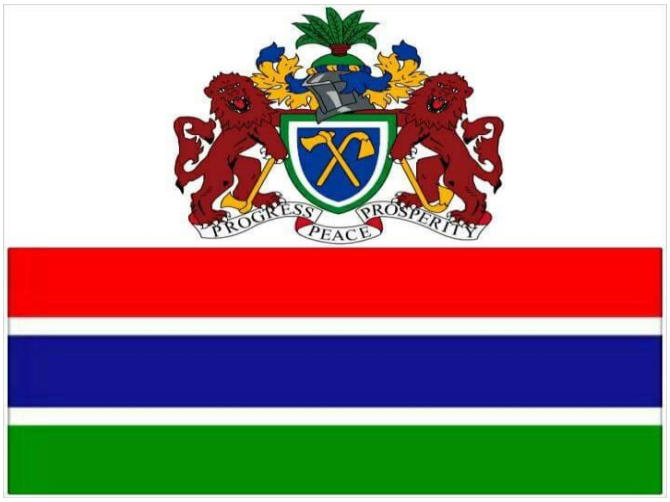

COMPREHENSIVE MULTI-YEAR PLAN FOR IMMUNIZATIONS (2017 – 2021)

THE GAMBIA

Contents

ABBREVIATIONS

AD	Auto-Disable
ADB	African Development Bank
ART	Antiretroviral Therapy
AEFI	Adverse Events Following Immunization
AFP	Acute Flaccid Paralysis
AIDS	Acquired Immunodeficiency Syndrome
APHO	Assistant Public Health Officer
ARI	Acute Respiratory Infections
BEMOC	Basic Emergency Obstetrics Care
BCG	Bacille Calmette-Guerin vaccine
BHS	Basic Health Service
CAN	Community Nurse Attendant
CBR	Crude Birth Rate
CDR	Crude Death Rate
CEO	Chief Executive Officer
CHN	Community Health Nurse
cMYP	Comprehensive Multi Year Plan
CUG	Close User Group
DHPE	Directorate of Health Promotion and Education
DHR	Directorate of Health Research
DHRH	Directorate of Human Resources for Health
DHS	Directorate of Health Services
DNPS	Directorate of National Pharmaceutical Services
DOTS	Directly Observed Treatment, Short Course
DPI	Directorate of Planning and Information
DPT	Diphtheria, Pertussis and Tetanus toxoid vaccine
DRF	Drug Revolving Fund
DST	Drug Sensitivity Test
DSW	Directorate of Social Welfare
ENC	Basic Emergency Newborn care
EPI	Expanded Programme on Immunization
EVM	Effective Vaccine Management
FP	Family Planning
GAVI	Global Alliance of Vaccine and Immunization
GFATM	Global Funds for AIDS, Tuberculosis and Malaria
GBOS	Gambia Bureau of Statistics
GDHS	Gambia Demographic and Health Survey
GDP	Gross Domestic Product
GIVS	Global Immunization Mission & Strategies
GLF	Gambia Local Fund
GNI	Gross National Income
GRISP	Global Routine Immunization Strategies and Practices
GVAP	Global Vaccine Action Plan
HCW	Healthcare workers

HePDO	Health Promotion and Development Organization
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HPV	Human Papilloma Virus
HSRS	Health Sector Requirement Studies
HSS	Health System Strengthening
ICC	Inter-agency Coordination Committee
ICT	Information Communication Technology
IDSR	Integrated Disease Surveillance Response
IEC	Information, Education and Communication
IMF	International Monetary Fund
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
IMR	Infant Mortality Rate
IWC	Infant Welfare Clinic
IPC	Inter Personal Communication
ISS	Immunization Service Support
JRF	Joint Reporting Form
KABP	Knowledge Attitude and Behavioral Practice
LDCs	Least Developed Countries
MCH	Maternal and Child Health
MCNHRP	Maternal and Child Nutrition and Health Results Project
MDG	Millennium Development Goal
MenA	Meningococcal A
MICS	Multiple Indicator Cluster Survey
MMR	Maternal Mortality Rate
MOFEA	Ministry of Finance and Economic Affairs
MOH&SW	Ministry of Health and Social Welfare
MPA	Minimum Package of Activities
MR	Measles-Rubella
MRC	Medical Research Council
MDFT	Multidisciplinary Facilitation Teams
NACP	National AIDS Control Programme
NCDs	Non-Communicable Diseases
NGOs	Non-Governmental Organizations
NHA	National Health Account
NID	National Immunization Day
NITAG	National Immunization Technical Advisory Group
NPHLS	National Public Health Laboratory Services
NT	Neonatal Tetanus
OIC	Officer in Charge
OPV	Oral Polio Vaccine
PAGE	Programme for Accelerated Growth and Employment
PHC	Primary Health Care

PHO	Public Health Officer
PIE	Post Introduction Evaluation
PPE	Personal Protective Equipment
PRSP	Poverty Reduction Strategic Paper
RCH	Reproductive and Child Health
RED	Reaching Every District
RHD	Regional Health Director
RHD	Regional Health Directorate
RPPHO	Regional Principal Public Health Officer
ROO	Regional Operations Officer
SBCC	Social and Behaviour Change Communication
SDD	Solar Direct Drive
SIA	Supplementary Immunization Activities
SSA	Sub Saharan Africa
STI	Sexually Transmitted Infection
SWOT	Strength, Weakness Opportunity and Threat
TB	Tuberculosis
TBA	Traditional Birth Attendants
TFR	Total fertility Rate
TT	Tetanus Toxoid vaccine
TV	Television
UN	United Nations
UNDP	United Nations Development Programme
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children Fund
US	United States
VDC	Village Development Committee
VPD	Vaccine Preventable Disease
VHS	Village Health Service
VHW	Village Health Workers (VHWs)
WHO	World Health Organization
YF	Yellow Fever

CHAPTER 1: COUNTRY INFORMATION

1.1 BACKGROUND

1.1.1 Demography

The Gambia is a narrow strip of land on both sides of the river, stretching inland for about 400 kilometers and occupies 11,000.square kilometers of land. The climate is subtropical Savannah with an annual rainfall of between 800mm – 1200mm lasting for about 5 months (mid-June to mid-October). The Gambia is predominantly an agrarian society with ground nut being the main cash crop. However, tourism also plays an important role in the economy. The Republic of The Gambia has an estimated total population of 1.8 million in 2015 with an annual growth rate of 3.3%[1]. The Gambian population is characterized by its youthful nature. Forty-four percent (44%) are below the age of 15 years; females constitute 51% of the total population and women of the reproductive age (i.e. 15 – 49 years) represent 23.3%.

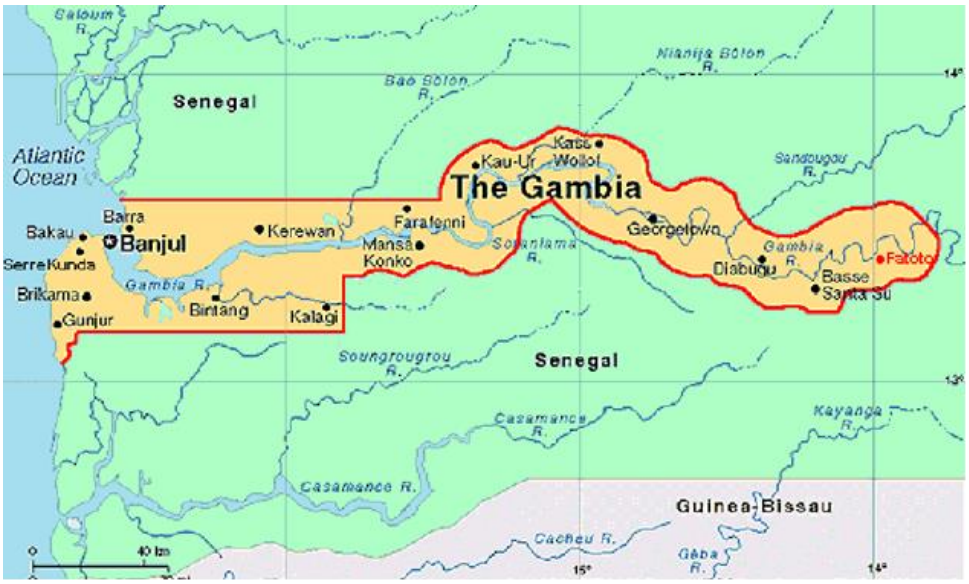

Figure X….. Administrative Map of Gambia

1.1.2 Socio-Economic Characteristics

The Gambia is amongst the Least Developed Countries (LDCs) with Gross Domestic Product (GDP) per capita of US$ 560 (IMF Staff report 2011). The national economy is based mainly on agriculture, with groundnut as the main export crop. The recent upturn in performance of the economy has however been driven mainly by the service sector including tourism, telecommunication, construction, etc. However it is the services sector that is the biggest contributor to GDP, at 60%, with agriculture contributing about 30%. The economy grew by

[1] National Population census 2003 projected

7.2% in 2007 over the preceding fiscal year; national revenue has been increasing progressively; inflation reducing to low single digit levels and was 2.3% as at end May 2007 (PRSP II, 2007). According to MOFEA, the Gambia has been registering annual GDP growth rates of more than 5% (2008-2011) during the current global economic crisis, and has maintained a stable macroeconomic environment that is increasingly threatened by a mounting debt burden. The Gambia is ranked 168 out of 187 countries in the 2011 UN Human Development Index and the last poverty survey (2008) revealed that about 55% of the population lives below the poverty line. The economy suffered a contraction of GDP to 4.3% in 2011 due to drought. This was due to a fall in crop production of around 45 per cent in that year, despite several non-agricultural sectors of the economy, such as tourism, performing well during 2011. The figures for 2012 show a rebound in GDP growth of 5.3 per cent due to a recovery in crop production and strong growth in wholesale and retail trade, and construction. The services sector saw its total contribution drop 1.8 percentage points from 16.3 per cent in 2011 to 14.5 per cent in 2012 (PAGE 2012).

CHAPTER 2: SITUATION ANALYSIS

2.1 **HEALTH SYSTEM ANALYSIS**

2.2.1 Function of the National Health System

The MOH&SW is responsible for the management of the health sector, which includes: policy formulation and policy dialogue, resource mobilization, regulation, setting standards, health service delivery, quality assurance, capacity development and technical support, technical advice to other government line Ministries on matters of public health importance, provision of nationally coordinated programmes such as epidemiology and disease control, coordination of health research and monitoring and evaluation of the overall sector performance. Due to on-going health system reforms, such as decentralization of health services, some of the functions of the central level management have been delegated to national semi autonomous institutions including referral hospitals, specialist and general hospitals, professional councils, national drug authority and other regulatory bodies as well as local government authorities and research activities conducted by some research institutions.

The Ministry is headed by a Minister who is appointed by the President and head of state, and assisted by a Permanent Secretary, who serves as the Chief Administrator of the Ministry. Two deputy permanent secretaries also assist the Permanent Secretary; The Deputy Permanent Secretary Technical assists the Permanent Secretary on technical operations of the Ministry, while the Deputy Permanent Secretary Administration and Finance assists the permanent secretary on administrative and financial matters.

2.2.2 Organization of The Gambia National Health System

The current organizational structure at the Ministry comprises of two departments namely; Medical and Health Department and Social Welfare Department. The department of Medical and Health comprises of; Directorate of Health Services (DHS); Directorate of Planning and Information (DPI); Directorate of National Public Health Laboratory Services (NPHLS); Directorate of Health Promotion and Education (DHPE); Directorate of Health Research (DHR); Directorate of Human Resources for Health (DHRH) and Directorate of National Pharmaceutical Services (DNPS). The Department of Social Welfare comprises of one directorate, which is the Directorate of Social Welfare (DSW).

The public health sector covers 90% of the health facilities in the country, complemented by a few NGO and private sector run health facilities, mainly located in the Greater Banjul Area. Thus, in the Gambia, the provision of healthcare is dominated by the Government facilities, with a minimum (subsidized) charge for accessing treatment under the basic care package at the three levels of health service delivery. The large majority of private health facilities are located in the Greater Banjul Area, making choice in health services delivery point in the rural community non-existence.

2.2.3 Governance

The central level is the decision-making point for the health sector's internal issues. The six directorates of the two departments plan, direct, manage and coordinate all Government health care activities countrywide through specialized units. The relationship between these directorates is neither vertical nor horizontal but iterative. The country is divided into seven health regions each with a regional health team (RHD), headed by a Regional Health Director (RHD). The RHDs are responsible for the day-to-day administration, management and supervision of health services in their respective regions. They have overall responsibility for the primary and secondary health care facilities and their staff within their regions. The Regional Public Health Officer, Regional Public Health Nurse, Senior Administrative Officer and other support staff, assists the RHDs. The tertiary level, which comprises the hospitals and teaching hospital on the other hand, has semi-autonomous boards and headed by CEOs and CMDs respectively.

The public health system is complemented by more than 60 private health facilities, NGO and community managed health facilities. Formal health services in The Gambia are delivered mostly in health facilities funded by the Government of The Gambia. These facilities are also supported by a number of donors and NGOs. NGOs and private practitioners also provide services though most of them are located in the Greater Banjul Area. In addition, there are a large number of private pharmacies, drug sellers, and traditional healers that deliver health services of some kind.

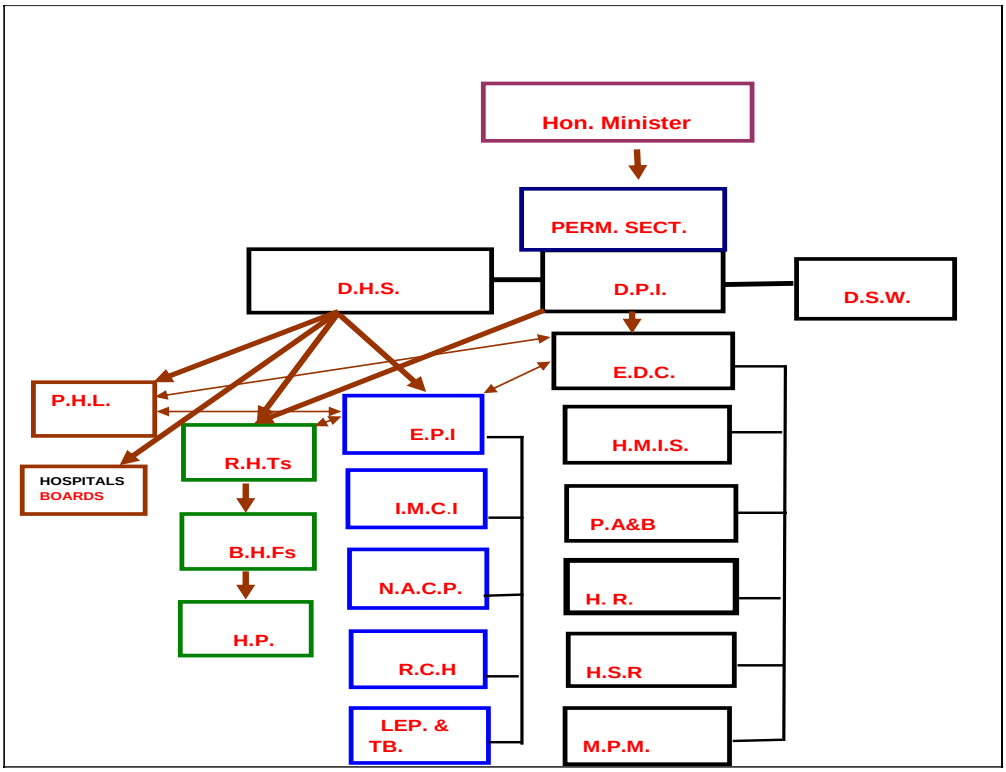

Figure 1: Organogram of The Gambian Health System

Table 1: Health facilities by type and Region

Health Facility Type	WHR1	WHR2	NBWR	NBER	LRR	CRR	URR	Total 2012
Hospitals	4	1	0	1	0	1	1	7
Major Health Centres	1	1	1		1	1	1	6
Minor Health Centres	5	4	4	6	5	7	10	41
NGO Facilities and Clinics	5	4	2		12	0	4	18
Private Health Facilities	6	9	0	0		12	5	23
Community Managed Facilities	7	9	6	5	4	8	1	40
Specialized RCH Clinics	2	0	0		10		10	4

RCH Outreach Clinics	13	24	32	31	34	62	61	257
RCH Base clinics sites	18	6	6	7	5	9	7	58
Total RCH clinic sites	31	30	38	38	39	71	68	315
PHC Key Villages	3	12	13	9	8	17	12	74
Total PHC Villages	26	92	100	95	92	159	70	634
Service Clinics		40	0	1	1	1		18
Total Service Delivery Points	91	150	151	148	145	251	160	1,096

Source: Health Service Statistics Report, 2012

2.2.4 The Referral System

Activities within the private sector of the health care delivery service are regulated and monitored by the Directorate of Health Services, a function that the regulatory bodies should be involved. The relationship between MoH&SW and the private sector health facilities is cordial. The Government is the main provider of health services in the country. The Government through its annual budgetary allocation to the health sector funds health care services. Donor partners such as UNICEF, WHO, UNDP, UNFPA, Global Fund, ADB etc. also give maximum support to the health sector through programmes and projects' support.

2.2.5 **The Tiers of The Gambia National Health System**

2.2.5.1 *Tertiary health Care (Hospitals)*

Currently there is one teaching and specialised hospital (Edward Francis Small Teaching Hospital) and five general public hospitals namely: Sheikh Zayed Regional Eye Care Centre in Kanifing, Bansang Hospital in Central River Region, Armed Forces Provisional Ruling Council hospital in Farafenni, North Bank Region, Sulayman Junkung General Hospital in Bwiam, Serekunda General Hospital in Kanifing and Jammeh Foundation for Peace Hospital in Bundung. They have semi-autonomous status, with hospital management boards, and are not generally supplied or supervised by the RHDs. They do, however, have some important responsibilities to the RHDs, including reporting diseases incidences, maternal deaths, and providing feedback on patients referred to them by the VHS and basic health facilities. The administration at the hospitals generally consists of the Chief Executive Officer and several administrative staff.

2.2.5.2 *Basic Health Services*

Basic Health Service is at the secondary level of the national health systems and it comprises of major and minor health facilities. The major health centre serves as the referral point for minor health centres for services such as: Family planning (prescribe contraceptives

and follow-up users; perform surgical contraception for men and women), Maternal and child Health (Provide basic gynaecological services; manage normal and complicated deliveries (including C-section); counsel mothers on infant and child nutrition, audit maternal deaths; provide antenatal, postnatal care (in facility and through treks) Disease Management: (Diagnose and treat cases of diarrhoea/dehydration, ARI, malaria, HIV/AIDS, STIs, leprosy and TB; manage simple mental health cases), Minor Surgery, Radiology Services, and Laboratory Services and Referral (refer and transport serious illnesses and injuries, or cases needing specialist care, to the nearest public hospital). The standard bed capacity for major health centres ranges from 110-150 beds per 150,000 - 200,000 population. The minor health facilities provide the following services: RCH services, FP services, Nutrition services, control of common endemic diseases, Health promotion and protection and provision of essential drugs and vaccines. A minor health facility has between 20–40 beds per 15000 population and should provide 70% of the basic health care package.

These BHS facilities provide the core outpatient (OPD) clinics and the Reproductive and Child Health (RCH) services. OPD clinics usually are held daily and treat children age five and above and all non-pregnant adults, as well as children less than five years and pregnant women. RCH clinics provide most of the health care to children under the age of five (Infant Welfare Clinic, IWC) and antenatal care for pregnant women including immunizations services. RCH base clinics are held at the facility at least once per week. Trekking team visits a set schedule of outreach clinics in each health facility's catchments area. These trekking stations are visited at least once a month, depending on the catchment area population. The RCH team usually consists of a nurse midwife, health facility-based CHNs or CHN/midwives (with the addition of the VHS/CHN at some of the clinics), Community Nurse Attendant(s) (CNAs), an APHO for EPI activities and a Drug Revolving Fund (DRF) collector. The number of staff will vary with the size of the facility and the catchment area. User fees were introduced in 1988 as part of the cost recovery programme. However, government introduced a policy for free maternal and child health services in 2007.Growth monitoring of children under five, antenatal care, immunizations and family planning services are all provided through these RCH base and trekking clinics. Supervision of the RCH team is carried out by the basic health facility and, ultimately, by the RHD.

Eighteen facilities run by NGOs supplement the government-run facilities and are supervised by the RHD in whose jurisdiction they operate. The Medical Research Council (MRC) is British research organizations that provide clinical services at Fajara, Keneba, and Basse. Twenty-three private health clinics and many pharmacies also diagnose and prescribe treatment, particularly in the urban area. These are not integrated into the government system, and provide services for fees paid by the patients.

2.2.5.3 *Village Health Services (VHS)*

Primary health care villages have been selected from those with a population of 400 and above or from those located in relatively isolated areas. In these villages, village health workers

(VHWs) and traditional birth attendants (TBAs) are selected by the Village Development Committee (VDC). They are given 6 (TBAs) to 8 (VHWs) weeks of formal training using a standardized curriculum at a designated place by the MOH&SW and partners. These workers are issued a start-up supply of medication and equipment (minimal) by Government. A fee of D 0.75($0.02) is charged for each patient seen. This money is paid to the VDC treasurer to be used for the purchase of additional drugs and supplies as needed. The VDC provides support to VHWs through in-kind contributions or voluntary labor in their farms. The VHW functions as a primary health care provider for minor illnesses and injuries, serving males and females of all ages. In addition, the VHW functions as a community based health educator and adviser. The TBA, as their name implies, have been part of the culture long before the formal health care system was introduced. They function as trained birth attendants, as antenatal and postnatal advisers, family planning distributors and health educators. Both TBA and VHW are expected to refer serious cases to the local health facility. The VHWs and TBAs are supervised and given continuing education by VHS/Community Health Nurses (VHS/CHN) who oversees circuits of 4 to 10 PHC villages. These VHS/CHNs in turn report through their nearest BHS facility and is supervised by the OIC of that facility and by the Regional Health Team. There are 634 PHC villages organized into 69 circuits. The CHNs were provided with motorcycles for supervisory VHS trekking. The VHS/CHNs are essential for the successful functioning of primary health care in The Gambia.

Effective and efficient referral services from one level of health care to another (community to secondary and secondary to tertiary), are important in patient management and disease outcome. However, the current referral system still has major challenges. Some of the challenges include inadequate and ill equipped ambulances, intermittent shortage of fuel, inadequate feedback mechanism, inadequate referral protocol and guidelines and late referrals especially at community level. This situation is further compounded by limited (only receiving) telecommunication services within health facilities.

2.2.6. Partnership in Health

Effective partnership and participation can contribute significantly to financing health. However, priorities of actors may differ from that of the national health agenda. This promotes vertical health programmes, inefficient utilization of health services which also has negative impact on the sustainability and overall performance of the health system. For these reasons better coordination mechanism of all actors and partners in health and healthcare delivery is required for sustainability and better health outcomes. Partnership will be based on consensus with partners on the strategic interest of the health sector and the common basket approach will form the basis for donor funding in health.

It is in the light of the aforementioned reasons that the national health policy provides a comprehensive framework for support to the sector, but is not sufficient alone to guarantee a coordinated approach to health sector development. The composition of stakeholders in the health sector is complex; there is a diverse range of partners who provide support in many

different forms. Such an environment necessitates the need for partner coordination, which is deemed critical for the successful implementation of any National Health Sector Strategic Plan.

In an attempt to strengthen the existing coordination mechanisms, the Ministry of Health in 2011, established coordination mechanisms such as: The Resource Mobilization Committee, Fellowship Committee, Institutional Committee, Bilateral Committee, MOU Committee, Project Management and Monitoring Committee, Hajj Committee, and the Regional Health Advisory committee.

National, regional and international cooperation are in line with the activities outlined in the health sector strategic plan by the Ministry of Health for the implementation of the Health Sector Policy. Multilateral, bilateral and non-governmental cooperation is founded on the basis of mutual agreement between the Government and the donor country or organization. Mechanisms for the joint management and evaluation of resources to support the functioning of health services are to be strengthened. The mechanisms for national and international coordination, as initiated by the MOH&SW and certain partners, are to be put in place under the umbrella of a sector-wide approach.

The health mapping exercise of 2001 defined the packages that were being implemented at the different levels of the health care delivery system. This was based on the reports of 3 documents, Health Sector Requirement Studies, 1995 (HSRS); the 1998 PER and the Report on extended Senior Management meeting, MoH&SW, December 1998 (MoH&SW SMM). The last review of the service delivery packages was based on the DOSH SMM report, where the packages were defined for PHC level, including RCH trekking sites, secondary level, distinguishing between minor and major health centre services; and tertiary level. Since then, no review of the service delivery packages has taken place, whilst the challenges of the health sector significantly changed with an increasing prevalence of Non communicable diseases, to cite an example.

Table 2:Components of basic health care package at the various levels of the health care delivery system

PHC	Minor H/C	Major H/C	Hospitals
Maintain supply of essential drugs;	MCH/FP (including obstetric services, vaccinations and contraceptives)	Out-patient services	All services provided by major health centres
Provide outpatient care, **make home visits;**	PHC	In patient	Specialized care using more sophisticated equipment.

carry out health education	Disease management	PHC	
conduct deliveries;	Referral of serious illness	Disease management	
identify and refer at-risk mothers	Eye care	MCH / FP (including obstetric services, vaccinations and contraceptives)	
provide care for minor ailment	Leprosy and Tuberculosis control	Minor surgery and laboratory services	
prevention and promo-tion activities	Public Health services	Referral of serious illness	
MCH: very basic obstetrical care;	In-Patient	Eye Care	
Referral to dispensaries or health centres.			
health education (including nutrition education			
MCH (antenatal, postnatal care, Family Planning)			
infant welfare care (including immunization)			

Table 3: Minimum Health Care Package (Health Policy 2012)

VHS	Minor H/C	Major H/C	Regional Hospital	Teaching Hospital
Primary care service including:	Maternity care (antenatal, delivery and postpartum	All services provided at minor H/C level	All services provided at major H/C level	All services provided at regional hospital level
treatment of minor illnesses and referrals	Family Planning	Comprehensive emergency obstetric care (including theatre and blood transfusion services)	Specialist care and service	Specialist hospital services (in- and out-patient services)
environmental health & sanitation	STIs/RTIs/HIV/AIDS prevention and control	Functional theatre	Higher level referral services	Post-mortem and embalmment services
antenatal, delivery and postpartum care,	IMNCI	Comprehensive emergency new- born care	Specialized dental and eye care services	Overseas referral
home visits,	Immunization	In-patient services	Comprehensive laboratory services	
community health promotion activities	Neonatal and child health	Pharmacy Services	Radiology services	
	Maternal and child nutrition	Basic Lab. services including HIV and TB Screening.		
	Basic EMOC			
	Basic emergency new-born care (ENC)			
	Disease prevention and control(malaria, TB, etc)			
	Health protection and control			
	Basic Lab services(HB, BF, VDRL, Urine analysis TB and HIV			

	screening)			
	In-Patient			
	Referral Service			
	Dispensary			
	Eye Care Service			
	Out-Patient			
	Registration of birth and death			

Regarding the implementation of the minimum package of activities (MPA) as defined in 2001, certain discrepancies exist across the levels, in that at the lower level (PHC) there is higher implementation of the package than at higher levels (Major H/Cs). In addition, variance in implementation has also been observed at the same level. For instance 50% of major health centres are currently equipped to perform Comprehensive emergency obstetric care (including theatre and blood transfusion services). Basse, Brikama and Soma are currently functional in terms of EMOC services, however, within the last ten years the number of major health centres that provide EMOC services varies between different facilities.

Over the last ten years, the disease pattern has changed significantly with increasing prevalence of non- communicable diseases (Table 3). The MPA as last defined has not accommodated the screening of cancers, testing for diabetes, haemodialysis, etc. These deviations, among others underline the urgency to review and implement health care packages for different levels of the health care delivery system.

2.2.7 Health Indices of The Gambia

The Crude Birth Rate (CBR) is 40.5 per 1000 population (Gambia Demographic and Health Survey [GDHS], 2013) and the Crude Death Rate (CDR) is estimated at 9.24 per 1000 population (World Bank Report, 2010). The Infant Mortality Rate (IMR) is 34 per 1000 and Under-5 Mortality Rate (>5 MR) is reported at 54 per 1000 live births (GDHS, 2013), Maternal Mortality Ratio (MMR) is 433 per 100000 live births (GDHS 2013). The Gambia is among the least developed and poorest countries; ranked 168 out of 182 countries in the Human Development Index of 2011 with a per capita Gross National Income (GNI) of about $US 1,282(UNDP, 2011). 61.2% of the population lives below the poverty line with a marked variation between urban and rural populations. Sixty percent of the population lives in the rural area; and women constitute 50.5% of the total population. The high fertility level of 5.6 births per woman (GDHS, 2013) has resulted in a very youthful population structure. The annual population growth rate is 3.3% (GDHS, 2013). Nearly 44% of the population is below 15 years and 19% between the ages 15 to

24 years; whilst those aged 65 years and above account for about 3.4% of the population, (Multiple Indicator Cluster Survey [MICS], 2006).

The health sector despite remarkable achievements registered in the past is still under great pressure due to a number of factors: high population growth rate, increasing morbidity and mortality, insufficient financial and logistic support, deterioration of physical infrastructure, inadequacies of supplies and equipment, shortage of adequately and appropriately trained health personnel, high attrition rate as well as inadequate referral system. Poverty, traditional beliefs and low awareness have led to inappropriate health seeking behaviours thus contributing to ill health.

Indicators of child and maternal mortality are improving, however more work need to b done in the following areas: poverty, low literacy, prevalence of communicable and non-communicable diseases such as Malaria, Diarrhoea, Pneumonia, Tuberculosis, Accidents, Hypertension, Cancers, and Pregnancy related conditions, and malnutrition and HIV/AIDS and its spread. Most of these diseases can easily be prevented if appropriate environmental and lifestyle measures are taken, with more attention paid to development of health promotion and prevention actions than merely focusing on curative care alone.

HIV prevalence stands at 1.9% with the main route of transmission being through heterosexual contact. However, in children, the major mode of spread is by transmission from mother to child during pregnancy, delivery and through breast-feeding. On the other hand, under-nutrition continues to be a major public health problem in the country, with 25% of children chronically malnourished or stunted and 8% severely stunted. 12% of the children were found to be wasted or acutely malnourished, with 4% severely wasted. 16% were found to be underweight, with 4% severely underweight (GDHS 2013), aggravated by poverty, food deficit, rural-urban migration, environmental degradation, poor dietary habits, low literacy levels, poor sanitation, infections and a high population growth rate.

Like many developing countries, The Gambia is also experiencing the ‘double burden of malnutrition’ with the emergence of Diet-related Non-Communicable Diseases (NCDs) such as diabetes, hypertension, coronary heart disease, obesity, and some forms of cancers. With infectious diseases still a major public health burden, the increase in prevalence of diet-related non-communicable diseases poses a challenge for the allocation of scare resources and is exerting immense pressure on an already over-stretched health budget.

Table 4: Basic Health Profile of Gambia

No	Indicator	Rate/Ratio	Source (Year)
1	Infant Mortality	34/1000	GDHS, 2013
2	Neonatal Mortality	22/1000	GDHS, 2013
3	Under Five Mortality	54/1000	GDHS 2013
4	Crude Birth Rate (CBR)	40.5/1000	DHS, 2013
5	Crude Death Rate	9.24/ 1000	(World Bank Report 2010)
6	Growth Rate	3.3%	GBOS, 2013 (2013 census)
7	Maternal Mortality	433/100000	GDHS, 2013
8	Antenatal care		
	a. At least once by skilled personnel	98.9%	GDHS,2013
	b. At least four times by a skilled personnel	77.6%	GDHS, 2013
9	Deliveries attended by skilled personnel	57%	GDHS, 2013
	Total fertility Rate (TFR)	5.6%	GDHS, 2013
	Contraceptive Prevalence	9%	GDHS, 2013
	Family planning Unmet need	24.9%	GDHS, 2013
11	HIV prevalence	1.9%	GDHS, 2013
12	Life expectancy	62. 5 Years-males 65 years-females 63.4 see more up to date	GDHS, 2013
13	Literacy Rate	69.9%	GDHS, 2013
14	Poverty Index	61.2%	UNDP, 2011
15	GDP per capita	USD 428	MoFEA, 2014
16	Total Health expenditure per capita (USD)	USD28.08	NHA, 2013
17	Total government expenditure on health per capita (USD)	USD 7.89	NHA, 2013

18	Government expenditure on health as percent of general government expenditure	12.4%	NHA, 2013
19	General government expenditure on health as percent of total expenditure on health expenditure on health	28%	NHA, 2013
20	Out of pocket expenditure on health as percentage of total health expenditure health expenditure	21.21%	NHA, 2013
21	Malaria incidence	10% or 103/1000	MOH&SW 2012
22	Professional Health workers per 10000 population	8.3/10000	MOH&SW 2012
23	Doctors per 10000 population	1.1/10000	MOH&SW 2012
24	Nurses per 10000 population	3.2/10000	MOH&SW 2012
25	Midwives per 10000 population	1.8/10000	MOH&SW 2012

2.2.8 Achievements and Challenges of the Health Sector

2.2.8.1 Achievements

A five-year strategic plan 2010-2014 was developed but the institutional arrangement was not in place to steer and monitor its implementation. Notwithstanding the health sector has registered several achievements: For instance, there is high political commitment for TB control in the Gambia. Diagnosis and treatment of TB is provided free of charge to all irrespective of nationality. There has not been any stock-out of anti-TB drugs in The Gambia. With the support of Global Fund, NLTP has increased Directly Observed Treatment, Short Course (DOTS) centres as part of the scale up plan from 11 in 2006 to 36 centres in 2013 including the Mile 2 central prison for infection control measures. Diagnosis of new smear positive cases increased from 1306 cases in 2008 to 1429 cases in 2012. The proportion of new smear positive TB cases (SS+) in all notified cases has increased from a baseline of 52% in 2003 to almost 64% in 2012. According to the routine HIV surveillance report, HIV prevalence among TB patients is estimated at 16%. In 2012, 69% and 98% of TB/HIV co-infected patients were initiated on ART and CPT respectively. NLTP has succeeded in the procurement a GeneXpert that can test many samples for Drug Sensitivity Test (DST) and culture in a short period of time. TB prevalence survey was successfully conducted under the RD 9 TB grant, a second of its kind in Africa. Finally, defaulter rate declined from 14% in 2005 to 2% in 2011 while treatment success rate increased from 86% in 2006 to 89% in 2012, exceeding the WHO target of at least 85%.

1. The HIV prevalence rate is 1.57% for HIV1 and 0.26% for HIV2 (MOH&SW 2012) compared with 2.8% for HIV1 and 0.9% for HIV2 (MOH&SW 2006).
2. There has been an increase in national coverage for penta-3-immunization of children from 96% in 2011 to 98 % in 2012 (MOH&SW2012).
3. Several policy documents have been developed on Health Financing, Non Communicable Disease, Tobacco Control, Tuberculosis and HIV, Reproductive Child Health, Health Research, Human Resource for Health, Mental Health, Traditional Medicine, and Prevention of Mother to Child Transmission, Social Welfare, and Disability.
4. The infant and under-five mortality rates were 98/1000 live births and 141/1000 live births in 2006 (MICS, 2006), which declined to 81/1000 and 109/1000 live births in 2010 respectively (MICS, 2010). These rates further declined to 34 and 54/1000 live births in 2013 respectively (GDHS, 2013).
5. Maternal mortality ratio dropped from 1050/100000 live births in 1990 (MoH&SW 1990) to 730/100000 live births in 2001(MoH&SW 2001) and further reduced to 433/100 000 live births in 2013 (GDHS, 2013).
6. The proportion of underweight children has increased from 17% in 2010 (MICS, 2010) to 22.6% in 2015 (SMART, 2015).

2.2.8.2 Challenges

Over the years, significant achievements were registered by the Health and Social Welfare Sector as highlighted above. However, in recent past frequent changes in senior management has hindered policy implementation, which also has the potential for eroding the much-needed institutional memory. In addition, there are limited human, financial and material resources to meet the growing demand of health and social welfare services at national, regional and community levels. High attrition rate of skilled health and social workers attributed to a number of factors such as poor working conditions and challenged personnel management (MOH&SW 2005). Furthermore, there is insufficient supply of drugs, basic equipment, consumables and other logistics including inadequate health and ICT Infrastructure. This situation therefore hinders efforts to reduce the burden of communicable and non-communicable diseases. Significant gains have been registered in the health service delivery system such as Expanded Programme on Immunisation (EPI), Reproductive and Child Health (RCH). However, sustaining the gains in service management areas such as Health Management Information System (HMIS), Health Financing, and referral services remain a challenge to the health system in general. Below is a brief summary of some of the key areas requiring urgent actions for greater achievements in the health sector.

Over the years, government has continually invested in the development of the human resource base for the health sector through the University of The Gambia (school of Medicine and Allied Health Sciences), the Gambia College (School Nursing and Midwifery and The School Of Public Health), the School for Enrolled Nurse in Bansang and the School for

Community Health Nurses in Mansakonko. Thus, more medical doctors, nurses, nurse midwives, pharmacists, public health officers and laboratory technicians are now providing invaluable health services to the Gambian Population. In addition, development partners such as the Global fund through the HIV/AIDS-Health System Strengthening (grant 8) has supported the training of nurses, laboratory technicians, pharmacy assistants and village health workers all geared towards improving health care delivery in The Gambia. Despite all these laudable initiatives and achievements, the physician population ratio estimated at 1.1 per 10,000 and the nurse/midwives -population estimated at 8.7 per 10,000 population in 2013 (WHS, 2015), underscore the urgent need for scaling-up training and retention of medical doctors, nurses and midwives in the health sector. In addition, the number of public/ environmental health officers increased from 100 in 2013 to 128 in 2014 (Human Resource for Health Directorate, 2014).

Government expenditure on health as percentage of total government expenditure in 2013 amounts to 12.5% and the total expenditure on health as percentage of GDP reported at 5.6% in 2013 (NHA, 2013). However, Government has steadily shown commitment in the budget apportioned to the health sector, notwithstanding the 15% allocation from the national budget, as pledged in the Abuja Declaration is still not achieved. In addition, out-of-pocket expenditure as percentage of private expenditure on health estimated at 30.7% (NHA, 2013) continues to impact negatively on the livelihood of the ordinary Gambians resulting in catastrophic health expenditure.

Whilst significant investment has been made in terms of availability of modern health care facilities across the country, diagnostic and rehabilitation services/facilities are limited and inequitably distributed. Similarly, adequate and skilled human resource to operate efficiently such services/machines also poses some challenges. In addition, ICT infrastructure and services are largely confined within the urban centres, but the low bandwidth and human resource capacity presents a challenge especially when plans are underway to introduce e-health services in the Ministry.

Government through the health ministry has invested greatly in medical consumables including essential drugs. However, owing to the high demand vis-a-vis population growth continues to exert pressure on the availability of drugs, and as such drug shortages in health facilities are often being reported. For instance, an assessment of the health sector based on the PAGE mid-term evaluation report 2012-2013, revealed 17% and 15% of male and female respondents respectively reported that their main reason for dissatisfaction with the health sector was primarily due to drug stock-out.

2.2.9 National Health Strategic Plan 2014-2020

The strategic priorities are in line with The National Health Policy, the PAGE, MDGs and Vision 2020 targets. These priorities are:

1. Maternal, neonatal, infant and child health services
2. Surveillance, prevention, control and management of communicable and Non communicable diseases (NCDs)
3. Improve knowledge and skills of health care providers at all levels
4. Build capacity of the Health Management Information System (HMIS) and data management system within the health sector
5. Improve health infrastructure at primary, secondary and tertiary health care levels
6. Establishment of a National M& E coordinating body

Vision: Provision of quality and affordable Health Services for All By 2020

Mission: Promote and protect the health of the population through the equitable provision of quality health care.

Goal: Reduce morbidity and mortality to contribute significantly to quality of life in the population.

The strategic objectives of the Gambia health sector strategic plan are;

1. To provide high quality basic health care services that is affordable, available and accessible to all Gambian populace.
2. To reduce the burden of communicable and non-communicable diseases to a level that they cease to be a public health problem
3. To ensure the availability and retention of highly skilled and well-motivated HR for Gambian populace based on the health demands
4. To increase access to quality pharmaceutical, laboratory, radiology and blood transfusion services to all by 2020
5. To improve infrastructure and logistics requirements of the public health system for quality health care delivery
6. To establish an effective, efficient, equitable and sustainable health sector financing mechanism by 2020
7. To improve the effectiveness and efficiency of Health Information System for Planning and decision making to yield improved service delivery
8. To ensure effective and efficient health service provision through the development of effective regulatory framework and Promoting effective coordination and partnership with all partners

2.2.10 Status of implementation of the cMYP 2012-2016

2.3 Immunization System

2.3.1 Routine Immunization Analysis

Immunization coverage

During the period under review of the cMYP 2012-2016 for which data were available from the JRF 2012-2015, coverage of over 90% has been attained for both DPT3 containing antigen and measles at national level which was what the program set to achieve between 2012 and 2015 as shown in Table 4. In addition, the DHS 2013 has revealed that the percentage of fully immunized children stood at 76%. There is also consistency between the administrative DPT3 containing antigen coverage with that of the WHO-UNICEF estimate of national immunization coverage in 2012 and 2013.

Immunization demand

Based on the National Data from EPI for 2014 and 2015, the drop-out rate for both DPT1-DPT3 reported 2.03 and 1.97% respectively, BCG-Measles at 7.2% and 9.09% are both within the WHO acceptable range (ie. 0-10%).

Immunization equity

Based on the DHS 2013, people in the lowest income class utilize immunization services more than those individuals in the highest wealth quintile, giving us a percentage gap of -7.3%. DPT3 containing antigen coverage of >80% was attained in all the seven health regions of the Gambia as shown in the JRF2012-2015 in Table 4

New vaccine introduction

As shown in Table 5, new vaccines were introduced into routine immunization service namely; Measles 2nd dose (2012), Rota virus (2013) and IPV (2015). Furthermore, MR has now replace Measles in 2017; MenA and HPV in 2019. Since the introduction of the Rotavirus, for instance there has been an increase in the DPT3 containing antigen coverage from 96% to 97% in 2015, which connotes that the new vaccine had impact on routine immunization for the period. Following WHO recommendation, the country switched from TT to Td in January 2020.

Table 5 : Situation analysis of routine immunization in The Gambia

Routine immunization	Suggested indicators	National status				Source of Data
		2012	2013	2014	2015	
Immunization coverage	Official coverage estimates % DTP3 containing antigen.	98%	98%	96%	97%	JRF 2012-2015
	Official coverage estimates % Measles (1)	93%	94%	96%	97%	JRF 2012-2015

	Other official coverage estimates as per immunization schedule (DPT3)	98%	97%	-	-	WUENIC
	Most recent survey coverage % DTP3	-	87.7%	-	-	DHS 2013
	Percentage fully immunized child		76%			DHS 2013
Immunization demand	Percentage drop-out DTP1 – DTP3	-	-	2.03%	1.97%	NATIONAL DATA
	Percentage drop-out BCG – Measles	-	-	7.2%	9.09%	NATIONAL DATA
Immunization equity	Percentage gap in DTP3 between highest and lowest socio-economic quintiles		-7.3			DHS 2013
	Number and proportion of districts with DTP3 coverage >80%	7	7	7	7	JRF 2012 -2015
	Number of high-risk communities identified for accelerated routine immunization programming	-	-	-	-	-
New vaccines introduction	Number of new vaccines introduced into the routine schedule in the last plan period	1	1	0	1	GAVI APPLICATION
	Pentavalent coverage	98%	97%	96%	97%	JRF 2012-2015
	Rotavirus coverage	ND	ND	92%	97%	JRF 2014-2015

2.3.2 Accelerated Disease Control Analysis

Poliomyelitis:

The coverage for OPV3 has steadily surpassed the national target of 90% from 2012 to 2015 (JRF 2012-2015). The country had at least one round of polio campaign in 2012, 2013 and 2014 as part of effort to sustain her polio free status. Over the years, improvements in disease surveillance particularly on AFP was observed with a Non-AFP rate of 5.6/100000 children under 15 years of age in 2015 (Weekly WHO-IST bulletin 2015).

Maternal and Neonatal Tetanus (MNT)

Whist significant improvements in TT2+ coverage has been realized in 2015, it remains to be a major challenge. Despite the incorporation of MNT in The National IDSR strategy, cases of MNT are not being reported. The DHS 2013 has indicated delivery at health facility level at 62.6%.

Measles and Rubella

Measles (1st dose) has steadily increased with over 90% of the national target for the period 2012-2015. However, measles 2nd dose introduced in late 2012 has witnessed a remarkable increase over the years, however laboratory confirmed cases for measles has improved from 1 in 2014 to 71 cases in 2015, which may suggest that there was pockets of children still un-immunized against measles. The increase in the number of confirmed measles cases is due to increased capacity of surveillance officers in measles sample collection and investigation, in which incentives were tied to outputs, several suspected cases of measles have been reported

over the period 2012-2015. In addition, after the MR catch-up campaign in 2016, the country recorded localized outbreaks in 2018 and 2020 in URR and WR1 respectively.

Yellow fever

Over 95% coverage has been registered in The Gambia from 2012-2015 exceeding the national target of 90% (JRF 2012-2016). However the number of districts reporting >1 suspected case of yellow fever were above 20 and there was no round of yellow fever campaign conducted yet.

Epidemic meningitis

Data for routine Meningococcal A is not available as it is not part of the routine immunization services for the Gambia. However, Meningococcal A campaign held in 2013 achieved a104% coverage (JRF 2013) as shown in Table 5.

Table6: Situation analysis by accelerated disease-control initiatives in The Gambia

Disease-control initiative	Suggested indicators	National status[1]				Source of Data
		2012	2013	2014	2015	
Polio	OPV3 coverage	98%	96%	97%	96%	JRF 2012-2015
	Non-polio AFP rate per 100 000 children under 15 years-of-age	-	-	-	5.6	WEEKLY IST BULLETIN 2015
	Number of rounds of national (NID) and sub-national (SNID) immunization days Coverage range	1	2	2	0	JRF 2012-2015
MNT	TT2+ coverage	67%	58%	60%	82%	JRF 2012-2015
	Percentage target population protected at birth from neonatal tetanus	67%	58%	60%	82%	JRF 2012-2015
	Number and proportion of districts reporting >1 case of neonatal tetanus per 1000 live births	ND	ND	ND	ND	
	Was there an SIA? (Y/N)	NO	NO	NO	NO	
	Neonatal deaths reported and investigated	NO	NO	NO	NO	
	Delivery at facility rate		62.6%			DHS 2013
Measles & rubella	Measles / MR vaccination coverage (1st dose)	95%	96%	96%	97%	JRF 2012-2015
	Measles / MR vaccination coverage (2nd dose)	37%	53%	73%	81%	JRF 2012-2016
	Number of laboratory confirmed measles/rubella outbreaks	0	0	1	71	JRF 2012-2015

	Geographic extent national immunization day (NID) Age group Coverage	0	0	0	0	JRF
	Total measles cases (Lab/clinical/epidemiological)	93	135	98	172	JRF 2012-2015
	Total rubella cases (Lab/clinical/epidemiological)	93	135	97	101	JRF 2012-2015
Yellow fever	YF coverage	95%	97%	96%	97%	JRF 2012-2015
	Number and percentage of districts reporting >1 suspected case	26	43	20	24	
	Was a preventive campaign conducted? (Y/N)	NO	NO	NO	NO	
Epidemic meningitis	Meningococcal A coverage	-	104%	-	-	

2.3.3 Routine EPI Immunization System Components Analysis

The EPI Programme

The Expanded Programme on Immunization (EPI) is one of the frontline public health intervention programmes under the directorate of Health Services within the Ministry of Health (MoHSW). EPI started in the Gambia in May 1979, following the 1978 yellow fever epidemic in the Upper River Region (URR). Since its inception, it has been integrated into the Reproductive and Child Health (RCH) and services are delivered primarily through the static and outreach strategies. Owing to the high infant and under five mortality rates, EPI has also been linked with other public health intervention programmes/units such as the Epidemiology and Disease Control, National Malaria Control , Leprosy/Tuberculosis Control, Integrated Management of Neonatal and Childhood Illnesses (IMNCI), National AIDS Control Programme (NACP) and the Health Promotion Directorate. Furthermore, the Ministry of health's effort is complemented by a host of NGOs (local and international specifically health-oriented) and other private clinics within the Greater Banjul Area. From May 1979 to date, the EPI has made steady progress in implementing and attaining Global Initiatives such as Polio Eradication, Maternal & Neonatal Tetanus (MNT) and Measles Elimination as well as Reaching Every District (RED)/ Reaching Every Child strategy as envisioned in the WHO AFRO Strategic Plan.

EPI Programme Goal

The goal of the EPI Programme is to reduce childhood morbidity and mortality due to EPI target diseases. These include Tuberculosis, Poliomyelitis, Diphtheria, Pertussis, Tetanus, Measles, Yellow Fever, Hepatitis B, *Haemophilus influenza type b* and pneumococcal diseases. The primary target age group for EPI activities is children aged less than one year and women of childbearing age (15-49 years).

The EPI Structure

Immunization services are provided through the Expanded Programme on Immunization. This is one of the high impact child survival and development programmes of the Ministry of Health &

Social Welfare. There are five directorates within the Ministry of Health namely, Directorates of Health Services, Planning & Information, Food Safety and Quality Assurances, National Public Health Laboratories and Social Welfare. The EPI Unit is under the Directorate of Health Services and is linked to other intervention programmes e.g. RCH, EDC, IMNCI etc. Immunization services are provided to the communities through the RCH clinics monitored and supervised by the Regional Health Teams. Figure 2 is an organogram showing the location and linkages of the EPI programme within the health sector.

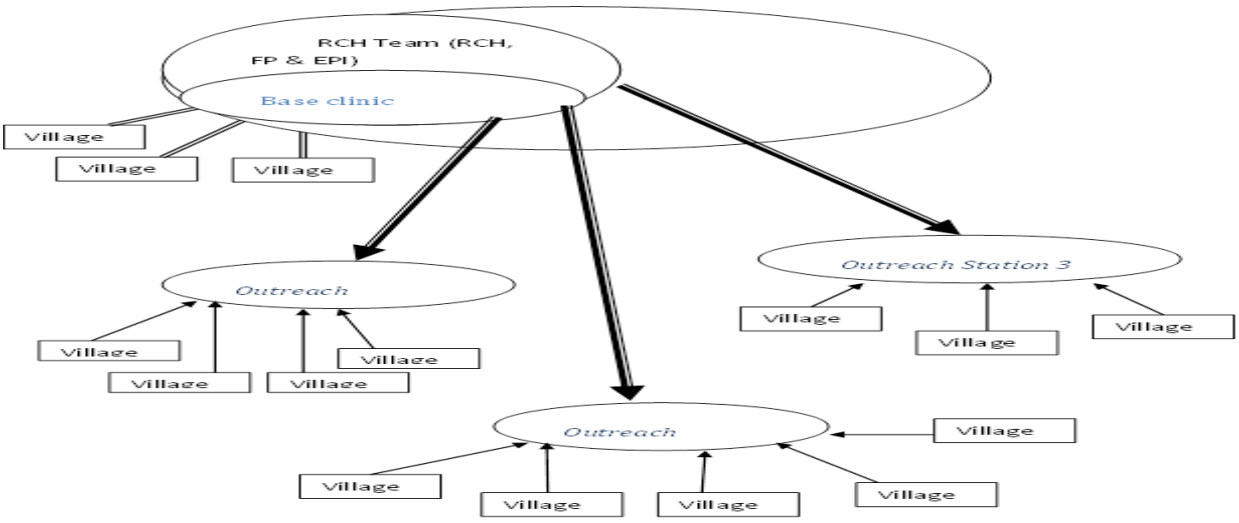

Figure 2: Diagram of EPI service delivery

The Guiding principles for achieving this goal focus on the following areas:

1. Strengthening Immunization Services (Expanding Outreach Services and immunizing more people in a changing world as well as conducting Polio and measles SIAs)
2. Accelerating disease Control- Disease Reduction (Integration, eradication and elimination of Polio, measles and Maternal & Neonatal Tetanus respectively).
3. Introducing New vaccines- Pentavalent/ Pneumococcal/ measles second dose/Rota/IPV
4. Drop Out reduction (Monthly Penta3 Monitoring) and Wastage reduction (Instituting wastage Monitoring system)
5. Political Commitment and community Involvement and Participation
6. Conducting operations research and other relevant technologies

However, achievement of the goal and objectives will depend heavily on the availability of financial and human resources and continuing political commitment for the EPI. The delivery of EPI vaccines is based on the national immunization schedule as shown in Table 7.

Table 7: National Immunization Schedule

Age	Vaccine
At birth or soon after	BCG, OPV 0, Hep B.
At 2 Months	OPV 1, Pneumo 1 and Penta 1,Rota 1
At 3 Months	OPV 2, Pneumo 2 and Penta 2, Rota 2
At 4 Months	OPV 3, Pneumo 3 and Penta 3, IPV
At 9 months	OPV 4, MR 1 and Yellow Fever
At 1 year	MenA
1 year after Penta 3	DPT Booster
At 18 months	OPV booster ,MR 2,
9 – 13 years (First contact)	HPV 1
At least 6 months after HPV 1	HPV 2
Td1	First contact in pregnancy or as soon as possible
Td2	At least 4 weeks after Td1
Td3	At least 6 months after Td2
Td4	At least one year after Td3 or in subsequent pregnancy
Td5	At least one year after Td4 or in subsequent pregnancy

Programme Management

In a bid to be in line with the global and regional initiatives to addressing problems of vaccine preventable diseases The government of The Gambia in collaboration with EPI national…. has

established a national medicine and vaccine regulatory body that looks at and ascertain the potency of vaccines and drugs coming into the country. EPI with some partners with support from partners has developed an annual work plan to guide the implementation of activities. However, the EPI unit is faced with challenges like the lack of an immunization policy to guide the implementation of all immunization services. Equally, there is no micro-planning done in the health facilities at regional level. NITAG has not met once since inauguration in 2015. There was no presentation on immunization financing to the legislature since 2012.

Human Resources Management

The EPI programme consists of the following:- Programme Manager; Deputy Programme Manager; Surveillance Officer; Data Manager; Logistician; Communication Officer, Capacity Building Officer, 2 Cold Chain Technicians, 1 Storekeeper, 2 Drivers and a Secretary. In addition there are EPI focal persons- Regional Principal Public Health Officer (RPPHO) /Regional Operations Officer (ROOs) in each Region and all the health facilities.

The strength of the EPI in the Gambia is largely anchored on the organizational structure from the central level to regional and service delivery point, while the human resource (Skilled personnel) available are best opportunities for the success in the EPI program. In contrast, irregular training for middle level managers, weak supportive supervision and low incentive to retain staff becomes a challenge and weakness in general of MoHSW. Evidence has shown that the incentives had a positive effect on retention, motivation and performance. Other forces that obstruct the institutionalization of EPI services are; high attrition and inadequate training (quality of training) of health institutions on immunization.

Financing Health care in The Gambia

Financial support for public health services including EPI comes from three (3) principal sources: 1. Government recurrent and development budget (10 -14%); 2. Cost-recovery on drugs (effective in some of the Bamako Initiative health facilities) and 3. External assistance.

Vaccine Supply, Quality and Logistics

All regions are equipped with at least two supervisory vehicles to facilitate effective supervision at both facility and community level. The supply system of vaccine and other immunization logistics are always available at all levels. This is a big improvement as it used to be a major challenge that leads to stock outs. There are functional cold chains systems at all level to assure the potency and efficacy of the vaccines at all times. However, there are some gaps that can affect the whole immunization services and they are as follows: most of the motorcycles are in bad condition and sometimes they are off the road; fuel allocated to the Public Health Officers is inadequate to deliver public health services in a month; in-adequate incinerators leads to poor EPI waste management and stock-out of vaccines due to mainly of consignments being expired as a result of poor vaccine management.

Immunization Services

The Gambia EPI Programme provides ten antigens to its target population through static and outreach strategies based on the national immunization schedule in as shown in the Table on National Immunization Schedule, Table 7 The static clinics are conducted in health facilities whilst outreach clinics are held at key villages/health posts. Both strategies are implemented through the Reproductive and Child Health (RCH) clinics; thus at a single visit, mothers and children can access a wide range of services. Approximately 60% of immunization services are delivered through outreach clinics.

The immunization coverage rate for Penta3 in the Gambia is 97% (Admin Data 2015) and 87.7% (GDHS 2013) while the dropout rate from Penta1 to Penta3 is 1.97%. The Gambia has an impressive geographical access of about 90%. However, due to increased demand as a result of population growth and ill equipped outreach sites, there are overcrowding at immunization sites. It is therefore prudent to build new sites especially in urban areas and existing ones rehabilitated to meet standards.

Surveillance and Reporting

As part of disease prevention and control measures, surveillance is a very important component. In the Gambia there are surveillance officers and tools for data collection across the country. In addition a fully equipped national public health laboratory has been established. Late disbursement of surveillance incentives, weak contact tracing and in-active surveillance system are some of the challenges faced by the immunization programme. However availability of a national pharmacovigilance committee to give technical advice and support vaccine reaction and site effects has also been established.

Several reviews, coverage surveys and operational research have been conducted between 2012 and 2015 to guide effective programme implementation and they are as follows:

1. Measles Second Dose Post Introduction Evaluation (PIE) in 2015.
2. Post Introduction Evaluation for HPV in 2015.
3. The Gambia Effective Vaccine Management (EVM) Assessment 2014.
4. Desk Review 2011/cMYP 2012-2016.
5. Comprehensive EPI review in 2015.

Demand Generation and Communication

Gathering information is crucial as quality information is the foundation of any advocacy and communication effort. There is a directorate of health promotion and education charged responsibility of running all communication activities in coordination with the communication

officer of the immunization programme .Some of the activities conducted by the directorate include engaging communities on what they know about EPI and RCH services through focus group discussions, face to face interaction and interviews. Communication support materials such as posters, leaflets, factsheet, T-shirts, caps and pictorial dialogue on immunization though available to an extent, there is need to produced more to create increased awareness/knowledge and demand for immunization services. Some of the messages on the communication support materials should be translated into local languages and depicted in pictorial/graphic form for better understanding. In addition, radio and television spots and jingles on immunization should be produced and aired on GRTS as well as private and community radio stations to create awareness.

Table 8: Situation analysis of routine EPI by immunization system components

System components	Suggested indicators	RESULTS				Source of Data
		2012	2013	2014	2015	
1. PROGRAMME MANAGEMENT						
Law & regulation	What numbers of functions are conducted by the NRA?	1	1	1	1	WHO Dossier Report and EPI Review Report 2015
	Is there legislation or other administrative order establishing a line item for vaccines?	Yes	Yes	Yes	Yes	WHO and UNICEF prequalified vaccine list
	Is there legislation identifying the sources of public revenue for immunization financing?	Yes	Yes	Yes	Yes	GG year vaccine subvention
Policy	Has the national immunization policy been updated in the last five years?	No	No	No	No	There is only a draft EPI policy
Planning	Does the country have an annual work plan for immunization funded through Ministry of Health budgeting processes?	Yes	Yes	Yes	Yes	
	What is the number and proportion of districts with an annual micro-plan for immunization?	0	0	0	0	
Coordination	What were the number of ICC (or equivalent) meetings held last year at which routine immunization was discussed?	4	4	4	4	ICC minutes

	What were the number of NITAG (or equivalent) meetings held last year?	O	O	o	o	ICC minutes
Advocacy	How many presentations on immunization performance or expenditures were made to parliament?	O	0	0	0	
2. HUMAN RESOURCES MANAGEMENT						
HR numbers	Number of health workers per 10 000 population					
	Percentage vaccinator posts currently vacant	0	0	0	0	
Capacity-building	Number & proportion of health workers & managers trained in immunization services through MLM or IIP training per year	0	0	0	0	
	Percentage of health workers trained in immunization in the last two years (data from PIE and EPI reviews)	0	0	250	200	EPI activity report
	Curriculum review for pre-service medical and nursing and public officers, immunization education conducted	0	0	0	0	
Supervision	Average number of central supervision visits to each district level per year	4	4	4	2	Supervisory Reports
4. VACCINE SUPPLY, QUALITY & LOGISTICS						
Transport / mobility	Percentage of districts with a sufficient number of supervisory/EPI field activity vehicles /motorbikes/bicycles (based on their need) in working condition	100	100	100	100	Regional inventory(it is important to note that there is need to provide more motorcycles at facility level
Vaccine supply	Was there a stock out of any antigen at national level during the last year?	No	No	yes	yes	EPI

	If yes, specify duration in months			3months	Six months	EPI
	If yes, specify which antigen(s)			BCG	YF and DPT	
Cold-chain/ logistics	Percentage of districts with adequate numbers of appropriate and functional cold-chain equipment	100%	100%	100%	100%	
	What was the year of last inventory assessment for all cold-chain, transport and waste management equipment (or EVM)?			2014		EVMA report
	Number of PHC facilities with >80% score for all indicators on the last EVM assessment			0		EVMA report
	Percentage districts with availability of a cold-chain replacement plan			0		Not available
Waste disposal	Availability of a waste-management policy and plan	Yes	Yes	Yes	yes	Anti-littering policy
5. IMMUNIZATION SERVICES						
Routine coverage	DTP3 coverage	98	97	96	97	JRF 2012-15
Demand	National DTP1–DTP3 drop-out rate			7.2	1.97	ADMIN DATA
	Percentage of districts with drop-out rate DTP1–DTP3 >10%			0	0	
Equity	Number of districts <80% coverage	0	0	0	0	JRF 2012-2015
	Percentage gap between lowest/highest socio-economic quintile					NA
	Percentage planned outreach visits conducted	100%	100%	100%	100%	EPI reports
	Line list of high-risk districts/communities identified	NA	NA	NA	NA	There are no high risk areas I the Gambia
	High-risk plan for disadvantaged communities	NA	NA	NA	NA	There are no high risk areas I the Gambia
New vaccines	Percentage PCV coverage (or coverage for other new antigens)	98	96	96	97	
6. SURVEILLANCE & REPORTING cont'd...						

Coverage monitoring	Percentage gap in match between DTP3 survey coverage and officially reported figures		9			DHS 2013
Immunization safety	Percentage of districts that have been supplied with adequate (equal or more) numbers of AD syringes for all routine immunizations	100%	100%	100%	100%	Requisition notes and vaccine ledgers
Adverse events	National AEFI system is active with a designated national committee	Yes	Yes	Yes	Yes	
	Number of serious AEFI cases reported and investigated	0	0	0	0	AEFI investigation report
7. DEMAND GENERATION AND COMMUNICATION						
Communication strategy	Availability of a routine immunization communication plan	No	Draft	Draft	Draft	Draft copy
Research	Year of last study on community knowledge, attitudes and practices in relation to immunization				2015/16	KABP report

2.3.4 Strength, Weakness Opportunity and Threat (SWOT) Analysis

The strength, weakness, opportunities and threat of Routine Immunization, accelerated disease control is as shown in Figure 3. And the SWOT analysis of the routine EPI immunization system components is in table….

STRENGTHS	WEAKNESSES
1. High political will from Government **2. Availability of Compressive National health sector plan & National M& E plan** **3. Existence of cMYP 2012-2016** **4. Over 90% coverage for DPT3** **5. Low drop-out rate for DPT1-DPT3 and BCG- Measles** **6. A non-AFP rate of 5.6/100000 children < 15yrs** **7. Successful introduction of three new vaccines into the routine immunization services** **8. Introduction of CUG facility to foster communication on surveillance /EPI services** **9. Introduction of Regional Operation Officers for EPI services in all health regions**	1. MNT not being reported. 2. National EPI Policy not updated. 3. Limited storage capacity of vaccine both at regional and facility level 4. Inadequate transportation facilities (Vehicles And Motor Cycles) for EPI/ Reproductive Child Health Outreach Services at facility level 5. Inadequate CUG facility at field level. 6. Weak coordination between central and regional level 7. Unavailability of Fire Extinguishers at regional EPI stores 8. Lack of office space, furniture and ICT equipment for ROOs
OPPORTUNITIES	THREATS
1. Availability of GAVI HSS Support for the country. **2. Upcoming of Program Based Budgeting in 2017** **3. Sustain and expand incentive package for health care workers** **4. Incorporation of e-Surveillance into the DHIS2 as part of the national disease surveillance system** **5. Introduction of Rapid Convenience Monitoring for monitoring vaccinated children** **6. Alignment of the cMYP 2017-2021 with the NHSSP 2014-2020 & the National M& E Plan-2015-2020**	1. Inadequate financial resource for EPI services 2. High attrition/staff turn-over at service delivery point 3. Mal-distribution/inequitable distribution of health care work force 4. Donor driven programmes 5. Shifting focus from routine surveillance services to emerging infectious diseases e.g. Ebola Viral Disease

Figure 3 SWOT Analysis for Routine Immunization and Accelerated Disease Control

Table 9: SWOT Analysis of Routine EPI Immunization System Components

1. Programme Management			
Strength	Weakness	Opportunities	Threat
1. Availability of national medicine regulatory council (NMC) **2. Availability of national immunization annual work plan.**	1. No annual micro planning at regional level. 2. Inadequate advocacy on immunization.	1. Availability Interagency coordinating committee (ICC). 2. Availability of National Immunization Technical Advisory Group (NITAG). 3. Availability of Technical and financial partners i.e WHO/UNICEF	1. No national immunization policy.
2. Human Resource Management			
Strength	Weakness	Opportunities	Threat
1. Well defined immunization structure in place.	1. No regular training for middle level managers on immunization. 2. Weak supportive supervision at both central and regional level. 3. Low motivation and retention packages.	1. Adequate immunization personnel at all immunization posts.	1. High staff attrition rate. 2. Curricular at training institutions are not regularly updated to current immunization technology.
3. Financing			
Strength	Weakness	Opportunities	Threat
4. Vaccine Supply, Quality and Logistics			
Strength	Weakness	Opportunities	Threat
1. Functional cold chain system at all levels. **2. Reliable vaccine supply at all levels.**	1. Inadequate incinerators at facility level. 2. Absence of computerized stock management system at national vaccine store. 3. Occasional vaccine Stock outs	1. Adequate supervisory vehicles. 2. Cordial collaboration with WHO and UNICEF in vaccine procurement.	1. Limited functional motorcycles for routine immunization services. 2. Inadequate fuel supply to support immunization service (motorcycles). 3. Use of inappropriate RCH trekking vehicle.
5. Immunization Services			
Strength	Weakness	Opportunities	Threat
1. High immunization coverage (Penta 3). **2. High utilization of immunization services (low**	1. Low community sensitization. 2. Low health worker population ratio (1.02/1000) compared	1. No hard-to-reach area in the country.	1. Overcrowding leading to long waiting time for clients.

dropout rate). **3. High access to immunization (BCG).**	to (2.3/1000). 3. ILL equipped outreach sites		
6. Monitoring, Surveillance and Reporting			
Strength	Weakness	Opportunities	Threat
1. Availability of surveillance officers and tools all over the country.	1. Late disbursement of surveillance incentives. 2. Weak contact tracing. 3. In-active surveillance system	1. Availability of a national vaccine pharmacovigilance committee 2. Availability of national public health lab.	
7. Demand Generation and Communication			
Strength	Weakness	Opportunities	Threat
1. There are regional health promotion and educations officers in all; the health regions **2. Availability of communication materials on immunisation services.**	1. No communication plan 2. In adequate advocacy programs 3. No television spots and jingles on routine immunization 4. No communication support materials translated to local languages.	1. Availability of a directorate of health promotion and communication	

CHAPTER THREE: IMMUNIZATION GOALS, OBJECTIVES, STRATEGIES AND KEY ACTIVITIES

3.1 Program Goals and Main Objectives

The goal of The Gambia comprehensive multi-year plan 2017-2021 is to reduce morbidity and mortality of infants and children from vaccine preventable diseases. Government and development partners did a thorough situation analysis of the period 2012-2015 of the EPI

immunization system and identified some priority areas for 2017-2021 planning years. The priority areas are:

1. Providing quality immunization services to all.
2. Strengthening surveillance and accelerating disease control (integration, eradication, and elimination of Measles/NNT, AEFI Surveillance)
3. Advocating for improved financing for immunization and community involvement and participation in immunization.
4. Improvement of coordination of immunization activities at national and the regional levels.
5. Strengthening of the Cold Chain System and other logistics to accommodate existing and new vaccines to be introduced
6. Improving data management system through the health information system and District Vaccine Data Management tool.
7. Introducing new vaccines such as HPV, MR and Meningococcal A into routine immunization schedule.
8. Integration of immunization into a well-functioning health system.
9. Conducting operational research on EPI activities and other relevant technologies.

The main objectives to achieve the set goals along the immunization system components are as shown below:

S/no	**Immunization Component System**	**Main Objectives**
1	Immunization services delivery	To increase demand and equitable uptake of immunization services for both traditional and new vaccines by 2021
2	Demand generation, communication and advocacy	To increase uptake of immunization services through advocacy, social mobilization and behavioral change communication by 2021
3	Vaccine, cold-chain and logistics	To strengthen the cold chain system and ensure the sustainable supply of vaccines and other related supplies at all level by 2021
4	Surveillance and reporting	To strengthen surveillance and reporting of EPI reportable diseases by 2021

5	Costing and financing	To increase access to funds for immunization services
6	Programme management.	To improve implementation and uptake of Immunization services at all levels
7	Human resource management	To strengthen human resources at all level

3.2 Priority Objectives and Milestones

After a detailed situation analysis of the EPI for the period of 2012 to 2015, new program priorities for the country comprehensive multi –year plan 2017-2021 were developed based on previous achievements and challenges. Set objectives were also developed along the national EPI priorities. Strategies and activities with timeline to achieve the set objectives were also itemized as shown in the annex 1. The Immunization Priority Objectives and Milestones as well as the key activities and timelines are shown in Table 9

3.3 Aligning with GVAP

In the course of developing the cMYP 2017-2021, the national priority objectives, strategies and key activities were aligned with the Global Action Plan 2011-2020 as summarized below and shown in the checklist in annex 2 Other reference materials that this cMYP was aligned with were the country National Health Sector Strategic Plan 2014-2020, the Global Routine Immunization Strategies and Practices (GRISP), the Regional Strategies for immunization 2014-2020.

3.4 Strategies

1. **Reach every child by strengthening the RED/REC strategy**

Planning for effecting management of human and financial resources, improving access to services, building community partnership and ownership, supportive supervision and monitoring for action and providing feedback for continuous self-assessment and improvement.

2. **Strengthen safe injection practices and waste disposal**

Strict adherence to injections being given using a single sterile syringe and needle combination, which is then safely disposed of after use. This policy will be adhered to by providing safe injection equipment and waste disposal facilities with continuous

strengthening and monitoring (reporting and management) of adverse events following immunization.

3. **Ensure sustainable financing through continuous advocacy and mobilization**.

Advocacy will continue for effective resource mobilization to ensure the financial sustainability and continued support by the national Government. The country will continue to work with health partners and stakeholders while ensuring efficient use of vaccines within the health system. GAVI Alliance will continue to support the country with vaccines.

4. **Effective Cold Chain and Vaccine Management.**

Effective management and maintenance of the cold chain system ensures the potency of vaccine throughout the supply chain. The country will continue to ensure preventive maintenance of cold chain equipment at all levels of services delivery. In addition, efforts will continue to expand the capacity at the national and sub-national cold rooms and ensure use of continuous temperature monitoring devices. Opportunity will be created to build capacity of staff on cold chain management regularly.

5. **Strengthen Advocacy, Communication and IEC**

Strengthen EPI communication and advocacy at all levels to promote vaccine demand. Stakeholders (Government officials, media, traditional leaders, community and civil society organizations) will be actively engaged to promote demand and sustain the uptake of immunization services.

6. **Sustain the benefits of integrated interventions through SIAs**

Planned Immunization campaigns will be carried out every year. The Programme will continue to use these supplementary activities to advocate and sensitize communities to demand child survival services including immunization.

7. **Ensure effective and sustainable introduction of new vaccines**

As indicated under immunization services, three new vaccines were introduced into routine immunization service namely; Measles 2nd dose (2012), Rota virus (2013) and IPV (2015). There are national efforts to introduce a vaccine against epidemic meningitis (Men A) within the next two years. National efforts on introducing new vaccines and use of technology to optimize protection and survival of children will be key considerations.

8. **Strengthen Programme Management**

Short term and in-service training of health workers will be organized regularly to build and maintain the skill of staff in immunization service delivery. Efficient organization of the programme at the national level and service delivery at all levels will be instituted to reduce missed opportunities and unmet need for immunization. Create and improve the physical state of existing service delivery points to enhance coverage.

9. **Strengthen AEFI and VPDs surveillance**

Surveillance for Vaccine Preventable Diseases (VPDs) will be strengthened especially at the community level using all available structures within the health system. Institutionalized AEFI surveillance will also be strengthened.

10. Effective Monitoring, evaluation and supervision for quality service

Intermittent reviews will be organized to assess performance and provide feedback to all levels. Facilitative and supportive supervision will be conducted regularly to strengthen capacity.

11. Strengthen capacity to conduct operational research relevant to immunization

Data driven and evidence-based decisions will be used to improve programme performance. Data validation at all levels, especially at service delivery points will be conducted regularly. The Programme will collaborate with other institutions to undertake research and to use the platform of collaboration to build the capacity of staff in operational research.

The national priority objectives for achieving the goal of the plan by 2021 is shown in Table 9

Table 10: Immunization Priority Objectives and Milestones

Immunization services	Current performance	Objectives	Milestones	Order of Priority
1. Immunisation services Delivery				
Immunization coverage	DPT3 coverage decreased from 98% in 2012 to 97% in 2015	To achieve 99% coverage at national and 96% coverage at regional for all vaccines by 2021 To achieve 99% coverage at national and 96% coverage at regional for DPT3 containing vaccine by 2021	Achieve 98% coverage at national and 95% coverage at regional for all vaccines by 2019 and 99% by 2021 Achieve 98% coverage at national and 95% coverage at regional for DPT3 containing vaccine by 2019 and 99% by 2021	1
	TT2+ coverage increased from 67% in 2012 to 82% in 2015	Achieve 90% coverage for TT2+ at national and 85% coverage in all health regions by 2021	Attain 86% coverage for TT2 + at national and in all health regions by 2018, 88% by 2020 and 90% by 2021	1
Immunization Demand	DPT1-DPT3 drop-out rate decreased from 2.03 in 2014 to 1.97% in 2015	To maintain DPT1-DPT3 dropout rate to no more than 5% by 2021	Increase DPT3 coverage to 98% by 2019 and 99% by 2021.	1
	BCG- Measles drop-out rate increased from 7.2 in 2014 to 9.09% in 2015	To reduce BCG- Measles drop-out rate to 5% by 2021	Increase measles 1st dose coverage to 98% by 2019 and 99% by 2021.	1
Immunisation equity	The % gap between Lowest and highest economic quintile stood at -7.03 in 2013	To bridge the % gap between the highest and lowest wealth quintile to zero by 2021	Decrease the % gap to -4% by 2018 between the highest and highest wealth quintiles and -2% in 2020 and 1.03% in 2021	1

Immunisation services	Current performance	Objectives	Milestones	Order of Priority
1. Immunisation services Delivery				
New vaccines introduction	3 new vaccines (Measles 2nd dose, Rota virus and IPV) introduced between 2012 to 2015	To increase the coverage of Measles 2nd dose from 81% by 2015 to 90% by 2021 in all health regions	Attain 85% coverage for measles 2nd dose by 2019 and 90% by 2021 in all health regions	1
		To increase Rotavirus coverage from 97% in 2015 to 99% by 2021 in all health regions	98% Rotavirus coverage by 2019 and 99% by 2021 in all health regions	1
		To increase IPV coverage from 71% in 2015 to 99% in 2021 in all health regions	85% IPV coverage by 2018, 95% in 2020 and 99% in 2021 in all health regions	1
		To introduce MR, HPV & MenA between 2017-2021	Introduce MR by 2017, HPV and MenA by 2018 Achieve 80% coverage of MR by 2017and for HPV and MenA by 2018 in all health regions	2

Immunization service	Current performance	Objective	Milestone	Order of priority
2. Demand generation, communication and advocacy				
Advocacy and Social Mobilization	Inadequate involvement and participation of policy makers, politicians, communities/religious leaders and the private sector in EPI services	To sensitize Policy makers and politicians, t actively involved and participates in immunization services by the end of 2021. To mobilize all communities to sustain high immunization coverage by the end of 2021.	By 2019, 80% of the policy makers , politicians communities actively participate and involved in immunization services By 2019, 90% of all communities are mobilized to sustain high immunization coverage	1
	Limited utilization of the print and electronic Media in promoting routine immunization services	To increase the utilization of the print and electronic media for routine immunization services by the end of 2021	By 2018, 75% of the Print and electronic media are utilized in routine immunization services.	2
Social and Behavioral Change Communication	Inadequate knowledge of caregivers/parents on the importance of immunization	To increase the awareness level of caregivers/parents from 5% on the importance of immunization by the end 2021	By 2019, 80% of the caregivers/parents are aware of the importance of immunization	1
	Limited involvement of male in immunization services	To actively increase the participation of male in immunization services by 2021	By 2017, 50% of the male actively participate in immunization services	1
	Inadequate SBCC support materials	To provide 90% of communities with SBCC support materials by 2021	By 2018, 70% 0f the communities provided with SBCC support materials	2

Immunization service	Current performance	Objective	Milestone	Order of priority
3. Vaccines, cold-chain and logistics				
Cold Chain System	Inadequate cold chain system at central, in regional stores and some public health facilities	To provide 40 M3 cold room at central level by end of 2021 To provide 25 TCW 3000 SDD in six regional cold stores by end of 2021 To provide 20 TCW 2000 in of public health facilities offering immunization services by the end of 2021.	By 2017, 40 M3 cold room at the Central level is provided By 2018 50% of the regional stores are provided with 25 TCW 3000 SDD. By 2019, 80% of public health facilities offering immunization services are provided with TCW 2000	1
	Lack of automatic voltage regulators for EPI central cold stores	To Procure and install automatic voltage regulators for the central EPI cold store by 2021	By 2017, automatic voltage regulators for the central EPI cold store procured and installed	1
	Lack of Multi-loggers at the cold rooms	To procure and install 2 multi-loggers at the cold rooms by 2021	.By 2018, 2 multi-loggers procured and installed in the cold rooms	2
Waste Management	Inadequate and aging incinerator in the six health regions	To provide six incinerators in six health region by 2021	By 2019,80% of the six regions are provided with incinerators	2

Immunization services	Current performance	Objectives	Milestones	Order of priority
4. Surveillance and Reporting				
Polio	Sustained the interruption of wild polio virus in the country	To sustain interruption of wild polio virus by 2021	Sustain interruption of wild polio virus by 2018 in all health regions	1
MNT	No data available on MNT status in the Gambia	To attain and maintain MNT elimination/control by 2021	All health regions to attain and maintain MNT elimination by 2018	1
Measles and Rubella	Measles surveillance data reported 172 suspected cases in 2015	To achieve an incidence rate of less than 1/1000000 population by 2021	To achieve an incidence rate of less than 1/1000000 population by 2020	1
Yellow fever	24 suspected cases of yellow fever reported in 2015	To attain and maintain Yellow fever elimination/control by 2021	All health regions to attain and maintain Yellow fever elimination by 2018	1
Epidemic meningitis	National Surveillance data reported 92 suspected cases of meningitis in 2015	To attain and maintain Meningitis control by 2021	All health regions to attain and maintain Meningitis control by 2018	1
AEFI surveillance and reporting	Vaccine and drug regulatory authority in place including an AEFI committee	To institutionalize routine AEFI surveillance in all health facilities by 2021	Institutionalization of routine AEFI surveillance in at least 80% of health facilities by 2019	1

Immunization Service	CURRENT PERFORMANCE	OBJECTIVES	MILESTONES	ORDER OF PRIORITY
5. Costing and Financing				
Financing and Resource Mobilization	Inadequate and difficulty in accessing operation funds for immunisation services	To increase and improve access to funds for EPI programme implementation by 2021	2019: 90% of EPI programmes funded and implemented	1
6. Program Management				
Political commitment and advocacy	Inadequate participation of senior government officials, politicians, religious leaders and the private sector in EPI related services	To increase the participation of senior government officials, politicians, religious leaders and the private sector in EPI related services by 2021	2020: Active participation of Senior government officials politicians, religious leaders and the private sector in 80% of the EPI related activities	1
Policy	No immunization policy	To develop a national immunization policy by 2021	2019: Develop a national immunization policy	1
Monitoring and evaluation plan	No M & E Plan	To develop an Integrated M & E plan for immunization services by 2021	2018: M & E Plan developed and used	1

Immunization Service	CURRENT PERFORMANCE	OBJECTIVES	MILESTONES	ORDER OF PRIORITY
7. Human Resource Management				
Staff Retention	High staff attrition rate	To retain 90% of staff involved in immunization services by 2021	2019: Retain 85% of staff involved in immunization services	1
Staff Distribution	Inequitable Staff Distribution	To develop a staffing norm for equitable distribution of immunization service providers by 2021	2018: staffing norm developed and used	2
Human Resource Development	No middle level managers trained on immunization services in last 5 years	To train 25 middle level managers on immunization services by 2021	2019: train 60% of middle level managers on immunization services	2
	Inadequate in-service training for healthcare workers on immunization	To train 90% of immunization service providers by 2021	2020: 90% of health workers trained	1

Table 11: Timeline of Activities- cMYP 2017-2021, The Gambia.

Thematic Areas	Objectives	Strategies	Activities	Timeline				
				2017	2018	2019	2020	2021
1. Immunization Service Delivery								
Immunization coverage	To achieve 99% coverage at national and 96% coverage at regional for all vaccines by 2021	Implement "Reach every community" in every health region	Update micro plans to include hard to reach communities	x	x	x	x	x
			Expand routine immunization services to reach all communities		x		x	
			Conduct refresher trainings on inter personal communication(IPC) for immunization service providers	x		x		x
			Conduct coverage surveys to identify areas of low coverage	x		x		x
Immunization demand	To maintain DPT1-DPT3 dropout rate to no more than 5% by 2021	Engaging communities to create demand for immunization services	Sensitize communities on their roles and responsibilities in immunization service delivery	x	x	x	x	x
Immunization equity	To bridge the % gap between the highest and lowest wealth quintile to zero by 2021	Improve immunization equity through program design.	Orientation of the highest income group on the benefits of immunization	x		x		
New vaccine introduction	To introduce MR, HPV & MenA between 2017-2021	Baseline survey for the introduction of new vaccines	Conduct immunization campaigns, demonstration, Post introduction Evaluation and cluster surveys		x		x	
			Conduct national immunization programme reviews regularly in preparation of strategic programme planning				x	

Thematic Areas	Objectives	Strategies	Activities	Timeline				
				2017	2018	2019	2020	2021
2. Demand Generation, Communication & Advocacy								
Advocacy and Social Mobilization	To sensitize Policy makers and politicians, actively involved and participate in immunization services by the end of 2021.	Engagement of policy makers and politician	Conduct advocacy meetings	X	X	X	X	X
	To mobilize all communities to sustain high immunization coverage by the end of 2021.	Community mobilization Increasing demand for immunization	Conduct SBBC meetings	X	X	X	X	X
	To increase the utilization of the print and electronic media for routine immunization services by the end of 2021		Organize radio and TV shows	X	X	X	X	X
			Organize media briefing	X	X	X	X	X
			Train health workers on risk communication	X		X		X
	To increase the awareness level of communities on the importance of immunization by the end of 2021		Sensitize communities on the importance of immunization	X	X	X	X	X
			Conduct open field days	X		X		X
Social and Behavioral Change Communication	To actively increase the participation of male in immunization services by 2021		Sensitization meeting with male	X	X	X	X	X
	To provide 90% of communities with SBCC support materials by 2021	Providing SBCC support materials	Develop, print and distribute SBBC support materials	X		X		X
			Train health workers on effective communication skills	X		X		X

Thematic Areas	Objectives	Strategies	Activities	Timeline				
				2017	2018	2019	2020	2021
3. Vaccine Cold Chain & Logistics								

Cold Chain System	1.To provide 40 M3 cold room at central level by end of 2021	Strengthening and expansion of the cold chain	1. Procure 1 cold room for central level, 45 fridges for regional and health facilities, and spare parts for all levels	X	X	X		
	2.To provide 25 TCW 2000 SDD in six regional cold stores by end of 2021		2. Install the fridges and the cold room at health facility regional, and central level	X	X	X		
			Procure and install three automatic voltage regulators at the central cold room	X				
	3. To provide 20 TCW 2000 in 30% of the newly built public health facilities offering immunization services by the end of 2021.		Procure and install two multi- loggers at the central and regional cold rooms		X			
	To Procure and install automatic voltage regulators for the central EPI cold store by 2021							
	To Procure and install Multi- loggers in the cold rooms by 2021							
	Maintaining regular and quality vaccine supply by 2021	1.Mobilize funds to procure vaccines	.Advocacy meeting with policy makers	X	X	X		
		2.Capacity building on effective vaccine management(EVM)	2. Train immunization providers on EVM	X	X	X	X	X

		3.Strengthening regular stock and temperature monitoring and recording at all levels	3.Provide two hundred fridge tags	X	X	X	X	X
	Inadequate EPI logistic system at all levels	Strengthening logistic system at all levels	Conduct supportive supervision and monitoring	X	X	X	X	X
			1.Procure spare parts and fuel	X	X	X	X	X
			2.Install spare parts	X	X	X	X	X
			3.Conduct regular maintenance	X	X	X	X	X
			4.Construct and refurbish dry stores		X	X		
Waste Management	To provide six incinerators in six health region by 2021	Improving waste management and injection safety	1.Construct and maintain incinerator		X	X	X	X
			2.Train incinerator attendance		X	X	X	X
			3.Procure PPEs		X			

Thematic Areas	Objectives	Strategies	Activities	Timeline				
				2017	2018	2019	2020	2021
4. Monitoring, Surveillance & Reporting								
Polio	To improve and expand disease surveillance & reporting by 2021	Strengthen and expand disease prevention and control services	Review and update Standard Operation Procedures and guidelines on surveillance	x		x		x

MNT			Train Health Care Workers on standard operation procedures and guidelines on surveillance	x		x		x
Measles & Rubella								
Yellow fever								
Epidemic meningitis			Review and update the EPI technical guideline	x		x		x
			Harmonize EPI data collection tools into Health Management Information System	x				
			Strengthen data management, reporting and feedback mechanism at central and regional levels	x				
			Strengthen collection, handling & transportation of samples to National Public Health Laboratory	x				

Thematic Areas	Objectives	Strategies	Activities	Timeline				
				2017	2018	2019	2020	2021
4. Monitoring, Surveillance & Reporting								

AEFI surveillance and reporting	To institutionalize routine AEFI surveillance in all health facilities by 2021	Strengthen AEFI surveillance and reporting	Develop, review and update AEFI reporting tools	x				
			Train health care workers on the use of AEFI tools	x				
			Institute monthly reporting of AEFI including zero	x				
			Establish & train national and regional AEFI committees to enable rapid and trustworthy investigation of, and response to, serious AEFIs	x				

Thematic Areas	Objectives	Strategies	Activities	Timeline				
				2017	2018	2019	2020	2021
4. Costing and Financing								
Financing and Resource Mobilization	To increase and improve access to funds for EPI programme implementation by 2021	Enhancing operational efficiency through better budget management	Develop and implement Operational Plan for immunization policy financing	X				
			Constitute a task force to advocate for more resource mobilization	X	X			

			Develop a tool that will track the execution of approved immunization budget	X				
			Develop a resource mobilization plan	X	X			
			Proportion of immunization budget released on time.	X	X	X	X	X
Thematic Areas	Objectives	Strategies	Activities	Timeline				
				2017	2018	2019	2020	2021
6. Programme Management								
Political commitment and advocacy	To increase the participation of senior government officials, politicians, religious leaders and the private sector in EPI related services by 2021	Engage Senior government officials and politicians and other stakeholders to participate in EPI related services	Sensitize senior government officials, politicians and other stakeholders	X	X			
			Conduct annual meetings with the health select committee of the National Assembly	X	X	X	X	X
			Conduct regular meeting with National Immunization Technical Advisory Group members (NITAG)	X	X	X	X	X
Policy	To develop a national immunization policy by 2021	Development of a national immunization policy with relevant stakeholders	Resource mobilization	X	X		X	
			Identify and engage partners		X	X	X	X
			Conduct training workshops to orient (NITAG)		X			

Monitoring and evaluation plan	To develop an Integrated Monitoring and Evaluation (M & E) plan for immunization services by 2021	Development of an integrated M & E plan	Mobilization of resources from immunization development Partners.	X	X			
			Identify and engage partners	X				
Thematic Areas	Objectives	Strategies	Activities	Timeline				
				2017	2018	2019	2020	2021
7. Human Resource Management								
Staff Retention	To retain 90% of staff involved in immunization services by 2021	Improve incentive package at all levels	Allocate 50% of basic salary as retention allowance for immunization service providers	X	X	X	X	X
			Create a special hard to reach area allowance for health staff.	X	X	X	X	X
			Provide performance based reward advocate for free medical care or all health workers and their immediate family members.	X	X	X	X	X
			Construct new and refurbish existing structures	X		X		X
Staff Distribution	To develop a staffing norm for equitable distribution of immunization service providers by 2021	Equitable distribution of immunization staff at all levels	Develop and implement posting guideline and policy	X				
			Implement staffing norm	X				
Human Resource Development	To train 25 middle level managers on immunization services	Strengthen capacity of Human Resource at all levels	Conduct training needs assessment at all levels (private & Public)	X	X			

	by 2021		Conduct training for middle level managers	X	X	X	X	X
	To train 90% of immunization service providers by 2021	Harmonize and improve continuous professional development	1: Develop guidelines for in service training	X		X		X

CHAPTER FOUR: COSTING, FINANCING AND FINANCIAL SUSTAINABILITY

4.1 Analysis of costing and financing (including Baseline).

Total cost for routine immunization for the base year for the cMYP (year 2015 was used because it had actual expenditures) and reflecting the current cost profile, was $5,008,050. Cost of new vaccines was more than half the total cost $2,954,117 (59%) and a fifth of the total cost was expenditure on Supplemental immunization activities, $1,061,369 (21%) in 2015 (as in Table C1).

Table C1: Baseline Cost Profile for Routine Immunization, 2015 in The Gambia

Cost category	2015 US$	Percent of Total cost
Traditional Vaccines	231,151	4.62
Underused Vaccines	0	0.00
New vaccines	2,954,117	58.99
Injection supplies	55,133	1.10
Personnel	145,068	2.90
Transportation	17,594	0.35
Other routine recurrent costs	488,221	9.75
Vehicles	0	0.00
Cold chain equipment	54,397	1.09
Other capital equipment	1,000	0.02
Supplemental immunization activities	1,061,369	21.19
TOTAL	**5,008,050**	**100.00**

Total cost of immunization services including shared cost for immunization staff for the period 2017 to 2021 is estimated to be **$ 32,331,733 ($32.3million).** In all, half (50.0%) of the total amount is for vaccines and logistics supplies for routine immunization. Shared health system cost constitutes 18.8%, Programme management, 12.9% and Supplemental immunization activities 9.2% respectively. Service delivery support constitutes 1.6% of the total cost (as in Table C2)

Table C2: Total Cost of Immunization Services, 2017-2021, The Gambia

cMYP Component	Future Resource Requirements US$ 2017	US$ 2018	US$ 2019	US$ 2020	US$ 2021	US$ Total 2017 - 2021	Percent of Total cost
Vaccine supply and logistics (routine only)	2,739,040	3,258,023	3,206,766	3,242,384	3,731,595	16,177,807	50.04
Service delivery	117,197	88,454	91,039	77,912	151,379	525,981	1.63
Advocacy and Communication	212,048	327,123	296,720	348,510	292,226	1,476,628	4.57
Monitoring and disease surveillance	162,789	177,492	197,534	215,172	231,049	984,036	3.04
Program management	669,871	767,396	852,561	1,174,850	706,011	4,170,689	12.90
*Supplemental immunization activities (SIAs)	248,465	267,568	1,619,539	853,475	-	2,989,047	9.24

Shared Health Systems Costs (EPI Portion)	1,009,268	1,298,464	1,169,713	1,226,392	1,303,708	6,007,545	18.58
Grand Total	5,158,676	6,184,520	7,433,873	7,138,696	6,415,967	32,331,733	100.00

*No SIAs cost for 2021- based on the assumption of the target date for Poliomyelitis eradication; in addition, SIAs for MR and TT would be conducted just the year before i.e. in 2020 per the planned activities.

4.2 Analysis of future resources requirements, financing and gaps.

4.2.1 Total Immunization Cost

Total immunization cost represents approximately 81.4% of total cost of the cMYP whilst shared health systems cost account for the remaining 18. 6%. Shared health systems cost was estimated for salaries of non-direct immunization staff contribution to immunization services at all levels.

Table C3: Total Immunization Cost 2017-2021 (US$)

Year	2017	2018	2019	2020	2021	Total direct costs	Percent of Total cost
Vaccine supply and logistics	2,739,040	3,258,023	3,206,766	3,242,384	3,731,595	**16,177,807**	61.46
Service delivery	117,197	88,454	91,039	77,912	151,379	**525,981**	2.00

Advocacy and Communication	212,048	327,123	296,720	348,510	292,226	**1,476,628**	5.61
Monitoring and disease surveillance	162,789	177,492	197,534	215,172	231,049	**984,036**	3.74
Program management	669,871	767,396	852,561	1,174,850	706,011	**4,170,689**	15.84
Supplemental immunization activities (SIAs)	248,465	267,568	1,619,539	853,475		**2,989,047**	11.35
Total direct costs	4,149,408	4,886,057	6,264,160	5,912,304	5,112,259	**26,324,188**	100.00

4.2.2 Routine Immunization

Total routine immunization cost is estimated to be $**22,943,198** ($22.9million) over the five years. Vaccines and injection safety supplies represent about 64.2% of routine recurrent cost. Of the cost of vaccines, new vaccines constitute 53.6% of the cost. Maintenance of cold chain and capital equipment and overheads 16.8% of total cost of routine immunization over the period.

Table C4: Routine Recurrent Costs 2017-2021

Cost category	Future Cost Projections (US$)					Total 2017 - 2021	Percent of Total
	2017	2018	2019	2020	2021		
Vaccines	2,346,303	2,869,120	2,817,185	2,866,801	2,958,487	**13,857,896**	60.40
Traditional	315,050	324,761	321,550	320,598	332,858	**1,614,817**	7.04
Underused	0	0	0	0	0	**0**	0.00
New	2,031,253	2,544,359	2,495,634	2,546,203	2,625,629	**12,243,079**	53.36

Injection supplies	108,162	106,748	111,117	114,660	524,516	**965,203**	4.21
Personnel	165,194	178,654	200,993	217,145	231,260	**993,246**	4.33
Salaries of full-time EPI health workers (immunization specific)	37,139	39,553	45,892	48,875	52,052	**223,512**	0.97
Per-diems for outreach vaccinators/mobile teams	0	0	0	0	0	**0**	0.00
Per-diems for supervision and monitoring	128,056	139,101	155,101	168,270	179,207	**769,735**	3.35
Transportation	28,698	36,308	45,147	29,037	32,004	**171,193**	0.75
Fixed Site Strategy (Incl. Vaccine Distribution)	0	0	0	0	0	**0**	0.00
Outreach strategy	28,698	36,308	45,147	29,037	32,004	**171,193**	0.75
Mobile strategy	0	0	0	0	0	**0**	0.00
Maintenance and overhead	452,136	511,936	553,732	595,438	635,275	**2,748,517**	11.98
Cold chain maintenance and overhead	147,769	155,495	172,339	180,105	182,454	**838,163**	3.65
Maintenance of other capital equipment	29,270	47,662	50,999	61,811	66,137	**255,878**	1.12
Building Overheads (Electricity, Water etc)	275,097	308,780	330,394	353,522	386,684	**1,654,476**	7.21
Short-term training	55,982	87,049	86,513	78,827	6,059	**314,430**	1.37
IEC/Social Mobilization	212,048	327,123	296,720	348,510	292,226	**1,476,628**	6.44
Disease Surveillance	34,733	38,391	42,434	46,902	51,842	**214,301**	0.93
Program management	338,791	371,567	435,655	742,501	313,268	**2,201,783**	9.60
Other routine recurrent costs	0	0	0	0	0	**0**	0.00
Subtotal	**3,742,049**	**4,526,897**	**4,589,494**	**5,039,822**	**5,044,937**	**2,2943,198**	100.00

4.2.3 Supplemental Immunization

Supplemental Immunization Services (SIAs) will be conducted for different antigens over the five-year period. Total cost of Supplemental Immunization Services over the period is $5, 978, 094 ($6 million)

Table C5: Total Supplemental Immunization Cost, 2017-2021

Vaccine Type	Future Cost Projections (US$)					
	2017	2018	2019	2020	2021*	Total
Polio (0-59 m0nths)	496,929	535,137	--		--	1,032,066
MR (9 months-5 years)	--	--	--	1,109,267	--	1,109,267
MenA (1 year-5 years)	--	--	1,093,036	--	--	1,093,036
YF (9 months-year-15 years)	--	--	2,146,042	--	--	2,146,042
TT (15 years-49 years)	--	--	--	597,683	--	597,683
Total	**496,929**	**535,137**	**3,239,078**	**1,706,950**	**--**	**5,978,094**

4.2.4 Cost by Strategy

The National Immunization Programme will focus mainly on these strategies for the delivery of immunization services (as in Table C6). The cost of fix and outreach strategies represents about 43.1% of total cost for the five years. Mobile strategy and campaigns account for 33.3% and 23.6% respectively. It is expected that there will increases in the coverage by strategies, however these proportions may not vary much over the period.

Table C6: Costs by Strategy (shared costs excluded) (US$)

Strategy	2017	2018	2019	2020	2021	Total cost	Percent of total cost
Fixed and Outreach activities	2,455,106	2,958,476	2,907,167	3,142,610	3,207,984	64,663,466	**43.12**
Mobile strategy	2,455,106	2,958,476	2,907,167	3,142,610	3,207,984	49,992,123	**33.33**
Supplemental immunization	248,465	267,568	1,619,539	853,475	0	35,320,780	**23.55**

activities							
Total	**5,158,676**	**6,184,520**	**7,433,873**	**7,138,696**	**6,415,967**	**149,976,368**	**100.00**

This information is demonstrated pictorially (for ease of appreciation) in Figure C1.

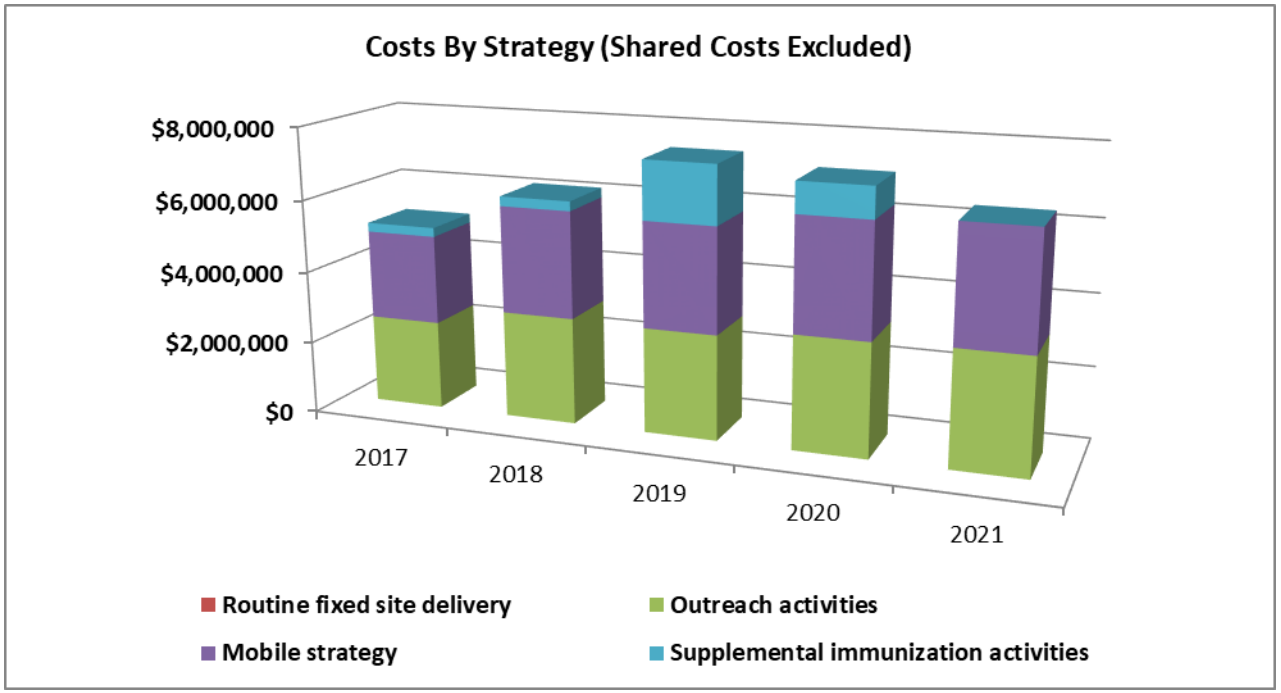

Figure C1: Total Immunization Cost by Strategy, 2017-2021

4.3 Resource Requirement & financing gaps

The future secure and probable financing and gaps (shared costs excluded) analysis indicate GAVI and Government will need to continue to contribute to immunization services. The government of The Gambia will continue to provide for health services and still remain a major source of financing. However due to Donor specialization, it is possible that in some programmes, a multilateral or bilateral organization may be the major funding source. The probable financing gap will be relatively wider from 2018 to 2020, and thus intensifying resource mobilization activities and active engagement of all partners will be key (as in Table C7) and pictorially demonstrated to appreciate the gaps in Figure C2 as well.

Table C7: Funding Gap (with secured funds only)

Secured Funding:	2017	2018	2019	2020	2021
	US$	US$	US$	US$	US$
Government	1,666,387	1,970,010	1,573,655	389,473	1,775,940
Sub-national government	0	0	0	0	0
Gov. co-financing of GAVI vaccine	134,240	138,774	143,318	148,048	153,130
UNICEF	66,885	42,413	75,000	60,000	5,000
WHO	93,770	0	0	0	0
GAVI	2,928,930	3,617,399	3,546,569	3,931,748	3,965,209
Rotary International	0	0	0	0	0
Total secure funding	4,890,212	5,768,596	5,338,542	529,269	5,899,279

Total resources needed:	5,158,676	6,184,520	7,433,873	7,138,696	6,415,967
Funding gap	**268,465**	**415,924**	**2,095,331**	**2,609,427**	**$516,689**

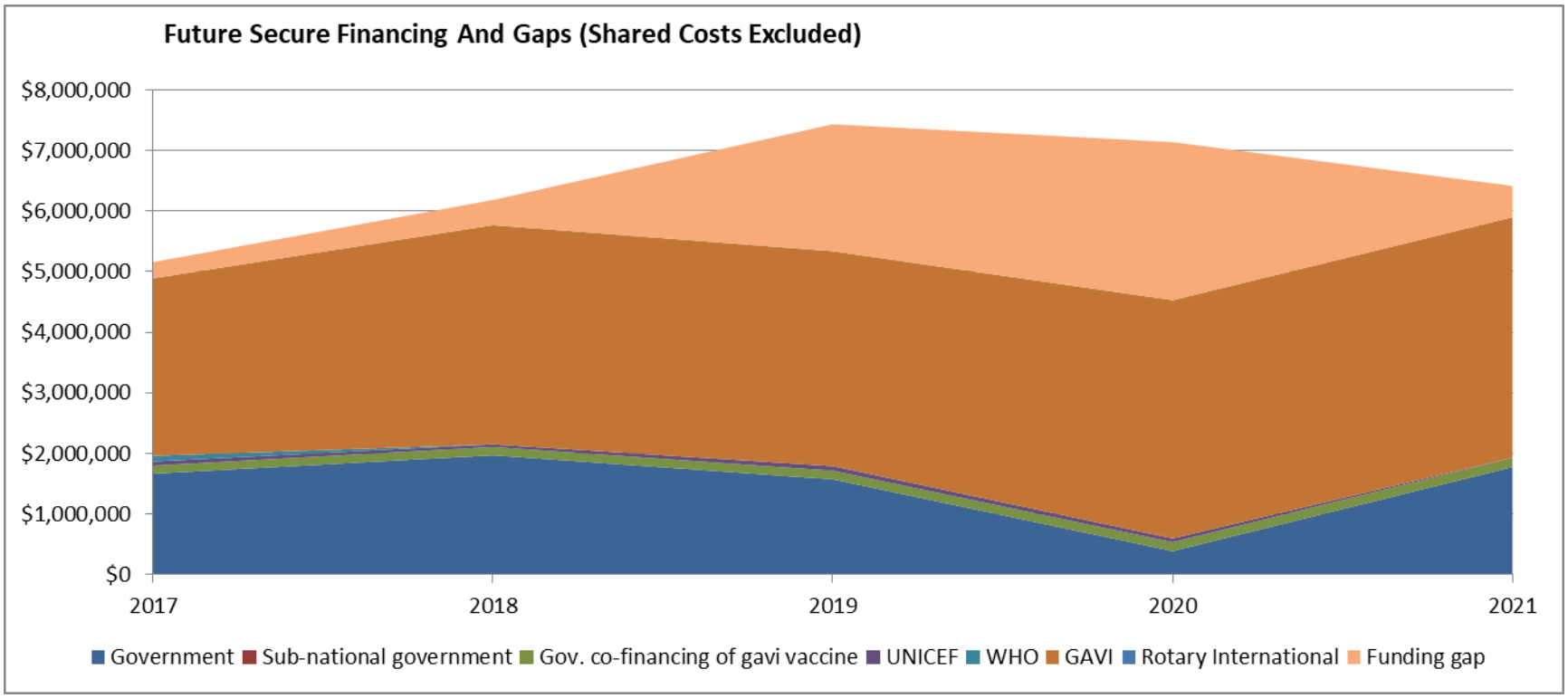

Figure C2: Future Secure and Probable Financing and Gaps (shared costs excluded)

The analysis indicates Government of The Gambia co-financing of GAVI vaccine is relatively low, the Government will pay approximately 5% of all co-financed vaccines in 2017, and will remain around this level (less than 5% till 2021). Thus GAVI remains the main provider of funds

for new vaccines; this is noted in the development of the financing component of this document. Active engagement of partners and continued Government support is imperative. It is important to note however that, The Gambia has always met its co- financing obligations (The Gambia GAVI HSS, 2014).

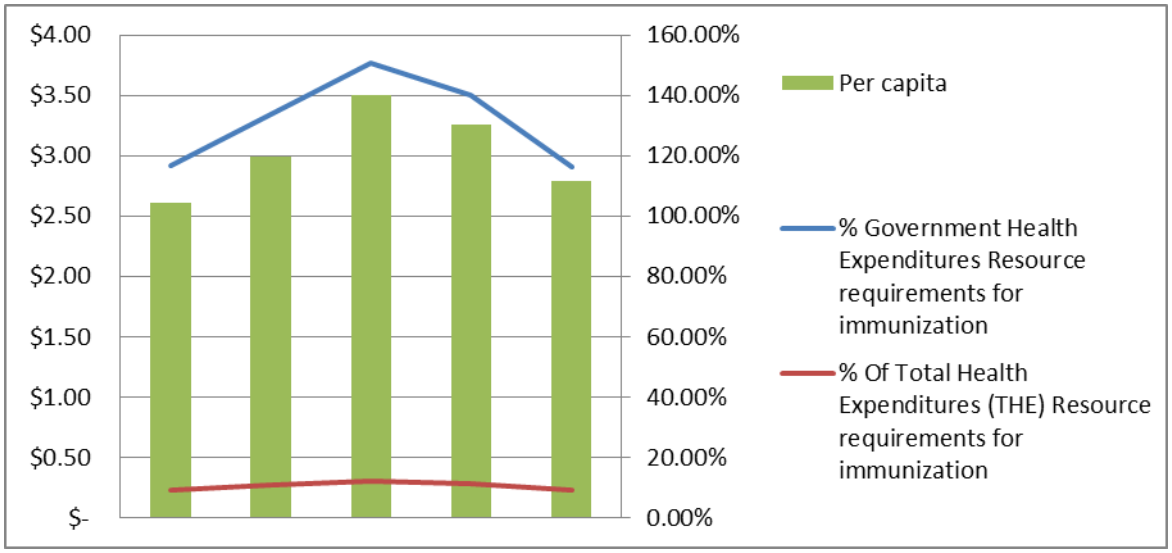

Figure C3: Immunization Sustainability Analysis and Selected Indicators (2017-2021)

However, for sustainability of immunization services, the percent of Total Health Expenditure resource requirements for immunization in The Gambia will be 9.3% in 2017 (as in Figure C3), will reach a maximum of 12.1% in 2019 and then decrease to 9.3% in 2021. Thus Government commitment moving forward is key.

4.4 Financing and Financial Sustainability Strategies

4.4.1 GAVI Graduation and Graduation Process

One of GAVI's strategic goals is to "contribute to strengthening the capacity of integrated health systems to deliver immunisation". The Government of Gambia has received various support from GAVI including Health System Strengthening (HSS) Cash Support of 2014 and the GAVI funded HPV demonstration (2014-2016) among others. The country has received co-financing for DPT-Hib-HepB and PCV-13 since 2009 and Rota virus vaccine since 2013, with an expected final year of co-financing in 2021.

4.4.2 Sustainability plan

The Government of The Gambia is fully committed to improving the health and welfare of the entire population and has formulated policies and strategies for achieving this national goal and ranks health very high as a national priority (as per the Programme for Accelerated Growth and Employment of The Gambia). The Primary health care strategy which calls for stronger partnership and collaboration encompasses a large range of providers and services across the public, private and non-government sectors contributing to improved access to different segment of the population. The Ministry of Health and Social Welfare will use the PHC strategy to sustain the gains registered under the national immunization programme with the support of GAVI and other partners during the implementation period of the current cMYP.

The Ministry of Health and Social Welfare will continue to provide support from the national budget towards maintenance of transport and cold chain facilities (GAVI HSS, 2014) as well as the running cost of transport facilities (The Gambia GAVI HSS, 2014). In addition, a cold van has been purchased for the distribution of vaccines routinely and during campaigns from ISS funds.

The Government of The Gambia will continue to support capacity building for staff, pay salaries, allowances and fuel from the Gambia Local Fund (GLF). The Gambia has always met its co- financing obligations and this will be continued to enhance effective immunization service delivery during the implementation of the cMYP 2017-2021 (The Gambia GAVI HSS, 2014).

The Ministry of Health and Social Welfare will work closely with various Ministries and partners such as the Ministry of Regional Integration, Lands and Traditional Rulers, Ministry

of Finance and Economic Affairs, GFATM, UNICEF, WHO, UNFPA, The Gambia Red Cross Society, Child Fund, Action Aid, HePDO and other potential partners in order to secure additional resources for the implementation of the of the cMYP 2017 – 2021.

The existing community structures such as the Village Development Committees (VDC), Multidisciplinary Facilitation Teams (MDFT), as well as community frontline communicators will be engaged to take ownership towards the maintenance of infrastructures for providing immunization services. As part of community engagement to improve immunization services, NGOs, CSOs, Community Volunteers and other critical partners operating at grass-root level will be mobilized and involved throughout the implementation of the cMYP. The Gambian EPI communication plan 2014-2018 highlights the importance of NGOs and CBOs in the promotion of immunization services and related essential family health practices. The WHO, UNICEF and the World Bank continue to be major partners as well as other partner in health such as The Red Cross. UNICEF has been a long standing partner in the provision of cold chain equipment while WHO continues to assist in technical areas and waste management as part of immunization service delivery and the World Bank through Maternal and Child Nutrition and Health Results Project (MCNHRP).

The government of The Gambia is committed to the immunization programme and has shown commitment to funding obligations over the years and will continue to collaborate with all partners in meeting national immunization targets in the coming years.

CHAPTER FIVE: MONITORING AND EVALUATION FRAMEWORK

The country cMYP 2017 – 2021 provides an opportunity for the programme managers at all levels to monitor and keep track of the objectives, strategies and key activities based on identified indicators. The cMYP 2017-2021 was also aligned with the national monitoring and evaluation framework and the GVAP M& E framework. The data to be used to monitor these indicators are either collected monthly routinely or through surveys. The EPI programme plan to conduct an annual review of these indicators and will be reported on. The cMYP 2017-2021 M&E Framework.

A mid-term evaluation of the cMYP is proposed in 2019 to evaluate the progress and performance in the implementation plan activities. It will also evaluate the progress towards achieving set targets and objectives.

A final evaluation of the cMYP 2017 – 2021 will be done in 2021 and the findings from this evaluation will inform the strategic focus for another cMYP cycle starting in 2022.

Table 12: Monitoring and Evaluation Framework for immunization services (2017-2021) in The Gambia

Objective	OUTCOME INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
1. Immunization Service Delivery												
To achieve 99% coverage at national and 96% coverage at regional for all vaccines by 2021	No. of coverage surveys conducted	97%	2015	JRF	99%	99%	99%	99%	99%	HMIS	Monthly	EPI
To maintain DPT1-DPT3 dropout rate to no more than 5% by 2021	Proportion of health facilities with dropout rate less than 5%	1.97%	2015	JRF	<5%	<5%	<5%	<5%	<5%	HMIS	Monthly	PHOs
To bridge the % gap between the highest and lowest wealth quintile to zero by 2021	Proportion of the rich utilizing Immunization services	-7.3	2013	DHS	0%	0%	0%	0%	0%	Assessment & Survey reports	Once	MOHSW & Partners
To introduce MR, HPV & MenA between 2017-2021	No. of new vaccines introduced	3	2012 - 2015	GAVI Application	MR	HPV, Men A	0	0	0	New Vaccine introduction reports	1 - 2 years	MOHSW & Partners

Strategies	OUTPUT INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
1. Immunization Service Delivery												
Implement "Reach every community" in every health region	Proportion of health facilities that have updated micro plans	96%	2015	EPI Comprehensive assessment	100 %	100 %	100%	100 %	100 %	Micro plan reports	Once	MOHSW & Partners
Engaging communities to create demand for immunization services	Proportion of health facilities that have functional health facility management communities	0	0	0	100 %	100 %	100%	100 %	100 %	Reports	Monthly	PHOs
Improve immunization equity through program design	Equal immunization coverage among all socio-economic class (Equal Ratio 1:1)	The difference between the highest and the lowest socio-economic class (-7.3)	2013	DHS	1 to 1	1 to 1	1 to 1	1 to 1	1 to 1	DHS	2 - 3 years	MOHSW & Partners

Introduction of new vaccines (MR, HPV & MenA) into the EPI schedule	Number of new vaccines introduced	Measles 2, Rota & IPV	2016	HMIS	MR	Men A and HPV	0	0	0	HMIS	Annual	MOHSW & Partners
Activities	INPUT INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
1. Immunization Service Delivery												
Update micro plans to include hard to reach communities	No. of micro plans conducted	3	2015	EPI Reports	100 %	100 %	100%	100 %	100 %	Reports	Annually	EPI , RHDs & Health Facility
Expand routine immunization services to reach all communities	No. of new immunization outreach Clinics established	0	2016	NA	80%	85%	90%	95%	100 %	HMIS	Bi-Annual	MOHSW & Partners
Conduct refresher trainings on inter personal communication(IPC) for immunization service providers	No. of Trainings conducted	80%	2015	EPI Reports	85%	90%	95%	98%	100 %	Training Reports and List of participants	Bi-Annual	MOHSW & Partners
Conduct surveys to identify areas of low immunization coverage	No. of coverage Surveys conducted	1	2013	EPI Reports	1		1		1	Survey results	Bi-Annual	MOHSW & Partners

Sensitize communities on their roles and responsibilities in immunization service delivery	No of sensitizations conducted	0	2015	EPI Reports	4	4	4	4	4	Sensitization Reports	quarterly	EPI , RHDs & Health Facility
Orientation of the highest income group on the benefits of immunization	No of orientation sessions conducted	0	2015	EPI Reports	4	4	4	4	4	Orientation Reports	quarterly	EPI , RHDs & Health Facility
Conduct Post introduction Evaluation	No of post-introduction evaluations conducted	PIE HPV demonstration project and Measles 2nd dose	2015	PIE HPV and Measles 2nd dose Report		MR	HPV & Men A			PIE Reports	A year after introduction	MOHSW & Partners
Conduct national EPI programme reviews	No of EPI reviews conducted	1	2015	EPI Reports	1		1		1	Review Reports	Bi-Annual	EPI , RHDs & Partners

Objective	OUTCOME INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
2. Monitoring, Surveillance and Reporting												
To improve and expand disease surveillance &	Monthly Reporting on Polio,	OPV3= 96%	2015	JRF	97%	98%	99%	99%	99%	HMIS reports	Monthly	PHOs
		2.TT2+ =	2015		85%	89%	93%	97%	99%	HMIS	Monthly	PHOs

reporting by 2021: 1. Polio 2. MNT 3.Measles,Yellow Fever,5 meningitis	MNT, Measles Yellow Fever and Meningitis	82%								reports		
		3.Measles 1= 97%	2015		98%	98%	98%	99%	99%	HMIS reports	Monthly	PHOs
		4.Yellow Fever= 97%	2015		98%	98%	98%	99%	99%	HMIS reports	Monthly	PHOs
		5. Meningitis = 104 (SIA)	2013 (SIA)		70%	80%	85%	90%	95%	HMIS reports	Monthly	PHOs
To institutionalize routine AEFI surveillance in all health facilities by 2021	% of health facilities reporting AEFI surveillance regularly	No base line result	2015	EPI comprehensive Assessment	60%	70%	80%	90%	98%	AEFI Reports	Monthly	EPI, EDC,RHDs and Health Facility
Strategies	OUTPUT INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
2. Monitoring, Surveillance and Reporting												
Strengthen and expand disease prevention and control services	% of health facilities reporting on surveillance regularly	98% of facilities reporting on polio measles and Yellow Fever 0% reprt on MNT	2015	HMIS and IDSR report	100 %	100 %	100 %	100 %	100 %	No, of reports submitted	Monthly	PHOs

Strengthen AEFI surveillance and reporting	Monthly Reporting on AEFI	0% for AEFI	2015	Case- based surveillance report and IDSR report	100 %	100 %	100 %	100 %	100 %	No, of reports submitted	Monthly	PHOs
Activities	INPUT INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
2. Monitoring, Surveillance and Reporting												
Review and update Standard Operation Procedures and guidelines on surveillance	No. of SOPs and guidelines	80 % of SOPs and guide lines	2015	IDSR technical guidelines	85%	90%	95%	98%	100 %	No of SOPs and guidelines printed and distributed	Bi-Annual	MOHSW & Partners
Train Health Care Workers on standard operation procedures and guidelines on surveillance	No of Health Care workers trained	80%	2015	EPI comprehensive Assessment	85%	90%	95%	98%	100 %	Health Care workers trained	Bi-Annual	MOHSW & Partners
Review and update the EPI technical guideline	No. of guidelines reviewed and updated	85%	2015	EPI comprehensive Assessment	100 %	100 %	100 %	100 %	100 %	guidelines reviewed and updated	Once	MOHSW & Partners
Harmonize EPI data collection tools into Health Management Information	No of HMIS report with EPI data	0%	2016	HMIS report	70%	80%	85%	90%	100 %	DHIS2 Database	Monthly	EPI, EDC,RHDs and Health Facility

System												
Strengthen data management, reporting and feedback mechanism at central and regional levels	No. of feedback reports sent from central to regional and from regional to health facilities	0%	2015	EPI comprehensive Assessment	70%	75%	80%	90%	100 %	feedback reports	Monthly	EPI, EDC,RHDs and Health Facility
Strengthen collection, handling & transportation of samples to National Public Health Laboratory	No of specimen samples sent timely	70%	2016	EPI comprehensive Assessment	75%	80%	90%	95%	100 %	Case investigation forms	Monthly	PHOs
Develop, review and update AEFI reporting tools	% of AEFI tools reviewed and updated	0%	2015	EPI comprehensive Assessment	70%	75%	80%	90%	100 %	AEFI tools	Bi-Annual	MOHSW & Partners
Train health care workers on the use of AEFI tools	Proportion of health care workers trained on AEFI	0%	2016	During the development of cMYP 2017 to 2021	70%	75%	80%	90%	100 %	health care workers trained	Bi-Annual	MOHSW & Partners

Institute monthly reporting of AEFI including zero	Proportion of health facilities reporting AEFI	0%	2016	HMIS report	70%	75%	80%	90%	100 %	Health Facility reports	Monthly	EPI
Establish & train national and regional AEFI committees to enable rapid and trustworthy investigation of, and response to, serious AEFIs	Percentage of staff trained on AEFI at all levels	0%	2016	During the development of cMYP 2017 to 2021	70%	75%	80%	90%	100 %	Training reports	Bi-Annual	EPI

Objective	OUTCOME INDICATOR	Baseline			Targets						Frequency of data collection	Responsible person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
3. Demand generation, communication and advocacy												
To sensitize Policy makers and politicians, actively involved and participate in immunization services by the end of 2021	% of policy makers and politicians sensitized on immunization services	25%	2016	ICC Report	30%	50%	80%	90%	100%	ICC Report	Quarterly	EPI

To mobilize all communities to sustain high immunization coverage by the end of 2021.	% of communities mobilised on high immunization sustainability	50%	2016		60%	70%	80%	90%	100%	EPI Activity Report	Yearly	EPI/DHPE
To increase the utilization of the print and electronic media for routine immunization services by the end of 2021	% 0f print and electronic media utilized in immunization services	50%			60%	70%	80%	90%	100%	EPI Activity Report	Yearly	EPI/DHPE
To actively increase the participation of male in immunization services by 2021	Proportion of male sensitize on their involvement in immunization services	0			25%	50%	75%	80%	100%	EPI Sensitization Report	Yearly	EPI/DHPE/RCH
To provide 90% of communities with SBCC support materials by 2021	% of communities provided with SBCC support material	0			50%		75%		100%	EPI Inventory	BI-annually	EPI/DHPE/RCH

Strategies	OUTPUT INDICATOR	Baseline			Targets						Frequency of data collection	Responsible person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
3. Demand generation, communication and advocacy												
Engagement of policy makers and politician	Proportion of policy makers and politicians engaged	10%			30%	50%	75%	90%	100%	Advocacy meeting Report	Yearly	EPI/DHPE
Community mobilization for increase immunization demand	Proportion of Communities mobilized for increased immunization demand	50%			65%	70%	80%	90%	100%	Sensitization meeting Report	Yearly	EPI/DHPE
Providing SBCC support materials	Proportion of communities provided with SBCC support material	50%			65%		75%		100%	EPI/DHPE Inventory	Yearly	EPI/DHPE
Activities	INPUT INDICATOR	Baseline			Targets						Frequency of data collection	Responsible person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
3. Demand generation, communication and advocacy												
conduct advocacy	Proportion of	25%	2016		100 %	100 %	100 %	100%	100%	Meeting report	Yearly	EPI/DHPE

meetings	advocacy meeting conducted											
Conduct SBBC meetings	Proportion of SBCC meeting conducted	50%	2016		60%	70%	80%	90%	100%	Meeting report	Quarterly	EPI/DHPE
Organize radio and TV shows	Proportion of radio and TV shows organised	55%			60%	70%	75%	90%	100%	Programme report	Quarterly	EPI/DHPE
Organize media briefing	Proportion of media briefing organised	15%			25%	50%	75%	90%	100%	Media briefing Report	Yearly	EPI/DHPE
Train health workers on risk communication	Proportion of health workers trained	0			50%		75%		100%	EPI Training Report	Yearly	EPI
Develop, print and distribute SBBC support materials	Proportion of SBCC support materials developed, printed and distributed	25%			50%		75%		100%	EPI/DHPE Inventory	BI-Annually	EPI/DHPE
Train health workers on effective communication skills	Proportion of health workers trained	25%			50%		75%		100%	EPI Training Report	Yearly	EPI/DHPE

Objective	OUTCOME INDICATOR	Baseline			Targets						Frequency of data collection	Responsible person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
4. Vaccine, Cold Chain and Logistics												
1.To provide 40 M3 cold room at central level by end of 2019	40m3 cold room provided at central level	1	2016	Cold chain inventory	1					Cold chain inventory, Invoice and receipts	Bi-annually	EPI
.To provide 25 refrigerators (TCW 3000 SDD) in six regional cold stores by end of 2021	% of refrigerators provided at the regional cold store	10	2016	Cold chain inventory		12	25			Cold chain inventory	Yearly	EPI
To provide 20 refrigerators (TCW 2000) in public health facilities offering immunization services by the end of 2021.	% of refrigerators provided in newly built facilities providing immunization services	5	2016	Cold chain inventory			16		20	Cold chain inventory	Yearly	EPI
To Procure and install automatic voltage regulators for the central EPI cold store by 2021	% of automatic voltage regulators installed for central and regional store	0	2016	Cold chain inventory	1					Cold chain inventory	Every 2 years	EPI

Maintaining regular and quality vaccine supply by 2021	proportion of vaccine stores maintaining regular and quality vaccine	55	2016	Stock card and Temperature record	100 %	100 %	100 %	100 %	100%	Stock card and Temperature record	Yearly	EPI
Inadequate EPI logistic system at all levels	Proportion of health facilities with improved logistic system	75%	2016	EVM report							Yearly	EPI
To provide six incinerators in six health region by 2021	% of incinerators provided at regional level	6	2016	Cold chain inventory			4		6	Cold chain inventory	Every 3 years	EPI
Strategies	OUTPUT INDICATOR	Baseline			Targets						Frequency of data collection	Responsible person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
4. Vaccine, Cold Chain and Logistics												
Strengthening and expansion of the cold chain	Proportion of additional Cold chain equipment installed	1%			50%	75%	100 %			Cold Chain inventory and supervisory report	Yearly	EPI
Mobilize funds to procure vaccines	Proportion of routine vaccine	100%		EVM report	100 %	100 %	100 %	100 %	100%	Government budget allocation	Yearly	EPI

	available.											
Strengthening regular stock and temperature monitoring and recording at all levels	Proportion of health facilities storing vaccines that record temperature daily	100%		EVM report	100 %	100 %	100 %	100 %	100%	Temperature monitoring chart	Monthly	EPI
Capacity building on effective vaccine management(EVM	No of capacity building workshop on EVM.	1	2014	EVM report		1		1		EVM training report	Yearly	EPI
Strengthening logistic system at all levels	Proportion of additional logistic provided	0		EVM report	25%	50%	75%	100 %		EPI Inventory	Yearly	EPI
Improving waste management and injection safety	Proportion of additional incinerators	0		EVM report		50%	80%	90%	100%		Quarterly	EPI/DHPE
Activities	INPUT INDICATOR	Baseline			Targets						Frequency of data collection	Responsible person
		Results	Year			2018	2019	2020	2021	Means of Verification		
4. Vaccine, Cold Chain and Logistics												

Procure 1 cold room for central level ,45 fridges for regional and health facilities , and spare parts for all levels	1. Cold room procured at central level. 2. No. of fridges procured at regional and health facities.3. No. of spare parts procured	central (1) regional (20) , health facility(50)	2016	EPI Inventory	1	25	45			EPI Inventory	Every 5 years	EPI
Install the fridges and the cold room at health facility regional, and central level	Cold room installed at central level. 2. No. of fridges installed at regional and health facities.3. No. of spare parts available at all levels	central (1) regional (20) , health facility(50)	2016	EPI Inventory	1	25	45			EPI Inventory	Yearly	EPI
Procure and install three automatic voltage regulators at the central cold room	No. of automatic voltage regulators procured and installed at	0	2016	EVM report	3					EPI Inventory	Yearly	EPI

	central cold room											
Procure and install two multi- loggers at the central and regional cold rooms	No. of multi-loggers procure and installed at central and regional cold stores	0	2016	EVM report		2				EPI Inventory	Every 5 years	EPI
Advocacy meeting with policy makers	No. of advocacy meetings conducted	4	2016	ICC Minutes	1	2	3			ICC Minutes	Yearly	EPI/DHPE
Train immunization providers on EVM	No. of immunization providers trained	200	2016	EVM report	25%	50%	75%	100 %		EPI training report	Yearly	EPI
Procure two hundred fridge tags and 100 freeze tags for central, regional and health facilities	Proportion of fridge tags and freezed tags procured for all levels	100%	2016	Shipping documents	25%	50%	75%	100 %		Shipping documents	Yearly	EPI
Conduct supportive supervision and monitoring	Proportion of supportive supervision and monitoring	50%	2016	Supervisory report	100 %	100 %	100 %	100 %	100%	Supervisory Report	Quarterly	EPI

	conducted											
Procure spare parts and fuel	Proportion of spare part and fuel procured	50%	2016	Shipping documents and inventory	30%	50%	70%	90%	100%	Shipping documents and inventory	Yearly	EPI
Install spare parts	Proportion of Spare part installed	0%	2016	Inventory	30%	50%	70%	90%	100%	EPI Inventory	Yearly	EPI
Conduct regular maintenance	Proportion of regular maintenanc e conducted	100%	2016	Maintenan ce log book	100 %	100 %	100 %	100 %	100%	Maintenance log book	Quarterly	EPI
Construct and refurbish dry stores	Proportion of dry stores constructed and refurbished	13%	2016	EVM report		50%	100 %			EVM report	Yearly	EPI
Construct and maintain incinerator	Proportion of incinerators constructed and maintained	70%	2016	EPI Comprehe nsive review		50%	100 %			EPI Comprehens ive review report	Every 5 years	EPI
Train incinerator attendance	Proportion of incinerator attendance trained	0%	2016	EPI Comprehe nsive review		25%	50%	75%	100%	EPI Comprehens ive review report	Yearly	EPI
Procure PPEs	Proportion of PPEs procured	0%	2016	EPI Comprehe nsive		100 %				EPI Comprehens ive review	Yearly	EPI

				review								

Objective	OUTCOME INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
5. Costing and Finance												
To increase and improve access to funds for EPI programme implementation by 2021	Total expenditure on immunization as % of MoHSW budget	30%	2015	JRF	40%	40%	40%	40%	40%	JRF reports	1	EPI
	Proportion of immunization budget released on time.	0	2015	JRF	80%	80%	80%	80%	80%	JRF reports	1	EPI
Strategies	OUTPUT INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
5. Costing and Finance												
Enhancing operational efficiency through better budget management	Availability of budget management tool	0	2015	EPI comprehensive review	1	0	0	0	0	Copies of the budget management tool	1	EPI
Activities	INPUT INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
5. Costing and Finance												

Develop and implement Operational Plan for immunization policy financing	Availability of an operational plan for immunization policy financing	0	2015	EPI comprehensive review	1	1	1	1	1	Copies of the annual operational plan	1	EPI
Constitute a task force to advocate for more resource mobilization	Availability of a task force for resource mobilization	0	2015	EPI comprehensive review	1	1	0	0	0	Records of taskforce members	1	EPI
Develop a tool that will track the execution of approved immunization budget	Availability of a tool to track the approved immunization budget	0	2015	EPI comprehensive review	1	0	0	0	0	copy of the tool developed	1	EPI
Develop a resource mobilization plan	Availability and use of a cMYP resource mobilization plan	0	2015	EPI comprehensive review	1	1	0	0	0	Records of Plan	1	EPI

Objective	OUTCOME INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
6. Program Management												

To increase the participation of senior government officials, politicians, religious leaders and the private sector in EPI related services by 2021	Number of advocacy meetings held with senior government officials, politicians, religious leaders and the private sector on EPI related services	0	2015	EPI comprehensive review	1	1	1	1	1	minutes of meetings	1	EPI
To develop a national immunization policy by 2021	Availability of national Immunization Policy	0	2015	EPI comprehensive review	1	0	0	0	0	Minutes of the immunization policy validation meetings	1	EPI
To develop an Integrated Monitoring and Evaluation (M & E) plan for immunization services by 2021	Availability of integrated M & E Plan for cMYP 2017-2021	0	2015	EPI comprehensive review	1	0	0	0	0	Integrated M & E Plan validated, lunched and distributed	1	EPI
Strategies	OUTPUT INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
6. Program Management												

Engage Senior government officials and politicians and other stakeholders to participate in EPI related services	Number of meetings with Senior government officials and politicians on EPI	0	2015	EPI comprehensive review	1	1	1	1	1	minutes of meetings	1	EPI
Development of a national immunization policy with relevant stakeholders	Number of stakeholder meetings held on Immunization Policy	0	2015	EPI comprehensive review	1	0	0	0	0	minutes of the stakeholder meetings	1	EPI
Development of an integrated M & E plan	Integrated M & E Plan Developed and launched	0	2015	EPI comprehensive review	1	0	0	0	0	minutes of the integrated M&E plan meetings	1	EPI
Activities	INPUT INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
6. Program Management												
Sensitize senior government officials, politicians and other stakeholders	Number of sensitization meetings conducted	0	2015	EPI comprehensive review	1	1	1	1	1	minutes of sensitization meetings	1	EPI

Conduct annual meetings with the health select committee of the National Assembly	Number of meetings conducted	0	2015	EPI comprehensive review	1	1	1	1	1	Minutes of annual meetings	1	EPI
Conduct regular meeting with National Immunization Technical Advisory Group members (NITAG)	Number of meetings conducted	0	2015	EPI comprehensive review	1	1	1	1	1	Minutes of annual meetings	1	EPI
Resource mobilization for policy development	Number of resource mobilization activities conducted	0	2015	EPI comprehensive review	1	1	1	1	1	Advocacy reports	1	EPI
Identify and engage partners on policy development	Number of partners engagement meetings held on policy development	0	2015	EPI comprehensive review	1	1	1	1	1	Minutes of annual meetings	1	EPI
Conduct training workshops to orient (NITAG)	Proportion of workshops conducted	0	2015	EPI comprehensive review	0	0	1	0	0	minutes of the workshop	1	EPI

Mobilization of resources for the printing and dissemination of final M & E plan	Number of resources mobilized	0	2015	EPI comprehensive review	1	1	0	0	0	Advocacy reports	1	EPI
Identify and engage partners on M&E plan development	Number of partners engagement meetings held on M&E development	0	2015	EPI comprehensive review	0	1	0	0	0	Minutes of annual meetings	1	EPI

Objective	OUTCOME INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
7. Human Resource Management												
To retain 90% of staff involved in immunization services by 2021	% of immunization staff retained	0	2015	EPI comprehensive review	1	1	1	1	1	Record of staff retention scheme	1	EPI
To develop a staffing norm for equitable distribution	Availability of staffing norm	0	2015	EPI comprehensive review	1	1	1	1	1	staffing norms produced	1	EPI

of immunization service providers by 2021												
To train 25 middle level managers on immunization services by 2021	Proportion of middle level managers trained on immunization services	0	2015	EPI comprehensive review	1	0	1	0	1	minutes of the training held	1	EPI
To train 90% of immunization service providers by 2021	% of immunization service providers trained	0	2015	EPI comprehensive review	1	0	1	0	1	minutes of the training held	1	EPI
Strategies	OUTPUT INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
7. Human Resource Management												
Improve incentive package at all levels	Proportion of health workers benefitied from incentives	0	2015	EPI comprehensive review	1	1	1	1	1	payment vouchers	1	EPI/HRH
Equitable distribution of immunization staff at all	Proportion of immunization service providers in rural and	0	2015	EPI comprehensive review	1	1	1	1	1	record of staffing norm	1	EPI/HRH

levels	urban areas											
Strengthen capacity of Human Resource at all levels	proportion of facilities with required human resource	0	2015	EPI comprehensive review	1	1	1	1	1	record of staffing norm	1	EPI/HRH
Harmonize and improve continuous professional development	proportion of immunization staff benefited from professional training	0	2015	EPI comprehensive review	1	0	1	0	1	Records of staff trained	1	EPI
Activities	INPUT INDICATOR	Baseline			Targets						Frequency of Data Collection	Responsible Person
		Results	Year	Source	2017	2018	2019	2020	2021	Means of Verification		
7. Human Resource Management												
Allocate 50% of basic salary as retention allowance for immunization service providers	Proportion of immunization service providers benefited from incentives	0	2015	EPI comprehensive review	1	11	1	1	1	payment vouchers	1	EPI
Create a special hard to reach allowance for	Number of immunization service providers received hard-	0	2015	EPI comprehensive review	1	1	1	1	1	Records of staff receiving hard to reach allowance	1	EPI

immunizatio n staff	to-reach allowance											
Provide performanc e based reward advocate for free medical care for all immunizatio n service providers and their immediate family members.	Number of immunization service providers and their families benefited from the performance based reward	s	201 5	EPI comprehensiv e review	1	1	1	1	1	Records of immunization staff and their families receiving performance based rewards	1	EPI
Construct new and refurbish existing structures	% of infrastructures refurbished	59	201 5	EPI comprehensiv e review	0	1	0	1	0	Contract documents	1	EPI
	Number of new structures constructed	59	201 5	EPI comprehensiv e review	0	1	0	1	0	Contract documents	1	EPI
Develop and implement posting guideline and policy	Availability of immunization staff posting policy	0	201 5	EPI comprehensiv e review	1	0	1	0	1	Posting Policy	1	EPI

Conduct training needs assessment at all levels (private & Public)	Number of training need assessments on immunisation conducted	0	2015	EPI comprehensive review	1	0	1	0	1	Needs assessment reports	1	EPI
conduct training for middle level managers	Proportion of middle level managers trained on immunization service delivery	0	2015	EPI comprehensive review	1	0	1	0	1	Training reports	1	EPI
Develop immunization guidelines for in service training	Availability of immunization guidelines	0	2015	EPI comprehensive review	1	0	1	0	1	Training guidelines	1	EPI

ANNEXURE

Annex 1: GVAP Checklist

Annex 2: Key Activities, Strategies and Objectives cMYP 2017-2021

Thematic Areas	Objectives	Strategies	Activities
1. Immunization Service Delivery			
Immunization coverage	To achieve 99% coverage at national and 96% coverage at regional for all vaccines by 2021	Implement "Reach every community" in every health region	1. Update micro plans to include hard to reach communities
			2. Expand routine immunization services to reach all communities
			3. Conduct refresher trainings on inter personal communication(IPC) for immunization service providers
			4. Conduct coverage surveys to identify areas of low coverage
Immunization demand	To maintain DPT1-DPT3 dropout rate to no more than 5% by 2021	Engaging communities to create demand for immunization services	5. Sensitize communities on their roles and responsibilities in immunization service delivery

Immunization equity	To bridge the % gap between the highest and lowest wealth quintile to zero by 2021	Improve immunization equity through program design.	6. Orientation of the highest income group on the benefits of immunization
New vaccine introduction	To introduce MR, HPV & MenA between 2017-2021	Baseline survey for the introduction of new vaccines	7. Conduct immunization campaigns, demonstration, Post introduction Evaluation and cluster surveys
			8. Conduct national immunization programme reviews regularly in preparation of strategic programme planning
Thematic Areas	Objectives	Strategies	Activities
2. Demand Generation, Communication & Advocacy			
Advocacy and Social Mobilization	To sensitize Policy makers and politicians, actively involved and participate in immunization services by the end of 2021.	Engagement of policy makers and politician	1. Conduct advocacy meetings
	To mobilize all communities to sustain high immunization coverage by the end of 2021.	Community mobilization Increasing demand for immunization	2. Conduct SBBC meetings
	To increase the utilization of the print and electronic media for routine immunization services by the end of 2021		3. Organize radio and TV shows
			4. Organize media briefing
			5. Train health workers on risk communication

	To increase the awareness level of communities on the importance of immunization by the end of 2021		6. Sensitize communities on the importance of immunization
			7. Conduct open field days
Social and Behavioral Change Communication	To actively increase the participation of male in immunization services by 2021		8. Sensitization meeting with male
	To provide 90% of communities with SBCC support materials by 2021	Providing SBCC support materials	9. Develop, print and distribute SBBC support materials
			10. Train health workers on effective communication skills
hematic Areas	Objectives	Strategies	Activities
3. Vaccine Cold Chain & Logistics			
Cold Chain System	1.To provide 40 M3 cold room at central level by end of 2021	Strengthening and expansion of the cold chain	1. Procure 1 cold room for central level, 45 fridges for regional and health facilities, and spare parts for all levels
	2.To provide 25 TCW 3000 SDD in six		2. Install the fridges and the cold room at health facility regional, and central level
	regional cold stores by end of 2021		3. Procure and install three automatic voltage regulators at the central cold room
	3. To provide 20 TCW 2000 in 30% of the newly built public health facilities offering immunization services by the end of 2021.		4. Procure and install two multi- loggers at the central and regional cold rooms

	To Procure and install automatic voltage regulators for the central EPI cold store by 2021		
	To Procure and install Multi- loggers in the cold rooms by 2021		
	Maintaining regular and quality vaccine supply by 2021	1.Mobilize funds to procure vaccines	5. Advocacy meeting with policy makers
		2.Capacity building on effective vaccine management(EVM)	6. 2. Train immunization providers on EVM
		3.Strengthening regular stock and temperature monitoring and recording at all levels	7. 3.Provide two hundred fridge tags
	Inadequate EPI logistic system at all levels	Strengthening logistic system at all levels	8. Conduct supportive supervision and monitoring
			9. Procure spare parts and fuel
			10. Install spare parts
			11. Conduct regular maintenance
			12. Construct and refurbish dry stores

Waste Management	To provide six incinerators in six health region by 2021	Improving waste management and injection safety	13. Construct and maintain incinerator
			14. Train incinerator attendance
			15. Procure PPEs
Thematic Areas	Objectives	Strategies	Activities
4. Monitoring, Surveillance & Reporting			
Polio	To improve and expand disease surveillance & reporting by 2021	Strengthen and expand disease prevention and control services	1. Review and update Standard Operation Procedures and guidelines on surveillance
MNT			2. Train Health Care Workers on standard operation procedures and guidelines on surveillance
Measles & Rubella			
Epidemic meningitis			3. Review and update the EPI technical guideline
			4. Harmonize EPI data collection tools into Health Management Information System
			5. Strengthen data management, reporting and feedback mechanism at central and regional levels
			6. Strengthen collection, handling & transportation of samples to National Public Health Laboratory
AEFI surveillance and reporting	To institutionalize routine AEFI surveillance in all health facilities by 2021	Strengthen AEFI surveillance and reporting	7. Develop, review and update AEFI reporting tools
			8. Train health care workers on the use of AEFI tools
			9. Institute monthly reporting of AEFI including zero

			10. Establish & train national and regional AEFI committees to enable rapid and trustworthy investigation of, and response to, serious AEFIs
Thematic Areas	Objectives	Strategies	Activities
5. Costing and Financing			
Financing and Resource Mobilization	To increase and improve access to funds for EPI programme implementation by 2021	Enhancing operational efficiency through better budget management	1. Develop and implement Operational Plan for immunization policy financing
			2. Constitute a task force to advocate for more resource mobilization
			3. Develop a tool that will track the execution of approved immunization budget
			4. Develop a resource mobilization plan
			5. Proportion of immunization budget released on time.
Thematic Areas	Objectives	Strategies	Activities
6. Programme Management			
Political commitment and advocacy	To increase the participation of senior government officials, politicians, religious leaders and the private sector in EPI related services by 2021	Engage Senior government officials and politicians and other stakeholders to participate in EPI related services	1. Sensitize senior government officials, politicians and other stakeholders
			2. Conduct annual meetings with the health select committee of the National Assembly
			3. Conduct regular meeting with National Immunization Technical Advisory Group members (NITAG)
Policy	To develop a national immunization policy by 2021	Development of a national immunization policy with relevant stakeholders	4. Resource mobilization
			5. Identify and engage partners
			6. Conduct training workshops to orient (NITAG)

Monitoring and evaluation plan	To develop an Integrated Monitoring and Evaluation (M & E) plan for immunization services by 2021	Development of an integrated M & E plan	7. Mobilization of resources from immunization development Partners. 8. Identify and engage partners
Thematic Areas	Objectives	Strategies	Activities
7. Human Resource Management			
Staff Retention	To retain 90% of staff involved in immunization services by 2021	Improve incentive package at all levels	1. Allocate 50% of basic salary as retention allowance for immunization service providers 2. Create a special hard to reach area allowance for health staff. 3. Provide performance based reward advocate for free medical care or all health workers and their immediate family members. 4. Construct new and refurbish existing structures
Staff Distribution	To develop a staffing norm for equitable distribution of immunization service providers by 2021	Equitable distribution of immunization staff at all levels	5. Develop and implement posting guideline and policy 6. Implement staffing norm
Human Resource Development	To train 25 middle level managers on immunization services by 2021	Strengthen capacity of Human Resource at all levels	7. Conduct training needs assessment at all levels (private & Public) 8. Conduct training for middle level managers
	To train 90% of immunization service providers by 2021	Harmonize and improve continuous professional development	9. Develop guidelines for in service training