

**Federal Ministry of Health  
Nigeria**

**Comprehensive Multi-Year Plan  
2006-2010**

**The National Programme on Immunization**

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## **i. List of Abbreviation**

Ads.	Auto-disable syringes
AEFI	Adverse Events Following Immunization
ALGON	Association of Local Government of Nigeria
BCG	Bacillus Calmette-Guérin
COMPASS	Community Participation for Action in Social Sector.
CBO	Community-based Organization
CSO	Civil Society Organization
DHMT	District Health Management Team
DPHC	Director of Primary Health Care.
DPT3	Third dose of Diphtheria, Pertussis (whooping cough) and Tetanus vaccine
DSNO	Disease Surveillance and Notification Officers
EPI	Expanded Programme on Immunization
EU_PRIME	European Union Partnership to Re-Enforce Immunization Efficiency
FMOH	Federal Ministry of Health
FOMWAN	Federation of Muslim Women Association in Nigeria
GAVI	Global Alliance for Vaccines and Immunization
GIVS	Global Immunization Vision and Strategy
IPDs	Immunization Plus Days
LGA	Local Government Area
LIDs	Local Immunization Days
MOE	Ministry of Education
MOLG	Ministry of Local Government
MTBF	Mean Time between Failures
NCWS	National Council of Women Societies
NDHS	National Demographic and Health Survey
NEEDS	Nigeria Economic empowerment and development Strategy
NHA	National Health Accounts
NICS	National Immunization Coverage Survey
NIDs	National Immunization Days
NPC	National Population Commission
NPI	National Programme on Immunization
OPV	Oral Polio Vaccine
PATHS	Partnership for Transforming Health Systems
PHC	Primary Health Care
PHCDC	Primary Health Care Development Committee
RED	Reaching Every District
REW	Reaching Every Ward
RI	Routine Immunization
SMOH	State Ministry of Health
UNICEF	United Nations Children Fund
VHC	Village Health Committee.
VPD	Vaccine Preventable Diseases
VVM	Vaccine Vial Monitor
WHA	World Health Assembly
WHC	Ward Health Committee
WHO	World Health Organization

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## Executive Summary

The Expanded Programme on Immunization was initiated in Nigeria in 1979 as the main strategy aimed at controlling childhood killer diseases, through provision of vaccines and immunization. The overall goal of the programme is to improve immunization coverage on a sustainable basis and reduce disease burden in all communities in Nigeria, while using immunization as platform to strengthen the overall primary health care delivery system.

The country made significant progress in achieving high routine immunizations coverage in the early 1990s which could not be sustained as a result of disruption of vaccine supply, withdrawal of donor support and lack of commitment during successive military regimes. Coupled with this are challenges such as a complicated bureaucratic system, a rapid population growth, existence of strong and widely revered traditional beliefs and a low social status of women. Today Nigeria has one of the lowest immunizations coverages in the world and is the major endemic focus of wild poliovirus.

Recently serious efforts by the Federal Government and development partners have resulted in some improvement in the cold chain system, creating awareness on the benefit for immunization among the communities, capacity building and partner coordination. The current document represents a five year comprehensive plan for immunization activities in the country. The plan highlights the national goals, objectives, and strategies derived from the programme situation analysis.

The analysis is done using the Health Sector reform Programme, reports from Expert Review Committee (ERC) on Polio Eradication Initiative (PEI) of Nigeria, National Immunization Coverage Survey (NICS) 2003, Demographic and Health Survey, programme administrative reports and other official documents. Through a process of situation analysis the following were identified as priority areas of focus (1) improving immunization coverage, poor distribution and frequent interruptions in supply of vaccines (2) bundled vaccines supplies (3) interruption of the transmission of the wild poliovirus (4) building capacity of staff at all levels (5) cold chain management (6) data and information management etc The plan provides a guide and the strategies for the next 5 years to address these problems through immunization system components rather than by targeted disease or initiative.

This plan has been developed within the context of the Global Immunization Vision and Strategies (GIVS) and aims to contribute towards the attainment of the fourth Millennium Development Goal (MDG4).

# 1 Background

## 1.1 Geography

Nigeria is one of the largest countries in Africa, it covers an area of 923 678 square kilometers. It lies within the tropics along the Gulf of Guinea on the West Coast of Africa lying between the latitudes of 4°1' and 13°9' N and longitudes 2°2' and 14°30' E. It shares border with the Republic of Benin to the west, the Republic of Cameroon to the east, the Republic of Niger to the north and the Atlantic Ocean to the south. The climate conditions divide the country into mangrove swamps and rain forest in the south, savannah region in the middle belt and desert in the far north. However the Country is criss-crossed by several large Rivers and streams.

The country has two main weather condition of raining seasons (April-September) and dry seasons (October –March). There is however a varying period of cold dry dust weather mainly in the northern parts of the country between November and January.

The Country operates a federal system of Government comprising 36 States and the Federal Capital Territory. The States are grouped into six geo-political zones.

The states are sub-divided into 774 Local Government Areas (LGA) serving as administrative units at the third tier of government. However the LGAs are further divided into wards (9565 wards) which is the lowest political unit

## 1.2 Demography

Nigeria has a projected population of over 130million people by year 2006 according to 1991 census data. At the current growth rate of 2.8 per cent annum the population is projected to double in 20 years. The population is predominantly young with approximately 45 percent under 15 years of age and 20 percent under 5. Women of child bearing age (15-49) account for 22-24 per cent of the total population.

### ▪ Settlement pattern

The country population predominantly (50-60 per cent) lives in the rural area<sup>1</sup>. However, there is evidence of rapid urbanization with several key cities with population in excess of 1 million. The cities are located mainly in the southern and middle parts of the Country. The rural populations have sometimes scattered settlements and there are many nomadic populations spanning the length and breadth of the country. The rural populations engage in various agricultural activities which are mainly subsistence in nature. These include fishing, mainly in the riverine settlements, crop farming and livestock grazing.

There are over 300 ethnic groups in Nigeria and the major languages are *Yoruba*, *Hausa* and *Igbo*.

### ▪ Socio-economic Status

Nigeria is a developing country with one of fast growing economy in Africa and GNP per capita of US\$340. Over 50% of the population lives below the poverty line. The country's economy is mainly dependent on oil which earns 75-90% of the foreign exchange.

The majority of the population is able to read and write (literacy rate 71%). The predominant religions are Christianity, mainly in the South and Islam in the North. Traditional religious practices still exist in many parts of the country especially in the rural areas. Traditional medical practices also flourish among the Nigerian communities.

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<sup>1</sup> NDHS 2003

▪ **Road network:** The country has a massive road network that spans the length and breadth of the country. The major highways are owned and maintained by the federal government while the various States develop and maintain Road within State.

The LGA authorities are engaged in construction of earth road which are mainly in the rural communities

The quality of road network depends mainly on the part of the country but generally Nigeria has a fairly good road network

**Electricity:** This is supplied to most parts by the Power Holding company Nigeria PLC (PHCN). However the supply of Energy by PHCN is erratic and unreliable; most commercial outfits and private home have to supplement with power generating sets.

**Water Supply:** Public water supply is a major challenge in the country as this is nearly non-existent in most parts of the country. Water supply in urban is through the sinking of boreholes buy private individual for sale to the public while there are few hand pumps in some rural communities. Most of the rural populace gets their drinking water from the stream.

**Communication:** The Country in the past 4-5year has witness a communications revolution and most parts of the country except few rural areas are serviced by one of the numerous wireless GSM communication network.

### **1.3 Health Care Delivery System**

The Nigerian national health care delivery system is based on the three tier system of primary, secondary and tertiary care.

The Federal government through the Federal ministry of health provides tertiary health care (teaching and specialists hospitals) and has the responsibility to develop policies, strategies, guidelines and plans and programmes that provide the overall direction for the national health care delivery system in the country; the state governments are responsible for secondary health care while the Local governments have responsibility for Primary Health Care.

The private sector (including multi-Nationals companies) participates mainly in the provision of secondary health care mainly in towns and cities although a few get involved in Immunizations.

#### **1.3.1 Primary Health Care.**

The Local governments are mainly responsible for the provision of Primary Health care in Nigeria, although the State and Federal government sometimes participate in the provision of infrastructures for the PHC. The primary health Care system was built-up following the alma-attar declaration into a vibrant functional system of health care delivery in the early 1980s. This was reflected in the gradual improvement in the RI coverage to about 80% in 1990. Subsequently the PHC system witness rapid deterioration and eventual collapse with most PHC centers not functioning and those functioning are operating at much less than optimal conditions. Thus currently the PHC is not performing optimally as it is poorly equipped and managed, only providing care to between 5-15% of its potential clientele. There is limited link between the Primary Health Care system and the higher levels of Health care delivery Systems.

The weak Nigerian health system is reported by the WHO report 2000<sup>2</sup> on health systems performance where Nigeria stood at 187th out of 191 countries. The health indicators for Nigeria as shown in the table 1 below are quite poor<sup>3</sup> Poor health management information system remains a major challenge and constraint for sector reforms, health planning, monitoring and evaluation and disease surveillance. Poor community participation in health care services seriously undermines service ownership and community support for health intervention programmes.

<sup>2</sup> WHO report on Health System Performance 2000

<sup>3</sup> State of the World Children 2006 and NDHS 2003

Re-activating the health care system and getting the various tiers of government to assume responsibility has been difficult as the Nigerian 1999 constitution did not clearly define government roles in the health care delivery system. Thus the health care reform seeks also to address the anomaly<sup>4</sup>

**Table 1: Some Vital Statistics for Nigeria<sup>5</sup>**

Statistic (indicator)	NDHS 2003	State of world's children 2006
Annual Growth Rate	2.83 percent	2.8 percent
Total Fertility Rate	5.7 per woman	5.7 per woman
Infant Mortality Rate	100/1000 live births	101/1000 live births
Under-five Mortality Rate	201/1000 live births	197/1000 live births
Maternal Mortality Ratio	948/100000 live births	800/100000 live births
Life Expectancy	-	43 years

### 1.3.2 Health Sector Reform Programme

In recognition of the weak Health system and the need to provide strategic directions and investments in key areas of national Health system, within the context of the overall Government macro-economic framework *NEEDS* the National Economic Empowerment and Development Strategy of the Federal Government and also getting the impetus from the Millennium Development Goals (MDG), the FMOH embarked on the Health Sector Reform Programme and plan of action 2004-2007.<sup>6</sup>

The major thrusts of the Health reform Programme are:

- Improving the stewardship role of Government,
- strengthening national health systems and its management,
- reducing the burden of disease,
- Improving availability of health resources and their management
- improving access and quality of health services
- Promoting effective collaboration and partnership within and without the health sector.

In order to legalize the national health system as well as really establish the functions of each level of government a National Health Bill has been drafted and is under process with the national assembly.

### 1.3.3 Health Policy

The country also revised its health Policy in 2004<sup>7</sup>. This Policy set the momentum for implementation of Health services in the Country.

The major focus of the revised policy includes amongst others, National Health Systems and Management; National Health Care Resources; National Health Information System and Partnership for Health Development.

The policy sets guidelines for the establishment of Primary Health Care Management Board or Agency in the State/FCT and Local government Areas as a major step towards improved management and financing of Primary Health Care. A few States have started implementation of these guidelines.

Specifically on immunizations, the Policy provides for free vaccines to all eligible age groups; support to States and LGAs on Immunizations and also to establish Standards and guidelines for Safe Injection and waste disposal, cold Chain and Logistics management.

<sup>4</sup> Document on Health Care reform in Nigeria 2004-2007

<sup>5</sup> NDHS and ICS 2003

<sup>6</sup> Document on Health Reform programme

<sup>7</sup> Revised National Health Policy 2004



### **1.3.4 Human Resources**

Health services in the country are constrained by the shortage of qualified personnel due to high attrition rates. There is persisting brain-drain of highly trained personnel.

There is also inequity in the distribution of health human resources between urban and rural areas. This, undoubtedly, has further adversely affected the development of primary health care facilities and delivery of service.

The government tried to address the human resource gaps in the PHC by the creation and training of special Primary Health care Workers to man the PHC. These categories of workers are the ones mainly responsible for provision of Immunization Services.

Utilization of public health services has also been declining despite the attempts being made to increase the availability of services leading to an absolute low level of health service utilization compared to other countries. Low utilization levels constrain the productivity of staff working in the health facilities.

### **1.3.5 Health Care Financing**

Public financing on health is less than \$8 per capita, compared to \$34<sup>8</sup> recommended internationally. Private expenditures are estimated to be over 70% of total health expenditure with most coming out of pocket expenses. These costs are just estimates as there is no system for national Health Accounts (NHA). There are no reliable data or information on the combined Federal, state expenditures or expenditures from private and donor sources<sup>9</sup>.

To address these lapses the HSRP envisages the institution of NHA, introduction of special Health taxes/fund and amongst others, re-design the NHIS as a sustainable mechanism for Health Care Financing.

## **1.4 EPI Programme**

The Expanded Program on Immunization (EPI) was initiated in 1979. It has witnessed varying stages of implementation with a high thrust for Universal Child Immunization, registering coverage of 81.5 per cent of all antigens between 1988 and 1990. The 1990s then witnessed major decline in the coverage. This was due to various problems such as Low political will and social support, inadequate funding and Poor community involvement and participation amongst others.

In 1995, a revitalized EPI program provided a new basis for Government ownership and was renamed the National Program on Immunization (NPI). The new level of support provided by Government led to an increase in immunization although figures on all antigens indicate coverage under 50 per cent as at 1999.

### **1.4.1 Programme Structure**

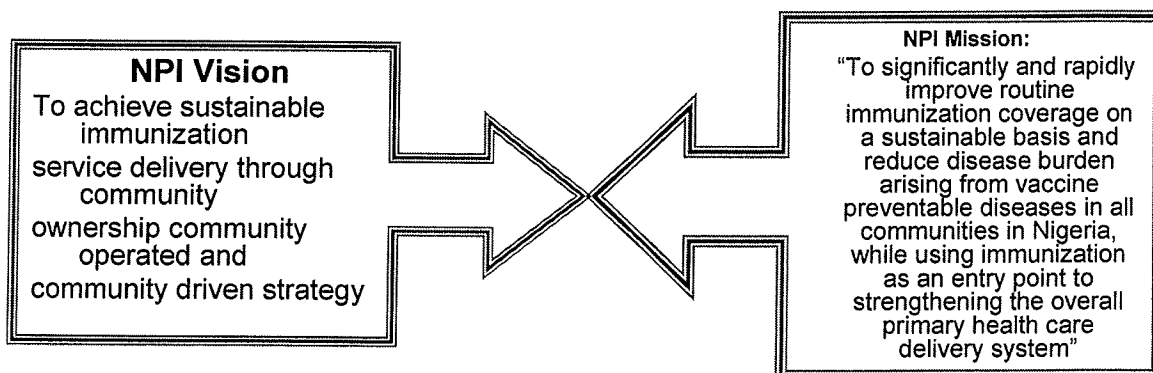
Nigeria is a signatory to the declaration of the survival, protection and development of children, which was articulated at the 49<sup>th</sup> World Health Assembly in 1988. This was reinforced by the world summit for children held in New York in 1990. This declaration established challenges for global immunization vaccine preventable diseases including poliomyelitis.

In pursuance of this objective, the government provides funds, vaccines, technical and material support to the states and LGAs. The National Program on immunization (NPI) Agency established under decree 12 of 1997 as a Parastatal of the Federal Ministry of Health plans coordinates and mobilizes resources for supplemental and routine immunization. The NPI is also charged with the responsibility of procurement and distribution of bundle vaccines, policy guidelines, and development of capacity at 2<sup>nd</sup> and 3<sup>rd</sup> tier of government, monitoring and supervision as well as data management for the Immunization programme.

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<sup>8</sup> Health Care Reform Document

<sup>9</sup> Health Sector Reform Document p8; Revised health Policy 2004p6



#### 1.4.2 Interagency Coordinating Committee (ICC)

Coordination of partners in immunizations activities is done through the Inter-agency Coordination Committee (ICC). The ICC is chaired by Federal Minister of Health and comprises WHO, UNICEF, USAID, Rotary International (Polio Plus), DFID, EU, ALGON, Embassy of Japan, Embassy of Canada, Embassy of Norway, World Bank, CHAN, MSF, Red Cross, and Coca Cola Nig.

The mandate of the ICC includes polio eradication and routine immunization. Thus, the ICC responsibilities for coordinating decision-making, and information sharing extend to all immunization activities/programmes undertaken by the Federal Government of Nigeria and her partners. The ICC has a coordination role for the activities of partners working at sub-national level with states and LGAs.

The ICC has technical working groups with clear terms of reference for their mandate. The ICC meets monthly.

#### 1.5 The National Health Plan and the cMYP

The National immunization programme through a stake holder consultative meeting developed in 2005 a blue print<sup>10</sup> for immunization strengthening. The blue print outlines the strategic direction for improvement in all aspects of routine immunization programme management.

Subsequently the NPI and partners developed a five year strategic plan for Routine Immunization sustainability 2006-2010. This the period of Strategic Activity plan was developed to fall in line with the last part of the National Health Plan 1998-2010<sup>11</sup>.

The strategic plan catalogues the various strategic activities for routine immunization strengthening in the country.

The cMYP is a reformatting of this 5 year strategic activity plan for improving immunization programmes and reducing morbidity and mortality from VPDs. The plan was developed following from evidence and recommendations from various EPI assessments in addition to the situation analysis of the immunization programme in the country. It also draws from the report of the Blue Print on RI strengthening as well as the strategic plans for the Health care delivery.

The cMYP which runs from 2006-2010 focuses on the main components of the immunization systems with key strategies and activities directed to the main national priorities for the immunization programme.

The restructuring of the Five year Strategic activity plan into Comprehensive Multi-Year Plan (cMYP) is meant for the country plan to be in line with the WHO/UNICEF Global Immunization Vision and Strategies (GIVS).

The cMYP also provide information on the resource implications for the activities as well as sources of financing of the various interventions. The cMYP has thus been enriched by a financial analysis and costing of the plan to apportion available funds and highlighting the probable funding sources as well as the funding gaps.

<sup>10</sup> NPI Blue print on Immunization

<sup>11</sup> National Health Plan 1998-2010

The cMYP is therefore a plan to guide the activities, and investment decisions in the immunization programme of the Nigerian Government and its development partners over the next 5 years or so. The plan acts as a sector-fundable document for immunization related activities.

However on an annual basis, detail of the activities will be elaborated in the annual plan which will be extractions from the cMYP.

### **1.6 Programme Goals**

The programme goals is as enunciated in the vision -mission of the NPI, which is to significantly and rapidly improve routine immunization coverage on a sustainable basis and reduce disease burden arising from vaccine preventable diseases in all communities in Nigeria, while using immunization as an entry point to strengthening the overall primary health care delivery system”

### **1.7 Programme Objectives**

1. To ensure that infants are fully immunized against vaccine preventable diseases before attaining the age of 12 months
2. To sustain high community awareness on the importance of completing the immunization schedule
3. Ensure that the routine immunization components of bundled vaccines, cold chain and logistics, human resource development with the operational finances are in place.
4. Develop a strategic framework which delineates the roles and responsibilities of the federal, state, LGA and wards, as well as the private sector and development partners.
5. Develop a comprehensive, timely and complete reporting system with necessary feedback mechanisms.

The set targets for routine Immunization coverage using DPT3 is 65% for 2006, 75% for 2007 and 80% from 2008 and maintained.

### **1.8 Governance and Partnerships**

The development of the Immunization blueprint by NPI was under the direction of the ICC. The body also provided direction for the development of the 5 year strategic plan which was subsequently approved by the National Council of Health.

The process of reformatting the strategic plan to develop this cMYP was under the direct supervision of the ICC, who has been involved in every step of the development of this cMYP.

### **1.9 Monitoring and Evaluation**

The monitoring for the cMYP will be done by annual joint review by NPI, partners and other stake holders. The monitoring framework will be developed with a set of indicators to measure the performance of the cMYP. Final evaluation of the cMYP will be done in 2010.

## 2 Situation Analysis

### 2.1 Routine Immunization

The Expanded Program on Immunization (EPI) was initiated in 1979. It has witnessed varying stages of implementation with a high thrust for Universal Child Immunization, registering coverage of 81.5 per cent of all antigens between 1988 and 1990 and this dropped to less than 25% in the late 90s. Routine immunization (RI) is provided at the health facilities either through the public health (mainly in LGA health facilities) or through the private sector. The private sector is a key player in health care delivery service in some states in Nigeria. The antigens given are BCG, OPV, DPT, MV, YF; Hep. B and TT.

This decline in the RI coverage occurred as a result of various reasons; mainly due to the collapse of the Primary Health care system in Nigeria in the 1990s. This led to weak health systems, poor funding by government at all levels, lack of involvement and ownership at the community levels, etc. Many Health facilities either were not functioning or not providing RI services. Vaccine stock outs were common place situation. The few facilities providing RI services are not able to reach the distant communities as minimal or no outreach or mobile immunization activities were conducted. Furthermore there were no activities to sustain community demands; clinics that are providing services do not conduct RI sessions regularly due to a combination of factors like, vaccine stock outs, staff absenteeism, minor holidays etc.

These findings were revealed by the National Immunization Coverage and Nigeria Demographic and Health Surveys (NDHS) both of 2003<sup>12</sup> which also confirms that the coverage of infants with all antigens in Nigeria remains very low in many parts of the country (table 2).

**Table 2 Findings on immunization coverage for DPT3 for the zones**

	NDHS (2003)	NICS (2003)
• DPT3 Coverage		
○ South-West	67.8%	47.8%
○ South-East	58.5%	65.5%
○ South-South	32.5%	36.5%
○ North Central	23.8%	31.9%
○ North East	9.1%	17.6%
○ North West	5.8%	9.8%
○ National level	21.4%	32%
• Fully immunized	13%	12.7%

In 1995, the Government tried to revitalize EPI program and set up the National Program on Immunization (NPI). The NPI has been active in Immunization activities since its formation but has mainly with its partners focused on the Polio Eradication Initiative.

However following the NICS and NDHS of 2003 as well as the need to meet with the policy of the Government<sup>13</sup> to reduce the mortality and morbidity of infants due to VPDs, the NPI and Partners started in late 2004 to re-vitalize routine Immunization. This they did by adopting the WHO-AFRO RED strategy for RI improvement having adapted to REW.

Activities for Routine Immunization Strengthening were further scaled up in 2005/2006 with implementation of some Rounds of LIDs and the introduction of IPDs as a strategy for Polio Eradication as well as provide opportunities for other Routine Vaccines and other childhood health interventions.

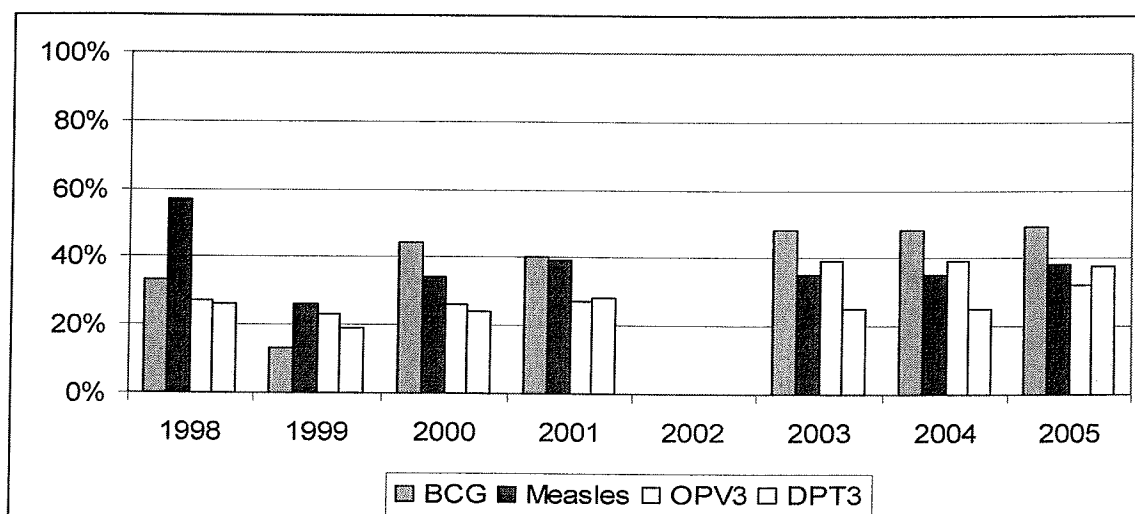
Currently there is very high level political will to improve immunization coverage. Various activities to improve the Routine Immunization are being put in place and this includes development of a REW field guide, training in some zones on REW approach as well as on basic knowledge and Skills on Routine immunization service provision.

The efforts yielded some marginal improvement in the RI performance with the DPT3 coverage rising from 25% in 2004 to 37.5% in 2005 and preliminary data for 2006 show great promise.

<sup>12</sup> Report on National Immunization Coverage Survey 2003 and NDHS 2003

<sup>13</sup> National Health Policy

Chart 1 Administrative Coverage<sup>14</sup>



### 2.1.1 Immunization Schedule and Strategies

The traditional antigens BCG, OPV, DPT, MV, are given to children under one with provision made for children 12-24 months that had not received their doses previously.

TT is administered to pregnant women and other women of child bearing Age

In 2003 the Country introduced Yellow Fever and Hepatitis B Vaccines into its Routine Immunization schedule for children less than 1 year.

Table 3: Nigerian Immunization Schedule<sup>15</sup>

Vaccine	No. of Doses	Age	Minimum interval between doses	Route of Administration	Dose	Vaccination Site
BCG	1	At birth or as soon as possible		Intra-dermal	0.05ml	Upper arm
OPV	4	At birth, 6,10 and 14 week of age	4weeks	Oral	2 drops	Mouth
DPT	3	At 6,10 and 14 weeks of age	4weeks	Intramuscular	0.5ml	Outer part of thigh
Hepatitis B	3	At birth, 6 and 14 weeks of age	4weeks	Intramuscular	0.5ml	Outer part of thigh
Measles	1	At 9 months of age		subcutaneous	0.5ml	Upper left arm
Yellow Fever	1	At 9 months of age		Subcutaneous	0.5ml	Right upper arm
Vitamin A	2	At 6months and 12 months of age	6 months	Oral	100,000IU 200,000IU	Mouth
Tetanus Toxioid	5	Women of Child bearing Age/ early Pregnancy	TT1 @ 1 <sup>st</sup> Contact TT2 at least 4wks after TT1, TT3 at least 6mths after TT2 TT4 at least 1yr after TT3, TT5 at least 1yr after TT4	Intramuscular	0.5ml	Upper arm

<sup>14</sup> Source of Data NPI RI annual Reports

<sup>15</sup> Source NPI

### **2.1.1.1 Reaching Every Ward (REW)**

In line with regional and global strategies for improving Routine Immunization (RI) coverage, Nigeria adopted the Reach Every District (RED) approach in December 2004 with minor modification focusing on the "Ward" which is the lowest administrative and political level in the country. Reaching Every Ward (REW) is the main operational focus for improving Routine Immunization performance which will also strengthen the Ward health structure and primary health care system. The REW strategy comprises of 5 operational components: (a) planning and management of resources (b) improving access and utilization of immunization services (c) supportive supervision (d) linking services with communities and (e) monitoring and use of data for action. With the recent step up efforts to improve REW implementation, operational guideline "REW field guide" and micro planning forms were developed in May 2006. A training framework consisting of Training of Trainers (TOT) for REW approach and Basic Guide for Service providers was conducted at the national, some zone and states from 3<sup>rd</sup> – 18<sup>th</sup> of August 2006 and this training is being cascaded to the LGA and Ward levels.

### **2.1.1.2 Local Immunization Day (LIDs)**

From 2005, states that have identified Wards/LGAs with relatively poor coverage conducted LIDs in order to improve their performance. Local Immunization Days (LIDs) are basically multi-Antigen catch up campaigns conducted in areas with relatively low RI coverage, by immunizing all children below the age of one (up to two years) in all fixed posts, temporary fixed posts as well as mobile posts. LIDs are conducted at least three times in a year, in the same wards, with at least four weeks intervals between each round, in order to complete the schedule for multi-dose antigens (DPT, OPV Hep B) and improve routine immunization coverage. The LIDs are also used to target the underserved populations within each Local government.

## **2.2 Data Management and EPI Reporting/ Monitoring System**

Data management and reporting has been very poor in the past however with the attempt at rejuvenating the routine Immunization in Nigeria efforts are being directed at improving reporting system in Nigeria.

Currently reports (RI data and IDSR data are collected monthly from the health facilities to the LGA from where compilation and transmission to the State is done. The States then collate and send it to the National level.

AFP data and Epidemic prone diseases are collected weekly and passed through the same channel to the National level.

Quality of RI administrative data is also under focus, and to ensure good quality reporting and monitoring system for RI, regular data quality self assessment is planned/conducted at LGA and facility levels.

## **2.3 Vaccine Supply and Distribution**

### **o Procurement and Distribution.**

Nigeria is one of the few countries in Africa that funds completely its vaccines procurement for routine immunization. In May 2003, the FGN/UNICEF signed a Memorandum of Understanding for the procurement of routine vaccines, which has ensured continued availability.

The NPI through the logistics working group of the ICC carries out annual vaccine forecast and then places order for the vaccines through UNICEF.

Vaccines are distributed from the National cold store through the zonal cold stores to the States. From the States vaccines are moved to the LGAs who in turn move vaccines to the Health facilities.

However, some challenges in vaccine procurement, distribution and utilization still persist. These include late fund release for vaccine purchase and lack of a system for vaccine effective distribution from the States to the LGA and further to the Health facilities. Indeed the weakest link lies with vaccine movement from the States to the LGA and down to Health Facilities. In addition monitoring of vaccine stocks at the periphery (States, LGAs and health facility

level) has not been quite efficient. Monitoring of vaccine utilization and consequent vaccine wastage is also an important challenge.

Thus the country experiences regular situation of vaccine stock out at all levels sometimes for several months.

The report of a joint WHO/UNICEF mission on vaccine security in Nigeria<sup>16</sup> indicated that the "push and pull" method of vaccine distribution is facing serious challenges due to poor financing of transportation cost of vaccines at the State and LGAs that are involved in the 'pull component; in addition to poor information management between states and LGAs and poor cold chain capacity amongst others.

The FGN/NPI tried to address this deficiency of distribution at the LGA level by piloting the use of private Sector Vaccine Distribution in 12 states. However the method did not produce the required success and it is currently being assessed with other methods with a view to recommending suitable vaccine distribution system in the Country.

The push initiative: - an interim method; in order to accelerate activities and achieve increase in coverage at the service delivery level has been started: The National level will push RI vaccines to the zonal, zonal to the states, states to LGAs and LGAs to the Health Facilities. The push initiative has sustained availability of vaccines with corresponding injection safety materials in sufficient quantities at service delivery sites.

In 2004 the Effective Vaccine Stock Management (EVSM) was implemented at the national cold store. The WHO-District Vaccine Monitoring tool that is part of the RI reporting format is currently being used to monitor vaccine utilization at the periphery. TOT at National and zonal level on Vaccine Management Training (VMT) for state officers was conducted in July and August 2006 to be cascaded to the LGA levels.

#### o Injection safety

Currently the country uses auto-disable syringes only during Immunization campaigns. The routine immunization services still rely on disposable syringes for their activities.

The country developed a draft injection safety policy (2000-2005) which provided for all aspects of safe injection practices with immunization. This draft policy is to be reviewed as most of the milestones were not met.

**Table 4: Vaccine supply and security Indicators**

Immunization System component	Indicator	Performance at National Levels		
		2003	2004	2005
Immunization safety	Percentage of states using AD syringes	NIL	NIL	NIL
Financial sustainability	% of total routine vaccines spending was financed by the government fund	100%	100%	100%
Vaccine supply	Percentage of districts with bundled vaccine supply	X	x	x
	Vaccine stock out at national level in the past 3 years	BCG 41 days (11.2%) DPT 114 days (31.2%) OPV 56 days (15.3%) Hep B 173 days (47.4%) Measles 131 days (35.9%) T T 15 days (4.1%)	BCG 188 days (51.6%) OPV 287 days (78.6%) Hep B 132 days (36.2%)	OPV 294 days (80.5%) Measles 14 days (3.8%)

## 2.4 Cold Chain

The country has in the past 5-6 years have expanded tremendously the cold chain capacity at all levels. This came as direct fallout of the Polio Eradication initiative. The country has national cold store in Abuja and six zonal cold store located in the six geo-political zones. Each State as well as LGA has a cold store.

<sup>16</sup> Report of Joint WHO-UNICEF mission on Vaccine security in Nigeria 2005

For routine Immunization purposes most parts of the country have adequate cold chain equipment to run its services.

- National Cold Store.

This is located in Abuja and receives vaccines that are brought into the country. Vaccines and other materials are distributed to the periphery from the National Store.

- Zonal Cold Stores.

Each geo-political zone has a cold store and this acts as transit points for vaccines and injection material being distributed for both routine immunization and supplemental activities.

The Zonal stores help to reduce the pressure of vaccine storage at both the National and state cold stores.

- State Cold Stores.

All states in the country and FCT have fully functional cold store which is run and maintained by the State ministry of Health. Equipment provision is by the State government, NPI and some partner agencies.

- LGA cold Store

Most LGAs are also well endowed with cold adequate chain equipment to conduct RI activities. All LGAs in the country have at least 2 units of solar refrigerators. This is important to reduce dependence on electric power supply which gets worse as we move to the periphery.

The main challenges are poor public power supply, lack of maintenance plan/poor maintenance of cold chain equipments, low capacity to carry out cold chain management at the periphery.

In 2005 the country's 2001-2005 cold chain rehabilitation plan was implemented up to 70% and currently the 2006 - 2010 rehabilitation plan for logistics and cold chain system which includes maintenance plan is near completion.

## **2.5 Accelerated Disease Control**

### **2.5.1 Polio Eradication Initiative**

- Wild Poliovirus situation

Nigeria accounts for about 80% of all global cases of wild polio virus with 784 cases in 17 northern states as at 25<sup>th</sup> August 2006. Out of these 17 endemic states five account for over 80% of the WPV cases. The persistent wild poliovirus transmission in northern Nigeria can be attributed to large numbers of missed children from previous Polio SIAs coupled with low routine immunization coverage. This now constitutes the greatest risk to the global polio eradication initiative.

### **2.5.2 Polio SIAs**

This is being carried out in Nigeria and started way back in 1996. This forms the mainstay of Polio Eradication Initiative in Nigeria.

The country has been carrying out an average of 4-6 Polio SIAs annually with more focus being placed in the northern parts of the country since 2002, as it has the highest burden of the Poliovirus transmission using the tOPV. However the country in 2006 introduced the mOPV1 as the WPV1 formed the major burden of WPVs in Nigeria. Nigeria conducted 9 rounds of NIDs and 4 rounds of SNIDs between 2004 and 2005. See table 5 below. The number of polio endemic states declined from 30 in 2004 to 21.

This represents 30% reduction in the geographic spread of the disease although it was accompanied by slightly increase in the number of confirmed polio cases from 781 in 2004 to 801 in 2005. The Polio SIA is closely monitored by the Expert Review Committee (ERC) which met 3 times in 2005 and has met 2 times in 2006 to review progress and made recommendations to address the identified problems.



**Table 5: Summary of Polio NIDs/SNIDs 2004 and 2005**

NIDs/SNIDs	2004			2005		
	Target Pop	No. Immunized	Cov %	Target Pop	No. Immunized	Cov %
<b>NID RD 1</b>	35925592	33511043	93.2	40540351	40978310	101
<b>NID RD 2</b>	36965277	35245972	96	29816432	40974607	137
<b>NID RD 3</b>	36695277	31710487	72	29816432	40909916	137
<b>NID RD 4</b>	40540983	40043853	98.8	29816433	40635674	136
<b>NID RD 5</b>	40540983	40351277	99.5	-	-	-
<b>SNID RD 1</b>	12938022	9315848	72%	13361882	16498060	123.5
<b>SNID RD 2</b>	12938022	9904150	76.6	17561510	22411532	128

The strategy used for the Polio SIAs was initially 'fixed post' strategy but this was reviewed to the 'House-to-house' strategy in 1999 due to low coverage. This house-to-house strategy had to be further reviewed in 2006 to IPDs based on the need to respond to the needs of the community who are requesting for additional vaccines to OPV, and also to rapidly assist in scaling up the RI coverage which is dismally low.

### 2.5.3 Immunization Plus Days (IPDs)

Immunization Plus Days (IPDs) are a modification of the National Immunization Days (NIDs) in which routine vaccines and other health interventions are delivered to communities during polio vaccinations. The Strategy delivers a range of antigens (measles and DPT vaccines) administered with the oral polio vaccines plus other child survival interventions such as anti-helminthics, Vitamin A, distribution of insecticide treated nets etc.

The concept was introduced to respond to community needs, in addition to improve Routine Immunization coverage as well as deliver other integrated interventions as required to meet the MDG4.

IPDs was field tested in 4 LGAs in April 2006 and conducted to scale in all LGAs in 11 high risks states in May and June 2006 in northern Nigeria. This strategy which emphasizes the use of child health card has shown increased eagerness from the communities to bring their children to the health facilities for immunization and other benefits offered. Political, traditional and religious leaders are increasingly identifying with the benefits of immunization.

Analysis of the monitoring data from the Immunization plus Days (IPDs) shows a significant improvement in the proportions of children vaccinated and an increase in public demand for vaccination.

### 2.5.4 Measles SIAs

One of the greatest causes of mortality in under 5years was measles mortality this was made more serious by the low level of Routine measles vaccination. In 2005 the country started the process of providing second opportunity for measles vaccination through measles catch up campaigns.

For this purpose the country was divided into 2 and the first accelerated measles catch up campaign was conducted in 19 States of the north plus FCT in December 2005. This was for children 9months to 15years and a total of 29,877,057 were targeted out of which 28,538,974 were vaccinated representing 95.5% coverage.

The second stanza took place in the 17 southern states in October 2006 in the same age group and recording similar success as in the north.

Total number of children vaccinated in the southern measles catch up campaign was.....out of a target of.....representing a coverage of ..... It should be noted however that in both campaigns performance variations occur at the sub-national levels.

### **2.5.5 Maternal and Neonatal Tetanus**

Nigeria currently has not developed a national program for MNT elimination; it has in its routine immunization schedule TT for CBAW and also for pregnant women. A Neonatal Tetanus Baseline Survey<sup>17</sup> was conducted in Kano State in April 2006 and this showed a mortality rate of 5.9 per 1000 live births as compared to a similar study done in 1999 that reported 20.6 per 1000 live birth. The country therefore in response to recommendations of the report, is in the process of developing a plan of action for MNT elimination.

### **2.5.6 Yellow fever**

Nigeria is one of the twelve highest risk countries amongst nations in the Yellow fever belt.<sup>18</sup> While Yellow fever Vaccine is currently part of the country Routine Immunization Schedule the coverage like other RI vaccines is very low and as such there is Danger of large outbreaks of yellow fever as its is currently being experienced in 3 of the highest risk countries. To this end Nigeria plans to take advantage of GAVI investment in Yellow Fever control to plan and conduct supplemental (Preventive Vaccination Campaigns) activities for Yellow Fever control.

## **2.6 Disease Surveillance**

### **2.6.1 IDSR in Nigeria**

Nigeria along with other member nations at the regional committee meeting in Harare in 1998 endorsed the Integrated Disease Surveillance and Response strategy as a means of strengthening communicable disease surveillance and making it more sensitive at all levels. IDSR implementation started in June 2000 with an orientation workshop held to sensitize National Programme managers of vertical Programmes and partners on IDSR. This was followed by an assessment of the surveillance system by a steering committee in 2001 with the aim of obtaining baseline information on existing disease surveillance system in the Country with a view to securing consensus on a list of priority diseases. It was also aimed at identifying the strengths, weaknesses and opportunities for the integration of surveillance activities at all levels.

The IDSR guidelines have been adapted for the use of Nigeria and training conducted in some States in 2003. However several States particularly in south of the country are yet to be trained on the IDSR.

IDSR is an integral part of the overall NHMIS. Currently NHMIS expects bi-annual returns from states, whereas disease surveillance returns are rendered monthly and weekly for epidemic prone diseases. Data on disease surveillance is fed back into the NHMIS system for effective health planning.

### **2.6.2 AFP Surveillance**

Nigeria has maintained highly sensitive surveillance systems for acute flaccid paralysis (AFP) since 2001. AFP reporting increased non-polio AFP rates reached levels of  $> 2$  per 100 000 nationally, with adequate specimens collected from 1298 of the 1937 AFP cases for the year. Thus, AFP surveillance quality has remained above certification quality at national and sub national levels in Nigeria. AFP surveillance network has two national laboratories and one reference laboratory in the country.

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<sup>17</sup> Report on NT Baseline Study 2006

<sup>18</sup> Yellow Fever Stockpile Investment Case: Submitted by Yellow Fever Task Force to GAVI.

**Table 6: Surveillance Performance for Nigeria: 2000 - 2005<sup>19</sup>**

<i>Year</i>	<i>Total AFP cases reported</i>	<i>No of confirmed polio cases</i>	<i>Total non-polio cases reported</i>	<i>Non-polio AFP rate</i>	<i>AFP cases with adequate stool samples %</i>
2005	4836	802	802	6.3	85
2004	4814	782	782	8.0	91
2003	3318	355	355	6.0	91
2002	3010	202	202	5.7	84
2001	1937	56	56	3.8	67
2000	979	28	638	0.7	36

### **2.6.3 Measles Surveillance**

Measles surveillance is part of the IDSR system however following the commencement of AMC in Nigeria; measles case base surveillance with laboratory support has started. The measles case based surveillance is using the AFP surveillance structure with support of six Laboratory located in each geo-political zones of the country. This measles case based surveillance is still in its early stages and evaluation is not possible at this time.

## **2.7 EPI communication**

There is currently no document that outlines the social mobilization and communication strategies for EPI in Nigeria (Routine and Supplemental) however the effort to develop one for Polio eradication Initiative at the National level is in advance stages. For routine EPI there are no permanent structures at the national State and LGA levels for mobilization activities, however many areas have as part of the new initiative to improve Routine Immunization established community linking committees at health facilities level. The Polio Eradication Initiative has committees that oversee SIA mobilization in the three levels and usually are functional during Polio eradication campaign. At the National level the ICC has a social mobilization working group that deals with mobilization and communication activities mainly for SIAs although this is being evolved to handle mobilization for Routine EPI.

### **2.7.1 Advocacy**

This is handled at the highest level by the ICC and supported by the Social mobilization working group. In addition there is a forum set up by the president; National forum of traditional and Religious leaders; the also is charged with advocacy.

In the process of revitalizing the Routine EPI in Nigeria, the ICC has held several advocacy meetings and discussions with key political leaders and other key stakeholder at National and State levels (President, National assembly members, forum of northern Governors, stakeholders consultative meetings media executives etc).

At lower levels state and LGA teams are also active in advocating for support for both routine and supplemental EPI.

### **2.7.2 Social Mobilization**

Community mobilization for routine immunization suffered tremendously during the period of deterioration of routine EPI. The various structures for community mobilization had collapse and thus community demand for RI also dropped drastically. However over the last 12 months efforts are being made to resuscitate these structures. It is a process that is on-going and needs to be continually supported.

However at the national Radio and TV jingles on routine EPI has recently started airing throughout the country

<sup>19</sup> Source NPI Abuja

### **2.7.3 Programme Communication**

Communication materials are more readily available for AFP surveillance, Polio SIAs and measles SIAs. Materials for Routine Immunization need updating as most were produced in the early 1980s.

## **2.8 Integration**

The concept of linking immunization with other health intervention which is the third strategic area of GIVS and this is part of the immunization programme in Nigeria. In early 2006 a broad based committee was set up by NPI and partners to study the issue of integrating immunization with other childhood survival interventions. The committee recommendations formed part of the decision of NPI and partners to implement the IPDs strategy for Polio eradication.

### **2.8.1 Vitamin A Supplementation.**

VAD is a public health problem in 95 countries throughout Asia, Africa and Latin America (WHO 2001). 140 million preschool children and more than 7 million pregnant women suffer from VADD. 1.2-1.3 million children and a significant number of women die needlessly each year because of it.<sup>3</sup> In a meta-analysis, by Beaton et al (1993) it was estimated that improving vitamin A status reduces U5MR by an average of 23%, and reduces diarrhea and measles morbidity.<sup>20</sup> Sustained elimination of VAD as a public health problem must be a principal element of child survival interventions where the problem exists. Research also suggests that VAD may be an important factor in increasing the risk of maternal morbidity and mortality.<sup>21</sup>

In recognition of this, the national health policy<sup>22</sup> provides for a target of reduction of VAD by 50% by the year 2010. Vitamin A supplementation is part of the RI schedule of the country, although coverage figures are not properly monitored, however, vitamin A supplement have been part of the Polio Eradication Initiative since 2000. Vitamin A is combined with Polio NIDs twice a year for children 6months to 59months.

Furthermore the measles campaign of October 2006 in southern Nigeria was integrated with Vitamin A.

### **2.8.2 Insecticide Treated Nets Distribution**

Following the adoption of the IPDs the polio campaign in the polio endemic States of Nigeria have integrated ITNs distribution to most of the campaign in selected areas.

The Roll back malaria programme in Nigeria and the EPI are programme plans together to ensure efficient integration of ITN with Immunization. In addition to the IPDs, the just measles campaign of October 2006 was also integrated with ITN distribution.

ITNs are also given to children who have completed their DPT3 schedule during Routine Immunization in some states in the country.

### **2.8.3 Immunization Plus Days. (IPDs)**

This strategy was introduced in 2006 as an approach for polio SIAs in Nigeria. The reason for the introduction of IPDs amongst others is to deliver other relevant intervention during the Polio immunization campaigns. The added interventions (pluses) are meant to address many causes of childhood morbidity and mortality as required by the MDG4 and well elaborated in the third strategic area of GIVS.

Additional Interventions carried out during IPDs include; distribution of ITNs, vitamin A supplementation, anti-helminthes distribution, distribution of anti-malaria tablets etc.

<sup>20</sup> Meta-analysis, Beaton et-al 1993. Effective of VAS in control of young Children morbidity and mortality in Developing countries, WHO Geneva ACC/SSN Nutrition policy discussion paper P 13.

<sup>21</sup> Sommer et-al 25 years of progress in controlling VAD: Looking to the Future. J. Nutr. 132: 9S Sept. 2002

<sup>22</sup> Nigeria National Health Policy 2004

## **3 National EPI Priorities, Objectives and Milestones**

### **3.1 Strategic Areas**

The cMYP will be implemented within the four strategic areas of the Global Immunization Vision and Strategies (GIVS)

1. Protecting more people in a changing world
2. Introducing new vaccines and technologies
3. Integrating immunization, other linked health interventions and surveillance in the health systems' context
4. Immunizing in the context of global interdependence

Activities in these strategic areas will be implemented within the framework of the components of the Immunization systems

#### **3.1.1 Immunization operations**

- **Service delivery**
- **Logistics**
- **Vaccine supply and quality**
- **Disease surveillance**
- **Advocacy and communications**

#### **3.1.2 Supportive components of immunization services**

- **Programme management.**
- **Sustainable financing**
- **Strengthening human and institutional resources**

### **3.2 Targets:**

Each component of the immunization systems has a set of planned targets which are developed for each year of the cMYP. (See table 7 below)

### **3.3 National Priorities**

#### **3.3.1 Low immunization coverage.**

Administrative and survey data clearly indicate the routine immunization coverage both at national and state level is unacceptably low. Both sources have variously attributed the poor performance to multiple factors associated with both the supply and demand sides in the service delivery system. These include weak primary health care system at the LGA and lack of ownership at the community level. To improve the coverage therefore, the new strategies that have been introduced (IPDs, REW and LIDs) focuses on delivery of services at the health facility as opposed to these facilities being closed down during previous polio SIAs. These strategies have also revived the confidence of the communities in immunization and engendered ownership.

There is need to strength capacity of health workers at all levels for efficient delivery of immunization services.

#### **3.3.2 Bundling of all vaccines and supplies**

The failure to bundle vaccines and supplies may lead to unsafe injection practices, supply mismatch, distribution problems, and interruptions of health commodities at service delivery points and the eventual loss of confidence

in the system by the community. This has serious repercussions on Immunization coverage. Therefore NPI will advocate to the Federal Government for continued funding of procurement of bundled vaccines. Revitalization of the Cold chain equipment in many states and Local Government Authorities. (Refer logistics working group)

### **3.3.3 Management of data and information**

Poor health management information system remains a major challenge and constraint for sector reforms, health planning, monitoring and evaluation and disease surveillance. One of the weaknesses highlighted by the situation analysis is poor data and information management and with the strengthening of surveillance, the quality of the data becomes a critical issue that should be given its due attention. Therefore, data quality self assessment (DQS) process is to be institutionalized at all levels for continuous data verification and quality improvement. Quality data properly analyzed is a powerful instrument for progress monitoring and resources mobilization. States and LGAs need to be empowered to better manage data for evidence-based disease control decision making.

### **3.3.4 The high intensity of Wild poliovirus Transmission in the Country.**

Challenges that continue to plague the Polio eradication initiative in Nigeria include the persistent high intensity WPV transmission due to large number of missed children in North West and North East zones which accounts for 90% of all confirmed WPV in the country. Therefore the introduction of the new strategy Immunization Plus was to provide opportunity to reach missed children with OPV whilst also increasing routine immunization coverage as well as delivering other child survival services.

### **3.3.5 Sustaining Gains of Accelerated Disease Control**

#### **3.3.5.1 Measles morbidity and mortality remains high in many states.**

Implementation of accelerated measles control activities commenced in Nigeria in 2005 that culminated with successful campaign in December of the same year. A total of 29,877,057 children aged 9 months to 15 years in 19 northern states plus FCT were targeted out of which 28,538,974 were vaccinated during the December measles SIAs representing 95.5% coverage. Similar activities will be conducted in the remaining 17 southern states in October 2006. Measles case based surveillance was initiated in 2005 with identification and training of personnel in six zonal laboratories. The nation-wide case based measles surveillance will commence immediately after the October 2006 accelerated measles campaign in the southern zones.

#### **3.3.5.2 Neonatal and maternal tetanus remains a public health problem in some states**

A recent Neonatal Tetanus Baseline Survey conducted in Kano State in April 2006 showed a mortality rate of 5.9 per 1000 live births as compared to a similar study done in 1999 that reported 20.6 per 1000 live birth.

### **3.3.6 Introduction of new vaccines and under-utilized vaccines**

#### **3.3.6.1 Under- utilized vaccines (Hep. B and Yellow Fever vaccines)**

Yellow fever and Hepatitis B Vaccines were introduced into the national schedule for Routine Immunization in 2003. The normal social mobilization and trainings were conducted. However the uptake of the vaccines is still low. The low coverage is a reflection of the generally low Routine Immunization coverage for other Antigens. As the intensification of the activities for Routine Strengthening continues the improvement of the coverage will be reflected also in these

vaccines. In addition Nigeria plans to take advantage of GAVI investment in Yellow Fever control to plan and conduct supplemental (Preventive Vaccination Campaigns) activities for Yellow Fever control.

#### **3.3.6.2 Introduction of new vaccines (Hib)**

Hemophilus Influenza b (Hib) Disease burden study has been proposed to be conducted jointly by National Programme on Immunization and Glaxo Smith Kline (GSK) in 2006 and the results will be used to inform decision on its introduction into the national immunization schedule. In addition the NPI and partners have set up a committee to look at all aspects of introduction of new vaccines into the countries RI schedule. Part of terms of reference of this committee is to provide a plan of for the country to introduce new vaccines.

### **3.3.7 Addressing Health System Wide Barriers to RI**

#### **3.3.7.1 Roles and responsibilities of federal, state LGA and ward levels, private sector and partners not defined.**

The pluralistic and complex nature of the government system in the country has led to lack of clarity for the roles and responsibilities of the various levels of the system and therefore impacting negatively on disease control programmes. The passing of the National Health Bill will assist to delineate the roles and make the systems more accountable to routine immunization services. It is the intention of the NPI to ensure that there is an appropriate strategy to clarify the managerial roles of the programme that will eventually contribute to the improvement for the overall health system.

#### **3.3.7.2 Availability of human, financial and material resources at state and LGA levels.**

As indicated in the situation analysis, health services are constrained by the limited financial resources, and shortage of qualified personnel due to high attrition rates. This, undoubtedly, has further adversely affected the development of primary health care institutions. Health manpower is the key resource for effective and efficient delivery of health care services. The planning of routine immunization services in such a weak health system may have subtle impacts on vaccine preventable diseases. Adequate consideration shall, therefore, be given to its planning and development. The NPI will therefore endeavor to take appropriate steps to strengthen managerial capacity at all levels, conduct basic health worker trainings, and advocate through the state ICC to the state Governors and LGA chairmen for filling of vacant posts and for increased allocation of financial resources to routine immunization.

**Table 7: National priorities, NPI objectives and milestones, regional and global goals, and order of priority**

Description of problems and other national priorities	NPI Objectives	Milestones	Regional and global goals (until 2010)	Order of priority
Low immunization coverage	To achieve 80% of DPT3 coverage in 80% LGAs by 2010, similar for other antigens	2006: Development of the Reaching Every Ward (REW) field guide and implementation of the REW approach. Achieving 65% DPT3 and other vaccines coverage 2007: 75% DPT3 and other vaccines coverage 2008: 80% DPT3 and other vaccines coverage 2009: Maintain 80% coverage 2010: Maintain 80% coverage	By 2010 or sooner all countries will have routine immunization coverage at 90% nationally with at least 80% coverage in every district	1
Availability of bundled vaccines at service delivery site	To make available bundled vaccines at service delivery points	By end of 2006, 50% vaccines arrive bundled at service delivery points By end of 2007, 80% vaccines arrive bundled at service delivery points By end of 2008, 100% vaccines arrive bundled at service delivery points	By 2009: All vaccines should be bundled at service delivery points and administered using AD syringes	1
Inadequate and obsolete Cold chain equipment in some states and LGAs	To conduct an assessment of the cold chain system and develop a rehabilitation plan	2006: Cold chain inventory completed 2007: Cold chain mapping done, shortfalls identified, orders placed 2008: New equipments installed and running 2009: 80% of cold chain equipment in working order 2010: System of quick repairs and timely replacements working in 50% LGAs	All vaccines used in the field are potent at the time of administration.	2



**Table 7: National priorities, NPI objectives and milestones, regional and global goals, and order of priority**

High intensity of wild polio virus transmission	To interrupt transmission of wild poliovirus in the country by 2007	2006: implementation of the Immunization plus strategy in the high risk northern states 2007: Stop wild polio virus circulation in high risk northern states and conduct Mop-up activities as determined by surveillance data in any location in the country	By 2006 or sooner stop indigenous poliovirus circulation in all countries of the world. To achieve eradication of wild polio virus by 2009	2
Weak Health Management Information System (HMIS)	To Strengthened the existing HMIS	2006: acquire a software, install computers and provide training to state and LGA levels 2007: Provide feedback to states, LGAs and partners on regular basis, continue training and improvement of the system 2008: Improved HMIS system in place generating LGA level data , staff at all levels trained, system stable	By 2009: At least 80% of countries will have an integrated MIS for integrated delivery of child survival interventions	3
Measles morbidity and mortality remains high in many states	To reduce measles morbidity by 90% and mortality by 95% by 2008	2006: Identification of three laboratories in each of the three northern zones. All Diseases Surveillance and Notification Officers (DSNOs), laboratory data managers were trained. The laboratories are functional. To conduct measles campaign targeting 9 months to <15 years old in 17 southern states 2007: Set up case-based and laboratory surveillance for measles in the three southern zones. Investigate all reported cases and outbreaks and document epidemiology of transmission 2008/2009: Do follow-up campaign in 9 months to <5 years old in all states	By 2010, reduce measles morbidity by 90% and mortality by 95%.	3
Under utilization of the Yellow Fever vaccine	To stimulate the up take of Yellow Fever vaccine	2007: Increase public awareness and enlightenment campaigns on the usefulness of Yellow Fever vaccine. Training of health workers on the storage and administration of Yellow Fever vaccine 2008: Increase routine Yellow Fever coverage to 80%	By 2010 or sooner All countries at risk to achieve 80% coverage at national level.  All countries to conduct emergency response within 14 days of laboratory confirmation of a case of yellow fever	3
Under utilization of the Hepatitis B vaccine	To stimulate the up take of Hep. B vaccine	2007: To evaluate the LGA and state coverage for 2006. Re-launch the Hep. B vaccine nationally Increase public awareness and enlightenment campaigns on the usefulness of Hep. B vaccine. Training of health workers on the storage and administration of Hep. B vaccine 2008: Increase routine Hep. B coverage to 80%	By 2010 or sooner: All countries will have introduced Hep. B vaccine in their NIP	3
Neonatal and maternal tetanus remains a public health problem in some states	Eliminate neonatal and maternal tetanus by 2009	2006: Increase routine TT2 coverage of pregnant women to 65% in all LGAs. 2007: Increase routine TT2 coverage of pregnant women to 75% in all LGAs. 2008: Increase routine TT2 coverage to 80%	By 2010 or sooner 80% of countries to have: - <1 case per 1,000 live births in every district - 80% TT2 coverage among WCBA - All countries to establish case-base surveillance	4

**Table 7: National priorities, NPI objectives and milestones, regional and global goals, and order of priority**

Introduction of new vaccine (Hib)	To introduce Hib vaccine into the national immunization schedule	2006: Assessment of disease burden due to Hib infection 2007: Phased introduction of Hib vaccine in some selected high performing states 2008: Scaling up of introduction to all states 2009: 80% coverage i.e. equal to DPT3 coverage	By 2010 or sooner: All countries will have introduced Hib vaccine in their NIP	4
Roles and responsibilities of federal, state LGA and ward levels, private sector and partners not defined	To define the roles and responsibilities of federal, state LGA and ward levels, private sector and partners	2006: Roles and responsibilities of federal, state LGA and ward levels, private sector and partners defined and agreed at ICC meeting		5
Inadequate human and material including financial resources at state and LGA levels	State and LGA - to deploy adequate resources for immunization, increase budget for immunization by 10% annually	2006: States and LGAs are in agreement to fill all vacant posts. 2007: adequate budgetary allocations at state and LGA - Vacant posts identified and filled. Recruitment of qualified staff at the LGA to undertake routine immunization service delivery at all wards and health facilities - Development of costed training plans for service providers, cold chain and vaccine management and planning and management of immunization service at ward, LGA and state levels - Training in immunization started in 25% states 2008: Training completed in 50% states 2009: Training completed in all states		5

## 4 Planning strategies and activities for System Components

### 4.1 *The Immunization System Components*

#### 4.1.1 Immunization operations

The immunization system is comprised of five key immunization operations, as follow:

- **Service delivery** – covers the strategies and activities in giving vaccinations
- **Logistics** – includes delivery of vaccines and equipment to the place of use, transport, management of cold chain and waste disposal
- **Vaccine supply and quality** – consists of forecasting vaccine needs, procurement of vaccines, monitoring of vaccine utilization and safety procedures
- **Disease surveillance** – includes monitoring of disease incidence, laboratory testing, record keeping and reporting
- **Advocacy and communications** – covers social mobilization, advocacy, community education on immunization and programme promotion.

#### 4.1.2 Supportive components of immunization services

The immunization operations are sustained through the following supportive components: management, sustainable financing, and human and institutional resources strengthening.

- Management includes policy making and standard setting, planning, co-ordination, information collection and sharing, collaboration with other partners, quality assurance, monitoring and evaluation.
- Sustainable financing comprises budgeting, identifying long-term funding sources, actions leading to increased allocation of financial resources for immunization programmes.
- Strengthening human and institutional resources includes staffing, training, supervision and institutional support (including supply of technical information, support to research projects etc.).

**Table 8: Planning strategies and activities for System Components**

**Table 8a: Service delivery**

Objective	Strategy	Activities
80% of LGAs to achieve 80% DPT3 coverage by 2008, similar for other antigens	Reaching Every Ward (REW) strategy implemented in every LGA. A minimum of 2 health facilities to conduct weekly fixed session per ward. 50% of health facilities to conduct a minimum of 2 out reach sessions per month  Plan to reach all hard to reach areas at least four times a year  Add vitamin A with routine measles  Insecticide treated Nets (ITN) distribution with routine immunization and measles SIAs  Develop annual training plan  AEFI monitoring	1. Establish baseline data of LGA and ward performance indicators
		2. Develop REW field guide by July 2006
		3. Print and distribute REW field guide by November 2006
		4. Conduct REW Micro-planning workshops at state and LGAs by December 2006
		5. Conduct Health Facility catchment Area micro-plan by March 2007
		6. Supportive Supervisory follow-up at all levels as from 2007
		7. Monitor sessions planned and held as from 2007
		8. Do Multi antigen immunization campaign (LIDs) 4 times in HR areas
		9. Add vitamin A to multi antigen immunization campaigns in HR areas
		10. Monitor use of Vitamin A for infants with routine measles dose
Interruption of wild polio virus transmission by 2007	Immunization Plus Days (IPDs)  Mop-up operation	11. Pilot distribution of bed-nets with measles campaigns, IPDs and routine immunization, then include on regular basis
		12. Joint planning with malaria department for ITNs
Reduce measles morbidity by 90% and mortality by 95% by 2008	Measles SIAs	13. Training needs assessment
	Integrate with polio eradication	14. Use "Basic Guide for Immunization Service Provider" for training of health workers
	Integrate with Vitamin A	15. Training on AEFI for LGA Immunization Officers
Eliminate neonatal and maternal tetanus by 2009	Provide TT register in every health facilities for Routine TT	16. Conduct IPDs 7 to 8 times every year in high risk (HR) states at at least two National Polio SIAs per year.
	Include TT in IPDs	17. Include Vitamin A, albendazole, ITNs when possible
	SIAs with TT	18. Conduct mop-up activities in hitherto polio free LGAs/states based on surveillance report
Control of Yellow fever	SIA with Yellow Fever Vaccine (Preventive Vaccinatio	19. Do catch-up camapaigns (9m - <15yrs) in 17 southern states by end 2006
		20. Add OPV to measles SIAs
		21. Include Vitamin A in measles SIAs
		22. Include TT in ward micoplans for routine immunization
		23. Microplans and budgets for IPDs to be modified to include TT
		24. Conduct TT campaigns targeting selected groups of women of child bearing age e.g. secondary schoos and post secondary institutions starting from 2007
		25. conduct Prventive Vaacination Campaigns with Yellow Fever Vaccine starting from 2007

## Planning strategies and activities for System Components

**Table 8b: Advocacy and communications**

Objective	Strategies	Key activities
Provision of information on immunization schedules and services to the population	Develop integrated communication plan that includes all components of immunization	1. Convene meeting of Communications Working Group to develop key components of media plan
		2. Consensus built on roles of Government, media agencies and partners
		3. Develop detailed media plan including mass media messages, schedules of broadcast and telecast
		4. Develop the messages for 'community dialogues' by health workers
		5. Develop a budget and obtain funds
Engage the community in providing immunization services	Extensive use of mass media	6. Develop communication plan
		7. Develop spots messages and jingles
		8. Negotiate rates and timings of broadcast with NTA, radio stations
		9. Finalize telecast and broadcast schedule
		10. Inter-personal communication training of health workers
	Community dialogues	11. Develop contents of messages
		12. Form or reactivate village Health Committees
		13. Institute use of community focal person to mobilize community for immunization activities
		14. Develop schedule of contacts and start the dialogues
		15. Include MNT in key messages on routine immunization
Create Awareness on use of AD syringes	MNT advocacy plan IEC materials on AD syringes	16. All training courses to include training on use of AD syringes
		17. Develop and disseminate messages over mass media
Create multi sectorial involvement in Immunization Activities	Advocacy	18. Advocacy meetings with states and LGAs on roles and responsibilities
Resource Mobilization	Advocacy with Ministry of Finance	19. Meetings with Ministry of Finance at different levels
	Forge consensus with states and LGAs on this issue	20. States and LGAs allocate more budget every year 21. Monitor budgetary support and spending at all levels
	Advocacy with Ministry of Finance for budget allocations	22. Regular meetings and feedback to Ministry of Finance

## Planning strategies and activities for System Components

**Table 8c: Surveillance**

Objective (1)	Strategy (2)	Key activities (3)
Interruption of polio transmission by 2007	AFP surveillance combined with other VPDs (initially with MNT and measles)	1. Active surveillance in all districts
	Measles and polio lab links	2. Combine measles/polio lab support, training, supplies
Reduce measles morbidity by 90% and mortality by 95% by 2008	Active measles surveillance combined with AFP surveillance	3. Active surveillance for AFP, measles and MNT in all districts
	Measles and polio lab links	4. Combine measles/polio lab support, training, supplies
	Establish case-based and laboratory based surveillance	5. Establish consensus with laboratories and regular funding
		6. Provide feedback on surveillance and performance data to state and LGA levels
Eliminate neonatal and maternal tetanus by 2009	Active surveillance in high-risk districts	7. Active surveillance for AFP, measles and MNT in all districts
Monitor AEFI	Integrate AEFI to integrated disease Surveillance	8. Surveillance for AEFI integrated with disease surveillance
Strengthen Epidemic preparedness and Response		9. Detection, reporting and investigation of all outbreaks of VPDs
		10. Reporting system in HMIS also reports vaccine stocks at all levels
		11. Develop software and install computers at state and LGA levels

## Planning strategies and activities for System Components

**Table 8d: Vaccine supply, quality and logistics**

Objectives	Strategies	Key activities
Bundled vaccines to arrive at service delivery points	Formalize immunization policy	1. Adopt decision at ICC meeting
	Implementation of Vaccine Management Plan and use computerized software backed by timely reporting from all levels to monitor vaccine stocks, movement and re-ordering	2. Accurate and timely forecast as well as placement of orders for bundled vaccines
		3. Ensure AD bundling with all vaccines in all LGAs
		4. Include reporting of AD use in the monthly report and stock position at different levels
		5. When ordering vaccines injection safety devices should always be included
No stock-outs of vaccines and AD syringes at national, state and LGA levels by 2007	Establish funding and timely ordering cycles	6. Timely ordering and distribution of vaccines and AD syringes
		7. Monitoring of stocks, advocacy with Ministry of Finance for funds
	Vaccine demand monitoring linked with supply	8. Monitor stock management in every LGA
		9. Monitor LGA stock in national database
Adequate cold chain capacity at all levels	Develop cold chain replacement and rehabilitation plan	10. Carry out inventory of all cold chain equipment
		11. Ensure adequate funding in federal, state and LGA budgets for procurement and maintenance of cold chain
		12. Carry out training in cold chain management and maintenance in all states and LGAs
All Immunization Activities to use Auto-disable syringes by end of 2007	Replace 10% of cold chain equipment every year	13. Select and purchase equipment to replace 10% of cold chain each year
		14. Review safe Injection Policy by end 2006
	Introduction and monitoring of safe injection practices	15. Print and disseminate policy
16. Develop Action plan for safe injection practices in Immunization by end 2006		
All AD syringes disposed of safely by 2008	Network of incinerators and waste management system	17. Ensure injection devices purchased with vaccines are auto-disable.
		18. Pilot the use of incinerators in 2007,
		19. Establish collection and management systems
	Training of health workers on correct technique of injection and safe disposal of Auto-Disable Syringes	20. Buy and install incinerators for 50% of LGAs by 2008
		21. Develop training material on injection technique and safe disposal
22. Include injection technique and safe disposal training in all training sessions of health workers		

## Planning strategies and activities for System Components

**Table 8e: Programme management**

Objectives	Strategies	Key activities
Multi Year Plan 2006-2010 available for sustainable immunization services in Nigeria	Review 2006-2010 Five-year Strategic Plan in line with GIVS framework	1. Plan reviewed by September 2006
		2. Plan endorsed by ICC
		3. Print and disseminate MYP
		4. Establish evaluation tools with indicators
Improved coordination and management of Immunization Programme	Expand ICC	5. Broaden agenda and participation at ICC to include routine EPI issues. Invite more stakeholders
	Strengthen ICC	6. Establish ICC in all states and child coordinating committees in all LGAs.
	Greater NGO involvement	7. Conduct a meeting with the NGOs to discuss participation
	Formation/reactivation of Community Link Committees	8. Establish/Reactivate LGA PHC management committee
9. Establish/Reactivate Ward Health management committee		
10. Establish/Reactivate Village Health management committee		
Regular provision of immunization in all wards (REW strategy)	By 2007, all LGAs to review session plans regularly to ensure efficient use of sessions and reduce vaccine wastage	11. Establish regular review meetings of programme staff at all levels
		12. Regular planned supportive supervisory visits to at least 10% of immunization sessions every month
		13. Include session plan review in supportive supervision
		14. Quarterly review of session plans
Develop a HMIS system that is comprehensive, timely and complete	Obtain consensus from states and LGAs on using a common system	15. Develop the software, install computers and provide training to state and LGA levels
	Incorporate elements of session planned and held, surveillance of diseases, cold chain and logistics, programme management, immunization performance in the reporting and compilation system	16. Provide regular feedback to states, LGAs and partners on regular basis, continue training and improving the system
		17. Staff at all levels trained,
		18. System fine-tuned and stabilized
Adequate human resources for immunization activities	Fill all vacant district posts by 2006	19. Review total health service needs and human resources plan
		20. Develop recruitment plan with budget
		21. Cost priority district post vacancies
		22. Determine priority districts for filling vacancies
		23.



<b>Objectives</b>	<b>Strategies</b>	<b>Key activities</b>
	Build consensus on state and LGA support to fill vacant posts	24. Hold meeting with states and LGAs and forge consensus 25. Vacant posts identified and filled. 26. Training in immunization done in all LGAs
Sustainable and adequate financing of Immunization Activities	Increase budgetary support at state and LGA levels for immunization	27. Monitor budget implementation for immunization at all levels 28. Increase budgetary support at all levels by 10% every year 29. Increase national funding for vaccines by 10% per year
Integration of Immunization with other Health Intervention	Integration of planning into national budgeting processes	30. Develop liaison processes to facilitate transfer of costing information to national budgeting decisions 31. Building financial planning and management capacity 32. Review vaccine usage for outreach and costing including AD syringes and safety boxes 33. Monitor sessions planned and held at all review meetings
All AD syringes disposed of safely by 2010	Review incinerator commissioning and waste management plan	34. All session plans must include planning for the disposal of wastes

.Table 9 Checklist, Using GIVS as Framework

GIVS strategies	Key activities	Activity included in cMYP			
		Y	N	Not applicable	New activity needed
<b>Strategic Area One: Protecting more people in a changing world</b>					
Strategy 1: Use a combination of approaches to reach everyone targeted for immunization	National commitment to ongoing immunization services through policy and strategy development that also includes human resources and financial planning	√			
	Formulate and implement costed comprehensive multi-year national strategic plans, budgeting and annual work plans based on data analysis and problem solving	√			
	Sustain high vaccination coverage, where it has been achieved			√	
	Develop national strategies to immunize children who were not immunized during infancy	√			
	Where and when appropriate, include supplementary immunization activities as an integral part of the national plans	√			
	Engage community members, NGOs and interest groups in immunization advocacy and implementation;	√			
	Assess the existing communication gaps in reaching all communities and develop and implement a communication and social mobilization plan	√			
	Provide regular, reliable, and safe immunization services that match demand	√			
	Micro-planning at the district or local level	√			
	Reduce the number of immunization drop-outs (incomplete vaccination) through improved management, defaulter tracing.	√			
Strategy 3 Ensure that the un-reached are reached in every district at least four times a year	Develop and update supervisory mechanisms and tools	√			
	Provide timely funding, logistic support and supplies for programme implementation in every district.	√			
Strategy 4: vaccinate beyond the traditional target group.	Define target populations and age groups for vaccination appropriate to the national situation	√			
	Assess the cost-effectiveness of different schedules and strategies	√			

GIVS strategies	Key activities	Activity included in cMYP				
		Y	N	Not applicable	New activity needed	
<b>Strategic Area One: Protecting more people in a changing world</b>	Procure vaccines only from sources that meet internationally recognized quality standards	✓				
		✓				
	Strategy 5: improve vaccine, immunization and injection safety	Achieve national self-reliance in quality assurance and regulatory oversight				✓
		Introduce, sustain and monitor safe injection practices, including the use of auto-disable (AD) syringes and other safe methods of vaccine administration	✓			
		surveillance and response to adverse events following immunization	✓			
		Be responsive to potential vaccine safety issues and address these urgently	✓			
	Strategy 6: Improve and strengthen vaccine management systems	Accurate demand forecasting at national and district levels to ensure the uninterrupted supply of assured quality vaccines, AD syringes and safety boxes	✓			
		Build capacity for effective vaccine management through training, supervision and the development of information systems	✓			
		Increase access and coverage through a "safe chain" approach which includes taking vaccines beyond the cold chain, using a VVM-based vaccine management system	✓			
		Move towards coordinated and sector-wide financing and management for transportation and communications				✓
Strategy 7 Evaluate and strengthen national immunization programmes	Conduct regular immunization programme evaluations at local, district and national levels and provide feedback on performance	✓				
	Perform operations research and evaluation of "what works" to improve the delivery of immunization and to make systems more effective, efficient and equitable	✓				

GIVS strategies	Key activities	Activity included in cMYP				
		Y	N	Not applicable		
<b>Strategic Area two: Introducing New Vaccines and technologies</b>						
<p>Strategy 8 Strengthen country capacity and set policies and priorities for new vaccines and technologies.</p> <p>Strategy 9: Ensure effective and sustainable introduction of new vaccines and technologies</p> <p>Strategy10: Promote research and development of vaccine against diseases of public Health importance</p>	Strengthen capacity to assess disease burden and cost effectiveness of new vaccines.	√				
	Ensure long-term financial requirements from national governments and supporting partners are understood and committed prior to the introduction of new vaccines.	√			√	
	Integrate the introduction of each new vaccine into countries' multi-year sector-wide plans and provide a financial analysis	√				
	Ensure adequate training of health workers and vaccine managers at all levels	√				
	Produce appropriate information, education and communication (IEC) materials to ensure good understanding of the benefits of new vaccines or technologies	√				
	Ensure that within five years of introduction the coverage of the new vaccine reaches the same level of coverage as for other vaccines given at the same time.	√				
	Expand surveillance diseases that can be prevented by new Vaccines	√				
	Produce local evidence to influence and prioritize public and private investments in new vaccines and technologies					√

GIVS strategies	Key activities	Activity included in cMYP			
		Y	N	Not applicable	New activity needed
<b>Strategic Area Three: Integrating Immunization, other Linked Health Interventions and Surveillance in the health system context</b>					
Strategy 11: Strengthen immunization programmes within the context of health systems development	Conduct regular analysis of district-wide data, to document key factors for the success and failure of immunization activities	√			
	Participate actively in collective efforts to shape sector-wide policies and programmes	√			
	Use the experience gained in health systems development as an opportunity to position immunization services in a way that ensures the maximum benefit for all people	√			
	Make an inventory of human resource needs	√			
Strategy 12: Improve Human resource Management	Plan for and provide sufficient, adequately paid and trained human resources	√			
	Ensure that Supportive supervision to these health Workers is resourced, prioritized, reliably conducted and monitored.	√			
	Motivate health workers in inaccessible or insecure areas to reach all eligible populations	√			
Strategic area 13: Assess and develop appropriate interventions for integration	Develop and field-test potential joint interventions	√			
	Tailor integrated packages of interventions to local needs and feasibility.	√			
	Include joint interventions in multi-year and annual plans	√			
	Formulate and implement as part of these plans integrated training plans	√			
Strategy 14: Maximize the synergy from integrated interventions	Implement interventions jointly with special emphasis placed on outreach and mobile teams	√			
	Monitor and evaluate the incremental efficiency, effectiveness and impact of combined interventions and their means of delivery	√			

GLVS strategies	Key activities	Activity included in cMYP				
		Y	N	Not applicable	New activity needed	
<b>Strategic Area Three: Integrating Immunization, other Linked Health Interventions and Surveillance in the health system context</b>						
Strategy 15: sustain benefits of integrated interventions	Create a management structure that facilitates coordination and efficiency	√				
	Establish joint financing, monitoring and evaluation functions	√				
	Pool the resources needed to cover operational and other costs	√				
	Remain attentive to community-perceived needs	√				
	Advocate for further synergy and explore additional linkages	√				
	Expand the existing surveillance systems (such as polio and measles surveillance) in order to progress towards effective case-based surveillance for VPDs	√				
	Improve coverage monitoring of vaccines and other linked health interventions	√				
	Expand the existing laboratory networks	√				
	Assure the training, equipment, reagents and quality control procedures	√				
	Improve data management through regular training, monitoring and feedback	√				
Strategy 16: Strengthen monitoring of coverage and case-based surveillance	Regularly review district indicators of performance	√				
	Development of better tools (e.g, computer software) for monitoring coverage of vaccines and linked intervention	√				
	Monitor the quality and performance of coverage monitoring and surveillance systems	√				
	Collaborate with civil authorities in advocating for increased registration of births and deaths	√				
	Include immunization-related issues in 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 established in response to complex emergencies	√				
	Strategy 17: Strengthen laboratory capacity through the creation of laboratory networks					
Strategy 18: Strengthen the management, analysis, interpretation, use, and exchange of data at all levels						
Strategy 19: Provide access to immunization in complex humanitarian emergencies						

GIVS strategies	Key activities	Activity included in cMYP			
		Y	N	Not applicable	New activity needed
<b>Strategic Area Four: Immunizing in a context of global interdependence</b>					
Strategy 20: Ensure reliable global supply of affordable vaccines of assured quality	Ensure long-term forecasting for existing and new vaccines through close collaboration between international agencies, donors and vaccine manufacturers	√			
Strategy 21: Ensure adequate and sustainable financing of national immunization systems	Strengthen national capacity for financial planning both within the immunization programme itself and the ministry of health as a whole	√			
	Commit increased and sustained national budget allocations for vaccines, on the basis of improved understanding of the value of vaccines in public health	√			
	Encourage local and district level contribution to health services and immunization programmes through interaction with local businesses and interests	√			
	Coordinate immunization financing through the ICCs to ensure adequate and appropriate donor support to national governments	√			
Strategy 22: Improve communication and information dissemination	Produce quality and timely information on the benefits of immunization	√			
Strategy 23: Define and recognize the roles, responsibilities and accountability of partners	Ensure that immunization remains high on national health agenda	√			
Strategy 24: Include vaccines in global epidemic preparedness.	Develop country-specific epidemic preparedness and prevention plans relevant to specific diseases	√			

**Table 10: Activity timeline**

Key activities	2006	2007	2008	2009	2010
<b>Service delivery</b>					
1. Conduct IPDs 4 to 5 times every year in high risk (HR) states					
2. Include Vitamin A, soap, albendazole, ITNs in the IPDs					
3. Conduct 2 rounds of house-to-house NIDs with OPV low transmission months					
4. Add OPV to measles or other campaigns.					
5. Do measles catch-up campaigns (9m - <15yrs) in all states southern by end 2006					
6. Include Vitamin A in measles SIAs					
7. Establish baseline immunization data of LGA and ward indicators					
8. Develop REW field guide					
9. Print and distribute REW field guide					
10. Conduct Micro-planning workshops on routine immunization					
11. Conduct Health Facility Catchment Area micro-plan					
12. Plan and conduct daily or weekly immunization sessions in all HF's					
13. Supportive Supervisory visits at all levels					
14. Monitor sessions planned and held and reasons of not held sessions					
15. Add Vitamin A for infants with routine measles dose and monitor					
16. Joint planning with malaria department for ITNs					
17. Initiate collaboration at State, LGA & Ward/HF levels & plan a common strategy					
18. Implement common strategy for child survival					
19. Monitor & evaluate implementation strategy					
20. Distribution of bed-nets with measles campaigns, IPDs and routine immunization.					
21. Include TT in LGA micoplans of routine immunization					
22. In hard to reach areas conduct TT campaigns 2 times every year					
23. Ensure HF workers conduct tracking of defaulters to reduce drop-out rate					
24. Plan for outreach & mobile services					
25. Use M& E data to plan for immunization sessions in high risk populations					
26. Complete distribution of M&E standardized guidelines					
27. Adapt / adopt national M&E standardized guidelines at State, LGA, Ward & HF levels for immunization					
28. Distribute standardized M&E reporting formats to all tiers of government.					



Key activities	2006	2007	2008	2009	2010
29. Strengthen capacity of M&E personnel to enable training at State, LGA & HF levels					
30. Supervise implementation of approved M&E guidelines at State, LGA & HF levels					
31. Ensure monthly records of RI indicators include: monthly DPT3 coverage, drop-out rate, maintenance of logistics, vaccine utilization reports					
32. Ensure yearly records of immunization indicators include: annual DPT3 coverage, drop-out rate & no. of outbreaks					
33. Ensure regular & systematic collation and analysis of M&E reports for feedback to all levels of government and HFs					
34. Invest in M&E for immunization to improve timeliness and completeness of data reporting					
35. conduct quarterly Data quality self assessment.					
36. Conduct two-yearly immunization coverage surveys					
37. Annual training needs Assessment of LGAs & HFs					
38. Develop and implement training programmes to equip health workers to perform their functions eg MLM training, REW, BGSP etc.					
39. Strengthen States & LGAs through training to support Ward-level Immunization service delivery.					
40. Conduct performance evaluation of training programmes in immunization twice a year					
41. Publish annual administrative performance from RI data					
<b>Advocacy and communications</b>					
42. Convene meeting of Communications Working Group to develop key components of media plan, build consensus on roles of agencies, partners					
43. Develop detailed media plan including mass media messages, schedules of broadcast and telecast					
44. Develop the messages for 'community dialogues' by health workers					
45. Communications budget developed and provided					
46. Conduct meeting(s) with the NGOs to discuss participation in immunization					
47. Sensitize to promote demand culture for routine immunization					
48. LGAs to develop IEC plans					
49. Use traditional communication channels to promote support for & trust in immunization					
50. Ensure wide and early circulation of RI coverage surveys					
51. Involve civil society in budget advocacy for immunization at all levels					
52. Encourage private sector to sponsor innovative delivery channels for marketing immunizations e.g. exercise books, school bags					

Key activities	2006	2007	2008	2009	2010
53. Develop and deliver appropriate RI messages at LGA & Ward levels					
54. Strengthen the involvement of health advocacy groups (health professionals, educators, private sector & media executives) in immunization at all levels					
55. Involve traditional & religious leaders, Presidential Media Committee (PMC) as partners in immunization					
56. Air appropriate jingles on immunizations regularly					
57. Integrate basic information on immunization into health education curricula in schools in Nigeria in collaboration with Federal Ministry of Education and in consultation with states.					
58. update and monitor relevant data on NPI website					
59. Develop the spots and jingles for TV and radio					
60. Negotiate rates and timings of broadcast with NTA, radio stations					
61. Finalize telecast and broadcast schedule					
62. Inter-personal communication training of health workers					
63. Develop contents of messages for community dialogues					
64. Develop schedule of contacts and start the dialogues					
65. Include MNT in key messages on routine immunization					
66. Disseminate messages over mass media					
67. Advocacy meetings with states and LGAs on roles and responsibilities					
68. Meetings with Ministry of Finance at different levels					
69. Evaluate the reach of different media strategies to target group					
<b>Surveillance</b>					
70. Active surveillance in all districts for AFP, measles and MNT					
71. Combine measles/polio lab support, training, supplies					
72. Surveillance for AEFI integrated with disease surveillance					
73. Detection, reporting and investigation of all outbreaks of VPDs					
74. Reporting system in MIS also reports vaccine stocks at all levels					
75. Develop software and install computers, at LGA and state levels					
76. Adopt existing AEFI policy in accordance with revised (2003) NIP					
77. Train HF workers and stakeholders on AEFI					
78. Establish AEFI reporting line between Wards & LGAs, & between LGAs States, & between States & NISC					
79. States & LGAs to adopt/adapt national mechanism for monitoring & evaluation of implementation of AEFI					
80. Training on AEFI for LGA managers					

Key activities	2006	2007	2008	2009	2010
81. Prepare and submit bi-annual reports on AEFI					
82. Include AEFI in national database for district monitoring					
83. Distribute standardized surveillance tools					
84. Strengthen capacity of State Epidemiologists & DSNOs for effective disease surveillance					
85. Conduct monthly State-level meetings of DSNOs with State Team					
86. Provide CHCC with LGA monthly surveillance report					
87. Provide feedback on disease surveillance from States & LGAs					
88. Evaluate bi-annually disease surveillance performance of States & LGAs.					
89. Use disease surveillance data to provide VPDs trends as basis for action					
90. State-owned laboratories to be established and strengthened where in existence, to improve disease surveillance.					
<b>Vaccine supply, quality and logistics</b>					
91. Carry out yearly vaccine forecasts using bottom-up approach following national standardized criteria timely vaccine forecast and ordering obtain budget					
92. Meeting of ICC to endorse compulsory bundling of ADs with all vaccines					
93. Implement bundling decision for all vaccines for placing orders					
94. Ensure AD bundling with all vaccines distributed to all from National cold stores down to HF levels					
95. Distribute regularly bundled vaccines to HFs, as required by the utilization report					
96. Ensure ward sub-health Committees and ward development committees are to be informed of vaccines received & logistics					
97. Include reporting of AD use in the monthly report and stock position at all levels					
98. Monitoring of stocks, advocacy with Ministry of Finance for funds					
99. Monitor LGA and state level stocks of vaccines and AD Syringes in national database					
100. Carry out cold chain assessment					
101. Build inventory of cold chain and make replacement plan					
102. Put in place minimum cold chain & logistics equipment at LGA & HF levels in conformity with NIP specifications					
103. Establish maintenance units at LGA level to regularly service cold chain equipment at LGA & HF levels.					
104. Select and purchase equipment to replace 10% of cold chain each year					
105. Monitor LGA and state level stocks of vaccines and AD Syringes in national database					
106. Test sample incinerators in 2006					
107. Develop training material on injection technique and safe disposal					
108. Buy and install incinerators for 50% of districts by 2008					

Key activities	2006	2007	2008	2009	2010
109. Adopt existing policy on waste management in accordance with revised (2003) NIP					
110. Ensure State Council on Health adopt standard local safe disposal system for injection equipment					
111. Print & distribute policy document on waste management					
112. Train HF operators on waste management					
113. Implement policy on autolisable (AD) syringes for RI services					
114. States to ensure the use of AD syringes in their LGAs by end of 2007.					
115. Establish collection and management systems of waste disposal					
116. Ensure safe disposal of used injection equipment					
117. States & LGAs to adopt/adapt national mechanism for monitoring & evaluation of implementation - monitor implementation of policy					
118. states to monitor implementation on a monthly basis					
119. submit bi-annual evaluation reports					
<b>Programme management</b>					
120. 5-year Strategic Plan reviewed and CMYP developed in 2006					
121. Multi year plan endorsed by ICC					
122. Print and disseminate MYP					
123. Establish SIAs and IPDs calendar in advance					
124. Establish consensus with laboratories and regular funding					
125. Establish regular review meetings of programme and laboratory staff					
126. Provide feedback on surveillance and performance data to state and LGA levels and to partners					
127. Regular planned supervisory visits immunization sessions every month					
128. Training needs assessment of health workers					
129. Adapt and use 'Immunization in Practice' and Basic guide for Routine Immunization Service Providers for training					
130. Train health workers at LGA and ward levels, all training sessions to include components of routine immunization, surveillance of VPDs, polio SIAs, IPDs, correct injection technique, use and disposal of AD syringes					
131. plan and conduct cascade training for MLM					
132. Training on AEFI for LGA managers					
133. Develop schedule of coverage surveys, obtain and allocate funds					
134. Implement the surveys by external agencies in 2007 and 2009					
135. Operational research: define aspects of the programme to be evaluated and the schedule					

Key activities	2006	2007	2008	2009	2010
136. Develop liaison processes with planning and finance ministries to facilitate transfer of costing information to national budgeting decisions					
137. Building financial planning and management capacity - training of staff					
138. Review vaccine usage for outreach and costing including AD syringes and safety boxes					
139. Determine priority districts for filling vacancies and the cost					
140. Monitor budget and spending at federal, state and LGA levels					
141. Hold meeting with states and LGAs and forge consensus to fill vacant posts					
142. Vacant posts identified and filled.					
143. Increase budgetary support for immunization at all levels by 10% every year					
144. Supervise implementation of approved M&E guidelines at State, LGA & HF levels					
145. Publish regular ICC reports & feedback to stakeholders					
146. Improve information & communication network linking ICC members					
147. Broaden agenda and participation at polio ICC to include routine EPI issues and all partners					
148. Invite additional bilateral & multilateral development partners as the need arises.					
149. Increase participation of bilateral & multi-lateral representation in ICC Working Group					
150. Adapt & adopt national ICC structure for the establishment of the State ICC					
151. Inaugurate State ICCs					
152. Operationalise State ICCs using the adopted national guidelines					
153. State ICCs Provide quarterly reports to the national ICC					
154. State to have quarterly review/support the LGA committees for all child survival activities.					
155. Adapt & adopt CHCC as contained in Nigeria Immunization Policy document (Revised) & approved by NCH in 2003					
156. Inaugurate CHCC at LGA level					
157. Operationalise CHCC in line with the TORs specified in the approved policy document					
158. Inaugurate sub-committees on supervision, M&E, AEFI, Mobilization & Advocacy, with the Supervisory Councilors for Health as Chairperson of sub-committees					
159. CHCC should strengthen & involve the Ward Health Sub-Committees towards achieving community ownership of immunization					
160. Ensure Ward Health Sub-committees regularly brief Ward Development Committees on immunization activities & related health matters					
161. Organise workshops for Supervisory Health Councilors on their roles & responsibilities with regard to cMYP 2006-2010					
162. Invite additional local Organised Private sector & NGOs as the need arises.					

## 5 Cost, Budget and Financing for cMYP

The implementation of any plan is dependent on adequate funding. Some of the initial steps to a successful funding of any programme lie in proper costing and cost analysis of the programme. The government at various levels working through the health ministries bears most of the responsibilities for funding the EPI programme. However many development partners collaborate effectively in the funding of various aspects of the EPI programme.

### ▪ Methodology for costing cMYP

The cMYP is a comprehensive strategic multi-year plan that seeks to include all immunization related interventions as well as those other health interventions that can be integrated with immunization activities.

Costing of this cMYP followed essentially the immunization system components:

#### Immunization operations

- Service delivery
- Logistics
- Vaccine supply and quality
- Disease surveillance
- Advocacy and communications

#### Supportive components of immunization services

- Programme management.
- Sustainable financing
- Strengthening human and institutional resources

The costing of these system components was done for inputs for each components; human resources salaries, vaccines, cold chain equipments, computers, office supplies, buildings and building maintenance, etc and for activities within each system components; training, fixed and outreach activities, active surveillance, etc.

Various methodologies were used to cost the cMYP depending on the inputs or activities:

- **Ingredient Approach:** This is based on unit cost and quantities of items to be costed for the year. Thus items like personnel emoluments, vehicles cold chain equipments etc were costed using the 'ingredient approach'.
- **Rule of Thumb:** This costing method is used based on previous practice, for instance setting aside a particular percentage of capital equipment for its maintenance.
- **Past Spending:** Here lump sum based on past expenditure for the same or similar activities for instance in the area of using cost/child in calculation of campaign costs or in building structures using past costs of similar structures.

### 5.1 Macroeconomic Information:

To appropriately situate the costing and financing of the cMYP in its proper financing framework, some basic macroeconomic information about Nigeria is presented. See table....

INDICATORS	2005	2006	2007	2008	2009	2010
	\$	\$	\$	\$	\$	\$
GDP per capita	560	570	580	590	600	610
Total health expenditures per capita (THE per capita)	3.2	4.2	5.2	5.2	6.2	6.2
	(%)	(%)	(%)	(%)	(%)	(%)
Government health expenditures (GHE%THE)	21.6%	31.0%	35.0%	40.0%	45.0%	50.0%

## 5.2 Cost of Implementing Immunization Activities

Costing of various input and activities of the system components of the cMYP were done using the various methodologies outlined above. These costs were then entered into the pre-designed cMYP excel based costing tool. Below are some of the components included in the costs:

Personnel Costs (EPI/Shared Cost)

Cold Chain equipment maintenance and overhead

Vaccines and injection materials.

Operational cost of campaign

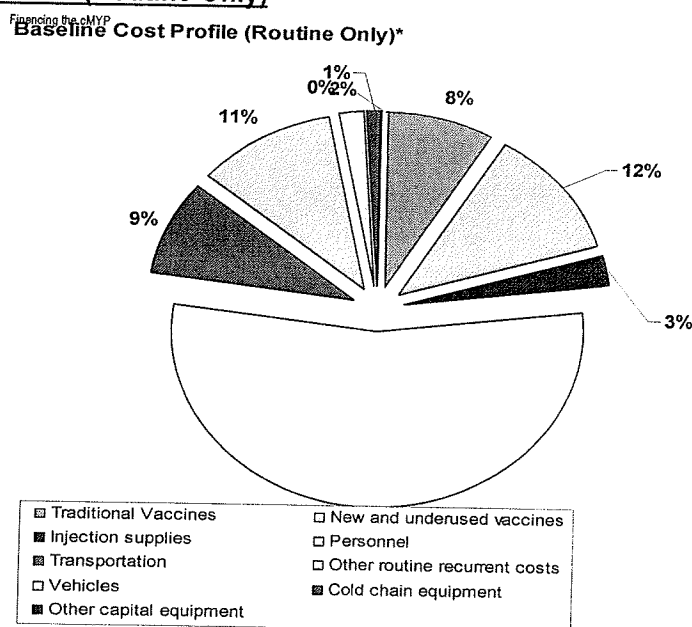
Programme management activities,

other recurrent costs and surveillance

Other equipment needs and capital costs

See table... for details of costs

### Baseline Cost Profile (Routine Only)



This chart shows the baseline cost profile for routine immunization using 2005 expenditure profile. The main cost drivers for RI in Nigeria are the cost of personnel and other recurrent costs. The personnel cost is high due to the large population size of the country with a huge number of Health facilities.

### Costs of Implementing Immunization activities during period of cMYP

Based on the costing of the various inputs and activities, a summary of the costs for each Immunization system component can now be summarized as follows:

	2,006.00	2,007.00	2,008.00	2,009.00	2,010.00	Total 2006 - 2010
MYP Components	US\$	US\$	US\$	US\$	US\$	US\$
Vaccine Supply and Logistics	75,333,437.00	86,562,411.89	79,070,568.29	79,538,064.94	105,018,504.68	425,522,986.80
Service Delivery	268,401,032.00	284,821,308.81	327,574,631.94	339,956,761.07	276,296,346.62	1,497,050,080.44
Advocacy and Communication	3,478,162.00	3,547,724.89	3,618,679.38	3,691,052.97	3,764,874.03	18,100,493.28
Monitoring and Disease Surveillance	1,972,352.00	2,077,991.33	2,230,779.32	2,393,362.92	2,578,742.19	11,253,227.75
Programme Management	20,240,706.00	20,541,479.84	23,101,255.64	19,666,524.97	18,817,764.57	102,367,731.02
Grand Total	369,425,689.00	397,550,916.75	435,595,914.56	445,245,766.87	406,476,232.10	2,054,294,519.29

The major cost driver for the period of the cMYP is mainly in the area of service delivery. As the country intensifies moves to expand the provision of routine immunization services in the country this main cost driver of service delivery will likely remain through the period of this multi-year plan.

Details of the main cost components for the future are shown below.

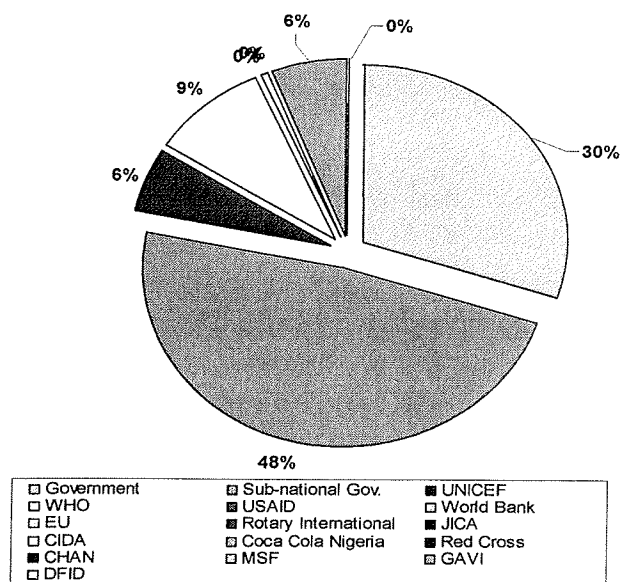
Cost Category	Expenditures						Total 2006 - 2010
	2005	2006	2007	2008	2009	2010	
<b>Routine Recurrent Cost</b>	<b>US\$</b>	<b>US\$</b>	<b>US\$</b>	<b>US\$</b>	<b>US\$</b>	<b>US\$</b>	<b>US\$</b>
Vaccines (routine vaccines only)	\$13,674,866	\$17,595,210	\$17,198,474	\$17,010,433	\$16,530,279	\$17,648,025	\$85,982,421
Traditional vaccines	\$5,663,762	\$8,294,399	\$7,906,431	\$7,430,785	\$7,500,380	\$8,362,579	\$39,494,575
New and underused vaccines	\$8,011,104	\$9,300,811	\$9,292,043	\$9,579,648	\$9,029,899	\$9,285,445	\$46,487,846
Injection supplies	\$1,794,984	\$3,856,740	\$4,284,577	\$5,522,288	\$5,985,208	\$6,298,798	\$25,947,610
Personnel	\$36,492,954	\$37,222,813	\$37,967,269	\$38,726,614	\$39,501,147	\$40,291,169	\$193,709,012
Salaries of full-time NIP health workers (immunization specific)	\$19,191,119	\$19,574,941	\$19,966,440	\$20,365,769	\$20,773,084	\$21,188,546	\$101,868,781
Per-diem for outreach vaccinators/mobile teams	\$10,296,541	\$10,502,472	\$10,712,522	\$10,926,772	\$11,145,307	\$11,368,214	\$54,655,287
Per-diem for supervision and monitoring	\$7,005,293	\$7,145,399	\$7,288,307	\$7,434,073	\$7,582,755	\$7,734,410	\$37,184,944
Transportation	\$5,855,590	\$6,339,313	\$6,674,682	\$7,043,492	\$7,444,941	\$7,633,574	\$35,136,003
Fixed site and vaccine delivery	\$4,461,987	\$4,584,448	\$4,705,722	\$4,834,400	\$4,966,342	\$4,826,913	\$23,917,825
Outreach activities	\$1,393,603	\$1,754,865	\$1,968,960	\$2,209,092	\$2,478,599	\$2,806,661	\$11,218,178
Maintenance and overhead	\$4,670,499	\$5,657,653	\$6,268,662	\$6,929,761	\$7,652,854	\$7,038,844	\$33,547,774
Cold chain maintenance and overheads	\$2,121,147	\$3,032,742	\$3,565,620	\$4,152,323	\$4,793,199	\$4,126,832	\$19,670,716
Maintenance of other capital equipment	\$4,380	\$29,039	\$55,253	\$76,694	\$104,896	\$102,158	\$368,040
Building overheads (electricity, water...)	\$2,544,972	\$2,595,871	\$2,647,789	\$2,700,745	\$2,754,760	\$2,809,855	\$13,509,019
Short-term training	\$513,911	\$1,597,874	\$1,629,831	\$1,662,428	\$1,695,676	\$1,729,590	\$8,315,399
IEC/social mobilization	\$147,882	\$3,478,162	\$3,547,725	\$3,618,679	\$3,691,053	\$3,764,874	\$18,100,493
Disease surveillance	\$1,128,755	\$1,972,352	\$2,077,991	\$2,230,779	\$2,393,363	\$2,578,742	\$11,253,228
Programme management	\$1,016,932	\$14,788,834	\$15,084,611	\$15,386,303	\$15,694,029	\$16,007,910	\$76,961,688
Other routine recurrent costs	\$7,519	\$7,669	\$7,823	\$7,979	\$8,139	\$8,301	\$39,911
<b>Subtotal Recurrent Costs</b>	<b>\$65,303,892</b>	<b>\$92,516,620</b>	<b>\$94,741,645</b>	<b>\$98,138,756</b>	<b>\$100,596,689</b>	<b>\$102,999,827</b>	<b>\$488,993,538</b>
<b>Routine Capital Cost</b>							
Vehicles	\$1,308,000	\$357,102	\$320,235	\$371,529	\$378,959	\$339,836	\$1,767,662
Cold chain equipment	\$715,846	\$3,471,624	\$1,895,533	\$2,330,516	\$1,169,111	\$296,823	\$9,163,607
Other capital equipment	\$0	\$491,436	\$512,657	\$406,708	\$533,368	\$0	\$1,944,170
<b>Subtotal Capital Costs</b>	<b>\$2,023,846</b>	<b>\$4,320,162</b>	<b>\$2,728,425</b>	<b>\$3,108,753</b>	<b>\$2,081,439</b>	<b>\$636,659</b>	<b>\$12,875,438</b>
<b>Campaigns</b>							
Polio	\$116,448,078	\$111,811,726	\$116,445,741	\$114,544,790	\$119,313,473	\$124,291,732	\$586,407,461
Vaccines	\$27,279,070	\$40,347,029	\$41,488,850	\$40,292,818	\$41,433,105	\$42,605,662	\$206,167,463
Other operational costs	\$89,169,008	\$71,464,697	\$74,956,891	\$74,251,971	\$77,880,368	\$81,686,070	\$380,239,998
Measles	\$44,804,813	\$58,736,972	\$0	\$64,224,086	\$67,162,081	\$0	\$190,123,139
Vaccines and supplies	\$17,749,161	\$9,214,296	\$0	\$9,743,205	\$10,018,938	\$0	\$28,976,438
Other operational costs	\$27,055,652	\$49,522,676	\$0	\$54,480,881	\$57,143,144	\$0	\$161,146,701
Yellow Fever	\$97,843,404	\$0	\$34,336,036	\$0	\$0	\$71,187,837	\$105,523,873
Vaccines and supplies	\$56,066,710	\$0	\$17,471,944	\$0	\$0	\$37,829,361	\$55,301,305
Other operational costs	\$41,776,694	\$0	\$16,864,092	\$0	\$0	\$33,358,476	\$50,222,568
MNT campaigns	\$22,619,547	\$0	\$45,322,098	\$47,374,072	\$49,619,273	\$0	\$142,315,444
Vaccines and supplies	\$1,731,200	\$0	\$3,390,143	\$3,393,072	\$3,489,096	\$0	\$10,272,311
Other operational costs	\$20,888,347	\$0	\$41,931,955	\$43,981,001	\$46,130,177	\$0	\$132,043,133
Other campaigns (Year 1 - Round 1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vaccines and supplies	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other operational costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other campaigns (Year 1 - Round 2)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vaccines and supplies	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other operational costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Outbreaks (CSM)	\$9,927,371	\$0	\$0	\$0	\$0	\$0	\$0
Vaccines and supplies	\$1,037,051	\$0	\$0	\$0	\$0	\$0	\$0
Other operational costs	\$8,890,320	\$0	\$0	\$0	\$0	\$0	\$0
Other campaigns	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vaccines and supplies	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other operational costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Subtotal Campaign Costs</b>	<b>\$291,643,213</b>	<b>\$170,548,698</b>	<b>\$196,103,875</b>	<b>\$226,142,948</b>	<b>\$236,094,827</b>	<b>\$195,479,569</b>	<b>\$1,024,369,917</b>
<b>Other Costs</b>							
Shared personnel costs	\$93,762,325	\$95,637,571	\$97,550,323	\$99,501,329	\$101,491,356	\$103,521,183	\$497,701,761
Shared transportation costs	\$3,477,095	\$3,546,637	\$3,617,570	\$3,689,921	\$3,763,719	\$3,838,994	\$18,456,841
Construction of new buildings	\$1,651,000	\$2,856,000	\$2,809,080	\$5,014,208	\$1,217,736	\$0	\$11,897,024
<b>Subtotal Optional</b>	<b>\$98,890,420</b>	<b>\$102,040,208</b>	<b>\$103,976,972</b>	<b>\$108,205,458</b>	<b>\$106,472,811</b>	<b>\$107,360,177</b>	<b>\$528,055,626</b>
<b>GRAND TOTAL</b>	<b>\$457,861,371</b>	<b>\$389,425,688</b>	<b>\$397,550,917</b>	<b>\$435,595,915</b>	<b>\$445,245,767</b>	<b>\$406,476,232</b>	<b>\$2,054,294,519</b>
<b>Routine (Fixed Delivery)</b>	<b>\$154,439,912</b>	<b>\$186,487,765</b>	<b>\$188,630,713</b>	<b>\$196,177,420</b>	<b>\$195,384,113</b>	<b>\$196,675,825</b>	<b>\$963,355,835</b>
<b>Routine (Outreach Activities)</b>	<b>\$11,778,246</b>	<b>\$12,389,226</b>	<b>\$12,816,329</b>	<b>\$13,275,547</b>	<b>\$13,766,827</b>	<b>\$14,320,838</b>	<b>\$66,568,767</b>
<b>Campaigns</b>	<b>\$291,643,213</b>	<b>\$170,548,698</b>	<b>\$196,103,875</b>	<b>\$226,142,948</b>	<b>\$236,094,827</b>	<b>\$195,479,569</b>	<b>\$1,024,369,917</b>



### 5.3 Financing the cMYP

Financing of the immunization programme in this country is mainly by the Government of Nigeria at various levels. This is logical as the major cost of immunization rests mainly on personnel and capital costs. However many development partners are very strategic in funding most of the activities that move immunization in Nigeria. Figure on shows the baseline financing profile of immunization programme in 2005 as it involved the Government and development partners.

Baseline Financing Profile (Routine Only)\*



Continued financing of the programme in 2006-2010 is still going to depend on the government at national and national level for the reasons state. In the same vein the development partners have showed a lot of commitment in continuing the funding assistance for the country's immunization programmes. Table...

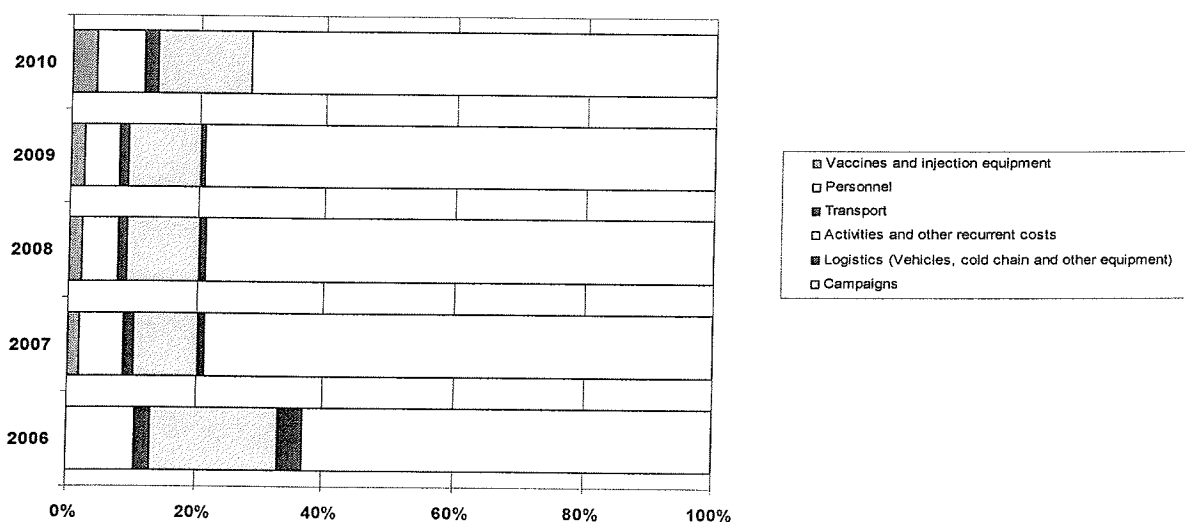
Resource Requirements, Financing and Gaps*	2006	2007	2008	2009	2010	2006 - 2010
<b>Total Resource Requirements</b>	<b>\$267,385,480</b>	<b>\$293,573,945</b>	<b>\$327,390,457</b>	<b>\$338,772,956</b>	<b>\$299,116,056</b>	<b>\$1,526,238,893</b>
<b>Total Resource Requirements (Routine only)</b>	<b>\$96,836,782</b>	<b>\$97,470,070</b>	<b>\$101,247,509</b>	<b>\$102,678,128</b>	<b>\$103,636,486</b>	<b>\$501,868,976</b>
per capita	\$0.7	\$0.7	\$0.7	\$0.7	\$0.7	\$0.7
per DTP targeted child	\$30.6	\$29.9	\$25.9	\$24.0	\$23.4	\$26.4
% Vaccines and supplies	22%	22%	22%	22%	23%	22%
<b>Total Secured Financing</b>	<b>\$203,074,193</b>	<b>\$169,940,673</b>	<b>\$165,471,305</b>	<b>\$165,048,424</b>	<b>\$164,451,802</b>	<b>\$867,986,397</b>
Government	\$44,714,916	\$32,525,701	\$32,488,008	\$31,715,984	\$31,463,590	\$172,908,198
Sub-national Gov.	\$41,251,728	\$41,136,954	\$40,919,260	\$41,804,402	\$41,660,174	\$206,772,519
UNICEF	\$14,876,482	\$1,808,772	\$1,808,772	\$1,333,772	\$1,333,772	\$21,161,572
WHO	\$55,037,963	\$45,281,957	\$45,311,957	\$45,250,957	\$45,250,957	\$236,133,792
USAID	\$698,105	\$698,105	\$698,105	\$698,105	\$698,105	\$3,490,525
World Bank	\$40,271,533	\$38,847,029	\$38,847,029	\$38,847,029	\$38,847,029	\$195,659,649
EU	\$1,207,360	\$1,206,919	\$1,206,919	\$1,206,919	\$1,006,919	\$5,835,038
Rotary International						
JICA	\$197,562					\$197,562
CIDA	\$238,543					\$238,543
Coca Cola Nigeria						
Red Cross						
CHAN						
MSF						
GAVI	\$1,580,000	\$3,435,235	\$4,191,255	\$4,191,255	\$4,191,255	\$17,588,999
DFID	\$3,000,000	\$5,000,000				\$8,000,000
<b>Funding Gap (with secured funds only)</b>	<b>\$64,311,287</b>	<b>\$123,633,272</b>	<b>\$161,919,151</b>	<b>\$173,724,532</b>	<b>\$134,664,254</b>	<b>\$658,252,496</b>
% of Total Needs	24%	42%	49%	51%	45%	43%

## FUNDING GAPS

As the table... above shows there are still substantial gaps in the funding requirements for the immunization programme.

Most of the funding gaps are identified mainly in the area of equipments like vehicles and cold chain equipment as well as transportation which could be for vaccine movement, outreach activities, supervision and monitoring etc. In addition there also exists funding gap on the personnel costs. The salaries of personnel is generally paid for by government and most of financing is secured, however other personnel cost for payment of per-diem during outreach and supervision are in many cases not secured as government at sub-national levels many times do not commit enough resources to these areas.

Composition of the Funding Gap\*



\* Immunization specific funding gap. Shared costs are not included.

Composition of the funding gap	2006	2007	2008	2009	2010	2006 - 2010
Vaccines and injection equipment		\$2,142,287	\$3,242,288	\$3,705,209	\$5,136,544	\$14,226,327
Personnel	\$6,710,007	\$8,462,965	\$8,822,981	\$9,190,198	\$9,980,221	\$43,166,373
Transport	\$1,648,891	\$1,942,986	\$2,183,117	\$2,452,624	\$2,900,686	\$11,128,303
Activities and other recurrent costs	\$12,850,294	\$12,407,506	\$18,573,836	\$19,819,005	\$19,757,058	\$83,407,699
Logistics (Vehicles, cold chain and other eq	\$2,506,206	\$1,290,560	\$1,670,888	\$1,179,574	\$127,082	\$6,774,310
Campaigns	\$40,595,890	\$97,386,968	\$127,426,041	\$137,377,921	\$96,762,663	\$499,549,483
<b>Total Funding Gap*</b>	<b>\$64,311,287</b>	<b>\$123,633,272</b>	<b>\$161,919,151</b>	<b>\$173,724,532</b>	<b>\$134,664,254</b>	<b>\$658,252,496</b>

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

## BRIDGING THE FUNDING GAP IN FINANCING.

Most areas of the immunization service have substantial funding when we consider the secured funds that are available (21-51%). However when the probable funding is included; GAVI funding for new and under-utilized vaccine (YF) which has been approved and other Agencies that planned to commit resources but are yet to do so, the funding gap reduces considerably. Having said that considerable gap still exists in many of the years particularly in the year 2010 when the sources of funding cannot be guaranteed.

Part of the cMYP include plans to institute and strengthen the ICC at sub-national levels, this will improve the resource mobilization potential at the sub-national level and help secure more fund for future financing of the Immunization programme.

In addition the Federal government commitment to Health, including immunization services is expected to also increase.

The immunization programme also has a lot of key development partners and these have continued to support the government, thus working within the National ICC it is the intention to continue to plan and work with these partners to bridge the gaps as the years go by.

## **6 Annexes**

- Maps
- ICC Structure
- ICC governance
- RI Data
- SIA Data
  - OPV
  - Measles
- IDSR Data