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Islamic Republic of Afghanistan

Ministry of Public Health

General Directorate of Preventive Medicine and PHC

National EPI Office

Expanded Program on Immunization

Multi-Year Plan of Action for EPI

2006 - 2010

April 2007

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ABBREVIATIONS

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

Executive Summary

Afghanistan's first Multi-year Plan of Action was for the duration 2001-2005, and GAVI approved the country in principle for GAVI ISS support in 2001. Up to now[1] this support has been approved for US$ 10,397,300, including three rewards totalling US$ 8,319,300 based on 2003, 2004 and 2005 achievements.

Since then, immunization has been included in the Afghanistan Basic Package of Health Services (BPHS) contracted out to NGOs. Furthermore, the new MoPH health strategy reflects an ambition to meet the Millennium Development Goals, especially reducing infant and childhood mortality by 20% by 2012, and places "full immunization coverage" as a high benchmark or objective to b e reached by 2015. This cMYP has been updated in the beginning of 2007 and aligned to be valid throughout current MOPH budgetary cycle of the Afghan year 1386-1388, i.e. 21 March 2007 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.

The reported number of children immunized with DPT3 in 2006 is 736,335[2] , i.e. a little less than the 796,256[3] reported number of children immunized with DPT3 in 2005. This was primarily because of confusion in recording when the country switched over to DPT-HepB Tetravalent vaccine in mid 2006. This has been fully analyzed and explained in the JRF, and notice of this situation has been taken by ICC and plan has been prepared to rectify the issues and improve the immunization coverage in the coming year. Other constraints such as insecurity and poor roads to many areas continue to act as barriers to increasing immunization coverage. A comprehensive evaluation of barriers to immunization was conducted in September 2005 and the attached workplan is a result of that meeting, updated this month by the GAVI preparation team during costing of the cMYP.

During the period 2007-2010, the coverage target for children (0-11 m) to be immunized with DPT3 and Measles has been set as follows to achieve at least 90% national coverage and at least 80% coverage in each district by 2010 in line with the global and regional goals.

Targets	2007	2008	2009	2010
DPT3 coverage %	78	83	87	90
Total number of children to be immunized with DPT-HepB-OR DPT-HepB-Hib3[4]	839,934	915,228	982,359	1,040,622
Measles coverage %	75	80	85	90
Total number of children to be immunized with first dose of Measles vaccine	807,629	882,147	959,776	1,040,622

Considering the last highest DPT3 coverage in 2005 whereby 796,256 children were immunized, Afghanistan is likely to receive approximately US$ 6,187,592 as rewards for the planned achievements from 2007 to 2010, as detailed below:

	Total No. of children to be immunized with DPT3[5]	Additional children immunized with DPT3 from previous year[6]	Reward (US$)
2007	839,934	108,692	2,173,835
2008	915,228	75,293	1,505,866
2009	982,359	67,131	1,342,621
2010	1,040,622	58,264	1,165,271
TOTAL			6,187,592

[1] March 2007
[2] Draft WHO/UNICEF Joint Reporting Form 2006
[3] WHO/UNICEF Joint Reporting Form 2005
[4] Pentavalent 3 (DPT-HepB-Hib) from 2008 onwards if introduced in the EPI schedule.
[5] Or DPT3 combination vaccine
[6] Or previous highest achievement of 2005 in case of year 2007

Any funds received from GAVI will be included in the Government of Afghanistan MOPH core budget and utilized for EPI activities according to the cMYP and in consultation with the ICC. The expenditures will be reported as required under the APR and will be open for audit by GAVI or its nominated agency at any time.

Regarding the budget, the main cost driver during 2006 was personnel (37%) followed by routine recurrent expenditure (35%). The cost of traditional vaccines and new vaccines (DPT-Hep B) was 13% and 20% of the routine immunization expenditure. Five country-wide NIDs for polio eradication and five subNIDs last year also required considerable funds and occupied significant amount of staff time.

The GoA provides the major bulk of salaries to the staff and bears almost all the buildings related expenses. This together contributed towards 20% of the total financing. The contribution of Unicef was 35%, GAVI 28% and the other donors 17%.

The MoPH and development partners in the ICC have agreed to request GAVI for provision of Hib vaccine, in the form of Pentavalent (DPT-HepB- Hib) to be introduced in January 2008. Since this vaccine is available under phase II that requires co-financing Afghanistan requests a special waiver of co-financing on the following grounds:

1. As under five child mortality is at least 210/1000live births in Afghanistan, more than 4000 lives will be saved with Hib vaccine.
2. Afghanistan being a fragile state is still passing through crisis and the economy has still not picked up as envisaged.
3. Afghanistan started receiving the tetravalent support of (DPT-HepB) under GAVI Phase 1 in 2006 and this will last till mid 2011. If Afghanistan introduces the Pentavalent vaccine in 2008 it loses almost 3 and half years of tetravalent vaccine support which does not require any contribution.

MOPH and ICC for EPI Afghanistan requests GAVI for provision of 11.237 million Pentavalent (DPT-HepB-Hib) doses as 1 dose/vial all liquid vaccine preparation along with associated AD syringes and safety boxes for the period 2008-2010 as per following schedule.

	2008	**2009**	**2010**	**2008-2010**
No. of doses of Pentavalent (DPT-HepB-Hib) vaccine	4,039,875	3,503,588	3,693,375	11,236,838
No. of AD Syringes	4,313,432	3,706,665	3,907,006	11,927,103
No of safety boxes	47,879	41,144	43,368	132,391
Total value (Vaccine, AD Syringes, Safety boxes) (US$)	**14,842,889**	**12,885,992**	**10,520,326**	**38,249,207**
Co-financing Share[7] (US$)	403,988	350,359	369,338	1,123,685
GAVI contribution (US$)	14,438,902	12,535,633	10,150,988	37,125,523

The Pentavalent vaccine will be introduced countrywide from January 2008 and will replace Tetravalent (DPT-HepB) vaccine in EPI schedule at 6, 10 and 14 weeks. Two additional cold rooms will be installed at national level by Q3 of 2007 to accommodate the 1dose/vial vaccine. There is adequate cold room capacity at regional, provincial and district level. A plan of action has been prepared for proper recording and reporting for this vaccine, besides training on routine EPI aspects including vaccine management and vaccine wastage reduction. Because of the operational issues related with lyophilized vaccine Afghanistan would only prefer all liquid vaccine.

[7] Waiver requested as described above.

I. Introduction

Today the Afghan National EPI is at a cross-roads; its past success as a "stand-alone" program must be translated into future success as an integral part of the national public health program. The Government of Afghanistan has recognized the importance of immunization and included it as one of the four health targets in the Government's "Afghanistan Compact 2006" document providing the basis for the Afghan National Development Strategy (ANDS). In its National Health Policy and Strategy, 2005-2009, the Ministry of Public Health (MoPH) has called for accelerated implementation of strategies to achieve the Millennium Development Goals (MDGs) which were initiated in 2003 where immunization was specified as part of the Basic Package of Health Services (BPHS), with access to BPHS envisioned as the right of all Afghans. With immunization in its new place as part of the "package" of primary health care services contracted to NGOs, National EPI should be involved in the MoPH stewardship of the package – planning, policy making, advocacy, coordination and monitoring. At the same time, with "full immunization coverage" as a high benchmark for ANDS, all departments of MoPH should be looking for ways to facilitate improved immunization coverage.

In its new integrated position in the health care system, advocacy for immunization and building awareness of the immunization schedule and its importance at the community level are key elements for successful implementation.

History of Multi-Year Plan of Action for EPI 2001 to 2005

In November 2000, when Afghanistan submitted the first national Multi-Year Plan of Action (MYPoA) for EPI for 2001 to 2005, after two decades of war, drought, and displacement, the Afghan health system was in shambles, but the National EPI represented a ray of light due to early support from global initiatives and donors. National Immunization Days (NIDs) for polio eradication had already been going on since 1997, the vaccine cold chain equipment and the AFP surveillance reverse cold chain were already established at the provincial level, Provincial EPI Management Team (PEMT) had structure and support, micro-planning for fixed, outreach and mobile strategies had been introduced, and the National Health Coordination Committee had been established especially to review EPI initiatives. 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. With GAVI and other partner support, the chief objectives of the MYPoA 2001-2005 have been accomplished in spite of many obstacles familiar to post-crisis countries.

Progress of Rehabilitation of Ministry of Public Health

At the same time, 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.

Position of EPI in MoPH Primary Health Care Program

As immunization is one component of BPHS, the planning, staffing, equipping, training, and supervising of immunization at the field level, including fixed center, outreach, and mobile strategies, is now under the purview and responsibility of the contracted NGO implementers of BPHS. Although this integration of immunization into the BPHS has been clearly stated in policy documents and the BPHS itself, the implications and ramifications of the change have not been fully understood by many of the partners. Many instances have arisen where the NGOs continue expecting UNICEF, WHO or National EPI to provide field-level implementation of EPI, and other units of MoPH have not had the experience in EPI planning to recognize the gap. For example, proposals have been submitted by NGOs and accepted by the MoPH Grants and Contract Management Unit (GCMU) which had no salary payment to vaccinators nor outreach plan to immunize children living more than five kilometers from the CHC or BHC. Furthermore, MoPH and donor partner Monitoring and Evaluation teams report of the "functionality" of the different health facilities in 2005 and 2006 completely ignored the status of the vaccines or the planning or practice of the vaccinator.[8]

In order to close these gaps at the field level and assure continuing and sustainable improvement in immunization coverage, National EPI must clearly become more closely involved at the central level both with the new implementing partners and with the different MoPH General Directorates (GD), such as Policy and Planning, Provincial Public Health, and Human Resource Development.

National and Global Position of the MYPoA

This second MYPoA, from 2006-2010 is thus dramatically different from the first MYPoA. EPI functions must be implemented in close coordination and collaboration with other relevant departments of the Ministry of Public Health as well as new implementing partners in the field. This MYPoA is 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 because communicable diseases do not respect national borders and we are all part of a global community. The five strategic areas of focus endorsed in the GIVS - protecting more people; introducing new vaccines and technologies; synergies with other interventions; immunization in health systems context; and global interdependence in immunization strategies are core elements of the MYPoA.

Alignment with National Planning Cycles and inclusion of Results-Based Planning

This MYPoA is situated according to the Afghan National Development Strategy and the pilot project of the Ministry of Finance to institute "program-based budgeting" in four ministries including the Ministry of Public Health from 1386-1388 (21 March 2007 to 20 March 2010).

While this MYPoA is framed within the current health and development environment, the specific strategies have been made following the results-based planning approach. The process started with an in-depth participatory problem analysis of immunization system in 2005 in a workshop setting where stakeholders at all levels of health system and development

[8] JHU, 2006. Balanced Score Card of BPHS facilities

partners participated.[9] The priorities and problem analysis findings fed into the planning process. The global and national immunization priorities and objectives which would contribute to the achievement of the national strategic results of reducing mortality in children were identified and put in a result chain..

The result chain identified the strategic result, the EPI outcomes and EPI outputs that would be necessary and sufficient to contribute to the national strategic plan. Subsequently, logical framework analysis was done to test the horizontal logic of the result chain where key indicators, targets, means of verification, risks and assumptions were spelled out. Vertical logic of log frame analysis took into consideration the findings of the problem analysis to ensure that all key links in the causation of problems were addressed and the course of action proposed was necessary and sufficient to achieve each of the identified outputs. The outcomes, outputs and activities were then put in a GANT chart and timeline, resource requirements and key partner(s) were identified for each activity to convert the result chain and the logical framework table into an operational plan.

II. Health system reforms & Health priorities in Afghanistan

II.1 National Health Policy and Strategy

In February 2002, within the context of the Transitional Islamic State of Afghanistan, the Ministry of Health developed a comprehensive interim health policy. To help close the gap between health policy and implementation, in August 2002 an Interim Health Strategy for 2002-2004 was produced and finalized in February 2003 with introduction of the Basic Package of Health Services (BPHS), revised in 2005.[10]

The aim of BPHS was to accelerate the implementation of health care services, to increase access to basic and essential preventive and curative health services in underserved rural areas, and to provide equitable and quality health care to the people, especially mothers and children. As mentioned above, to implement BPHS, the GoA/ MoPH received funds from donors to contract national and international NGOs to establish the required services, which reached about 82% geographic coverage in 2006. In addition, the Ministry has retained responsibility for managing and delivering services in a few provinces through the so-called Ministry of Public Health Strengthening Mechanism (MoPH-SM).

In 2005 the National Health Policy (NHP) 2005-2009[11] was established as a guide to the overall context within which all health and health-related work for accelerating implementation should be developed and implemented over the next five years. During this period, there will be two national health strategies, one for 2005-6 and one for 2007-9.[12] Two national health strategies are needed because considerable uncertainty exists around future funding for the health sector, including implementation through contracting out primary care and hospital services to non-government organizations. In the NHP, the government has reiterated the Primary Health Care Strategy as the guiding principle to provide essential health care to the people of Afghanistan.

[9] Proceedings of the June 2005 EPI workshop on Improving Immunization Coverage
[10] Basic Package of Health Services, Afghanistan, 2005.
[11] National Health Policy 2005-2009
[12] National Health Strategy 2007-2009

Realizing that the problem of maternal mortality cannot be addressed without a higher level of referral services for emergency obstetric care, the Essential Package of Hospital Services[13] was developed in 2006 and provincial hospitals are being enrolled, again through a mechanism of "contracting out" to NGOs with support of major development partners / donors.

II.2 Millennium Development Goals

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 II.1: Health MDGs and the revised target for 2015 and 2020[14]

MDG	2003 level	2006 level[15]	Target 2015	Target 2020
Reduce child mortality by 2/3	Under-5 mortality rate: 230/1,000 live births Infant mortality rate: 140/1,000 live births Proportion of 1-year-old children immunized against measles: 60%	U5 MR = 210 IMR = 130	Under- 5 mortality rate: 115/1,000 live births Infant mortality rate: 70/1,000 life births Proportion of 1-year-old children immunized against measles: 90%	Under- 5 mortality rate: 77/1,000 live births Infant mortality rate: 47/1,000 life births
Reduce maternal mortality by 3/4	Maternal mortality ratio: 1600/100,000 live births Proportion of births attended by skilled personnel: 14.3%		Maternal mortality ratio: 800/ 100,000 live births Proportion of births attended by skilled personnel: 50% 50% of the need for family planning of women is met	Maternal mortality ratio: 400/100,000 live births 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 HIV/AIDS and STDs • 60% of known drug users will be under treatment	

[13] Essential Package of Hospital Services, Afghanistan, 2005

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

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

II.3 Health Achievements and Current Challenges

During 2002-2005, the Ministry of Public Health made impressive post conflict achievements in the five areas of: Information gathering, Disease prevention, Health reforms, Donor and other coordination, and Physical construction:[16]

Information gathering
- National health resources assessments
- Studies on maternal mortality, nutrition status, and national mortality and injury
- Assessments on hospitals, national cold chain, food security and livelihood studies.

Disease prevention
- Millions of children vaccinated against measles and polio. Campaign Coverage >95%
- Millions of children receiving vitamin A biannually. Campaign Coverage >85%
- About 4 million women of child bearing age vaccinated for tetanus. Campaign Coverage >95%

Health reform
- Formulated the Interim health policy and health strategy, including individual programmes
- Implemented the Basic Package of Health Services
- Developed the Essential Package of Hospital Services
- Achieved Priority Reform and Restructuring Status by the Government
- Created an annual budget feeding into the National Budget
- Restructuring and reorganization of the Ministry
- Formulated terms of reference for all Ministry departments and staff
- Improved Ministry senior level decision-making by establishing a new Executive Board with a Management Executive Forum to strengthen communication between departments and a new Technical Advisory Group for evidence-based decision making.
- Revised the health and management health information system (HMIS)
- Held provincial planning workshops in all provinces

Donor and other coordination
- Established a Consultative Group for Health and Nutrition to coordinate work across ministries and among donors
- Established a National Technical Coordination Committee to coordinate all NGOs and other agencies implementing health care
- Instituted Coordination Committees of Provincial Health Directors held quarterly in Kabul

Physical construction
- Within the framework of a protocol on construction and sites selected by communities, renovated 138 health facilities
- Constructed 107 facilities

[16] Health Sector Achievements2001-2005

Current Challenges Facing the Ministry of Public Health

The national health policy and the health strategy of 2005-2006 focus on accelerating the implementation of essential, basic services through improvement at all levels of the health sector. Health policy and planning focuses in the following three areas:

- Implementation of health services
- Reduction of morbidity and mortality
- Institutional development.

In addition, three different situations also will be addressed with particular strategic approaches for people living in areas which are:

- Not currently covered by any health services;
- Underserved, having poor access to health services; or
- Affected by the emergency withdrawal or collapse of contracted out services.

In the longer term, the Ministry will also need to take into account the following possibilities:

- Reductions in external donor funds for contracting NGOs.
- Increasing demands on central government funds.
- Return of many hospitals to direct Ministry control.
- Rising expectations in the population for access, quality and range of services.
- More services in the main urban centers being provided by private practitioners.

II.4 Health Financing

The 1385 (April 2006-March 2007) approved National Budget for the Islamic Republic of Afghanistan[17] 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*'.

II.5 Health Sector Share of National Budget

For the fiscal year 1385 a total amount of US$ 106 million was budgeted for health and nutrition, US$ 28 million operating budget and US$ 78 million development budget. This was about 4.8% of the total National Budget for 1385.

There are many donors that support the health and nutrition program. The main donors are USAID, EC, World Bank. World Bank funds flow to a bank account held by the Ministry of Finance (as part of government core budget). The Ministry of Public Health manages the fund through contracting NGOs for service delivery. Funds for contracting from USAID flow through WHO while the EC funds are overseen by the donor and directly provided to the implementing agency. Other donors are UNICEF, WHO and UNFPA who conduct their own

[17] Islamic Republic of Afghanaistan, National budget 1385

fund raising and investment in health sector based on Joint Programming with MoPH. The Global Alliance for Vaccine and Immunization (GAVI) support started for Afghanistan in late 2003. GAVI is providing support for Immunization Services Strengthening (US$ 10.4 million so far) and Safety of Immunization Injection (US$ 1.6 million). GAVI has also provided support for the introduction of Hepatitis-B vaccine in July 2006, US$ 100,000 for the introduction plan and US$ 5.856 million for the bundled DTP-HepB vaccine..

While the health sector mainly depends on external support, with the improvement of the situation and the recovery of the government capacity to raise taxes, GoA is expected to increase its contribution to health sector support. For year 1385, the GoA target for revenue collections was $520 million; while ambitious, this is only about 24% of the total core national budget. GoA predicts that revenues will rise at ___% per year. Unfortunately, the increase in hostilities and insecurity in southern Afghanistan and the continuing rise in the illegal market in poppy products prevents any real progress in developing a sustainable economy.

As GoA cannot predict capacity for funding for immunizations in the near future, ICC is thus requesting a waiver of the co-financing requirement in the GAVI New Vaccine Support application for pentavalent vaccine.

III. EPI and Health Situation Analysis

About 210,000 Afghan children under age five die each year, mostly from diarrheal diseases, acute respiratory infections and other communicable diseases. Estimates for 2005 place the infant mortality rate at 130/1000 live births and the under-five mortality rate at 210/1000 live births.[18] The high burden of communicable diseases, especially, diarrhea, acute respiratory infection, measles and malnutrition and consequent high morbidity and mortality remains a major issue in fulfillment of child's right to survival, growth and development.

An estimated 15,000 women die annually from pregnancy-related causes. The adjusted Maternal Mortality Ratio of Afghanistan is 1600/100,000 live births. Poor quality and low availability of maternal health services; the socio-cultural and physical barriers to access; inadequate trained female health workers; and high illiteracy and ignorance are major factors behind the high maternal mortality.

Progress in Polio Eradication[19]

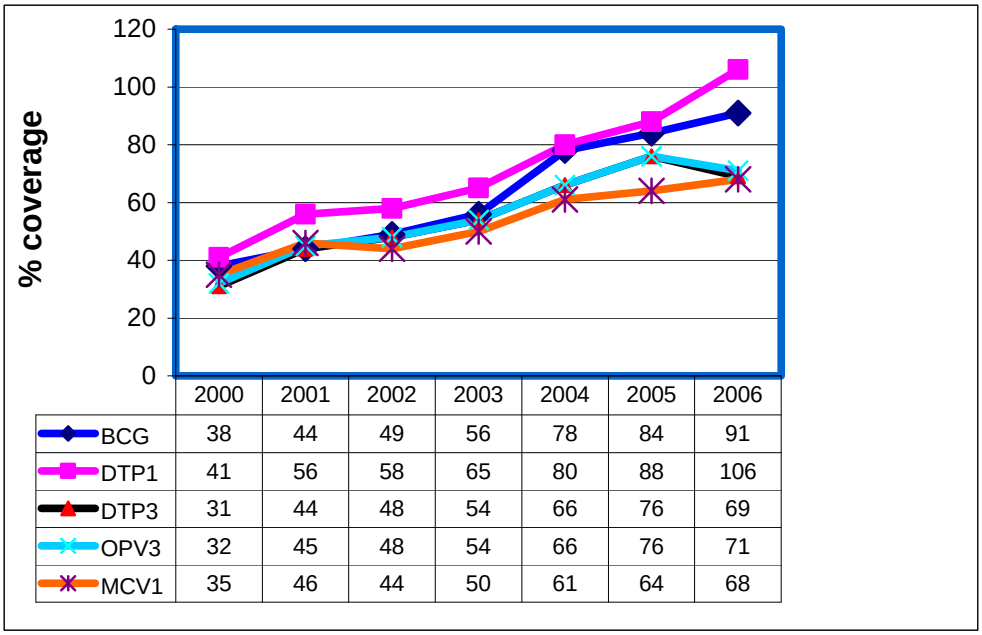
Polio Eradication has remained a top priority in the country. At least four rounds of Polio SIA are being conducted each year – two in the Spring and two in the Fall - with coverage over 95%. Vitamin A is given with the second round twice a year. From 63 confirmed polio cases in year 1999, there was a steady decline to 04 cases in year 2004 and localization of virus circulation in the southern part of the country. In 2006, 31 confirmed polio cases were reported. 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.

[18] UNICEF 2005. Best estimates of social indicators in Afghanistan.
[19] National Surveillance Bulletin, weekly, 03 March 2007

Routine EPI Coverage[20]

In 2006, the national routine EPI coverage of BCG for newborns was 77%, and for children under one year old OPV 3 coverage was 71%, DPT3-69% and Measles-68%. The TT 2 + coverage among pregnant women was 54%. 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.

Figure 2: Afghanistan Immunization Coverage Trend 2000-2006



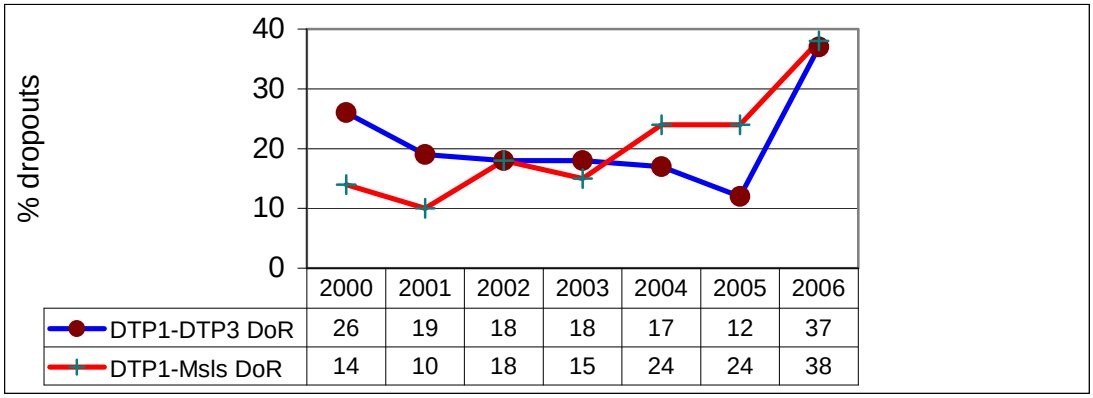
	2000	2001	2002	2003	2004	2005	2006
BCG	38	44	49	56	78	84	91
DTP1	41	56	58	65	80	88	106
DTP3	31	44	48	54	66	76	69
OPV3	32	45	48	54	66	76	71
MCV1	35	46	44	50	61	64	68

Considering the reporting difficulties in 2006, we may look province-wise at reported routine EPI coverage of children under age one year for 2005. A little more than half of the 34 provinces had greater than 80% coverage with DPT3 while unfortunately still about one-quarter of the provinces had less than 50% coverage with DPT3. District level disaggregation of the same coverage data shows that only 46% (152/329) of the districts had over 80% coverage with DPT3, and all provinces have some districts with less than 50% DPT3 coverage. Only 28% (92/329) of the districts had above 80% coverage with measles vaccine.

One of the causes of low coverage is high dropout rate. Figure 3 below shows an improving DTP1-DTP3 drop-out rate (DoR) and but an increasing DTP1-Measles dropout rate in 2005 while data in 2006 are difficult to interpret due to reporting difficulties mentioned before. The children who are not reached by routine immunization accumulate over years to build up a large pool of susceptible population and consequently periodic outbreaks of measles and whooping cough are being reported.

[20] WHO-UNICEF JRF 2006

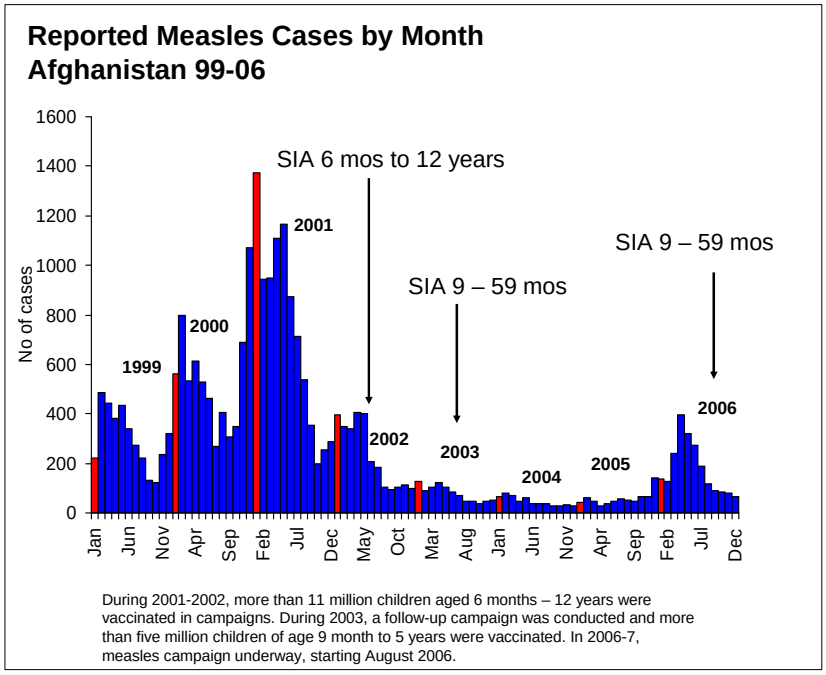
Figure 3: Afghanistan DTP1-DTP3 and DTP1-Measles Dropout trend 2000-2006



	2000	2001	2002	2003	2004	2005	2006
DTP1-DTP3 DoR	26	19	18	18	17	12	37
DTP1-Msls DoR	14	10	18	15	24	24	38

Measles Situation and SIA in 2006

In 2000, WHO estimated that 30,000 – 35,000 measles deaths occurred among children less than 5 years of age in Afghanistan. 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. Considering the burden of the disease, Afghanistan national immunization program conducted two successive rounds of measles immunization campaigns in year 2001-2002 (for children 6 months to 12 years old) and 2003 (for children 9 months to 5 years old). Consequently the number of reported measles cases decreased from 8762 in year 2001 to 559 in year 2004 (94% reduction), and there was no major outbreak of measles from 2003 to mid-2005.



Due to low routine coverage and accumulation of susceptible children, the country experienced outbreaks of measles in 2005 and 2006. 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. In fact, country-wide measles SIA is underway for 2006-7 and was started from August 5-10, 2006, in nine provinces with remote and underserved areas. From November 2006 to February 2007, thirteen provinces in the east, west, south and southeast conducted measles SIA in the second phase. SIAs in the remaining 12 provinces in the north, northeast and central areas are planned for May 2007.

Neonatal tetanus - SIA for third dose TT

Tetanus is one of the important causes of neonatal and maternal deaths in the country. The NNT baseline survey that was conducted in 3 provinces of Afghanistan revealed that the number of NNT cases/deaths per 1000 live births is ranging from 4.8 to 8.9. In some districts the figure is higher and there is even a local name for the disease such as Haftak (disease killing new born babies within seven days after birth).

Available data shows that more than 90% 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 2003-2006 only improved to 54%.
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. The country has recognized the need to conduct the 3rd round of TT immunization campaign in 317 districts to achieve at least 80% coverage with three doses of TT vaccine among women of childbearing age. TT SIAs are being conducted in conjunction with the phased Measles SIAs as mentioned above, first phase in nine provinces in August 2006 and second phase in 13 provinces from November 2006 to February 2007 and third phase in 12 provinces in May 2007.

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.

Hepatitis B Vaccine Introduction

Hepatitis B virus infection is an important public health problem and a major cause of morbidity and mortality 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. Furthermore, Hepatitis B is the leading cause of cirrhosis of the liver and primary hepatocellular carcinoma. It is estimated that, of Afghan children born this year, 11,000 would die prematurely of HBV-induced liver disease without this valuable vaccine.

Hepatitis B vaccine was introduced in 2006 as a component of the DPT vaccine, to be given on the same schedule, at 6 weeks, 10 weeks and 14 weeks. The vaccine was introduced in July in central, eastern and southeastern parts of Afghanistan; in northern and northeastern parts in August; and in the southern and western areas in September.

The Ministry of Public Health is also taking other public health measures to prevent transmission of Hepatitis B infection. The most common way of transmission is through infected blood products and contaminated needles and other medical instruments. The Ministry of Public Health has provided the training and facilities for all blood banks in

Afghanistan to test for Hepatitis B virus before transfusion of blood. All government-supported facilities offering the Basic Package of Health Services are also bound to use new sterile needles with every injection and to properly sterilize medical instruments. Also auto-disable syringes are used in all supplementary immunization activities.

Evidence for burden of Hemophilus Influenza illness:
As mentioned above, about 210,000 Afghan children under age five die each year, mostly from diarrheal diseases, acute respiratory infections and other communicable diseases. Estimates for 2005 place the infant mortality rate at 130/1000 live births and the under-five mortality rate at 210/1000 live births. The high burden of communicable diseases, especially, diarrhea, acute respiratory infection, measles and malnutrition and consequent high morbidity and mortality remains a major issue in fulfillment of a child's right to survival, growth and development.

Infections due to Haemophilus influenzae are a major cause of morbidity and mortality in young children throughout the world. Of the six serotypes known to cause disease, type b alone is responsible for over 90% of the life-threatening Haemophilus influenzae infections in children, including meningitis and pneumonia. From 300 000 to 500 000 children die each year due to these Haemophilus influenzae type b (Hib) diseases. To prevent Hib meningitis, pneumonia, epiglottitis, and other serious infections, Hib vaccine is safe and highly effective – 90-99% of children develop antibodies after three doses.[21] WHO recommends that Hib vaccine now be included in routine infant immunization programs for all children by 2005.

A study by Bhutta published in 2005[22] shows that 91% of the 1.4 million childhood deaths in the Eastern Mediterranean Region occur in seven countries, Afghanistan included. Of these childhood deaths, about 21% are due to pneumonia which occurs after the neonatal period. About 10% of these pneumonia deaths or 2% of all childhood deaths are preventable by Hib vaccination. Thus Hib vaccination has the potential of saving 4,200 lives of children under age five in Afghanistan.

This would be a great achievement for Afghanistan and contribute to fulfilling the commitment of the Government to achieving the Millenium Development Goals.[23] Of course, the vaccine will only do its job if it is delivered through proper cold chain in three doses to more than 90% of children under age one year. This is the challenge of the National Immunization Program if GAVI agrees to support the vaccine for the Afghan children.

EPI Achievements in 2006[24]

The main achievements in 2006 can be summarized as follows:

1. Partnership and coordination

- Inauguration of Hep-B vaccine introduction into national immunization program by Minister of Public Health as one of the important health events

[21] WHO, 2000. Introduction of Haemophilus influenzae type b vaccine into immunization programmes. Management guidelines, including information for health workers and parents
[22] Child health and survival in the Eastern Mediterranean region. BMJ 333:839-842, 21 October 2006
[23] Conference on MDGs
[24] Annual Progress Report for 2006.

- Practical involvement of MOPH high level authorities in monitoring of health system functioning including immunization service at provincial and district levels
- Involvement of private health sector in provision of immunization service in Kabul
- Regular feedback to health partners in various forums: Consultative Group on Health and Nutrition (CGHN), National NGO Technical Coordination Committee (NTCC), Inter-agency Coordination Committee (ICC), and EPI Task Force.
- Development and costing of comprehensive Multi-Year Plan (cMYP) based on MOPH policies and strategies

2. Service Delivery

- Expansion of immunization service delivery from 870 EPI fixed centers in 2004 to 1135 fixed centers by the end of 2006, and conducting relevant outreach sessions and pulse immunization
- Introduction of Hep-B vaccine into national immunization program in July 2006, distributing brochure on DPT-HepB vaccine in local languages for health staff
- Conducting 5 rounds of NIDs and 5 rounds of SNIDs for polio eradication
- Implementation of phase-wise MMRC & MNTE SIAs in 22 provinces of the country. The remaining 12 provinces will be covered during first half of 2007. 1.6 million children under 5 years and 1.3 million CBA women were covered during the 1st and 2nd phases of SIA.

3. Management and capacity building:

- Adoption, translation, printing and using guideline 'How to increase immunization coverage at service level,' with revision in 2006 based on EPI Reviews.
- Revision of national guidelines for MMRC and MNTE and NIDs
- Developing Standard Operating Procedures for vaccine management and conducting vaccine management training courses for (69) staff including DPT-HepB topics.
- Development of database for vaccines and supply management at central and regional levels and participation in a regional workshop on vaccine management
- Refresher Training Courses for (1196) vaccinators on EPI
- Training of (1196) vaccinators on safety of immunization injections, safe waste disposal and detecting and reporting of AEFI
- Training of all vaccinators (about 2270) on Hepatitis B vaccine introduction
- Training of master trainers, district coordinators, cluster supervisors, social mobilizers and volunteers for NIDs for polio eradication, training and supervising post-campaign assessments
- Training of master trainers, district coordinators, cluster supervisors and community vaccinators for MMRC and MNTE supplementary immunization activities
- Training 21 master trainers, 118 imams, 127 teachers, 599 community elders, 611 CHWs and 78 trainers on community awareness and mobilization in four provinces - Kandahar, Urozgan, Helmand and Zabul of Southern region.
- Continuing supportive supervision on a monthly basis throughout 2006.
- Twice yearly meetings for EPI Review were held in all regions.
- Briefing with Deputy Minister for Technical Issues on cost effectiveness of introduction of Hib vaccine and sending letter of intent to GAVI to introduce new Hib vaccine in EPI routine

4. Surveillance and data management

- Active surveillance of AFP through experienced and high quality surveillance network
- Using AFP Surveillance Network to document increasing trend in cases of Measles to advocate for MMRC supplementary immunization activities and to monitor MNTE.
- Improving Measles case-based surveillance; revision and distribution of surveillance guidelines; providing further training to laboratory technician for measles serology in Iran
- Training 393 AFP focal points, PEMT staff and PPOs on measles case-based surveillance and surveillance of Adverse Events Following Immunization (AEFI).
- Investigation and control of measles outbreaks in Nangrahar and Kandahar

Challenges and constraints

Following are challenges and constraints raised in the EPI Reviews that might have negative effect on improving the quality and coverage of immunization services in Afghanistan:

- Insufficient number of experienced and trained EPI health workers, especially female
- Inadequate transport and communication at the district level to enable monitoring and delivery of supplies to the periphery
- Discrepancy between different sources of population data: the government's Central Statistic Office (CSO) data seems to be underestimated and the data derived from NIDs looks like it is overestimated. The UNIDATA population figure is based on population census carried in 1979. This is a challenging factor in planning, implementation, monitoring and evaluation of immunization program.
- Shortage of cold chain equipment (mainly refrigerators) at service level due to prolonged use, poor maintenance, unavailability of spare parts and skilled technicians. In addition, the BPHS implementing partners having the responsibility of running immunization service do not have access to the manufacturers offering standard cold chain equipment for storage of vaccines.
- Poor capacity of some NGOs in management of EPI program as they have only recently become involved in health care services.
- Poor coordination and communication between the micro-planning at district /provincial level and the GCMU at central level to ensure that all populations are covered with immunization services. The contracting NGOs in some cases have identified a narrow catchment area for provision of immunization service, including only areas served by fixed centers and outreach and not including remote and hard-to-reach areas. The GCMU at the central level may not be aware of the deficiencies in the NGO's contract.
- The process of contracting out BPHS is competitive between NGOs and the process of handing over health facilities from one NGO to another creates gap during which the immunization service might be stopped and the vaccinators are not paid.
- Prolonged administrative procedure in MOPH and MoF for releasing of fund for EPI

EPI Workshop in 2005

Participatory problem analysis to find the causes of low immunization coverage over three causal depths was conducted in June 2005 with stakeholders from all levels of the health system in the course of a workshop. The immediate causes of low immunization coverage identified were:

- vaccinators not coming to the immunization clinic,
- children not brought to vaccination sites by parents,
- missed opportunities - children not immunized during other health services contacts, and
- high drop out - children do not come to complete the series.

The key underlying causes identified were:

- low payment and different norms for payment of vaccinators,
- poor planning, supervision and monitoring of immunization activities,
- lack/shortage of professional EPI staff,
- lack of female staff in remote areas,
- vaccinators not communicating with parents on the benefits of immunizations,
- lack of health educators in the outreach teams,
- poor planning of outreach/outreach sites and services, and
- separation of EPI from other dept-no integration of services.

The basic causes were:

- vertical program,
- scattered population,
- geographical barriers,
- poor security environment, and
- socio-cultural obstacles to access.

IV. Multi Year Plan of Action for 2006 – 2010 (1385-1388)

IV.1 Convergence of National Health Policy and National EPI Priorities

The National Health Policy 2005-2009 states that the mission of the Ministry of Public Health is to ensure the accelerated implementation of quality health care for all the people of Afghanistan, through targeting resources especially to women and children and to under-served areas of the country, and through working effectively with communities and other development partners.

The National Health Policy objectives 2005-2009 are to reduce the high levels of mortality and morbidity by:

- Improving access to quality emergency and routine reproductive and child health services.
- Increasing the coverage and quality of services to prevent and treat communicable diseases and malnutrition among children and adults.
- Strengthening institutional development and management at central and provincial levels to ensure the effective and cost-efficient delivery of quality health services.
- Further developing the capacity of health personnel to manage and better deliver quality health services.

In line with the NHP mission and objectives, the priorities of National EPI for the planned period 2006-2010 are as follows:

- Achieving over 90% coverage nationally and over 80% coverage with all routine immunizations in every district, including BCG, DPT-HepB3 , OPV3 and Measles
- Polio Eradication
- Sustaining 90% reduction in measles cases and thus low infant mortality due to Measles
- Elimination of Neonatal Tetanus
- Achieving 100% safe injections
- Achieving “no stock-out” for vaccine and immunization supplies
- Enhancing national capacity to manage EPI service delivery network
- Linking immunization with other maternal and child health interventions
- Creating demand for immunization services
- Ensuring financial sustainability of immunization

IV.2 Planned Strategic Result of the National EPI MYPoA

The planned strategic result of the National EPI for the period of 2006-2010 is **“**reduction in mortality and morbidity among children and women from vaccine preventable diseases”. This will directly contribute to the NHP objectives mentioned above. (See the logical framework Annex-2 and MYPoA operational plan Annex-3 for details).

The planned outcomes and outputs of EPI for the period 2006-2010 are:

Outcome-1: Over 80% infants receive full immunization by their first birthday according to the national immunization schedule. The following project outputs will ensure that the planned outcome-1 above is achieved:

Output 1.1: >95% of communities have access to immunization services
Output 1.2: >90% of health workers follow safe injection practices
Output 1.3:>90% of parents/care-providers of infants know the benefit of immunization

Output 1.4: National vaccine and immunization logistic management system provides safe and adequate vaccines and immunization supplies
Output 1.5: Competency/capacity of the EPI network to manage and deliver immunization services is enhanced

Outcome-2: Burden of national target vaccine preventable diseases reduced: 0 Polio status achieved and maintained; Measles mortality reduced by 90%; Neonatal Tetanus prevalence reduced to <1/1000 live birth. The following project outputs will ensure that the planned outcome-2 above is achieved:

Output 2.1: Polio Supplementary Immunization Activities (SIA) conducted as necessary and over 95% of under-five children in target area vaccinated with OPV in each round.
Output 2.2: Measles SIA conducted and >90% of children between 9-59 months receive measles immunization every 3 years for measles second opportunity
Output 2.3: One round (third round) of TT SIA conducted and over 80% of child bearing age women immunized with 2+ doses of Tetanus Toxoid.
Output 2.4: Surveillance of vaccine preventable diseases strengthened and integrated with Disease Early Warning System
Output 2.5: National standards for investigation and control of vaccine preventable diseases developed and implemented.

Outcome-3: Effective and sustainable introduction of new vaccines

Output 3.1: EPI Manual, guidelines and communication materials updated and used for effective introduction of new vaccines
Output 3.2: National vaccine and immunization logistic system, including cold chain improved to meet the requirements of new vaccines
Output 3.3: Surveillance system to include new antigens to document baseline and reduction in occurrence of vaccine preventable diseases.
Output 3.4: Twice yearly review of possibilities for improving government support to immunization.

IV.3 Implementation Modality

The primary responsibility for implementing the MYPoA at the central level rests with the National EPI, Ministry of Public Health. To achieve the program outcomes identified; the outputs, activities, implementation timeline, budget, and partner agency supporting or likely to support the government in implementing each of the activities are also identified in the operational plan, Annex 4. The National EPI will work with other MoPH departments and coordination forums to ensure the consistent planning, implementation and monitoring of the program.

Program/ policy review, development-related activities and higher-level advocacy will be conducted by the National EPI. The field level activities such as service delivery, training, monitoring, supervision, policy implementation, improving service quality and adopting 'best practices' will be the responsibility of all the BPHS implementers, the Provincial Health Authorities including the Provincial Health Directors, the Provincial EPI managers and their teams and the health facility in-charges of all public service facilities.

IV.4 Monitoring and Evaluation

The indicators identified in the logical framework (Annex-2) will be used for monitoring. The following major monitoring and evaluation events are planned for the period:

a. Nation-wide EPI coverage survey
b. National EPI review and study to identify barriers to immunization and to identify immunization communication needs
c. Injection safety assessment
d. Periodic data quality self assessment and data quality audit
e. Nation-wide cold chain assessment
f. Periodic self assessment of national and regional Vaccine Storage Facilities (VSF)

IV.5 ICC Evolving into CGHN and NHCC

Given that full immunization coverage is a commitment of the MoPH and the GoA and the new understanding of EPI integrated in the BPHS as provided by multiple donors and NGOs, the achievements and challenges, plans and policies of immunization will need to be discussed in the broader coordination forums of the Ministry instead of a focused Inter-agency Immunization Coordination Committee (ICC). For example, in 2006 the Consultative Group on Health and Nutrition was the donor body consulted during planning for the Measles and TT SIA in June. The outcome of the first phase of the Measles SIA and further plans for measles control were discussed in the National Health Coordination Committee, a MoPH mechanism for coordination of implementing NGOs. EPI will be placed on the agenda of the CGHN at least annually to review progress and approve the next year's plan.

Besides this, quarterly analysis of coverage data and review of the status of implementation of planned activities as verified by field visits will be conducted by the National EPI and EPI Task Force at national level and by the Provincial Health Coordination Committees (PHCC) at provincial level. The findings of all monitoring and evaluation efforts will be presented and discussed in the quarterly EPI Task Force meeting and in the CGHN annually.

V. Costing and Financing Analysis of the cMYP for EPI Afghanistan for 2007-2010

Introduction and Background

The comprehensive Multi-year Plan (cMYP) for Afghanistan was first drafted in September 2005. It was updated in early 2007 for the period of 2007-2010, corresponding to Afghan years 1386, 1387, 1388[25]. 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.

[25] Afghan year begins on 21st March. However the plan period is according to the calendar years and therefore covers years 2007, 2008, 2009, 2010

Table 1: Demographic Indicators	2006	2007	2008	2009	2010
Population growth (%)	2.40%	2.40%	2.40%	2.40%	2.40%
Births (% total population)	4.80%	4.80%	4.80%	4.80%	4.80%
Infant Mortality Rate (per 1,000 live births)	155	155	155	155	155
Pregnant women (as a factor of births)	1.0	1.0	1.0	1.0	1.0
Childbearing age women (CBAW) (% of total population)	20.00%	20.00%	20.00%	20.00%	20.00%

Table 2: Population Projections	2007	2008	2009	2010
Population	26,549,294	27,186,477	27,838,953	28,507,087
Births	1,274,366	1,304,951	1,336,270	1,368,340
Infant Mortality	197,527	202,267	207,122	212,093
Surviving Infants (SI)	1,076,839	1,102,684	1,129,148	1,156,247
Pregnant women	1,274,366	1,304,951	1,336,270	1,368,340
Child Bearing Age Women	5,309,859	5,437,295	5,567,791	5,701,417
Target Population (Births or SI)	1,274,366	1,304,951	1,336,270	1,368,340
Incremental Increase	29,868	30,585	31,319	32,070

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.

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 2010 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: 52 District health coordinators and 16 Regional EPI trainers are planned to be recruited in 2007 in addition to 240 vaccinators, 60 of whom are to be recruited each year.
   b. Transport: The transport fleet will be strengthened with 49 supervisor vehicles, 240 motorcycles for outreach and a truck for supplies during the plan period.
   c. Cold Chain: Additional cold chain equipment including spares will be procured to replenish the old one and to establish new EPI static centres. This includes installation of two cold rooms at National level for storing of

Pentavalent vaccine, electric generators, 510 ice-lined refrigerators (ILRs) and a large number of cold boxes and vaccine carriers etc.

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 2006.
7. There is already a balance of appx US$ 8 million of GAVI ISS funds with GOA from Phase1. These are considered as secure funding during the plan period. In addition to these funds appx US$ 6 million funds are expected under GAVI phase 2.

Costing and Financing Analysis for 2006:

In 2006 the total immunization expenditure is estimated to be US $ 29.669 Million[26]. This included US $ 1.128 Million (4%) as the shared cost. Out of the total immunization specific expenditure of US $ 28.541 Million an amount of US $ 12.676 Million was spent on campaigns and an amount of US $ 15.865 Million was spent on routine immunization activities. The campaigns in 2006 included 5 rounds of Polio NIDs and 5 rounds of Polio SNIDs besides a combined campaign of Measles and MNT targeting 9 month to 59 month children for Measles and CBWs in 12 provinces (remaining provinces to be completed in 2007).

The cost per DPT3 child was US $ 22. The per capita expenditure on routine immunization is estimated to be US $ 0.6 (Table 3)

Table 3 : Baseline Indicators	2006
Total Immunization Expenditures	$28,541,227
Campaigns	$12,676,308
Routine Immunization only	$15,864,919
per capita	$0.6
per DTP3 child	$21.9
% Vaccines and supplies	36.6%
% National funding	20.0%
% Total health expenditures	13.6%
% Gov. health expenditures	38.3%
% GDP	0.23%
Total Shared Costs	$1,128,467
% Shared health systems cost	4%
TOTAL	$29,669,694

The main cost driver during 2006 was personnel (37%) followed by routine recurrent expenditure (35%). The cost of traditional vaccines and new vaccines (DPT-Hep B) was 13% and 20% of the routine immunization expenditure (Chart 1).

The GoA provides the major bulk of salaries to the staff and bears almost all the buildings - related expenses. This together contributed towards 20% of the total financing. The contribution of Unicef was 35%, GAVI 28% and the other donors 17% (Chart 4).

[26] Derived through utilizing the Cmyp tools

Chart 1

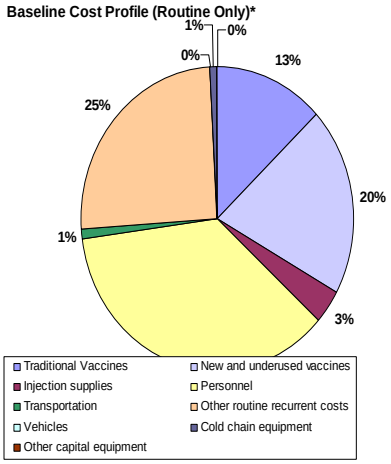


Chart 2

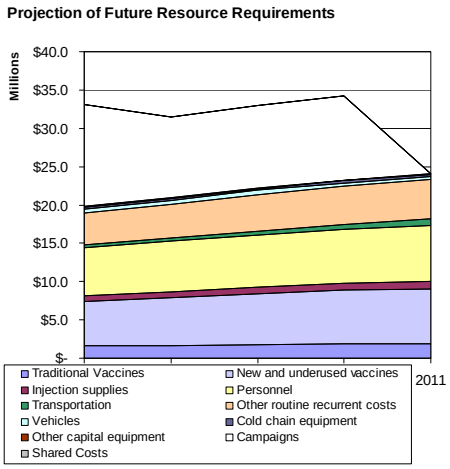


Chart 3

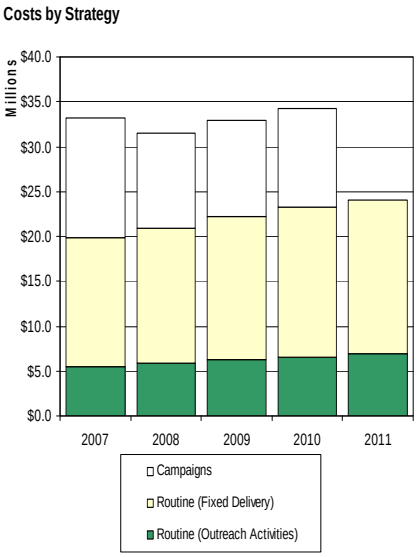


Chart 4

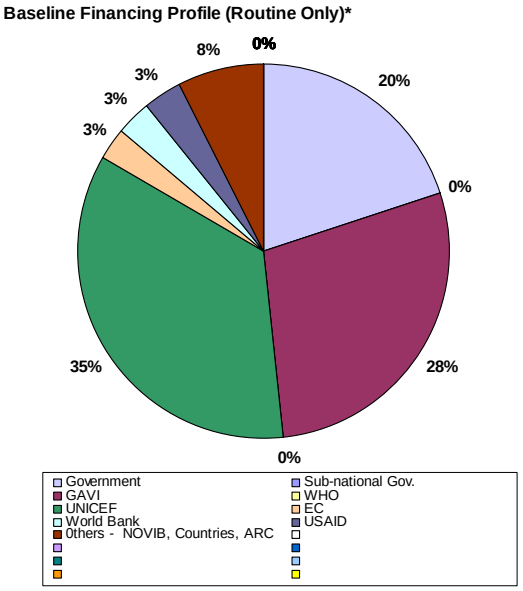


Chart 5

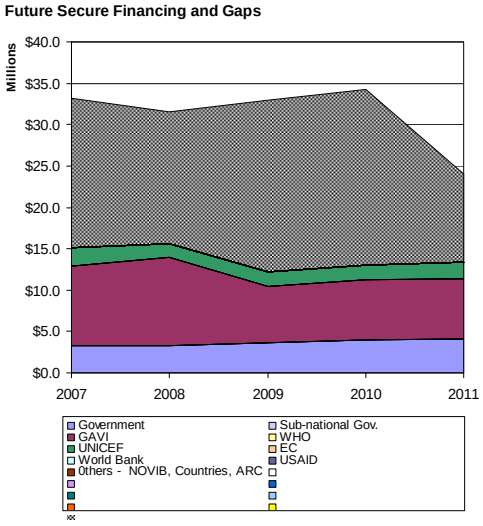
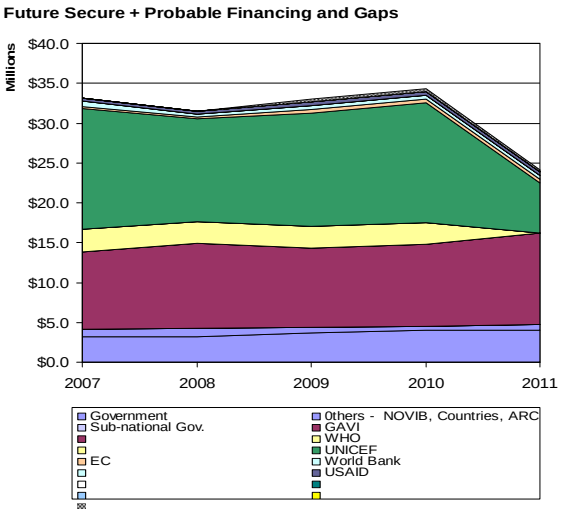


Chart 6



Scenarios for EPI

The future resource requirements and the likely source of the financing has been estimated under 2 Scenarios.

- Scenario 1: The present scenario i.e. continuation of use of Tetravalent (DPT-Hep B) Combo Vaccine.
- Scenario 2: Introduction of Hib Vaccine in the form of Pentavalent (DPT-Hep B-Hib) Vaccine country wide from 1st January 2008.

Scenario 1: Future cost requirement and financing: Tetravalent vaccine

The coverage objectives under scenario 1 and scenario 2 are the same, whereby 90% immunization coverage is planned to be reached country wide by 2010. EPI Afghanistan has been approved for Tetravalent vaccine and associated injection safety supplies for mid 2006-mid 2011. Under this scenario the cost of Tetravalent vaccine for the plan period will therefore be borne by GAVI. Under this scenario the total resource requirement is US $ 131.909 million. The yearly requirement ranges from US $ 31.524 Million to US $ 34.272 Million with a yearly average of US $ 32.977 Million.

The per capita cost is US $ 0.8 per annum, while the per DPT targeted child cost is approximately US $ 23 per annum (Table 4).

Table 4 : Resource Requirements, Financing and Gaps*	**2007**	**2008**	**2009**	**2010**	**2007-2010**
Total Resource Requirements	**$33,144,079**	**$31,524,721**	**$32,967,390**	**$34,272,746**	**$131,908,936**
Annual growth rate	14%	-5%	4%	4%	
Total Resource Requirements (Routine only)	**$19,822,062**	**$20,947,605**	**$22,167,235**	**$23,245,161**	**$86,182,062**
per capita	$0.7	$0.8	$0.8	$0.8	$0.78
per DTP targeted child	$23.6	$22.9	$22.6	$22.3	$22.85
% Vaccines and supplies	41%	41%	42%	42%	

Total Secured Financing	**$15,097,990**	**$15,593,165**	**$12,199,069**	**$13,071,149**	**$55,961,373**
Government	$3,246,508	$3,248,038	$3,629,999	$4,032,399	$14,156,944
Sub-national Gov.					
GAVI	$9,603,496	$10,661,636	$6,812,844	$7,192,223	$34,270,199
WHO					
UNICEF	$2,247,986	$1,683,491	$1,756,226	$1,846,527	$7,534,230
EC					
World Bank					
USAID					
0thers - NOVIB, Countries, ARC					
Funding Gap (with secured funds only)	**$18,046,089**	**$15,931,556**	**$20,768,322**	**$21,201,597**	**$75,947,563**
% of Total Needs	54%	51%	63%	62%	
Total Probable Financing	**$18,046,089**	**$15,931,557**	**$20,457,531**	**$20,894,865**	**$75,330,042**
Government					
Sub-national Gov.					
GAVI			$3,032,196	$3,125,636	$6,157,832
WHO	$2,929,709	$2,773,105	$2,762,488	$2,682,723	$11,148,025
UNICEF	$12,862,008	$11,157,399	$12,392,847	$13,116,506	$49,528,760
EC	$225,000	$236,000	$490,000	$490,000	$1,441,000
World Bank	$683,480	$398,000	$490,000	$490,000	$2,061,480
USAID	$393,000	$393,000	$490,000	$490,000	$1,766,000
0thers - NOVIB, Countries, ARC	$952,892	$974,053	$800,000	$500,000	$3,226,945
Funding Gap (with secured & probable funds)	**$0**	**-$1**	**$310,790**	**$306,732**	**$617,521**
% of Total Needs	0%	0%	1%	1%	

Considering only the secure funds, there is a considerable funding gap ranging from 51% to 63%. This is despite the fact that the GOA contribution increases from US$ 3.246 million in 2007 to US$ 4.032 million in 2010. The year-wise composition of the funding gap is given in Table 5.

Table 5 : Composition of the funding gap	**2007**	**2008**	**2009**	**2010**	**2007-2010**
Vaccines and injection equipment		$626,206	$665,395	$702,868	$1,994,469
Personnel	$2,245,892	$2,276,395	$4,320,596	$4,202,849	$13,045,731
Transport	$100,000	$123,778	$532,000	$648,259	$1,404,038
Activities and other recurrent costs	$2,178,181	$2,103,403	$3,568,610	$3,841,271	$11,691,465
Logistics (Vehicles, cold chain and other equipment)	$200,000	$224,658	$881,565	$778,764	$2,084,987
Campaigns	$13,322,016	$10,577,116	$10,800,155	$11,027,586	$45,726,874
Total Funding Gap*	**$18,046,089**	**$15,931,556**	**$20,768,322**	**$21,201,597**	**$75,947,563**

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

Scenario 2: Future cost requirement and financing: Pentavalent vaccine

Under this scenario the Pentavalent (DPT-Hep B-Hib) Vaccine will be introduced in the routine immunization with the GAVI support from 1st January 2008. GoA has requested GAVI to be exempted from co-financing on the following grounds:

a. Afghanistan is still a fragile state in economic crisis and striving to attain stability.
b. Afghanistan is already approved for Tetravalent Vaccine uptil mid 2011, which doesn't require any financial contribution towards the cost of the vaccine.

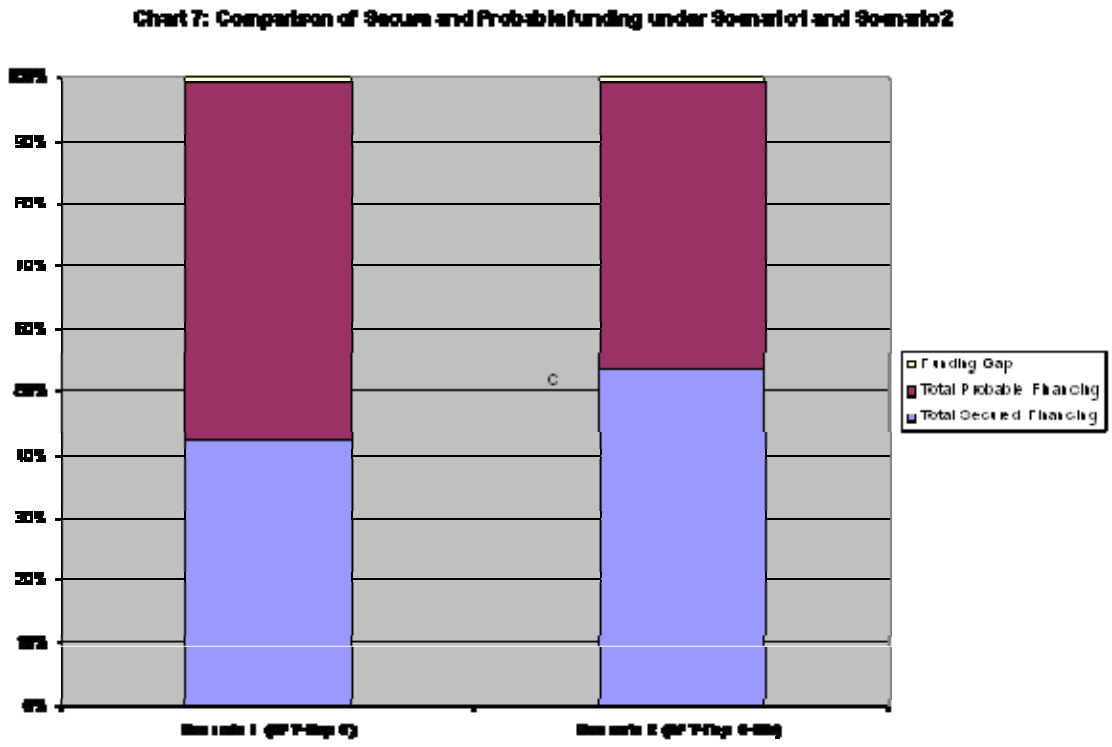
However for the costing and financing under this scenario, the GoA co-financing share has been included at a rate of US $ 0.10 per dose. It is expected that this amount would be waived by GAVI as mentioned above or borne by an EPI partner.

The total resource requirements under this scenario are US$ 162.982 million. However the funding gap is much less than scenario 1 and ranges between 37% to 54%. The details of the resource requirements and the composition of the funding gap is given in table 6 and 7 respectively.

Table 6 : Resource Requirements, Financing and Gaps*	**2007**	**2008**	**2009**	**2010**	**2007-2010**
Total Resource Requirements	**$33,144,079**	**$43,760,626**	**$42,130,945**	**$43,946,437**	**$162,982,087**
Annual growth rate	14%	24%	-4%	4%	
Total Resource Requirements (Routine only)	**$19,822,062**	**$33,183,510**	**$31,330,790**	**$32,918,852**	**$117,255,213**
per capita	$0.7	$1.2	$1.1	$1.2	$1.1
per DTP targeted child	$23.6	$36.3	$31.9	$31.6	$30.8
% Vaccines and supplies	41%	63%	59%	59%	
Total Secured Financing	**$15,097,990**	**$27,686,469**	**$21,210,320**	**$22,584,057**	**$86,578,836**
Government	$3,246,508	$3,727,092	$4,039,320	$4,464,506	$15,477,426
Sub-national Gov.					
GAVI	$9,603,496	$22,275,885	$15,414,774	$16,273,024	$63,567,179
WHO					
UNICEF	$2,247,986	$1,683,491	$1,756,226	$1,846,527	$7,534,230
EC					
World Bank					
USAID					
0thers - NOVIB, Countries, ARC					
Funding Gap (with secured funds only)	**$18,046,089**	**$16,074,157**	**$20,920,626**	**$21,362,380**	**$76,403,251**
% of Total Needs	54%	37%	50%	49%	
Total Probable Financing	**$18,046,089**	**$16,074,158**	**$20,609,836**	**$21,055,648**	**$75,785,730**
Government					
Sub-national Gov.					
GAVI			$3,032,197	$3,125,636	$6,157,833
WHO	$2,929,709	$2,773,105	$2,762,488	$2,682,723	$11,148,025
UNICEF	$12,862,008	$11,300,000	$12,545,151	$13,277,289	$49,984,448
EC	$225,000	$236,000	$490,000	$490,000	$1,441,000
World Bank	$683,480	$398,000	$490,000	$490,000	$2,061,480
USAID	$393,000	$393,000	$490,000	$490,000	$1,766,000
0thers - NOVIB, Countries, ARC	$952,892	$974,053	$800,000	$500,000	$3,226,945
Funding Gap (with secured & probable funds)	**$0**	**$0**	**$310,790**	**$306,732**	**$617,521**
% of Total Needs	0%	0%	1%	1%	

Table 7 :Composition of the funding gap	**2007**	**2008**	**2009**	**2010**	**2007-2010**
Vaccines and injection equipment		$768,808	$817,699	$863,651	$2,450,158
Personnel	$2,245,892	$2,276,395	$4,320,596	$4,202,849	$13,045,731
Transport	$100,000	$123,778	$532,000	$648,259	$1,404,038
Activities and other recurrent costs	$2,178,181	$2,103,403	$3,568,610	$3,841,271	$11,691,464
Logistics (Vehicles, cold chain and other equipment)	$200,000	$224,658	$881,565	$778,764	$2,084,987
Campaigns	$13,322,016	$10,577,116	$10,800,155	$11,027,586	$45,726,874
Total Funding Gap*	**$18,046,089**	**$16,074,157**	**$20,920,626**	**$21,362,380**	**$76,403,251**

The percentage of the secure funding incase of scenario 2 as depicted in the Chart 7 is greater than incase of scenario 1. Therefore from the financial sustainability point of view opting for the scenario 2 will be more beneficial for the EPI program. However it requires successful outcome of negotiations with GAVI regarding the waiver of the co-financing component.



Sustainability Analysis:

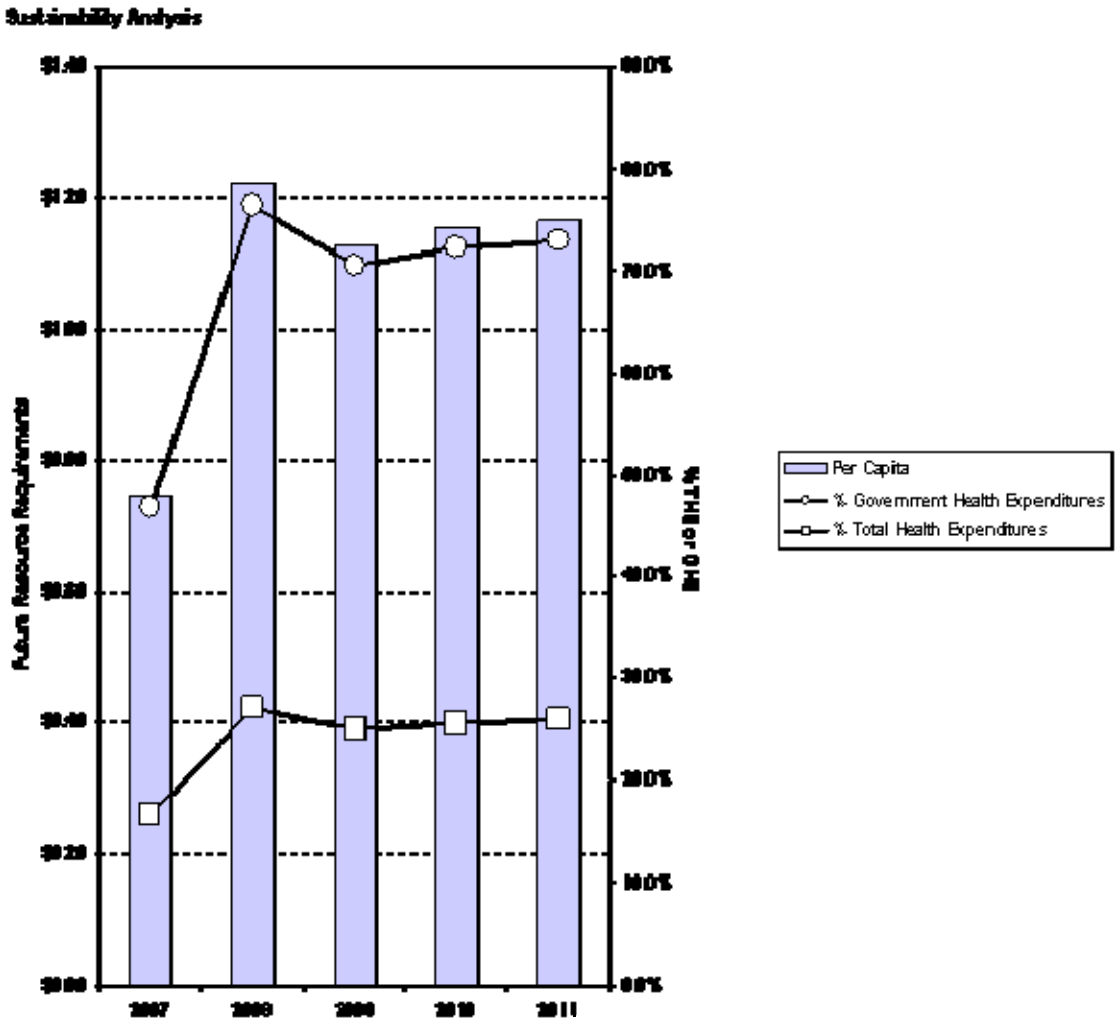
Despite the fragile economic situation in Afghanistan, the GoA contributed 20% of the routine immunization cost in 2006 (Chart 4). It is expected that GoA will not only maintain this baseline but will gradually increase its contribution towards immunization and ensure gradual sustainability towards the EPI Program. Similarly EPI partners have contributed greatly towards the immunization program, and it is expected that they will continue contributing towards this cause.

It can be seen from the table 8 and chart 8 below that despite the best efforts by GOA, complete financial sustainability of the EPI program does not seem to achievable in the near future . However it is expected that with more stability and peace in the coming years, the Government financial position will improve and thus lead to more financial sustainability of the EPI.

Table 8 and chart 8 depict the financial sustainability of the EPI program in Afghanistan.

Table 8 : Macroeconomic and Sustainability Indicators	2006	2007	2008	2009	2010
Reference					
Per capita GDP ($)	$269	$281	$293	$303	$313
Total health expenditures per capita (THE per capita $)	$4.5	$4.5	$4.5	$4.5	$4.5
Population	$25,927,045	$26,549,294	$27,186,477	$27,838,953	$28,507,087
GDP ($)	$6,974,375,087	$7,460,351,617	$7,965,637,781	$8,435,202,613	$8,922,718,350
Total Health Expenditures (THE $)	$116,671,702	$119,471,823	$122,339,147	$125,275,286	$128,281,893
Government Health Expenditures (GHE $)	$41,418,454	$42,412,497	$43,430,397	$44,472,727	$45,540,072
Resource Requirements for Immunization					
Routine and Campaigns ($)	$28,541,227	$33,144,079	$43,760,626	$42,130,945	$43,946,437
Routine Only ($)	$15,864,919	$19,822,062	$33,183,510	$31,330,790	$32,918,852
per DTP3 child ($)	$21.9	$23.6	$36.3	$31.9	$31.6
% Total Health Expenditures					
Resource Requirements for Immunization					
Routine and Campaigns	24.5%	27.7%	35.8%	33.6%	34.3%
Routine Only	13.6%	16.6%	27.1%	25.0%	25.7%
Funding Gap					
With Secure Funds Only		15.1%	13.1%	16.7%	16.7%
With Secure and Probable Funds		0.0%	0.0%	0.2%	0.2%
% Government Health Expenditures					
Resource Requirements for Immunization					
Routine and Campaigns	68.9%	78.1%	100.8%	94.7%	96.5%
Routine Only	38.3%	46.7%	76.4%	70.4%	72.3%
Funding Gap					
With Secure Funds Only		42.5%	37.0%	47.0%	46.9%
With Secure and Probable Funds		0.0%	0.0%	0.7%	0.7%
% GDP					
Resource Requirements for Immunization					
Routine and Campaigns	0.41%	0.44%	0.55%	0.50%	0.49%
Routine Only	0.23%	0.27%	0.42%	0.37%	0.37%
Per Capita					
Resource Requirements for Immunization					
Routine and Campaigns	$1.10	$1.25	$1.61	$1.51	$1.54
Routine Only	$0.61	$0.75	$1.22	$1.13	$1.15

Chart 8


Sustainability Analysis
Future Resource Requirements
% THE or OHE
Per Capita
% Government Health Expenditures
% Total Health Expenditures

Annexes

Annex-1: Situation Analysis Data Tables

Table 6: Situational Analysis by Status of Accelerated Disease Control Initiatives

Component	Suggested indicators	National*			
		2003	**2004**	**2005**	**2006**
Polio	National OPV3/DPT3 coverage	54%	66%	76%	69%
	Non-polio AFP rate per 100, 000 children under 15 yrs. of age	3.19	4.46	5.37	5.99
	No. of confirmed polio cases	8	4	9	31
	No. of rounds NIDs	4	5	4	5
	Coverage range of NIDs		95-99%	95-99%	90-99%
	No. of rounds SNIDs	1	2	2	5
	Coverage range of SNIDs		95-99%	95-99%	90-99%
	No. of rounds mop-ups	1	0	3	0
	Coverage range of mop-ups		95-99%	95-99%	0
MNT	TT2 coverage (pregnant women)	40%	45%	55%	54%
	Number of districts reporting > 1 case per 1,000 live births OR with no reporting system	ND	95 reported cases	41 reported cases	33 reported cases
	Was there an SIA (Y/N)	Yes	Yes	No	yes
Measles	Measles coverage	50%	61%	64%	68%
	No. of outbreaks reported	None	None	4	2
	Measles SIA (Y/N)	Yes	No	No	Yes
	Age group covered in Measles SIA	9-59 months	N/A	N/A	9-59
	Coverage of Measles SIA	95%	N/A	N/A	95%

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

Table 7: Situational Analysis of Routine EPI by System Components

System components	Suggested indicators	National			
		2003	2004	2005	2006
Routine Coverage	National DTP3 coverage[27]	54%	66%	76%	77%
	% of districts with > 80% coverage	19%	30%	44%	49%
	National DPT1-DPT3 dropout rate	18%	17%	14%	13%
	Percentage of districts with Drop out rate DTP1-DTP3>10	70%	70%	58%	63%
New vaccines	National HepB-3 coverage (started July 2006)		N/A	N/A	Not available
Routine Surveillance	% of surveillance reports received at national level from districts compared to number of reports expected	AFP 100%, Measles: 87%, NNT: 75%	AFP 100% Measles/ NNT (87%)	AFP 100%, Measles/ NNT (64%)	AFP 100%, Measles/ NNT (100%)
Cold chain/Logistics	Percentage of cold chain equipment replaced in past 2 years	ND	30%	30%	13%
	Percentage of districts with complete cold chain equipment	ND	57%	87%	100%
Immunization safety	Percentage of districts 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	Yes	Yes	No
	If yes, specify duration in months	na	1 month	1 month	na
	If yes, specify which antigen(s).	na	OPV, DTP	OPV, DTP	na
Communica-tion	Availability of a plan (yes, August 2006)	No	No	No	No
Financial sustainability	What percentage of total routine vaccine spending was financed using Government funds? (including loans and excluding external public financing)	ND	ND	ND	27%
Human resources availability	No. of health workers/ vaccinators per 10,000 population. Alarm level is below 10-30 per 10,000 population.	0.68/ 10000	0.79/ 10000	0.84/ 10000	About 1/10000
Management planning	Are a series of district indicators collected regularly at national level?(Y/N)	Yes	Yes	Yes	Yes
NRA	Number of functions conducted	NA	NA	NA	NA
Research/ studies	Number of vaccine related studies conducted/ being conducted	One	One	Nil	Nil
ICC	Number of meetings held last year	4	3	3	4

[27] Recorded coverage 69%, official estimate 77%. See JRF

Table 8: Global Goals, National Priorities and National Objectives

Description of global goals /national priority	National objectives based on global goals/national priority	Milestones
Routine Immunization Coverage: By 2010 or sooner all countries will have routine immunization coverage at 90% nationally with at least 80% coverage in every district	• By 2008 national DPT3 coverage will be 83% • By 2010 routine DPT3 immunization coverage will be 90% with at least 80% coverage in 100% of districts by 2010.	**DPT3 coverage**[28] 2006: 77%[29] 2007: 78% 2008: 83% 2009: 87% 2010: 90%, >80% in100% distt
Polio Eradication: By 2010, the world will be certified polio-free	Stop Polio virus transmission by 2007	2006: End polio transmission 2007: 0 polio case 2008: 0 polio case 2009: 0 polio case 2010: Polio free certification
Measles Control: 90% reduction in infant mortality by 2010	50% reduction in infant mortality due to measles by 2007 and 90% by year 2010	MCV1 coverage 2006: 68% 2007: 75% 2008: 80% 2009: 85% 2010: 90%
Neonatal Tetanus Elimination: Elimination in every district by 2005	NT Elimination in 50% of districts by 2006 and in every district by 2007	TT2 coverage for Pregnant Women 2006: 50% 2007: 70% 2008: 80% 2009: 85% 2010: 90%
Hepatitis B Introduction: By 2002, 80% of all countries with adequate delivery systems will have introduced hepatitis B vaccine. By 2007, all countries.	By 2006, Hep B will be introduced	2006: DPT-Hep B Introduced 2007: 2008: 2009:
Hib Introduction: By 2005, 50% of the poorest countries with high disease burdens and adequate delivery systems will have introduced Hib vaccine.	By 2007, Hib disease burden will be estimated	2006: 2007: Study conducted 2008: Hib vaccine introduced as DPT-HepB-Hib 2009: 2010:
Immunization safety: By end of 2003, all countries would use only auto-disable syringes for immunization.	• Goal reached: All immunization injections use AD syringes • By end 2006, 100% of EPI centres implement safe immunization practices.	2006: 100% 2007: 100% 2008: 100% 2009: 100% 2010: 100%

[28] Or other combo vaccine with DPT.
[29] While reported coverage was 69%, official estimate was 77%. See JRF.

No stock outs of immunization supplies	By 2006, national execution of immunization supplies forecasting, supply requisition, stock control, supplies distribution and reporting • By 2008, vaccine financing line in the national Budget • By 2010, no stock out of immunization supplies at the service delivery point	2006: 2007: 2008: vaccine in national budget 2009: 2010:
Create and update national immunization advocacy and communications plan	By 2006, national immunization advocacy and communication plans to be created	2007: Plan developed 2008: 2009: 2010:
Financial sustainability	By 2010, national government funding to be increased to 47%.	2006: 27% 2007: 32% 2008: 37% 2009: 42% 2010: 47%

Annex-2: Logical Framework Analysis

Result/outcome/output		Indicators	Baselines	Targets for the plan period	Means of verification	Geog. Focus
Strategic Result	Reduction in mortality and morbidity among children and women from vaccine preventable diseases	• Reported measles cases • Reported neonatal tetanus cases • Polio case incidence	• 1990 • 33 • 31 cases in 2006	• Reduction by 90% • MNT cases < 1/1000 live births • "0" polio	• Survey • Integrated surveillance system report	National -do-
Outcome-1	>90% infants receive full immunization by their first birthday	BCG, DTP 3, OPV3 and measles coverage rate		>90% for all	WHO-UNICEF joint report/ Coverage survey	Districts/ Provinces
Output 1.1	>95% of communities have access to immunization services	• % of infants having immunization facility or outreach available within 1/2 hour travel time from home (by walking or any transport) • Incidence of violence directed against immunization facilities and immunization service providers	To be established Periodic	>95% Gradual reduction	Survey System of reporting incidence of violence directed against imm. facilities/service providers	Provinces
Course of Action	1. Conduct an EPI coverage survey to establish baselines of all indicators and to track progress 2. Carry out data quality self assessment 3. Carry out an EPI programme review 4. Monitor EPI main indicators regularly and use data for action 5. Conduct Drop-out rate assessment and take actions to address high drop-out rate 6. Revise district micro-planning tools. 7. Conduct District micro-planning exercise in all districts with active involvement of communities & partners. Use district micro-plans to determine need and type of the services centres and outreach. 8. Establish national database of district indicators by 2007 9. Strengthen and expand supportive supervisory system to all provinces					

Course of Action	10. Develop policy, tools and operational procedures for integrated approach and provide services as a package to ensure convergence of interventions on women and children. 11. Link EPI service delivery to MCH services at health facilities to make it a one stop service package. 12. Evaluate the process and impact of integrated approach in SM projects (Panjshir, Parwan & Kapisa) and replicate in other districts 13. Develop/implement integrated logistic, monitoring, supervision, recording and reporting tools 14. Develop operational guideline for Sustainable Outreach Services (SoS). 15. Conduct Sustainable outreach Services in hard to reach and under served areas based on individual community needs, service and resources availability 16. Support MoPH and the Ministry of Interior to design and implement a communication campaign to promote immunization (health services) a neutral public good and the right of a child 17. Establish a system of reporting and reviewing incidence of violence directed against immunization facilities and immunization service providers 18. Develop national policy to involve private sector in provision of immunization services in hard to reach and un-served areas.

Result/outcome/output		**Indicators**	**Baselines**	**Targets**	**verification**	**Geog.**
Output 1.2	>90% of service providers follow safe injection practices	% of vaccinators followed safe injection practices as per WHO standards	72% in imm.practice 33% in curative (2003 asmnt)	95% in immunization	Safety of injection assessment. Review of supp.supervision checklist.	Districts
Course of Action	1. Conduct national workshop on safety of injection with active participation of concerned MoPH departments, partners, line ministries and mass media representative 2. Revise national policy on safety of injection (S.I) and safe waste disposal (S.W.D) and develop/submit related legislation document for approval of the government authority. 3. Incorporate S.I and S.W.D topic in all training packages and conduct training for midlevel managers, supervisors,service providers 4. Support Institute of health science and community midwifery schools to include S.I and S.W.D in their curriculum. 5. Train head nurses of hospital on S.I and S.W.D 6. Strengthen surveillance of AEFI and incorporate reporting of AEFI in routine HMIS system 7. Establish national expert review committee and provincial investigation teams for AEFI. 8. Monitor timeliness and completeness of AEFI reports including zero report 9. Develop and implement national comprehensive communication plan for S.I and S.W.D in coordination with all concerned departments and partners.					

Result/outcome/output		Indicators	Baselines	Targets for the plan period	Means of verification	Geog. Focus
Output 1.3	>90% of parents/care-providers of infants know the benefit of immunization	% of parents/caregivers of infants knowing the benefits of immunization	To be established	>90	Survey	By province
Course of Action	1. Conduct study to identify barriers to immunization and to identify immunization communication needs 2. Design and implement an immunization communication plan 3. Review training material and update/include as necessary interpersonal communication and community mobilization in training packages of vaccinators and managers 4. Train immunization service providers and managers on interpersonal communication and community mobilization 5. Conduct special communication campaigns in link with special service delivery events like outreach and other SIAs 6. 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)					
Output 1.4	National Vaccine and Immunization Logistic Management system provides safe and adequate vaccines and immunization supplies and adequate funding for immunization secure	1. Proportion of national and regional VSF that meet the Effective Vaccine management criteria 2. % regional and National VSF getting adequate resources (> 80% of planned) by item 3. Proportion of national, regional and provincial VSF following National Vaccine Management Standard Operation Procedures (SOP) 4. % of provincial stores reporting stock out of vaccines 5. % of provincial stores reporting stock outs of immunization supplies 6. % of provincial stores reporting stock outs of cold chain spares 7. %of government financial contribution in EPI	1. Not assessed 2. VSF have no formal plans 3. SOP develped 4. Periodic stock outs reported 5. –do- 6. –do- 7. >1% in 2003	1. National and Regional VSF 2. 100% 3. 100% 4. … 5. … 6. …. 7. 46% in 2010	1. Assessment report 2. Annual Review of VSFs 3. Annual assessment of VSF 4. Provincial quarterly stock position report 5. –do- 6. –do- 7. Financial reports	By facilities

Course of Action	1. Update the national cold chain inventory and inventory management system 2. Carry out nation—wide cold chain assessment 3. Develop national standards for cold chain equipment and supplies. 4. Develop cold chain replacement and expansion plan 5. Carry out quarterly self assessment of national and regional Vaccine Storage Facilities (VSF) to ensure that the facilities meet the Effective Vaccine Management criteria 6. Procure and replace 10% cold chain equipment annually as necessary 7. Procure cold chain equipment for 10% cold chain expansion annually 8. Expand the dry storage capacity of NSF 9. Endorse/update vaccine management standard operation procedures (SOP) 10. Develop annual plans including needs forecast, supplies distribution, equipment and building maintenance and supervision plans for the national and regional VSFs 11. Provide operational support to the vaccine logistic network including transport, fuel, travel cost, salary/incentive according to the agreed annual plans (Plus incentive) 12. Develop and update national forecast for vaccines and vaccination supplies 13. Establish vaccine wastage monitoring system, monitor regularly and take actions to reduce vaccine wastage. 14. Procure traditional EPI vaccines and bundled vaccination supplies as per the vaccine and injection supplies forecast 15. Procure DTP-HepB vaccines and bundled vaccination supplies as per the supplies forecast 16. 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. 17. Procure pick-ups (Toyota hilux) for provincial EPI teams/VSF, one each for 14 provinces and replacement for 5 provinces each year 18. Update FSP and implement planned activities to secure funding and efficient and effective use of resources. 19. Monitor FSP indicators to ensure adequate funding for immunization, reliability and efficiency of the resources as planned.

Result/outcome/output		Indicators	Baselines	Targets for the plan period	Means of verification	Geog. Focus
Output 1.5	Competency/capacity of the EPI network to manage and deliver immunization services enhanced	1. % of provinces having Provincial Health Directors, PEMT managers and supervisors trained in Mid-Level Management (MLM) 2. % of provinces having PEMT managers and supervisors skilled in supportive supervision 3. % of immunization service provider trained on "Immunization in practice" 4. Periodicity of national, regional and provincial EPI review meetings	1. <50% 2. <50% 3. <50% 4. No fixed plan	1. >90% 2. >90% 3. >90% 4. 5. Annual - national, semi-annual- regional & quarterly- provincial	1. Training report 2. EPI review 3. Training report 4. Meeting reports	National with provincial disaggre-gation
Course of Action	1. Review/update & reinforce national EPI policies & standards as necessary 2. Conduct training needs assessment of immunization service providers and managers 3. Recruit/ employ 16 regional EPI trainers/ supervisors, 2 in each region, to conduct initial and refresher training of all levels of health workers on EPI, including vaccinators, and to follow up training with supportive supervision in the field. 4. Adopt Mid-level management training package and train Provincial Public Health Directors, PEMT Managers, PEMT and BPHS implementers NGOs supervisors and District Coordinators (head of health facilities) with emphasis on supportive supervision 5. Adopt "Immunization in practice" for training of immunization service providers 6. National annual EPI planning and review workshop with participation of the provincial EPI managers and BPHS implementers 7. Half yearly regional EPI planning/review workshop with participation of the provincial EPI managers and PBHS implementers 8. Quarterly provincial EPI planning /review workshop with participation of the provincial EPI managers and BPHS implementers 9. Recruit and maintain level of technical and managerial expertise that is necessary to manage and deliver immunization services at all levels (incentive/salary) 10. Assign 7 EPI technical officers in national EPI to provide support to the prov teams, train staff, improve supervision, monitoring 11. Review FSP and MYPoA annually and update as necessary 12. Advocate with government authorities to secure funding for purchase of new vaccines 13. Develop vaccine self reliance initiative plan for Afghanistan 14. Conduct periodic EPI Task Force meetings to review technical and operational aspect of the MYPoA implementation 15. Conduct periodic ICC meetings and in those meetings review progress of MYPoA implementation				

Result/outcome/output		Indicators	Baselines	Targets for the plan period	Means of verification	Geog. Focus
Outcome -2	Burden of national target vaccine preventable diseases reduced (0 polio status, measles mortality reduction by 90%, tetanus prevalence <1/1000 live birth)	1. Number of polio cases reported 2. No of measles cases reported 3. No of measles outbreaks reported 4. Maternal and neonatal tetanus cases reported	In 2006 1. 31 cases 2. 1990 cases 3. many 4. 33 nnt cases	1. 0 2. 90% reduction 3. 0 4. <1/1000 live birth	5. Surveillance report 6. Surveillance report 7. Survey 8. Survey	National with provincial disaggre-gation
Output 2.1	Polio SIA conducted as necessary and over 95% of under-five children vaccinated with OPV in each round.	1. % of under-five children vaccinated with OPV in each round. 2. % of districts with <95% coverage 3. % of districts with all clusters >95% coverage	1. >95% 2. … 3. …..	1. >95%. 2. <5% 3. >95%	SIA coverage report/post SIA LQA	
Course of Action	1. Update Polio SIA operational guidelines 2. Procure and preposition OPV, additional cold chain supplies as necessary 3. Carry out polio SIAs- include training of volunteers, supervisors, monitors as necessary, conduct advocacy, social mobilization and programme communication to support the campaign and house to house vaccination 4. Carry out post campaign Coverage Assessment 5. Conduct focused group discussions with the active participation of community and service providers (team member) to develop specific strategic plan for district with security concern and where still there is polio virus circulation.					
Output 2.2	Measles SIA conducted every 3 years and >90% of children between 9-59 months receive measles immunization	% of target children (between 9-59 months) who receive measles immunization	>90% in 2003	>90%	SIA coverage report/post SIA LQA	

Course of Action	1. Update measles SIA operational guidelines as necessary 2. Procure and preposition measles vaccine, diluent, injection supplies additional cold chain supplies as necessary 3. Conduct advocacy for fund raising for measles SIA 4. Carry out measles SIA in phases- include training of volunteers, supervisors, monitors as necessary, conduct advocacy, social mobilization and program communication to support the campaign 5. Include other antigens (DPT, TT) or interventions (eg. bednets) in measles SIAs to make it more attractive and use resources efficiently 6. Carry out post campaign coverage assessment 7. Conduct case-based measles surveillance

Result/outcome/output		**Indicators**	**Baselines**	**Targets for the plan period**	**Means of verification**	**Geog. Focus**
Output 2.3	One round (third round) of TT SIA conducted and over 80% of child bearing age women immunized with 2+ doses of Tetanus Toxoid	% of child bearing age women immunized with at least 2 or more Tetanus Toxoid doses	>80% TT2 in 2003	>80%	SIA coverage report/post SIA LQA	
Course of Action	1. Procure and preposition TT, injection supplies, additional cold chain supplies as necessary 2. Update MNTE SIA operational guidelines as necessary 3. Carry out TT SIAs as part of multi-antigen campaign- include training of volunteers, supervisors, monitors as necessary, conduct advocacy, social mobilization and program communication to support the campaign and house to house vaccination 4. Carry out post campaign coverage assessment/survey to determine the coverage 5. Carry out district profiling and risk mapping and initiate measure to ensure that high risk districts carry out additional SIAs to reduce risk 6. Conduct MNT tetanus burden assessment and protection at birth assessment during immunization coverage survey					
Output 2.4	Strengthen and Expand surveillance of vaccine preventable diseases with focus on AFP, Measles case based, NNT surveillance.	1. % of sentinel site Non polio AFP rate 2. % of measles and NNT report reached to the national level 3. % of reported measles cases with adequate sample	1. 2/100,000 2. 54% (2005) 3. ???	1. 2/100,000 2. 90% 3. >80%	1. Weekly data 2. Completeness of reports at the national level 3. Measles surveillance reports	District Province

Course of Action	1. Review AFP indicators to ensure active AFP surveillance continues. 2. Plan and conduct internal review of AFP surveillance to ensure the system met the standard of certification. 3. Conduct ERC meeting as per approved time table. 4. Strengthen capacity of ERC and National certification committee. 5. National focal point for case based measles surveillance to regularly review indicators. 6. Provide measles lab/labs with adequate supply and diagnostic kits. 7. Conduct training for PEMT managers, DHCs on measles and NNT surveillance 8. Train AFP focal points and PPOs on sample collection for measles serological test. 9. Provide centrifuges to the provincial labs where is necessary. 10. Strengthen capacity of national measles lab and Establish at least two more regional measles lab 11. Develop/revise guideline and tools for active NNT surveillance 12. Study burden of prenatal transmission of Hep B Virus toward introduction of neonatal HBV dose in immunization schedule 13. Hire consultant to adopt guideline and study burden of Hib infection as baseline 14. Establish hospital based surveillance of Hib infection

Result/outcome/output		**Indicators**	**Baselines**	**Targets for the plan period**	**Means of verification**	**Geog. Focus**
Output 2.5	National standards for investigation and control of vaccine preventable diseases developed and implemented	1. % of PEMT managers, technical coordinators NGOs, CDC or other relevant staff in MoPH trained on integrated vaccine preventable diseases surveillance guidelines 2. Integrated surveillance system meets the recommended standards 3. Reported outbreaks managed as per national standards	1. To be determined 2. Standards to be developed	1. >90% 2. Meets standards 3. 100%	1. Training reports 2. Evaluation of integrated surveillance system 3. Outbreak/response report	
Course of Action	1. Establish an integrated framework in MoPH for surveillance of vaccine preventable diseases. 2. Draft/ Update national guidelines for integrated surveillance of vaccine preventable diseases 3. Recruit/ train and supervise relevant staff in surveillance of vaccine preventable diseases 4. Conduct integrated response to outbreak early warning system					

Result/outcome/output		Indicators	Baselines	Targets for the plan period	Means of verification	Geog. Focus
Outcome -3	**Effective and sustainable introduction of new vaccines**					
Output 3.1	Need for vaccine established and MoPH and partners submit application	Proposal agreed by technical and development partners			Minutes of ICC	national
Course of Action	Application/proposal drafted: - based on a situation analysis of the current system - aligned to the health sector plan and the health planning and budgeting cycles includes an analysis of the estimated burden of disease and impact of the new vaccine - includes an analysis of cost-effectiveness in the national context and ability to finance - includes a plan for introduction of the new vaccine(s) - includes a plan for controlling vaccine waste and reducing immunization drop-out rates - includes a plan for improving injection safety in the immunization system - includes costing and plans for financing of vaccine purchase and immunization services - Includes agreement to undertake regular Vaccine Management Assessments					
Output 3.2	Vaccine storage and vaccine and immunization logistics plan worked out	See indicators above for vaccine storage and logistics including cold chain				
Course of Action	1. Calculate cold storage required and arrange for procurement if gaps 2. Draft distribution plan and review with provincial EPI management teams 3. Update cold chain and logistics SOPs, publish, train cold chain staff and EPI workers 4. Distribute vaccine and evaluate plan for future adjustments					

Result/outcome/output		Indicators	Baselines	Targets for the plan period	Means of verification	Geog. Focus
Output 3.3	EPI Manual and Communication materials updated with new vaccine introduction	See indicators above for increasing access and quality of service delivery and parental knowlege				
Course of Action	1. Review lessons learned in introduction of DPT-Hep B vaccine 2. Update national EPI policy through EPI Task Force and GD of policy and planning 3. Update national EPI manual, review with partners, publish, train trainers to introduce to EPI workers 4. Supervise administration, recording and reporting closely 5. Update communication materials, incorporate into communication plan					
Output 3.4	Surveillance system to include new antigens to document baseline and reduction in occurrence of vaccine preventable diseases.	See indicators above for surveillance				
Course of	1. Hire consultant to adopt guideline and study burden of Hib infection in Afghanistan 2. Establish hospital based surveillance of Hib infection 3. Review as necessary the integrated vaccine preventable diseases surveillance guidelines and train all relevant staff in MoPH on the use of integrated vaccine preventable diseases surveillance guidelines					
Output 3.5	Twice yearly review of possibilities for improving government support to immunization	See indicators above for advocacy with MoPH and Gov				
Course of	1. Twice yearly meeting of ICC with Ministry of Finance to advocate for vaccine support 2. Update Financial Sustainability Plan annually 3. Update cMYP annually 4. Review possibilities for co-financing and advocate GoA support for immunization					

Annex-3: Operational Work plan

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Outcome-1: >80% infant receive full immunization by their first birthday																					
Output 1.1: >95% of communities have access to immunization services																					
1.1.1	Conduct an EPI coverage survey to establish baselines of all indicators and to track progress			X												X					
1.1.2	Carry out data quality self assessment																				
1.1.3	Carry out an EPI programme review				X						X						X				
1.1.4	Monitor EPI main indicators regularly and use data for action	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.1.5	Conduct Drop-out rate assessment and take actions to address high drop-out rate		X				X				X										
1.1.6	Revise district micro-planning tools	X				X				X				X				X			

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.1.7	Conduct District micro-planning exercise in all districts with active involvement of communities & partners. Use district micro- plans to determine need and type of the services centres and outreach	X	X			X	X			X	X			X	X			X	X		
1.1.8	Establish national database of district indicators by 2007				X																
1.1.9	Strengthen and expand supportive supervisory system to all provinces	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.1.10	Develop policy, tools and operational procedures for integrated approach and provide services as a package to ensure convergence of interventions on women and children.			X	X	X															
1.1.11	Link EPI service delivery to MCH services at health facilities to make it a one stop service package	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.1.12	Evaluate the process and impact of integrated approach in SM projects (Panjshir, Parwan & Kapisa) and replicate in other districts		X	X																	

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.1.13	Develop/implement integrated logistic, monitoring, supervision, recording and reporting tools			X	X	X															
1.1.14	Develop operational guideline for Sustainable Outreach Services (SoS).			X	X	X															
1.1.15	Conduct Sustainable outreach Services in hard to reach and under served areas based on individual community needs, service/ resources availability	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.1.16	Support MoPH and the Ministry of Interior to design and implement a communication campaign to promote immunization (health services) a neutral public good and the right of a child	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.1.17	Establish a system of reporting and reviewing incidence of violence directed against immunization facilities and immunization service providers				X	X															
1.1.18	Develop national policy to involve private sector in provision of immunization services in hard to reach and un-served areas.				X																

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Output 1.2: >90% of service providers follow safe injection practices																					
1.2.1	Conduct national workshop on safety of injection with active participation of concerned MoPH departments, partners, line ministries and mass media representative		X																		
1.2.2	Revise national policy on safety of injection (S.I) and safe waste disposal (S.W.D) and develop/submit related legislation document for approval of the government authority.		X	X																	
1.2.3	Incorporate S.I and S.W.D topic in all training packages and conduct training for mid level managers, supervisors and service providers	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.2.4	Support Institute of health science and community midwifery schools to include S.I and S.W.D in their curriculum.		X	X	X																
1.2.5	Train head nurses of hospital on S.I and S.W.D		X	X																	
1.2.6	Strengthen surveillance of AEFI and incorporate reporting of AEFI in routine HMIS system	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.2.7	Establish national expert review committee and provincial investigation teams for AEFI.			X	X	X	X														
1.2.8	Monitor timeliness and completeness of AEFI reports including zero report	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.2.9	Develop and implement national comprehensive communication plan for S.I and S.W.D in coordination with all concerned departments and partners.		X	X	X																
Output 1.3: >90% of parents/care-providers of infants know the benefit of immunization																					
1.3.1	Conduct study to identify barriers to immunization and to identify immunization communication needs			X																	
1.3.2	Design and implement an immunization communication plan				X	X	X	X	X	X	X	X	X	X	X	X					
1.3.3	Review training material and update/include as necessary interpersonal communication and community mobilization in training packages of vaccinators and managers				X	X															

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.3.4	Train immunization service providers and managers on interpersonal communication and community mobilization				X	X															
1.3.5	Conduct special communication campaigns in link with special service delivery events like outreaches, supplementary immunization activities				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.3.6	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)				X																
Output 1.4: National Vaccine Logistic Management system provides safe and adequate vaccines and immunization supplies																					
1.4.1	Update national cold chain inventory and inventory management system	X																			
1.4.2	Carry out nation—wide cold chain assessment		X												X						
1.4.3	Develop national standards for cold chain equipment and supplies		X																		

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.4.4	Develop cold chain replacement and expansion plan			X																	
1.4.5	Carry out quarterly self assessment of national and regional Vaccine Storage Facilities (VSF) to ensure that the facilities meet the Effective Vaccine Management criteria	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.4.6	Procure and replace 10% cold chain equipment annually as necessary	X				X				X				X				X			
1.4.7	Procure cold chain equipment for 10% cold chain expansion annually	X				X				X				X				X			
1.4.8	Expand the dry storage capacity of NSF	X																			
1.4.9	Endorse/update vaccine management standard operation procedures (SOP)		X	X																	
1.4.10	Develop annual plans including needs forecast, supplies distribution, equipment and building maintenance and supervision plans for the national and regional VSFs	X				X				X				X					X		

SL No.	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.4.11	Provide operational support to the vaccine logistic network including transport, fuel, travel cost, salary/incentive according to the agreed annual plans (Plus incentive)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.4.12	Develop and update national forecast for vaccines and vaccination supplies					X				X				X				X			
1.4.13	Establish vaccine wastage monitoring system, monitor regularly and take actions to reduce vaccine wastage.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.4.14	Procure traditional EPI vaccines and bundled vaccination supplies as per the vaccine and injection supplies forecast	X		X		X		X		X		X		X		X		X		X	
1.4.15	Procure DTP-HepB vaccines and bundled vaccination supplies as per the supplies forecast	X				X				X				X				X			
1.4.16	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.			X				X				X				X				X	

SL No.	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.4.17	Procure pick-ups (Toyota hilux) for provincial EPI teams/VSF, one each for 14 provinces and replacement for 5 provinces each year	X				X				X				X				X			
1.4.18	Update FSP and implement planned activities to secure funding and efficient and effective use of resources.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.4.19	Monitor FSP indicators to ensure adequate funding for immunization, reliability and efficiency of the resources as planned.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Output 1.5: Competency/capacity of the EPI network to manage and deliver immunization services enhanced																					
1.5.1	Review/update & reinforce national EPI policies & standards as necessary	X	X																		
1.5.2	Conduct training needs assessment of immunization service providers and managers		X																		
1.5.3	Recruit/ employ 16 regional EPI trainers/ supervisors, 2 in each region, to conduct initial and refresher training of all levels of health workers on EPI, including vaccinators, and to follow up training with supportive supervision in the field.		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

SL No.	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.5.4	Adopt Mid-level management training package and train Provincial Public Health Directors, PEMT Managers, PEMT and BPHS implementers NGOs supervisors and District Coordinators (head of health facilities) with emphasis on supportive supervision		X				X				X				X				X		
1.5.5	Adopt "Immunization in practice" for training of immunization service providers			X				X				X				X				X	
1.5.6	National annual EPI planning and review workshop with participation of the provincial EPI managers and BPHS implementers	X				X				X				X				X			
1.5.7	Half yearly regional EPI planning/review workshop with participation of the provincial EPI managers and PBHS implementers		X				X				X				X				X		
1.5.8	Quarterly provincial EPI planning and review workshop with participation of the provincial EPI managers and BPHS implementers	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.5.9	Recruit and maintain level of technical and managerial expertise that is necessary to manage and deliver immunization services at all levels (incentive/salary)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.5.10	Assign 7 EPI technical officers in national EPI office to provide support to the provincial teams, train staff, improve supervision and monitoring	X																			
1.5.11	Review FSP and MYPoA annually and update as necessary				X				X				X				X				X
1.5.12	Advocate with government authorities to secure funding for purchase of new vaccines				X		X		X		X		X		X		X		X		X
1.5.13	Develop vaccine self reliance initiative plan for Afghanistan																X	X	X	X	X
1.5.14	Conduct periodic EPI Task Force meetings to review technical and operational aspect of the MYPoA implementation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.5.15	Conduct periodic ICC meetings and in those meetings review progress of MYPoA implementation		X		X		X		X		X		X		X		X		X		X

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Outcome-2: Burden of national target vaccine preventable diseases reduced (0 polio status, measles mortality reduction by 90%, tetanus prevalence <1/1000 live birth) .																					
Output 2.1: Polio SIAs conducted as necessary and over 95% of under-five children vaccinated with OPV in each round																					
2.1.1	Update Polio SIA operational guidelines as necessary	X																			
2.1.2	Procure and preposition OPV, additional cold chain supplies as necessary	X	X	X	X	X	X	X	X	X	X	X	X								
2.1.3	Carry out polio SIAs- include training of volunteers, supervisors, monitors as necessary, conduct advocacy/ social mobilization to support the campaign and house to house vaccination	X	X	X	X	X	X	X	X	X	X	X	X								
2.1.4	Carry out post campaign coverage assessment (LQA)	X	X	X	X	X	X	X	X	X	X	X	X								
2.1.5	Conduct /FU focused group discussions with the active participation of community and service providers to develop specific strategic plans for districts with security concern and polio virus circulation.	X	X	X	X	X															

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Output 2.2: Measles SIA conducted every three years and >90% of children between 9-36 months receive measles immunization																					
2.2.1	Update measles SIA operational guidelines as necessary													X							
2.2.2	Procure and preposition measles vaccine, diluent, injection supplies additional cold chain supplies as necessary	X												X							
2.2.3	Conduct advocacy for fund raising for measles SIA												X	X							
2.2.4	Carry out measles SIA in phases- include training of volunteers, supervisors, monitors as necessary, conduct advocacy, social mobilization and program communication to support the campaign	X	X												X	X					
2.2.5	Include other antigens (DPT, TT) or interventions (eg. bednets) in measles SIAs to make it more attractive and use resources efficiently	X	X												X	X					
2.2.6	Carry out post campaign coverage assessment	X	X												X	X					
2.2.7	Conduct case-based measles surveillance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Output 2.3: One round (third round) of TT SIA conducted and over 80% of child bearing age women immunized with 3+ doses of Tetanus Toxoid																					
2.3.1	Update TT SIA operational guidelines (2006)																				
2.3.2	Procure and preposition TT, injection supplies, additional cold chain supplies as necessary	X																			
2.3.3	Carry out TT SIA- include training of volunteers, supervisors, monitors as necessary, conduct advocacy/ social mobilization to support the campaign and house to house vaccination	X	X																		
2.3.4	Carry out post campaign lot quality assessment	X	X																		
2.3.5	Conduct MNT tetanus burden assessment and protection at birth assessment during imm. coverage survey			X																	
2.3.6	Carry out district profiling and risk mapping and initiate measures to ensure that high risk districts carry out additional SIAs to reduce risk					X				X				X				X			

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Output 2.4: Strengthen and expand surveillance of vaccine preventable diseases with focus on AFP, measles case based, NNT surveillance. Establish hospital based Hib surveillance (to determine burden of the Hib infection)																					
2.4.1	Review AFP indicators to ensure active AFP surveillance continues.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.4.2	Plan and conduct internal review of AFP surveillance to ensure the system met the standard of certification.			X						X											
2.4.3	Conduct ERC meeting as per approved time table.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.4.4	Strengthen capacity of ERC and National certification committee.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.4.5	National focal point for case based measles surveillance to regularly review indicators.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.4.6	Provide measles lab/labs with adequate supply and diagnostic kits.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.4.7	Conduct training for PEMT managers, DHCs on measles and NNT surveillance		X				X				X				X				X		
2.4.8	Train AFP focal points and PPOs on sample collection for measles serological test.		X				X				X				X				X		

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
2.4.9	Provide centrifuges to the provincial labs where is necessary.		X												X						
2.4.10	Strengthen capacity of national measles lab and Establish at least two more regional measles lab	X				X	X														
2.4.11	Develop/revise guideline and tools for active NNT surveillance		X																		
2.4.12	Study burden of prenatal transmission of Hep B Virus toward introduction of neonatal HBV dose in immunization schedule						X	X	X												
2.4.13	Hire consultant to adopt guideline and study burden of Hib infection as baseline			X	X																
2.4.14	Establish hospital based surveillance of Hib infection			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Output 2.5: National standards for investigation and control of vaccine preventable diseases (VPD) developed and implemented																					
2.5.1	Establish an integrated framework in MoPH for surveillance of vaccine preventable diseases.			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

S.N..	Activity/task	Implementation time frame																			
		2007				2008				2009				2010				2011			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
2.5.2	Draft/ Update national guidelines for integrated surveillance of vaccine preventable diseases			X										X							
2.5.3	Recruit/ train and supervise relevant staff in surveillance of vaccine preventable diseases			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.5.4	Conduct integrated response to outbreak early warning system	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Outcome 3 - Effective and sustainable introduction of new vaccines																					
Output 3.1 Need for vaccine established and application submitted by MoPH and partners																					
Output 3.2 Vaccine storage and vaccine and immunization logistics plan worked out, published, and implemented																					
Output 3.3 EPI Manual and Communication materials updated with new vaccine introduction, training of trainers and implementation with supervision																					
Output 3.4 Surveillance system to include new antigens to document baseline and reduction in occurrence of vaccine preventable diseases.																					
Output 3.5 Twice yearly review of possibilities for improving government support to immunization																					

Annex-4: Work Plan and Indicators for NIP Financial Sustainability

Strategy	Activities	Date	Responsible	Indicators		
				Description	Baseline	Target
1. To mobilize Resources						
1.1 Mobilize government resources for NIP	Include NIP requirement in NDB, secure funding for procurement of new vaccine in government budget	2007	H.F Officer	- % of GoA contribution in procurement of new of vaccine from domestic revenue.	0%	2008- 10 % 2010- 10% 2012- 10%
	Set target for government financial commitment for post-vaccine fund support years	2007	NEM & HFO	- % of GoA financial contribution in routine Imm. from core budget	10 % 2004	2008- 26% 2010- 30 % 2012- 34%
	Develop EPI five year plans with proper budgeting with the active participation of partners.	Q1, 2007	NEM	-Plan developed	draft	MYP
	Develop long term strategic plan (2005-2015) for vaccine and cold chain and propose Vaccine Independency Initiative	2007	NEM & NCM	- % of government contribution in routine capital cost	0% 2004	2012- 10%

Strategy	Activities	Date	Responsible	Indicators		
				Description	Baseline	Target
1.2 Mobilize donors funding for immunization	Monitor how BPHS fund is being used for immunization at the districts level.	2005-2006	NEM, HFO	% of NGOs contribution in recurrent cost	2004: 10%	2007: 15% 2010: 30 %
	Advocate with WB, EC and USAID to specify required funding for EPI from already approved funding for BPHS	2005-2006	GDPP, NEM	% of NGOs contribution in Capital cost	2004: 10%	2010: 30%
	Identify new donors for NIP through CGHN and other forums Use different mechanisms such as WB by down scheme to attract additional funding for EPI	2006-2012	GDPP, NEM	Number of new donors identified	2004: 0	2010: >2
	Advocate with donors to provide fund for BPHS/EPI through strengthening of MoPH core budget using the GCMU financial management mechanism	2006-2008	GDPP, NEM	Number of donors channeling fund through MoPH	2004: 2	2008: 4
	Generate reports on expenditures in link with activities and result	2005-2012	NEM, HFO	Number of financial report presented	2004: 0	2 per year
	Develop proposals for new activities and present to donors for fund raising	2006-2012	NEO	Proposal developed	2004: 0	2006: 1 2010: 2

Strategy	Activities	Date	Responsible	Indicators		
				Description	Baseline	Target
1.3 Mobilize resources from private sector	Contribute in related policy and guideline development	2006	NEM	Policy document developed	No	Yes
	Identify potential private providers especially in hard to reach areas	2006-2012	NEM, HFO	Number identified	0	……
	Initiate financial contribution of private sectors in provision of supports to different immunization initiative such as mass campaigns	2006-2012	NEM	% of financial contribution of private sector in EPI	2004: 0%	2008-0.5% 2012-1%
2. Increase reliability of resources						
2.1 Ensure reliability of resources	Build financial management capacity at all level to ensure timely report and improve planning.	2006	HFO	Financial report completeness	2004: 0%	2006: 50% 2007: 80%
	Incorporate the NIP requirement in MoPH annually budget.	2005-2012	HFO	% of GoA funded program cost secured in NDB	2004- %	2008: 100% 2008- 80 % 2010- 90% 2012- 100%
	Review/ update NIP requirement regularly	2006-2012	HFO & NEM	Review report	2004: 0	One report/year
	Secure funding for procurement of new vaccine under GAVI initiative from the government sources	2008-2012	Deputy Minister	% of GoA funding secure for purchase of new vaccine	0%	100%

Strategy	Activities	Date	Responsible	Indicators		
				Description	Baseline	Target
3. Increase efficiency of the resources						
3.1 Enforce integration and maximize efficiency of immunization	Integrate EPI with other evidence based child survival interventions and develops integrated managerial and logistic tools.	2006-2008	GD PM /PHC & NEM	% of districts followed one point station service deliver	0%	2006-30% 2008-70% 2009-100%
	Ensure all health facilities are providing immunization services and follow one point station service delivery approach	2006-2012	NEM	% of health facilities is followed one station services delivery	2004-45%	2006-50% 2007-100%
	Improve planning for out reach, enhance mobilization activities	2005-2012	NEM	% of Districts with micro-plan	2004: 46%	2006: 75% 2006: 100%
	Shift from pulse immunization as an approach to reach underserved and hard to reach areas to sustainable out reach services (SOS).	2006-2007	NEM	% of districts implemented SOS	2004: 0	2006: 20% 2007: 50% 2008: 100%
	Reduce Drop-Out Rate and Missed opportunity	2005-2012	NEM	DPT-Hep B drop out rate	2004-18%	2007- 15% 2008- 12% 2010-<10%

Strategy	Activities	Date	Responsible	Indicators		
				Description	Baseline	Target
3.2 Reduce vaccine wastage	Establish vaccine wastage monitoring system	2005-2012	NEM	DPT-HepB wastage rate	2003 (DPT): 27%	2007-15% 2010-10%
	Improve vaccine management at all level	2005-2006	NEM & NCM			
	Improve health workers performance and apply policy on use of multi dose vials of DPT-HepB, OPV and TT in subsequent session in out reach	2005-2007	NEM	% of out reach sessions applied the policy	2004: 0%	2006: 50% 2007: 100%

Additional Indicators for Monitoring of FSP

	Indicators	Unit	Responsible for monitoring
1	Implementation rate of the program budget	%	NEM & HFO
2	Implementation rate of the projected budget for domestic resources	%	NEM & HFO
3	Implementation rate of the projected budget for external resource	%	NEM & HFO
4	Specific operating expenditure/GDP-debt servicing	%	HFO
5	Specific investment expenditure/ GDP-debt servicing	%	HFO

Annex 5: Using the GIVS framework as a checklist

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

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

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

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

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

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

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

Annex –6: Annual Work Plan for 2006

Ministry of Public Health of Islamic Republic of Afghanistan
General Directorate of Preventive Medicine & PHC
National EPI Office
Action plan for GAVI Support Fund (2007)

Milestone	Activity	Timeframe 2007												Costs					Resp	Partiner
		M	A	M	J	J	A	S	O	N	D	J	F	QTY	Times	Days	Unit cost	Total cost		
1. Policy and Management 21	Revise & finalize National EPI Policy Printing cost)													100	1	1	5	500	NEO	EPI T.F
	Revise Financial Sustainability Plan (FSP)													100	1	1	5	500		
	Develop EPI Multi Year plan (printing cost)													100	1	1	5	500	NEO	EPI T.F
	Strengthening district health management Team(DHMT) including immunization service delivery in 52 districts with low immunization coverage by assigning District Health Officers													52	12	1	400	249,600	NEO	EPI T.F
	Develop national policy and regulation for vaccine procurement (DHMT) in 52 districts with low immunization coverage through recruiting District Health Officers (DHMT)													100	1	1	5	500		
	Conduct quarterly review meeting with PEMT managers and NGOs													240	4	2	25	48,000	NEO	EPI T.F
	Conduct annual EPI review meeting													80	1	5	45	18,000	NEO	
	Conduct quarterly ICC meeting													30	4	1	8	960	NEO	EPI T.F
	Sub-total																	318,560		
	Supervise & Monitor EPI activities regularly:																			
	Conduct quarterly monitoring/supervision by national EPI management staff (Per diem)													5	12	20	30	36,000	NEO	EPI T.F
	Conducting of periodic supportive supervision (per diem, transport, stationary, training materials)													68	5	12	10	40,800	NEO	EEPI TF
	Sub-Total																	76,800		
2 - Service delivery, Microplanning 22	Provide fixed and sustainable outreach immunization in all the districts													400	12	1	80	384,000	NEO	EPI TF
	Introduce defaulter tracking system within the health centers catchment areas in Nangrahar,Kunduz, Badakshan, Herat, Bamyan, Khost, Sar-e-Pul, Kandahar,													100	1		50	5,000	NEO	EPI TF
	Identify hard-to-reach areas and provide immunization service to the populations through mobile activities																	172,000	NEO	EPI TF
	Sub total																	561,000		

Milestone	Activity	Timeframe 2007 M	A	M	J	J	A	S	O	N	D	J	F	Costs QTY	Times	Days	Unit cost	Total cost	Resp	Partner
3.Training 22	Selection and training of 16 EPI Regional Trainers (2/region) on EPI (training materials, stationary, refreshment, transport, per diem, photocopy etc)													16	1	15	30	7,200	NEO	EPI TF
	Training of 300 Nurses on immunization including injection safety in Badakhshan, Ghzni, Heart, Kunduz, Kabul, Kandahr (training materials, stationary, refreshment, transport, per diem, photocopy etc													300	1	5	20	30,000	NEO	EPI TF
	Conduct refresher training courses for 300 District Health Officers (DHO) and Health Officers of BHCs and CHCs on immunization including safety of injection (training materials, stationary, refreshment, transport, per diem, photocopy etc)													300	1	5	20	30,000	NEO	EPI TF
	Refresher training for 500 vaccinators in remaining provinces on immunization and injection safety													500	1	3	20	30,000	NEO	EPI TF
	Sub-Total																	97,200		
4. Communication 22	Conduct communication need assessment & developing/Printing SM & communication materials (Posters and local initiatives)													329	2		15	9,870	NEO	EPI TF
	Booklet for school teachers on EPI													30000	1		1	30,000	NEO	UNICEF
	Consensus workshop on role of Mass media in promotive activities for EPI													50	1		102	5,100	NEO	UNICEF
	Booklet for Mass media workers on EPI													200	1		1	200	NEO	UNICEF
	Development, translation and printing of communication material on EPI for using at community level by EPI health workers, nurses, CHWs													1500	1	1	4	6,000	NEO	EPI TF
	Sub total																	51,170		
5. Equipmt 25	Provision of 10 sets of laptop for EPI management team													8	1	1	1500	12,000	NEO	EPI TF
	Provision of audio-visual equipment for regional training centers													8	1	1	1000	8,000	NEO	EPI TF
	Sub-total																	20,000		

Milestone	Activity	Timeframe 2007 M	A	M	J	J	A	S	O	N	D	J	F	QTY	Times	Days	Unit cost	Total cost	Resp	Partner
Surveys/surveillance 21	Transportation of blood sample for measles cases to central lab													14	14		10	3,960	NEO	WHO,NGO
	Conduct Self Data Quality Audit (DQAS)													1	1		3040	3,040	NEO	WHO,NGO
	Conduct KAP & drop-out Rate survey regarding EPI													1	1		5000	5,000	NEO	WHO,NGO
	Sub total																	**12,000**		
7. Programme management 21	Incentive for PEMT staff													102	12		70	85,680	NEO	
	Incentive for NEPI manager													1	12		850	10,200	NEO	
	Incentive for National EPI staff													4	12		650	31,200	NEO	
	Incentive for Financial Officer													1	12		460	5,520	NEO	
	Incentive for Hep focal point/ICC liaison officer													1	12		800	9,600	NEO	
	Incentive for Data Entry Clark													1	12		400	4,800	NEO	
	Incentive for Measles Lab Focal Point													1	12		150	1,800	NEO	
	Incentive for National EPI office drivers													2	12		130	3,120	NEO	
	Incentive for regional EPI trainers													16	12		150	28,800	NEO	
	DSA for NEPI driver													2	12		150	3,600	NEO	
	DSA for PEMT drivers													204	12		12	29,376	NEO	
	Sub total																	**213,696**		
8. Others 21	Office Running Cost (national & provincial)													35	12		50	21,000	NEO	
	Maintenance, repairing for EPI vehicles													36	12		200	86,400	NEO	
	Fuel for EPI vehicles													36	12		200	86,400	NEO	
	Sub-Total																	**193,800**		
Total																		**1,544,226**		
Commission for fund transfer 21																		**15,422**		
Grand Total																		**1,559,648**		

National EPI Manager **Preventive Medicine & PHC Director** **Ministry of Public Health**