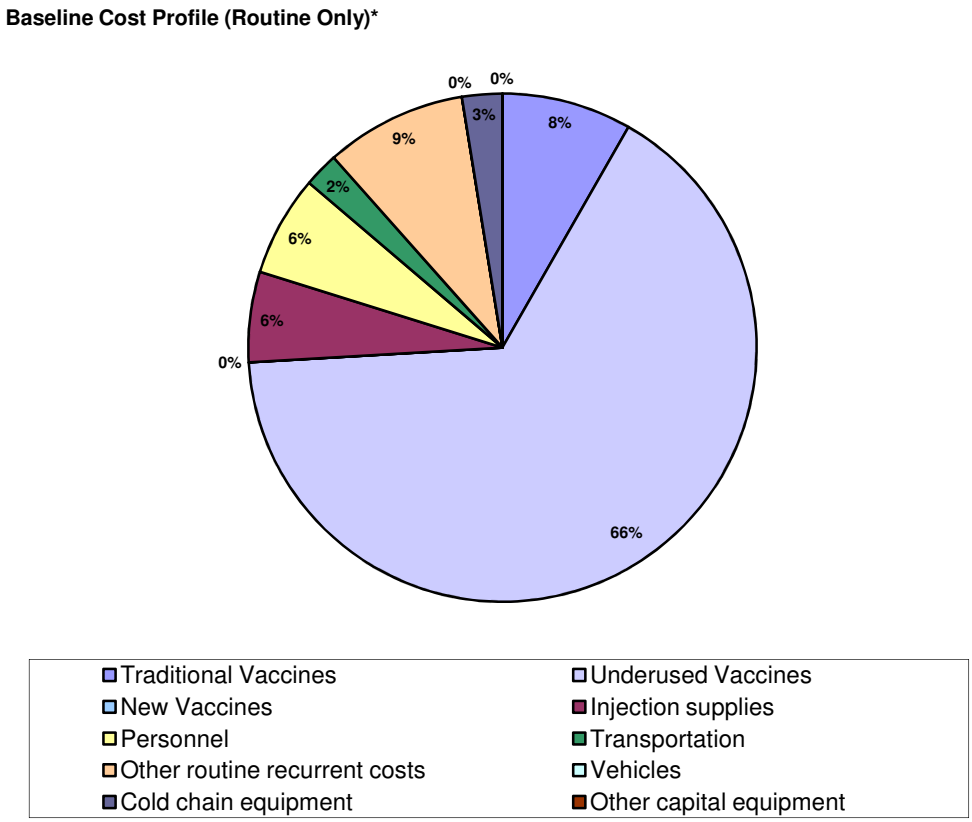
The major cost driver for routine immunization was vaccines cost (traditional & underused) amounting for 66% (US$16.2 million) of total routine expenditure; this is mainly due to the introduction of DTP-Hep-Hib which required US$ 14.4 million.

Personal cost ranked the second after vaccines constituting 9% of routine expenditure (US$3.9 million) followed by other routine recurrent cost included maintenance and overhead, training, IEC/social mobilization, surveillance and program management.

Remaining cost was the cost of procurement of injection supplies (6%), cold chain equipment and transport (chart N01)

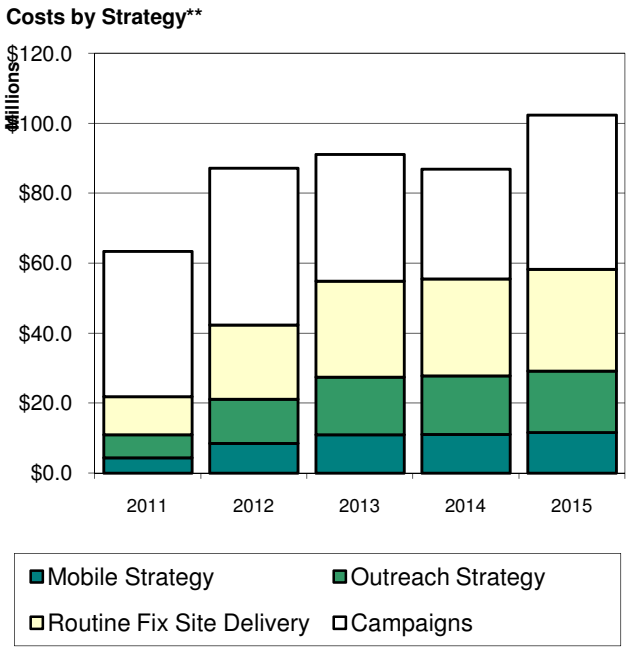
[5] Derived through utilizing the Cmyp tools

Chart N01



GAVI remained the major funding source contributing (74%) to cover the above mentioned routine line items, UNICEF was the second (13%), donors were the 3rd and the remaining cost covered by government and WHO in 2009.

From the below figure GAVI is the major financing source for routine immunization during 2009 covering mainly underused vaccines cost, personnel, training, transportation, outreach, supervision/monitoring, surveillance, maintenance and overheads and vehicle. NEPI used remaining r reward money to cover the cost of above mentioned activities while the remaining was covered by donors and partners (WB, USAID, EC, UNICEF and WHO. UNICEF ranked the second funding source as it covered the cost of traditional vaccines, injection supplies, in addition to part of the training and social mobilization activities and cold chain equipment and maintenance.



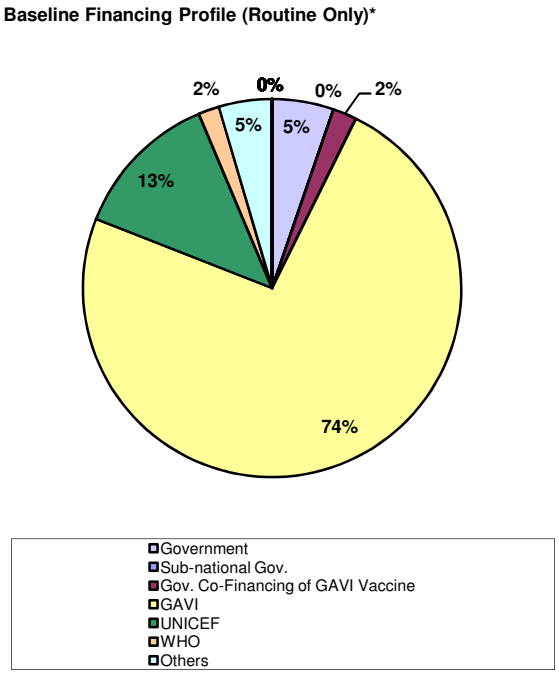


Chart N2 **Chart N03**

D5.4 Future resource requirements, financing and gap analysis 2011-2015: In order to achieve the national objectives mentioned in previous chapters, there would be a significant increase and growth of expenditure as explained below. As seen in the below table; a resource envelope of U$ 468.6 million will be needed over the plan period, with an annual average of U$90 million which is more than that in the baseline year (U$38.5 Million). This increase is mainly due to the planned introduction of new vaccines (Rota and Pneumococcal vaccines

Table N014 | **Expenditures** | **Future Resource Requirements**

cMYP Component	2009	2011	2012	2013	2014	2015	Total 2011 - 2015
	US$	US$	US$	US$	US$	US$	US$
Vaccine Supply and Logistics	$18,429,330	$38,404,042	$50,877,799	$51,364,818	$53,890,583	$55,315,595	$249,852,837
Service Delivery	$1,885,458	$2,020,230	$2,131,798	$2,247,021	$2,352,750	$2,452,801	$11,204,600
Advocacy and Communication	$100,468	$62,220	$62,424	$85,958	$79,018	$98,263	$387,883
Monitoring and Disease Surveillance	$281,001	$336,600	$369,342	$403,259	$430,808	$465,922	$2,005,931
Programme Management	$1,185,480	$1,282,630	$1,368,625	$1,436,324	$1,499,688	$1,517,537	$7,104,804
Supplemental Immunization Activities	$16,712,221	$41,480,669	$44,864,992	$36,301,441	$31,375,825	$44,115,179	$198,138,105
Shared Health Systems Costs	$960	$225,379	$42,615	$22,243	$33,512	$23,142	$346,891
G	**$38,594,918**	**$83,811,770**	**$99,717,595**	**$91,861,064**	**$89,662,184**	**$103,988,439**	**$469,041,051**

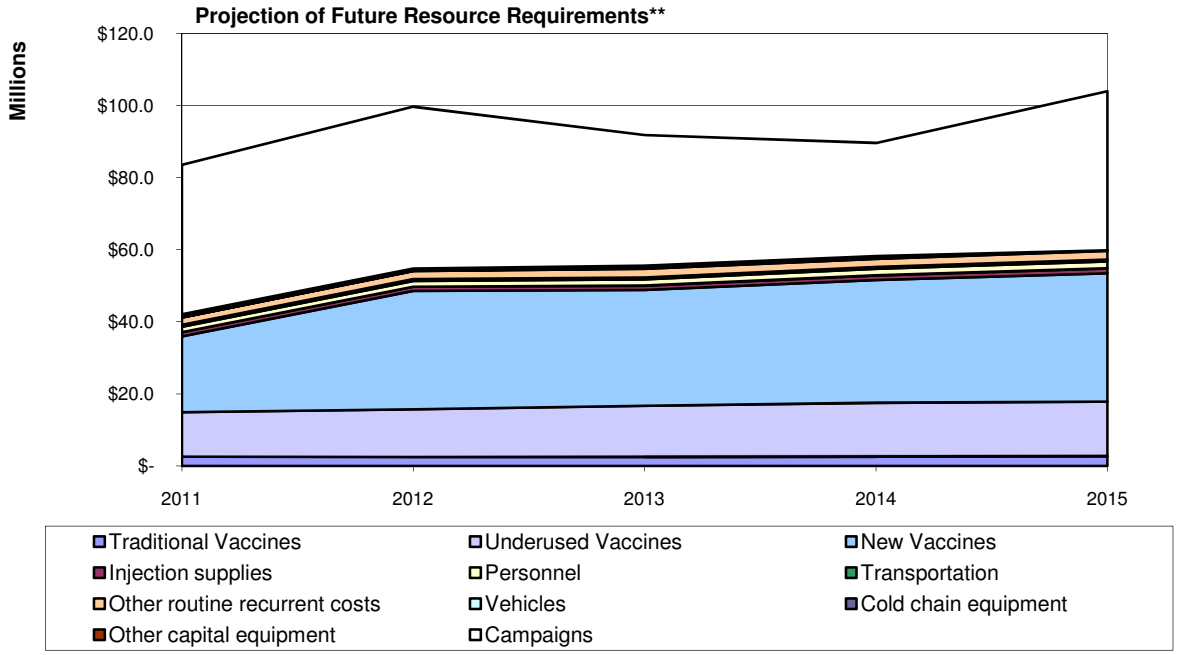


Chart N04

The above chart shows the breakdown of required resource by category.

This resource requirement can be translated into $ 22.5 per DTP3 child and 0.8 dollar per capita, this cost per DTP3 child is almost double that of the baseline year.

D5.5 Financing and gap analysis

Looking at the financial profile for the plan period (see in the below table); the total secure funds are US$ 104.5 million. GAVI is the major funding source followed by UNICEF, then other donors. GoA moved from the least funding source to be the fourth because of co-financing and covering the personnel and some recurrent cost. WHO is the least funding source.

The funding gap when considering only **secure** funds will reach 22.3% of total resource requirements. Table N014

Resource Requirements, Financing and Gaps*	2011	2012	2013	2014	2015	Avg. 2011 - 2015
Total Resource Requirements	$83,586,391	$99,674,980	$91,838,821	$89,628,672	$103,965,297	$468,694,160
Total Resource Requirements (Routine only)	$42,105,722	$54,809,988	$55,537,380	$58,252,847	$59,850,118	$270,556,055
per capita	$1.4	$1.8	$1.8	$1.8	$1.9	$1.8

per DTP targeted child	$40.3	$50.0	$48.4	$43.5	$49.2	$46.3
Total Secured Financing	$19,289,874	$19,914,919	$21,622,134	$22,120,256	$21,584,324	$104,531,507
Government	$466,216	$410,336	$430,428	$688,267	$370,541	$2,365,788
Sub-national Gov.						
Gov. Co-Financing of GAVI Vaccine						
GAVI	$14,537,545	$14,351,481	$15,101,145	$15,669,181	$15,726,330	$75,385,682
UNICEF	$3,434,864	$3,503,837	$3,492,911	$3,525,334	$3,516,152	$17,473,098
WHO			$668,561	$479,826		$1,148,387
Others	$851,249	$1,649,265	$1,929,089	$1,757,648	$1,971,301	$8,158,552
Funding Gap (with secured funds only)	$64,296,517	$79,760,061	$70,216,687	$67,508,416	$82,380,973	$364,162,653
% of Total Needs	77%	80%	76%	75%	79%	78%
Total Probable Financing	$64,296,517	$79,334,197	$70,216,687	$67,508,415	$74,379,249	$355,735,065
Government	$245,660	$1,077,041	$361,205	$414,850	$956,847	$3,055,603
Sub-national Gov.						
Gov. Co-Financing of GAVI Vaccine	$0	$0	$0	$0	$0	$0
GAVI	$25,087,600	$32,861,034	$32,128,073	$34,026,255	$35,606,606	$159,709,568
UNICEF	$27,100,988	$36,505,808	$31,958,363	$27,596,481	$30,780,227	$153,941,867
WHO	$8,822,400	$8,890,314	$5,769,046	$5,420,379	$7,035,569	$35,937,708
Others	$3,039,869			$50,450		$3,090,319
Funding Gap (with secured & probable funds)	$0	$425,864	$0	$1	$8,001,724	$8,427,588
% of Total Needs	0%	0%	0%	0%	8%	2%

Note: Costs not including shared health system costs

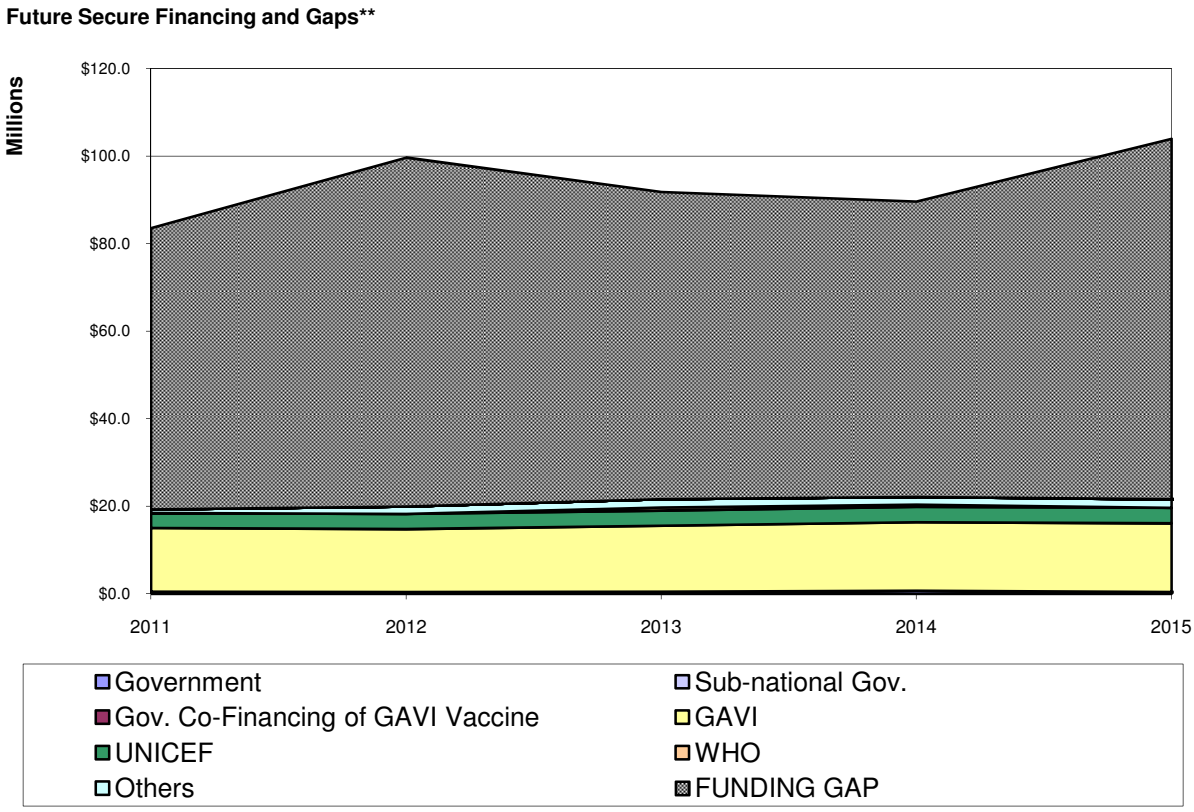


Chart N05

Composition of this funding gap is shown in Table N0 15

Table N015

Composition of the funding gap	2011	2012	2013	2014	2015	Avg. 2011 - 2015
Vaccines and injec-tion equipment	$21,042,600	$32,861,034	$32,128,073	$34,026,255	$35,606,606	$155,664,568
Personnel	$75,660				$100,000	$175,659
Transport	$170,000	$0	$0	$0	$84,000	$254,001
Activities and other recurrent costs	$1,067,012	$1,575,717	$988,355	$1,428,198	$2,294,119	$7,353,401
Logistics (Vehicles, cold chain and other equipment)	$460,576	$458,318	$798,819	$678,138	$181,069	$2,576,920
Campaigns	$41,480,669	$44,864,992	$36,301,441	$31,375,825	$44,115,179	$198,138,105
Total Funding Gap*	**$64,296,517**	**$79,760,061**	**$70,216,687**	**$67,508,416**	**$82,380,974**	**$364,162,654**

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

Out of the funding gap; US$ 155.6 Millions are needed to cover new vaccines cost. Other areas that have no funding source yet are the cost for procurement of capital equipments especially cold chain and vehicles, operational cost of polio NIDs, measles and MNT campaigns and this mainly because of failure to obtain long term funding commitment from financing sources.

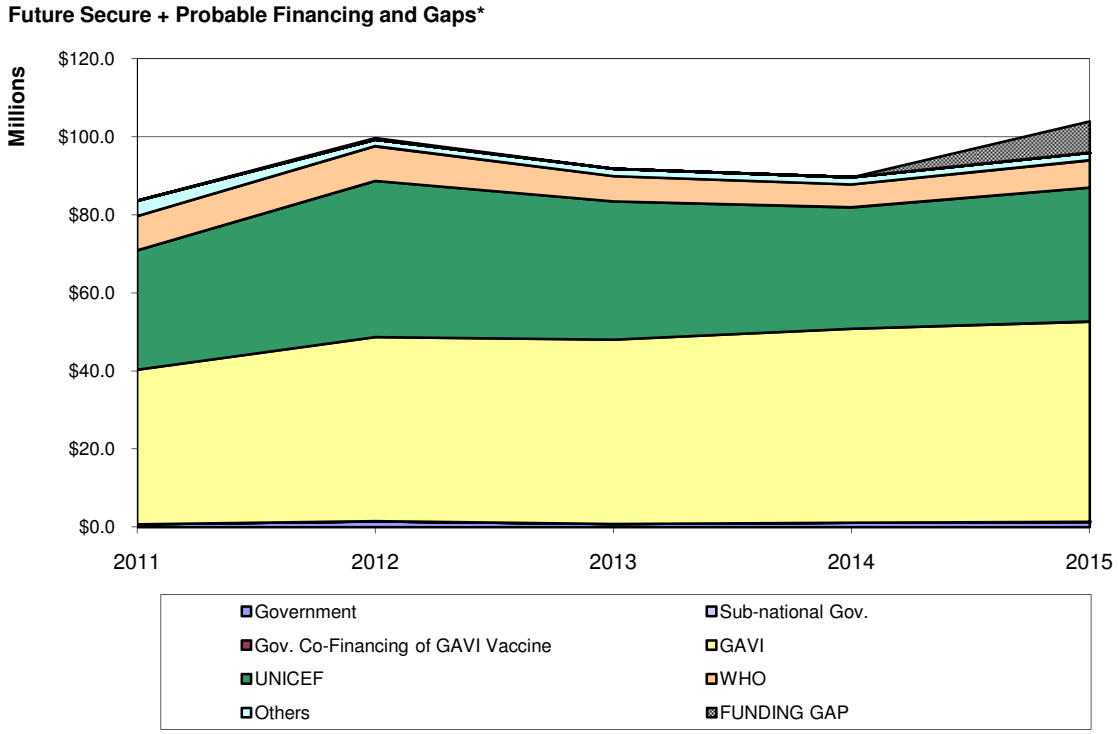


Chart N06

D5.6 Government co-financing for under used and new vaccines: During the period 2011-2015, the government share for under used and new vaccines will be US$8.2 million with an average annual of US$1.88 except for the first year where only Rota vaccine will be introduced and it would be in June, 2010. Detailed co-financing for each vaccine by year is in table 16 below:

GAVI Order of Vaccines	Vaccine	Classification	2011	2012	2013	2014	2015
			$	$	$	$	$
1st Vaccine	DTP-HepB-Hib	Underused	$333,000	$525,000	$549,900	$567,750	$579,900
2nd Vaccine	Pneumo	New	$825,200	$700,000	$733,200	$757,000	$773,200
3rd Vaccine	Rota	New		$563,400	$477,800	$500,400	$516,800

D5.7 Sustainability analysis

In this baseline scenario; the annual resource requirement needed during the plan period will represent between 1.8- 4 % of the total expenditure on health, and between 7-18 % of government expenditure on health. These needs are translated into an average US$ 1.7 per capita which more or less double the base line year. See table 17 below:

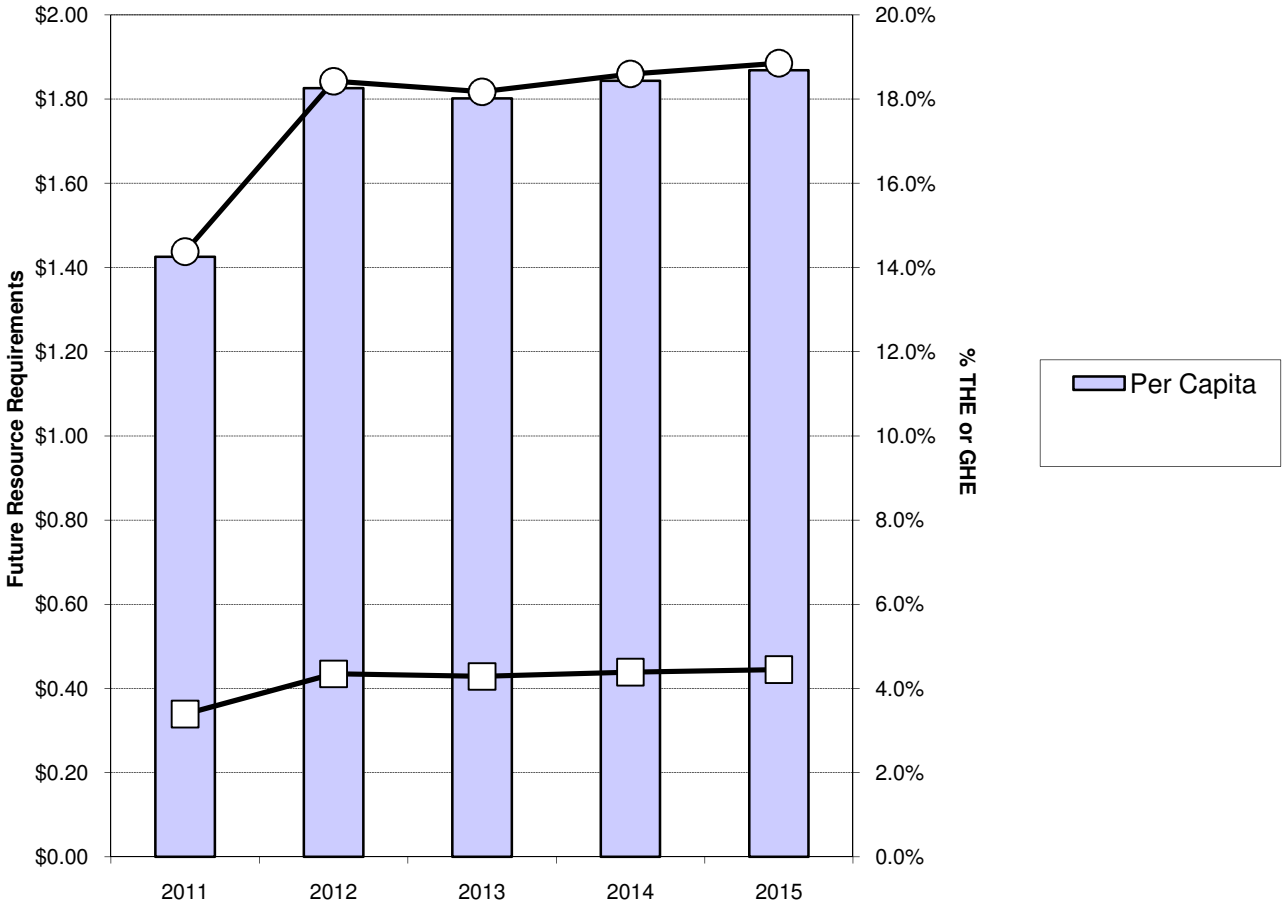
Macroeconomic and Sustainability Indicators	2009	2011	2012	2013	2014	2015
Reference						
Per capita GDP ($)	$486	$486	$486	$486	$486	$486
Total health expenditures per capita (THE per capita $)	$42.0	$42.0	$42.0	$42.0	$42.0	$42.0
Population	28,055,270	29,418,083	30,124,117	30,847,096	31,587,426	32,345,524
GDP ($)	$13,634,861,220	$14,297,188,239	$14,640,320,756	$14,991,688,455	$15,351,488,977	$15,719,924,713
Total Health Expenditures (THE $)	$1,178,321,340	$1,235,559,477	$1,265,212,905	$1,295,578,015	$1,326,671,887	$1,358,512,012
Government Health Expenditures (GHE $)	$278,083,836	$291,592,037	$298,590,246	$305,756,411	$313,094,565	$320,608,835
Resource Requirements for Immunization						
Routine and Campaigns ($)	$38,034,049	$83,395,723	$99,867,116	$91,855,254	$89,592,990	$104,542,986
Routine Only ($)	$21,321,828	$41,915,054	$55,002,125	$55,553,813	$58,217,165	$60,427,806
per DTP3 child ($)	$21.9	$40.1	$50.2	$48.4	$43.5	$49.7
% Total Health Expenditures						
Resource Requirements for Immunization						
Routine and Campaigns	3.2%	6.7%	7.9%	7.1%	6.8%	7.7%
Routine Only	1.8%	3.4%	4.3%	4.3%	4.4%	4.4%
Funding Gap						
With Secure Funds Only		5.2%	6.3%	5.4%	5.1%	6.1%
With Secure and Probable Funds		0.0%	0.0%	0.0%	0.0%	0.6%
% Government Health Expenditures						
Resource Requirements for Immunization						
Routine and Campaigns	13.7%	28.6%	33.4%	30.0%	28.6%	32.6%
Routine Only	7.7%	14.4%	18.4%	18.2%	18.6%	18.8%
Funding Gap						
With Secure Funds Only		22.0%	26.8%	23.0%	21.6%	25.9%
With Secure and Probable Funds		-0.1%	0.2%	0.0%	0.0%	2.7%

% GDP						
Resource Requirements for Immunization						
Routine and Campaigns	0.28%	0.58%	0.68%	0.61%	0.58%	0.67%
Routine Only	0.16%	0.29%	0.38%	0.37%	0.38%	0.38%
Per Capita						
Resource Requirements for Immunization						
Routine and Campaigns	$1.36	$2.83	$3.32	$2.98	$2.84	$3.23
Routine Only	$0.76	$1.42	$1.83	$1.80	$1.84	$1.87

*Note:- Shared costs not included

Chart N0 7

Sustainability Analysis



It is assumed that if the country economic situation and its expenditure on health will not change so much during the plan period, the MOPH has to exert more efforts with the Ministry of Finance (MoF), UNICEF, Donors, WHO and other potential partners in order to secure sufficient

resources to the EPI program in order to implement the cMYP. The IACC is expected to play a major role in this regard.

Considering existing partners (WHO and UNICEF) and donors; they are committed to finance what they used to do in the previous years with possibility of more funding for other line items according to availability of fund. In addition they will contribute to training, social mobilization and cold chain rehabilitation for new vaccines introduction, and surveillance.

D5.8 Strategies towards Sustainability

The positive prognosis concerning economic development and allocation of more public resources to health sector will not entirely contribute to secure enough funds from the government source. This is because of other competing priorities in health care.

To achieve the objectives of the program based on the program strengths and underlying opportunities and overcoming any forthcoming risks, this plan includes a set of strategies based on the local context and program vision. Addressing the financial gap is a matter of primary importance.

The program strategies would be articulated upon the following:

1. Strategies to increase efficiency/effectiveness of current EPI program.

    - Considering the high cost of vaccines major efforts will be directed towards reducing vaccine wastage rates through adequate training EPI staff including health workers on vaccine management.
    - Improving fund-raising and use a social mobilization/IEC approach to direct families to fixed sites to maximize use of existing immunization services.
    - Transfer of skills and competences at the District levels through more training and increase technical capacities of Districts level staff.
    - Continue use of DQS tool to improve data quality and enhance use of data timely especially at lower levels.

2. Strategies to increase resource allocations:

    - Advocate for immunization-specific budget line item an incremental increase in the plan MoF to cover the operational and development cost beside government co-financing for vaccines.
    - Obtain commitment from new and traditional donors to continue their support especially in the following areas; capital equipments, short term training and IEC/social mobilization.
    - Using the cMYP to advocating more/new donor support (World Bank, EC, USAID-JICA, CIDA and private sector, etc) to ensure better commitment and support to immunization services
    - Use opportunity of GAVI HSS to fund outreach activities and procure cold chain equipment to low performing localities in targeted states.

3. Strategies to increase resource reliability

- To advocate and sensitize Districts on prioritization of EPI activities and use of local revenues and ensure availability of specific budget line items for the EPI program to finance their local activities.
- Advocate for better integration of resources and maximize use of shared cost and other existing opportunities.
- Add new influential members to ICC

E. Monitoring and Evaluation of the Plan

The main guidelines that would ensure effective implementation, monitoring and evaluation of the cMYP are outlines below.

Implementing the Plan

This cMYP for immunization shall be implemented as a component of the 2009-2015 strategic plan of Ministry of Public Health of Afghanistan. All departments at national level, province and districts shall ensure that they focus on the key strategic objectives and activities in their respective areas of responsibilities. Linkages with other key stakholders and sectors as needed, in order to facilitate implementation of the activities in this plan.

Monitoring the progress of the implementation of planned activities is an essential component of the cMYP management process. The indicators for each strategic objective shall be monitored at all levels of operations, national, province and district.

In order to institutionalize the monitoring process, annual objectives shall be developed during each year based on the cMYP and based on a review process, and this shall be the basis for development of the annual Action Plan and the Task Lists to be developed by focal persons / teams responsible for each activity area. The following management review mechanism shall be institutionalized:

- Monthly EPI review meetings at districts level
- Quareterly EPI review workshops at provincial and regional levels
- Mid-year and annual EPI review workshops at national level
- Quarterly progress reviews by ICC

Quarterly reviews shall focus on activity completion (Activity Performance Indicators) and expenditure, while the mid-year and annual reviews shall concentrate on the overall outcome objectives and the Key Performance Indicators outlined in this plan.

In order to evaluate progress toward achieving the objectives of this cMYP, the following evaluation mechanisms shall be implemented:

- Mid-term Evaluation
- Summative (or End of Plan) Evaluation

These evaluation exercise shall be conducted by independent groups and institutions recommended by the ICC. The summative evaluation process may be linked to a comprehensive Immunization programme review that would feed into the development of the next medium term strategic plan for immunization (2016 – 2020).

Timeline for key activities:

Table N018

Objective	*Key Activities*	*Timeline*				
		2011	*2012*	*2013*	*2014*	*2015*
1. To achieve and sustain 90% coverage nationally and at least 80% coverage with all routine antigens in every district.	Revise district micro-planning guideline and tools	■	■	■	■	■
	Re-schedule/revise district micro-plans	■	■	■	■	■
	Training of staff on district micro-planning at various levels	■	■	■	■	■
	Mobilize sufficient fund for adequate payment of EPI service providers	■	■	■	■	■
	Provision of vaccines, cold chain, transport, staff per-diems immunization recording/reporting materials	■	■	■	■	■
	Adapt/develop guideline on supportive supervision	■				
	Revise supervisory checklist	■				
	Train EPI operation staff on supportive supervision	■		■		■
	Conduct joint supervision with other health department/stakeholders	■	■	■	■	■
	Conduct Data Quality Self assessment (DQS) and use data for actions	■		■		■
	Provide guidelines and forms for data collection	■	■	■	■	■
	Analysis of data and provide regular feedback	■	■	■	■	■
	Strengthen information sharing mechanism Conduct RED evaluation	■	■	■	■	■
	Conduct EPI coverage survey	■				
	Conduct external evaluation of immunization program		■			
	Adapt/develop comprehensive communication policy and strategies for immunization program	■				
	Conduct regular advocacy activities in communities	■	■	■	■	■
	Strengthen communication partnership with civil societies/community groups	■	■	■	■	■
	Development of Information, Education, Communication (IEC) materials	■	■			
	Organize annual vaccination week campaigns	■	■	■	■	■
	Improve inter-personal communication at service delivery level.	■	■	■	■	■
	Conduct study to identify barriers to immunization and to identify immunization communication needs	■	■			
	Design and implement an immunization communication plan	■				
	Review training material and update/include as necessary interpersonal communication and community mobilization in training packages of vaccinators and managers	■			■	
	Train immunization service providers and managers on interpersonal communication and community mobiliza-	■				■

	tion					
	Conduct special communication campaigns in link with special service delivery events like outreach and other SIAs					
	Develop mechanism and materials to facilitate organization of sessions on benefit of immunization in formal (from primary schools to universities) and non-formal learning events (functional literacy and vocational training)					
2. To achieve polio eradication goal & sustain eradication status and achieve certification of polio eradication	Strengthen appropriate mechanism for coordination of EPI interventions with other child health programs					
	Develop policy, tools and operational procedures for integrated approach and provide services as a package to ensure convergence of interventions on women and children.					
	Link EPI service delivery to MCH services at health facilities to make it a one stop service package.					
	Evaluate the process and impact of integrated approach					
	Develop/implement integrated logistics, monitoring, supervision, recording and reporting tools					
	Conduct Sustainable outreach Services in hard to reach and underserved areas based on individual community needs, service and resources availability					
	Implement national policy to involve private sector in provision of immunization services in hard to reach and un-served areas.					
	Strengthening defaulter tracing system					
	Reduce missed opportunities					
	Revise/update Polio Operation guidelines					
	Revise Micro-plans at all levels					
	Conduct high quality NIDs/SNIDs/Mopping up campaigns with more than 95% coverage in all clusters/districts					
	Conduct focused group discussions for developing specific strategic plan for districts with security concern and where still there is polio virus circulation					
	Conduct high quality active surveillance					
	Receive zero reports with 90% or more completeness and timeliness					
	Complete all documentation required for certification					
	Strengthened community-base AFP reporting					
	Continue producing quarterly AFP bulletin					
	Conduct annual refresher training courses for central, regional, provincial and district AFP surveillance officers /focal points					
	Conduct annual external AFP surveillance assessment					
3. To achieve and maintain Measles elimination	Update measles SIA operational guidelines as necessary					
	Conduct susceptibility analysis for identification of accumulated susceptible groups before each follow up SIA					
	Conduct measles follow up campaigns integrating with TT/OPV					
	Conduct advocacy for fund raising for measles SIA					
	Carry out post campaign assessment Improve MCV1 and MCV2 coverage through routine immunization					
	Coordinate measles surveillance with all stakeholders					
	Conduct Quarterly Measles surveillance review					
	Support national measles lab					
	Conduct weekly measles surveillance committee meetings					
	Conduct annual assessment of lab for accreditation					

	Send samples to RRL for identification of circulating genotype					
	Revise guideline for control of measles outbreaks					
	Prepare contingency plan for timely response to measles outbreaks					
	Investigate all out breaks and collect 5 specimens from each outbreak					
	Provide recording/reporting materials for measles surveillance					
	Send serum specimens to RRL for QC Provide basic and refresher training for surveillance officer/focal persons					
4.To attain elimination of Maternal and Neonatal Tetanus (MNT)	Increase routine TT2+ (see objective1)					
	Introduce use of Protection At Birth (PAB)					
	Revise/Update SIAs manuals					
	Revise micro-plans at all levels					
	Conduct integrated TT SIAs in all high risk Districts					
	Conduct quarterly MNT surveillance review meetings					
	Update MNT case-base surveillance guideline					
	Refresher training for AFP surveillance personnel on NNT reporting and investigation					
	Develop guideline for community -base surveillance					
	Train of AFP personnel on MNT reporting and investigation					
	Involve community health workers in reporting NNT cases					
	Training of community health workers and midwives					
5.To strengthen VPDs /AEFI Surveillance system	Establish a unified/integrated system of VPD surveillance system in the country					
	Adapt/develop manuals on integrated VPD surveillance Training of surveillance officers (EPI,DEWS,AFP)					
	Distribution of surveillance Manuals					
	Maximize utilization of existing AFP surveillance staff					
	Involve DHOs in VPDs surveillance					
	Conduct Basic and refresher training for DHOs and focal persons at reporting sites					
	Training of lab staff on Rotavirus, meningitis and pneumococcal surveillance					
	Refresher training of surveillance officers on AEFI Conduct quarterly and annual review workshops					
6.To expand lab-base surveillance of diseases prevented by new vaccines	Expand lab-base (hospitals) surveillance					
	Revise manuals/SOPs, print and distribute					
	Provide lab equipment, reagents, recording/reporting materials					
	Training of lab and surveillance staff					
	Provide basic and refresher training for surveillance officers/focal persons					
	Conduct regular monitoring					
	Conduct annual surveillance review meeting					
7. To ensure that National Vaccine and Immunization Logistic Management system provides safe and adequate vaccines and immunization sup-	Update the national cold chain inventory/management system					
	Carry out nation—wide cold chain assessment					
	Revise national standards for cold chain equipment and supplies.					
	Develop cold chain replacement and expansion plan					
	Carry out annual self assessment of national and regional Vaccine					
	Storage Facilities (VSF) to ensure that the facilities meet the Effective Vaccine Management criteria					

plies and adequate funding	Procure and replace 10% cold chain equipment annually					
	Procure cold chain equipment for 10% cold chain expansion annually					
	Expand dry storage capacity of NSF					
	Update vaccine management standard operation procedures (SOP)					
	Develop annual plans including needs forecast, supplies distribution, equipment and building maintenance and supervision plans for the national and regional VSFs					
	Provide operational support to the vaccine logistic network including transport, fuel, travel cost, salary/incentive according to the agreed annual plans (Plus incentive)					
	Introduce VSSM, at national and provincial VSFs					
	Strengthen vaccine wastage monitoring system, monitor regularly and take actions to reduce vaccine wastage.					
	Make sure that the vaccines are procured bundled					
	Conduct competency based training of Cold Chain Technicians, Supervisor and PEMT manager on the cold chain inventory system, cold chain equipment handling, maintenance, basic repairs, use of planning and supervision tools and vaccine management SOPs.					
	Procure pick-ups (Toyota hilux) for provincial EPI teams/VSF, one each for 34 provinces and replacement for 5 provinces each year					
	To maintain "no stock-out status"					
8.To enhance managerial capacity of national Immunization program	Revise ICC mandate					
	Add new influential members to ICC					
	Conduct regular quarterly meetings					
	Train National, provincial and district levels EPIO /DHOs on different aspects of Immunization Problem to be able to:					
	Train staff on Problem Solving Approaches					
	Conduct an EPI coverage survey to establish baselines of all indicators and track progress					
	Carry out data quality self assessment					
	Carry out an EPI program review					
	Monitor EPI main indicators regularly and use data for action					
	Conduct Drop-out rate assessment and take actions to address high drop-out rate					
	Revise district micro-planning tools with involving partners and communities					
	Conduct District micro-planning exercise in all districts					
	Use district micro- plans to determine need and type of the services centers and outreach					
	Improve national database of district indicators					
	Strengthen and expand supportive supervisory system					
	Conduct operational research					
	Review/update & reinforce national EPI policies & standards as necessary					
	Conduct training needs assessment					
	Adopt Manuals for MLM					
	Adopt "Immunization in practice" for training of immunization service providers					
	Conduct National annual EPI planning and review workshops					
	Recruit and maintain level of technical and managerial expertise					

	Review FSP and cMYP annually and update as necessary					
	Develop vaccine self reliance initiative plan for Afghanistan					
	Conduct periodic EPI Task Force meetings to review technical and operational aspect of the cMYP implementation					
	Conduct periodic ICC meetings and in those meetings review progress of cMYP implementation					
	Establish coordination and information sharing mechanisms with partners and MOPH departments					
	Use of District Public Health Department personnel in immunization activities					
	Develop MOU with civil society organizations to promote vaccination coverage					
9.To work toward ensuring financial sustainability of immunization program	Advocate with government authorities to secure funding for co-financing/purchase of new vaccines					
	Mobilize the government to increase its share in Operational cost of the program annually					
	Conduct regular follow-up meetings with concerned financial departments in MoH and MoF					
	Advocate for mobilizing donors' resources					
	Mobilize and involve new national and international donors					
	Prepare and submit appropriate funding proposals					
	Conduct national resource mobilization workshop					
10.To reduce morbidity and mortality by introducing Pneumococcal and Rota virus vaccines	Submit application for GAVI fund support for introduction of the new vaccines					
	Ensure government co-financing for new vaccines					
	Revision of training material and guidelines including AEFI					
	Update immunization registers and records					
	Develop, print and distribute IEC materials and organize social mobilization/sensitization campaigns					
	Training of EPI staff					
	Conduct Post Introduction Evaluation (PIE)					
	Continue surveillance of Rotavirus and Pneumonia					