

MINISTRY OF HEALTH AND SOCIAL WELFARE

REPUBLIC OF LIBERIA

2013 ANNUAL REPORT



List of Abbreviation

ACT	Artemisinin-based Combination Therapy
AIDS	Acquired Immunoe deficiency Syndrome
ARI	Acute Respiratory Infection
ART	Anti- Retroviral Therapy
ARV	Antiretroviral
CDDs	Community Directed Distributors
CDTI	Community Directed Treatment with Ivermectin
CHV	Community Health Volunteer
CHT	County Health Team
EPI	Expanded Program on Immunization
GAVI	Global Alliance for Vaccines and Immunization
gCHV	General Community Health Volunteer
GoL	Government of Liberia
GFATM	Global Fund for AIDS Tuberculosis and Malaria
НСТ	HIV Counseling and Testing
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
IPT	Intermittent Preventive Treatment
ITN	Insecticide Treated Nets
MOHSW	Ministry of Health and Social Welfare
MDGs	Millennium Development Goals
NACP	National AIDS Control program
NLTCP	National Leprosy and TB Control Program
NMCP	National Malaria Control Program
NTDs	Neglected Tropical Diseases
OPD	Out-patient Department
PMTCT	Prevention of Mother to Child Transmission
STI	Sexually Transmitted Infection
ТВ	Tuberculosis

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Executive Summary

The Ministry developed a 10 year National Health and Social Welfare Policy and Plan (2011-2021) with a mission to reform and manage the sector to effectively and efficiently deliver comprehensive, quality health and social welfare services that are equitable, accessible and sustainable for all people in Liberia. The policy vision is a healthy population with social protection for all, and the goal is to improve the health and social welfare status of the population of Liberia on an equitable basis. The ten-year plan adapts the WHO health systems framework and includes seven building blocks: governance and leadership, health financing, human resources, information systems, management and organization, medical products and technology, and infrastructure network. In the execution of this goal, mission and vision, the Ministry made significant gains under each building block in 2013.

The Ministry of Health and Social Welfare during the year under review, made gains with support from the Government of Liberia, donors, development partners, stakeholders and service providers. In 2013, preliminary results from the Liberia Demographic and Health Survey revealed that the proportion of children receiving all basic vaccines increased from 39% in 2007 to 55% in 2013, total fertility rate reduce from 5.2 children per woman in 2007 to 4.7 children per woman in 2013 and the proportion of family planning users increase from 11% in 2007 to 19% in 2013. Also, the proportion of pregnant women assisted at delivery increased from 46% in 2007 to 61% in 2013. These gains have contributed to decline in infant mortality rate from 72 deaths per 1,000 live births in 2007 to 54 deaths per 1,000 live births in 2013, while under five mortality decline from 111 deaths per 1,000 live births in 2007 to 94 deaths per 1,000 live births. Also, the distribution of over one hundred thousand mosquito nets to pregnant women attending antenatal care across Liberia increase the proportion of households with at least one mosquito nets to 58% and have reduce the prevalence of malaria from 66% in 2005 to 32% presently.

The Ministry during the same period constructed five microscopic laboratories in five counties to improve diagnostic services, installed 53 Solar Panels at health facilities in six counties to provide electricity and constructed eight incinerators to improve waste management and sanitation at 8 health facilities. To address the equity gap in the provision of health services and improve maternal health services, the Ministry completed the construction of four clinics, one health centers, three maternal waiting homes, four maternal wings and finalized infrastructure design work for the construction of a new National Drug Services (NDS) central warehouse that is expected to improve supply chain management.

Other achievements worth noting under the health and social welfare sector include, the launched of the Promise Renewed by the President of Liberia in line with international "Child Survival Call to Action", provided 83 orphanages that cater to 3,357 orphans with support, developed a concept paper to initiate Liberia Health Equity Fund that aimed at providing universal health coverage for all, launched the Post Graduate Medical Residency Program and started the training of 19 residents in the areas of General Surgery, Obstetrics & Gynecology, Internal Medicine and Pediatrics and deployed graduates of the A.M. Dogliotti College of Medicine to be trained in basic surgical emergencies in 6 hospitals for subsequent

assignment in county hospitals. According to the World Health Organization, Liberia is on track of achieving MDG 4 by 2015.

The human resources for health building block though faced with numerous challenges ranging from low motivation to insufficient number of skilled and qualified work force, made progress in 2013. In light of this, the Ministry awarded 22 international scholarships in public health and health related fields and 257 local scholarships were awarded to students at various universities and health training institutions to acquire knowledge and skills in medicine. Additional 20 employees were supported to acquire additional skills and knowledge at the Liberia Institute of Public Administration (LIPA) in M&E, HR management, etc. To further strengthen the health work force, 397 health workers were recruited and placed on government's payroll, an integrated Human Resources Information System (iHRIS) was developed to track and profile health workers at every level of the health system and 3,578 employees were provided health insurance through Secure Risk Insurance Company.

Noteworthy accomplishments include:

- The Annual Health Sector Review Conference with the theme Universal Health Coverage: Health and Social Protection for all was successfully held in October 2014.
- The Concept Paper to initiate the National Health Equity Fund (Universal Insurance Scheme) was developed.
- The Ministry has started the implementation of the Accelerated Action Plan for the Reduction of Maternal and Newborn Mortality in Liberia.
- Government's respond to Dire Need for Mental Health Drugs in the Country an Unprecedented Action taken and more than US\$100,000 worth of MH Drugs procured.
- The conduct of an annual health facility accreditation survey

Section 1: Introduction

The Ministry is headed by a Minister with four deputies and six assistant ministers. The four deputy ministers are, Deputy Minister for Administration, Deputy Minister for Health Services who is also the Chief Medical Officer of the Republic of Liberia, Deputy Minister for Planning, Resource and Human Development and Deputy Minister for Social Welfare. The six Assistant Ministers are for Curative Services, Preventive Services, Social Welfare, Planning and Policy, Administration, and Health and Vital Statistics. See the Ministry's structure below for further information.

The Ministry is decentralized at the level of the district and county. The national level is responsible for policy and strategic plans formulation and resource mobilization, while the county and district levels are responsible for implementation of the health and social services backed by the sector policies, operational guidelines and strategic plans.



At the operational level, County Health and Social Welfare Officers (CHOs) head the County Health and Social Welfare Teams (CHSWTs), while Officers in Charge (OICs) manage health services at the facility level and District Health Officers supervise health activities within their respective districts.

Section 2: Department of Health Services

2.0 Bureau of Curative and Preventive Services

The Bureau of Curative Services is composed of the Ministry's operational level, which is the county health and social welfare teams and health facilities (e.g., clinics, health centers and hospitals). The Bureau has oversight for services provided at health facilities with support from various programmes.

The Bureau of Preventive Services oversee programs which coordinates and support the prevention, management and control of diseases of public health concern, including communicable and non-communicable diseases, as well as mental health. It coordinates the MOHSW response to health emergencies, facilitate monitoring activities for control of emergencies and disease outbreaks.

2.1 Service Delivery Report

2.1.1 Counties Reporting Coverage

Out-patient reporting is gradually improving since the integration of data collection and reporting instruments. However, individual county reporting continues to fluctuate especially with Bomi, River Gee and Grand Gedeh. The current national out-patient department reporting coverage is 83% with four counties (Bong, Grand Cape Mt, Grand Kru and River Gee) reporting 100%. The lowest reporting county is Montserrado, however, it has shown remarkable improvements over the past three years, from below 45% in 2010 to 66% in 2013. Table A in the annex provides the number of functional health facilities by county, expected number of reports and actual reports received.



In-patient reporting from health centers and hospitals across the country has shown significant improvement in recent years. Reporting coverage increased from 40% in 2011 to 85% in 2013. The county with the noticeable reporting decline following improvement in 2012 is Montserrado, from 73.1% in 2012 to 38% in 2013. Effort is been made to improve the reporting coverage in Montserrado County as this has been a major challenge working with the number of health facilities in the county. Most counties reporting show significant increase. However, there are few counties that experienced low reporting coverage such as Nimba, Grand Gedeh and Lofa. Figure 2.2 presents In-patient reporting coverage by county in 2013. Table B in the annex provides the number of functional in-patients facilities and their reporting status.



Health facility reporting coverage and data quality continue to improve as a result of training in data management and reporting, data use for decision making, quarterly data verification and quality checks exercises and the initiation of the performance based financing program.

2.1.2 Health Facility Utilization

Health services utilization in Liberia is measured by Primary Health Care (PHC) head count and the number of curative consultations¹. In 2013, 83% (657) of the functional health facilities in the country reported on health services provided. Utilization records show *5,455,431* visits across the country with 34.5% (1,883,987) of these visits made by patients' under-5 years old. Curative consultations constituted 61% of all visits.

The utilization rate for 2013 is 1.4 per inhabitant with variations across counties ranging from 0.5 in Gbarpolu to 2.5 in Bong County. The lowest utilization of health services in most part of Liberia is mainly attributed to the inadequate access and the quality of health care delivery. Approximately 28% (1 million)

¹ PHC head count means the number of visits made to health facilities that includes preventive and curative services while curative consultation refers to health services provided at health facilities to patients that exclude preventive services such as immunization, counseling and family planning. Both preventive and curative consultation data provides an opportunity to assess the utilization of services at health facilities and within each country.

of the population have to walk over 5 kilometers or over one hour to reach the nearest health facility. Table 2.1 presents data on health facilities utilization by county. The availability, reliability and timeliness of health services data is key to making informed decisions and prompt health interventions. In light of the above, data gatherers and producers are regularly trained (In-service or in workshops), to improve the quality of health data and services.

Table 2.1: Utiliz	Table 2.1: Utilization of Health Facilities by County in 2013												
	Projected Catchment		PHC Head Cour	nt	Curativ	ve consultations	(OPD)	% of Cur.	Utiliz.				
County	Population In 2013	< 5 yrs	5yrs and above	Total	< 5 yrs	5yrs & over	over Total		Rate				
Bomi	93,331	40,608	92,833	133,441	86,664	41,588	128,252	96	1.4				
Bong	369,998	684,318	242,428	926,746	168,032	85,196	253,228	27	2.5				
Gbarpolu	92,519	14,507	35,405	49,912	30,728	17,528	48,256	97	0.5				
G. Bassa	245,969	67,902	158,339	226,241	125,154	126,520	251,674	111	0.9				
G. C. Mt	140,991	55,342	93,192	148,534	82,383	50,682	133,065	90	1.1				
G. Gedeh	138,974	36,615	82,301	118,916	55,981	25,666	81,647	69	0.9				
G. Kru	64,255	25,014	52,993	78,007	46,807	23,548	70,355	90	1.2				
Lofa	307,180	97,059	215,821	312,880	157,648	78,443	236,091	75	1.0				
Margibi	232,911	91,620	200,358	291,978	159,431	65,199	224,630	77	1.3				
Maryland	150,824	44,786	90,532	135,318	72,336	34,058	106,394	79	0.9				
Monts.	1240,693	454,796	1,764,175	2,218,971	743,583	322,387	1,065,970	48	1.8				
Nimba	512,620	179,508	336,659	516,167	305,959	169,351	475,310	92	1.0				
River Gee	74,102	33,219	75,838	109,057	54,629	27,861	82,490	76	1.5				
Rivercess	79,340	26,182	54,434	80,616	43,446	23,060	66,506	82	1.0				
Sinoe	113,604	32,511	76,136	108,647	54,642	26,409	81,051	75	1.0				
National	3857,309	1,883,987	3,571,444	5,455,431	2,187,423	1,117,496	3,304,919	61	1.4				

Analysis of patients' utilization records across Liberia in 2013 shows an average of 40visits/day/facility (22working days/month)². However, this varies greatly between and within counties. The highest utilization of health facility on average per day was reported in Bong (90 visits/day/facility), Montserrado (35 visits/day/facility), and Margibi (34 visits/day/facility). The lowest average patient visits to health facility per day was seen in Sinoe (12 visits/day/facility), Gbarpolu (14 visits/day/facility), and Grand Kru (17 visits/day/facility). The low utilization of health services can be attributed to health seeking behavior (cultural practices and beliefs), long distances to access health care (an estimated 28% or 1,057,832 population living more than one hour walk from a health facility), poor road network, health workers attitudes to patients, long waiting time, and the unpredictable stock out of essential drugs.

2.1.2.1 Out-Patient Department Consultations

Attendance at various health facilities are gradually increasing over the past five years. The number of patients increased from 3,935,901 in 2009 to 5,455,431 in 2013. Curative consultations also bloat from

² Estimation is based on 526 reported health facilities with a total of 5,455,431 PHC visits within 264 working days (excluding Saturdays, Sundays and holidays especially for health clinics).

2,854,920 visits in 2009 to 3,304,919 in 2013. This gradual increase in patients load at health facilities could be attributed to increasing public education on their health and wellbeing as well as improving quality and access to health care. Figure 2.3 presents the number of patients' visits to health facilities from 2009 to 2013.



2.1.2.2 In-Patient Department Consultations

In 2013, data from around the country show that 133,910 patients were admitted for various medical conditions. Montserrado accounts for 35.5% of total admission nationwide, followed by Nimba (14.6%), Margibi (14.5%) and Bong (8%). The majority of patients were admitted for malaria treatment (32.2%), Anemia (7.5%), Acute Respiratory Infections (ARI) (5.7%) and Sexually Transmitted Infections (5.5%). Table C in the annex presents in-patient admission by causes and by county.

In-patient records from across Liberia shows that 133,910 patients were admitted in 2013, which is a huge decline from 264,784 in 2011. The dropped in admission could be attributed to the decline in the reported cases of malaria episodes from approximately 61.2% in 2011 to 47% in 2013 due to preventive measures such as ITNs ownership and use³. Examination of the in-patient report shows that 9% of the admitted patients were discharged and 5.4% (7,243) died. In-patients' deaths vary across counties with the highest proportion of maternal inpatient deaths being reported by Gbarpolu (38.4) and Sinoe (11.9). Compared to previous years (2,531 in 2010 and 1,725 in 2011) the mortality rate has decreased from 8,404 in 2012 to 7,243 in 2013. Furthermore, inpatient records indicate that on a daily basis, there were approximately two neonatal and one maternal death among inpatient admission. Table D in the annex presents admissions and deaths by county in 2013.

³ The Liberia Malaria Indicator Survey (LMIS) 2011 results showed an increased in ITNs used from 33% in 2009 to 39 in 2011 for pregnant women and for children under five an increase of 11% (26% to 37%) over the same period.

2.1.3 Child Health

In an effort to attain MDG 4, the Ministry of Health and Social Welfare has prioritized cost effective child health interventions at the community and health facility levels. These child survival activities include immunization, integrated management of neonatal and childhood illnesses (IMNCI), integrated management of acute malnutrition (IMAN), essential nutrition actions (ENA), micro-nutrient supplementation and deworming. Progress made during the year on these interventions is discussed below.

2.1.3.1 Immunization

Reaching universal immunization coverage continues to be a challenge in Liberia, however, significant gains have been made in recent years. Liberia's program of immunization offers five antigens to children less than one year. Antigens administered to children age 0-11 months are as follows: BCG (82%), OPV3 (84%), Penta-3 (84%), Measles (70%), Yellow Fever (70%) and fully immunized (65%). Although, the current rates are encouraging, there are data abnormalities. For examples, OPV-3 coverage is higher than OPV2 and Penta-2 coverage is lower than Penta-3. These irregularities could be attributed to cross borders migration, issues related to the projection of catchtment population, double counting, data entry errors and vaccination of over age children in few cases. Figure 2.4 presents national immunization coverage by antigens in 2013.



Whilst gains are made nationally, immunization coverage varies by county and by antigen with Penta-1 doses achieving the highest coverage at 92%, followed by third dose of OPV and Penta at 84%. Grand Bassa and Maryland Counties reported the lowest number of fully immunized children. Immunization statistics show that 65% of children under 1 year were fully immunized with the current six antigens provided through Liberia's routine immunization services. Table E in the annex presents immunization coverage by county.

According to the revised Global Alliance for Vaccine and Immunization (GAVI), co-financing policy approved in December 2010 by the GAVI Board, Liberia is within the low –income group and Liberia has agreed to co-finance US\$ 0.20 per dose for both Pentavalence and Yellow Fever vaccines. In 2013, the total cost spent on the procurement of vaccines was US\$ 742,500.00 of which Liberia contributed US\$ 143,044.22 from the National Budget.

The difference between Penta1 and Penta 3 (dropout rate) is used as a performance indicator for the immunization program. In 2013, counties with the highest dropout rate were Gbarpolu (32%), followed by Margibi (24%), and Bomi (24%). The negative dropout rate in Grand Gedeh, River Gee, Sinoe and Lofa Counties could be attributed to the current refugee population in Grand Gedeh and River Gee Counties and cross border immunization services by counties bordering the Republic of Guinea, Sierra Leone and Cote D' Ivoire. However, the huge dropout and the negative dropout rates is being address by the immunization program by regular monitoring and supervisory visits and the coaching of vaccinators and health workers. Figure 2.5 presents Penta dropout rates by county.



Immunization coverage shows fluctuation since 2010. Penta-3 coverage increased from 73% in 2010 to 92% in 2012 and decreased to 84 in 2013 while Measles coverage increased from 70% in 2010 to 76% in 2012. However, Measles coverage decreased in 2013 to 70%. Figure 2.6 shows immunization coverage trends by Penta 3 and Measles since 2013.



2.1.3.2 Integrated Management of Neonatal & Childhood Illness (IMNCI)

Diseases and health conditions that contribute to high childhood mortality in Liberia include malaria, diarrhea, pneumonia, acute respiratory infection and malnutrition. To facilitate the accomplishment of MDG 4, the Ministry has prioritized the Integrated Management of Neonatal and Childhood Illness (IMNCI) as a vital child survival intervention. In 2013 like previous years, Malaria accounted for the highest disease burden among children under-five years old, followed by Acute Respiratory Infection (ARI) and Pneumonia. Approximately 47% of children less than five years that visited health facilities in 2013 were diagnosed of Malaria while 25.3% had ARI or Pneumonia. Table F in the annex presents selected under-five diseases by county in 2013.

2.1.3.3 Micro-nutrient Supplementations and Deworming

The administration of Vitamin A as a supplement to children under the age of five has proven to reduce diarrhea episodes, shorter and lessen severe attacks of measles, pneumonia and reduce the overall childhood morbidity and mortality. In 2013, 40,671 children 6-11 months and 26,848 children 12-59 months were provided Vitamin A supplements, while 48,223 postpartum mothers received Vitamin A accounting for 30% coverage. Table G in the annex presents Vitamin A supplementation coverage by county. Though the routine Vitamin A supplementation data is reporting with very low coverage, however, Vitamin A supplementation during the two rounds of integrated immunization campaigns for under-5s reached over 95% of children under the age of 5 years nationwide. During the period, 740,025 (99% of targeted children) children 12 – 59 months were de-wormed.

2.1.3.4 Child Mortality

Analysis of the 2013 data from across the country shows that curative services (diagnosis and treatments) for children under –five years accounts for 66.2% (2,187,423) of the 3,304,919 curative consultations during the period. A total of 3,783 under five deaths were reported by health facilities nationwide in 2013. Malaria accounts for 17.5%, anemia 7.1% and injuries 7.9% of reported under-five deaths in health

facilities. Table H in the annex presents under-five mortality by causes and by county in 2013. Under-five mortality figures over the past 3 years indicate an increasing trend (1,207 deaths in 2010, 1,707 deaths in 2011 and 3,734 in 2012). Also, the 2013 under five inpatient deaths increase slightly compare to 2012. This trend could be attributed to HMIS strengthening at all levels. Reporting coverage has improved, including the quality of data generated from the health information system.

Since 1990, the global under-five mortality rate has dropped by 41 percent from 87 deaths per 1,000 in 1990 to 51 in 2011. The 2012 Atlas for MDGs 4 indicates that Liberia is among eight countries that have made significant progress in achieving reduction of under-5 mortality. Also, Liberia attained the fastest rate of annual reduction of under-5 mortality among these eight countries at a rate of 5.4%. In 2013, preliminary results from the Liberia Demographic and Health Survey revealed that infant mortality rate decline from 72 deaths per 1,000 live births in 2007 to 54 deaths per 1,000 live births in 2013, while under five mortality decline from 111 deaths per 1,000 live births in 2007 to 94 deaths per 1,000 live births. This has placed Liberia among countries on track for achieving MDG 4. This progress is attributed to the government's robust child survival strategies that include integrated immunization campaigns with deworming, Vitamin A supplementation and increasing number of fully immunized children through the routine EPI system.

2.1.4 Maternal Health

In order to accomplish MDG 5 (Improving maternal health), the Ministry of Health and Social Welfare developed the Essential Package of Health Services (EPHS) with defined maternal health interventions at both the community and health facility levels. The EPHS is an assortment of health services that the Ministry is committed to providing at every health facility. Health interventions undertaken to improve maternal health in Liberia include, antenatal care, delivery, postnatal services, Intermittent Preventive Treatment, Family Planning and Tetanus Toxoid immunization.

2.1.4.1 Antenatal Care

Antenatal services are a cost effective maternal health intervention that is globally encouraged to ensure that pregnant women are assessed periodically and prepared for labor and delivery. ANC coverage⁴ data is used to find out the proportion of pregnant women who received care during pregnancy. With an estimated 5% of the general population expected to be pregnant women, the 1st ANC visit in 2013 is 75.8% and the 4th visit accounts for 54.4%. While ANC 4th and more visits statistics are encouraging, ANC 1st visit has declined by approximately 12% from 2011 to 2012 and by 11.2% in 2013. Table I in the annex presents ANC visits by county. Although, ANC 4th and more visits rate has been maintained above 50% over the past three years, there was a decline by 3.6% in 2013. Also, there are huge disparities across counties with Sinoe, Grand Gbarpolu and Grand Cape Mount recording the lowest ANC visits. Analysis of the data indicates that in these three counties, about 4 out of every 10 pregnant women attended at least 4 antenatal services.

⁴ANC coverage is calculated by dividing the number of ANC visit by the expected number of pregnant women in the catchment population

ANC Dropped Out Rate

ANC drop-out rate is determined by the difference between those attending ANC first and 4th visits. In 2013, the national drop-out rate is 21.4% with variations across counties. Nimba (61.9%) and Bomi (29.2%) reported the highest drop-out rates while Maryland and Grand Gedeh reported more 4th ANC visits than 1st visits. This abnormal presentation of ANC stats could be attributed to the presence of refugee population in these two counties and cross border health services utilization. Figure 2.7 presents ANC dropped out rate by county.



2.1.4.2 Delivery

The expected number of deliveries⁵ for 2013 was projected to be 173,579. However, only 53% of these deliveries were reported (91,678). Institutional deliveries account for 46% of the expected deliveries while reported home deliveries represent 7% of the expected deliveries. The proportion of deliveries attended by skilled personnel is 45.5%. Deliveries assisted by skilled staff increased by 8% from 2011 to 2012 and by 0.5% from 2012 to 2013. This modest improvement in skilled attendant at birth could be attributed to increased awareness created at the community level, motivational packages for TTMs to refer pregnant women to the facilities and the construction of additional maternal waiting homes to accommodate pregnant women in labour or near term. Comparative analysis of delivery data shows a decline using estimates of either reported or expected deliveries and indicates that Liberia has made progress by steadily increasing facility-based delivery.

2.1.4.3 Postnatal Care

Postnatal care attendance is a critical component of maternal and newborn health. It is where both the mother and the newborn are assess for complications and provided early preventive treatment. Regardless of where the delivery occurs, newborns mothers must attend postnatal care to be examined by trained

⁵ Expected deliveries is derived by estimating 4.5% of the population

health worker within 42 days after delivery. In 2013, only 34.4% (59,688) of expected postpartum mothers attended postnatal care clinic. Only River Gee reported above 50% of women who delivered attended PNC. Table J in annex A shows PNC visits by county. However, postpartum visits reported are not disaggregated by visits (first, second or third) due to lack of additional PNC information.

2.1.4.4 Intermitted Preventive Treatment (IPTp)

The administration of Intermitted Preventive Treatment (IPTp) to pregnant women is an effective strategy endorsed by WHO and Rollback Malaria to reduce severe malaria in pregnancy and the associated complications. Pregnant women are encouraged to take at least two doses of IPTp to prevent severe malaria whilst pregnant. Figure 2.8 depicts IPTp administration in 2013. Nationally, IPT1 first dose coverage is 48% while IPT2 is estimated to be 40% with variations across counties. The proportion of pregnant women receiving IPT in 2013 reduced 7.9% for first dose.



Although Intermitted Preventive Treatment (IPT-2) second dose coverage is very low (40.3%), coverage did not increase over the one year period. An analysis of IPT-2 coverage shows encouraging trend from 2008 to 2013. Figure 2.9 presents IPT 2 coverage trend since 2008.



2.1.4.5 Family Planning

Contraceptive prevalence rate is gradually increasing in Liberia. It has increased by 8% over a six years period, from 11% in 2007 to 19% in 2013 (LDHS). However, unmet need (36%) for family planning services is still high and the inequity in access between rural and urban residents is unacceptable. Increasing access to family planning services is an important component towards fertility control, and the reduction of maternal and infant mortality. In 2013, 382,015 women of reproductive age (15-49 years) were provided family planning services, excluding those that opted for condoms. Oral pills and injectables (Depo) were widely accepted. IUCD and implant were barely used by females partly due to limited service provision as well as inadequate access to family planning information. Only 765 women opted for IUCD while 14,794 accepted implants. However, IUCD and implant users double over the one year period (2012 to 2013). Table K in the annex shows family planning commodities issued by type and by county in 2013.

Analysis of the family planning data from across the country shows a gradual increased in family planning use over the past five years. In 2010, there were 65,812 new users of family planning commodities (pills, implants, Depo and IUCD) and 54,900 in 2011. In 2012, 51,816 couples were protected from pregnancy and in 2013, 71,714 couples were protected.

Couples years of protection (CYP) continue to increase with a number of new family planning users. The number of couples that were protected from being pregnant increased from 38,342 in 2010 to 71,714 in 2013. Figure 2.10 presents trend in couples' years of protection.



2.1.4.6 Tetanus Toxoid (TT)

Globally, Tetanus Toxoid (TT) vaccines are administered to pregnant and non-pregnant women of childbearing age (15–49 yrs) to protect their unborn children from neonatal tetanus. In Liberia, TT vaccines are administered through routine immunization services. In 2013, 218,992 doses of TT vaccines were administered to women of reproductive age, with pregnant women being the most beneficiaries. Bong County reported the highest TT second dose coverage for pregnant women (76%) while Lofa reported the lowest (47%) coverage. Figure 2.11 shows TT -2 and more coverage by county.



2.1.4.7 Maternal Mortality

Liberia is among countries with dire maternal mortality rates, at 770 deaths per 100,000 live births. To ensure that this undesired rate tumbles, the health sector has elaborated maternal and newborn mortality reduction road map and cost effective interventions. Factors affecting maternal health include, limited access to basic and emergency obstetric services, low utilization of family planning services, low coverage of antenatal and postnatal services, unskilled birth attendant during home deliveries, delays in referrals, and weak referral systems. Despite the under-reporting of maternal deaths by health facilities for fear of

been investigated, criticized and punished. Maternal death records for 2013 indicate that for every 1,000 live births there were approximately 4 maternal deaths. Counties that reported high maternal deaths were Gbarpolu and Grand Gedeh. It is worth noting that this figure (373) excludes maternal deaths that occurred within the community. The majority of maternal deaths in Liberia are due to postpartum hemorrhage, obstructed or prolonged labor, complications from unsafe abortions, eclampsia, malaria and anemia.

Pregnancy Related Complications

In 2013, 22,780 cases of maternal complications were recorded at health facilities across the country. The majority of the pregnancy related complications were due to anemia (56%), abortion (15%), hemorrhage (6%), and Pre-eclampsia (5%). It is also worth stating that maternal deaths recorded in this report only reflect those occurring at or reaching health facilities and precludes community maternal mortality.

2.1.5 Morbidity and Mortality

This section of the report discussed three major diseases (Malaria, Tuberculosis and HIV/AIDS) that have generated both national and international interest and are very relevant to Liberia's MDGs accomplishments. Although these priority diseases account for a significant proportion of Liberia's disease burden and mortality, they are of major public health concern. However, other communicable and non communicable diseases are equally of public health relevance and have been provided due attention.

2.1.5.1 Malaria

Liberia has made efforts towards reducing the untold suffering and burden associated with malaria. However, it remains a major public health problem in Liberia, taking the greatest toll on young children and pregnant women. To address the malaria burden, the MOHSW introduced a policy and strategic plan for malaria control and prevention. Measures instituted are attempts to fulfill the Roll Back Malaria (RBM) objective for reducing malaria morbidity and mortality.

In 2013, malaria accounted for 37.6% of curative consultations (3,304,919) across Liberia. The number of children under-5 diagnosed of malaria represents 46.5% of all malaria cases. Approximately 82% of all diagnosed malaria cases were treated with ACT. It is worth noting that these malaria cases are confirmed by either Rapid Diagnostic Test (RDT) or microscopy.

The overarching goal of the Liberia National Malaria Strategic Plan for 2010-2015 is to reach Millennium Development Goal 6: to have halted by 2015 and begun to reverse the incidence of malaria and other major diseases. Liberia has adopted four major strategies to control malaria in the country. The first strategy is to improve treatment by scaling up the availability, accessibility and use of artemisinin-based combination therapy (ACT), the first-line treatment for malaria. The second strategy is an Integrated Vector Management (IVM) approach, and the third strategy addresses malaria in pregnancy. The fourth approach to malaria prevention is to increase support for advocacy, health education, and behavior change.

In fulfillment of these strategies the MOHSW with support and collaboration from partners have made substantial gains. First, treatment with ACT has improved from 66% in 2011 to 81.9% in 2013. Second, mosquito net ownership increased from 18% in 2005 to 50% in 2012 and 58% in 2013 (2013 LDHS). Third, IPTp administration increased from 16% in 2008 to 39.8% in 2012 and 40% in 2013 (HMIS). Fourth, the use of mosquito net increased from 6% in 2005 to 32% in 2011 and 40% in 2013 (LDHS 2013). Also, the prevalence of malaria in children under the age of five reduced from 66% in 2005 to 49% in 2012. The below figures present households mosquito net ownerships and net use respectively.



The distribution of mosquito nets nationwide and the massive public education on malaria through various channels have help to increase the use of net. Figure 2.14 shows household use of net from 2005 to 2013.



2.1.5.2 Tuberculosis

Liberia is amongst countries with the highest prevalence and burden of tuberculosis in sub–Saharan Africa. Although, few cases of TB were detected between 2005 and 2007, an increase in notification was observed from 2008 to 2012. This huge notification was partly due to the expansion of the program through funding from the Global Fund. The estimated number of all forms of TB cases in 2013 was expected to be 10,492

while the smear positive cases were projected to be 4,552. However, the actual cases of all forms of TB notified were 5,830 which 56% of the expected cases and the reported number of new smear positive cases detected during the year was 2,579 which 44.2% of projected smear positive cases. Table 2.2 provides information on the expected and confirmed TB cases from 2006-2013.

Table 2.2: TB Cases Estimated and Reported from 2006 – 2013												
		Years										
Classification	2006	2007	2008	2009	2010	2011	2012	2013				
Estimated Population	3,362,026	3,419,317	3,476,608	3,549,617	3,624,159	3,700,266	3,777,972	3,857,309				
Estimated TB Cases of All												
Forms	9,145	9,301	9,447	9,655	9,858	10,065	10,276	10,492				
Estimated Smear Positive TB												
Cases	3,967	4,035	4,111	4,189	4,277	4,366	4,458	4,552				
TB Cases Notified												
(New Smear Positive)	2,906	2,850	3,042	3,796	3,750	4,261	3,249	2,579				
TB Cases Notified												
(All Forms of TB)	4,514	4,535	5,007	5,964	6,668	7,899	6,212	5,830				
Case Detection Rate												
(New Smear +ve)	73%	70%	74%	91%	88%	98%	77%	57%				
Case Detection Rate												
(TB Cases of All Forms)	49%	49%	53%	62%	68%	78%	60%	56%				

TB notification trend over the years have shown uneven pattern. It increased from 6,668 cases in 2010 to 7,899 in 2011 and decline to 5,830 cases in 2013. On the other hand, TB smear positive cases detected in 2013 decreased by 670⁶ over the one year period. The dropped in TB positive cases detection could be attributed to the level of public awareness and education on TB and alleviation of stigma associated with the disease. Figure 2.15 presents TB notification by years.



⁶ TB 2013 data (# of Notified TB Cases, success rate, etc) is based on only 3 quarters report (Jan-Sept.)

TB positive cases detected rate decline in 2012 from 98 cases per 100,000 inhabitants in 2011 to 77 in 2012 and further decline by 20 cases per 100,000 inhabitants in 2013. The current new smear positive detection rate is 57⁷ per 100,000 inhabitants. This current figure is far below the WHO recommended target of 70 new cases per 100,000 inhabitants. Therefore, all efforts must be mustered to meet the recommended target and sustain by expanding services and by creating greater access. Figure 2.16 presents TB detection rates from 2006-2013.



Treatment Success Rate: TB treatment success rate (total number of patients who completed TB treatment and were declared cured) has plateau over the past five years. There has been no significant change, since 2008. Figure 2.17 shows TB treatment success rates since 2008.



Treatment Outcome: Cured, completion, defaulters, deaths and treatment failure rates reported from 2008 to 2013 indicate that the program has made gains in maintaining low death, and failure rates. On the other hand, TB cured rates continue to fluctuate. The number of patients that defaulted treatment reduced from

⁷ TB 2013 success rate is based on 3 quarters reports (January to September 2013) because of their reporting cycle and the Government's mandate to submit report to the Parliament before the 4th week of January.

13% in 2008 to 5% in 2013, while death rate continuous to show a stable pattern since 2011. The program targets for defaulter and death rates are less than 5%, and 4% for failure respectively. Though the program has achieved its targets, more work needs to be done to further reduce current defaulters and death rates and increase cured and completion rates. Table 2.3 presents TB treatment outcome from 2008 to 2013.

Table 2.3: TB Treatment Outcome										
	Years									
Outcome	2008	2009	2010	2011	2012	2013				
Cured Rate	56	65	57	64	57	60				
Completion Rate	11	18	25	22	30	25				
Defaulter Rate	13	10	9	6	4	5				
Death Rate	5	4	5	4	4	3				
Failure Rate	1	2	1	1	1	2				

In 2013, the National Leprosy Strategic Plan was developed for period 2014-2018. Also, the number of new leprosy cases diagnosed was 206 with children accounting for 19. Table 2.4 shows the trends in Liberia leprosy cases.

Table 2.4: Leprosy Cases Trend in Liberia										
		Years								
Cases	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Total new Cases	323	418	410	414	415	482	293	91	206	
New MB Cases	104	270	301	302	307	357	179	64	129	
New Children Cases	43	68	45	47	43	84	13	8	19	
New Cases with Disability	0	22	0	0	6	6	26	3	3	

2.1.5.3 HIV/AIDS

Liberia has a generalized epidemic with a national prevalence rate of 1.5%. As we accelerate efforts towards attainment of the Millennium Development Goals (MDGs), we must ensure active surveillance. HIV and AIDS remains one of the leading causes of death among women and children and the second leading cause of mortality among young people. Despite being a post conflict country with many challenges, Liberia has significantly reduced the HIV prevalence among pregnant women from 5.7% in 2006 to 2.6% in 2011 and has initiated strategies to reduce the chances of mother to child transmission (MTCT) of the disease.

HIV Counseling and Testing: HIV Counseling and Testing (HCT) is a very important for HIV prevention, care and treatment services and have proven over the years to influence behavioral change. The scaling up of HCT interventions since 2007 by increasing the number of HCT facilities provided access to HIV

services in general. Data generated from 369 HCT centers across the country at the end of June 2013 revealed that 113,553 persons were counseled for HIV testing. This number represents 5.7% of the targeted persons for 2013. Out of this number 110,137 persons agreed to be tested after counseling and 109,384 received their test results. Table 2.5 presents HIV counseling and testing since 2010.

Table 2.5: HIV Counseling and Testing Services Since 2010										
Indicator(s)	201	0	2011	-	2012		201	3		
Number and percent of women and men who received a pre-test counseling for HIV	208,155	11.1%	131,392	6.8%	220,331	11.0%	113,553	5.7%		
Number and percent of women and men who received HIV test	173,729	9.3%	115,840	6.0%	208,070	10.4%	110,137	5.5%		
Number and percent of women and men who received an HIV test who know their results	171,714	9.2%	112,983	5.8%	205,506	10%	109,384	5.5%		
Number of sites providing HIV counseling and testing services	176		230		369	9	369			

Prevention of Mother to Child Transmission (PMTCT): the prevention of HIV from parents to their unborn children is very importance for reducing the spread and morbidity and mortality associated with HIV. PMTCT is an essential strategy for HIV control and prevention and a driver for attaining MDG 6. By the end of June 2013, 65,058 pregnant women were tested and knew their status. Of this number, 641 pregnant women who were positive were initiated on antiretroviral treatment to reduce the risk of mother to child transmission. This number represents 42% of expected number of pregnant women that were to be placed on ARV. Table 2.6 presents PMTCT services provided since 2010.

Table 2.6: PMTCT Services provided since 2010										
Indicator(s)	2010		2011		2012		201	3		
Number and percentage of pregnant women who were tested for HIV and who know their results	61,039	34%	67,217	36%	123,343	65%	65,058	34%		
Number and percent of HIV positive pregnant women who received antiretroviral treatment to reduce the risk of mother to child transmission	590	31.6%	809	48%	866	57%	641	42%		
Number and percent of infants born to HIV-infected women receiving a virological test for HIV	194	58%	444	96%	598	99%	336	56%		
Number of sites providing PMTCT services	15	6	230)	335		335	5		

HIV & AIDS Care, Treatment and Support Services (ART): HIV and AIDS service provision has experienced rapid scale-up during the last 7years which is evidenced by the increased number of patients enrolled in care and treatment. The number of patients swelled from 916 in 2006 to 9,493 patients by the end of June

in 2013. Additionally, the number of persons eligible for treatment receiving treatment and support services range from 13% (1,414/11,253) in 2007 to 34% at the end of June 2013 (5,946/17,702). Table 2.7 presents ART services in since 2010.

Table 2.7: ART Services provided since 2010									
Indicator(s)	2010		2011		2012		2013		
Number and percent of eligible adults and children with advance HIV infection receiving ART	4,098	26.5%	5,269	35.2%	5,478	31%	5,946	34%	
Number and percent of eligible children with advance HIV infection receiving ART	314	7%	570	13%	430	11%	346	9%	
Number of sites providing HIV Care and Treatment services	29		36		44		46		

People living with HIV and AIDS can live healthy and productive lives when they have access to information, treatment, care and support. Support is defined as acceptance, affection, respect and love from friends, family members and the community. Care includes moral support and access to necessary medical treatments, a healthy diet, clean water and accommodation.

2.2 **Programmatic Interventions**

This section describes activities and major achievements by various programs in the Department of Health Services during 2013.

2.2.1 Family Health Division

The Division of Family Health is responsible for setting standards and guidelines, developing policy, planning, coordinating and monitoring of activities related to: reproductive health, child survival, adolescent and women's health programs in the country. The Division also oversees the development of strategies designed to promote and strengthen family-centered primary health care initiatives at the community and facility levels. The division has Reproductive Health, Child and Adolescent Health as sub units. Below are key accomplishments of the Division:

- Trained 163 health professionals (CMs, RNs and PAs) from the 15 counties in Basic Life Saving Skills (BLSS), 186 service providers in Family Planning counseling and the insertion of Jadelle and IUD from seven counties (Bong, Lofa, Nimba, Grand Gedeh, River Gee, Maryland, and Bong) and 120 staff from the 15 counties on neonatal resuscitation.
- Trained 62 health professionals and 214 gCHVs from Sinoe Cape Mount, Gbarpolu and Margibi in Home Based Maternal and Newborn Care (HBMNC).
- 173 health professionals from six counties were trained in the clinical management of rape
- Refurbished seven health facilities to provide medical management for rape at Duport Road Clinic, Liberia Government Hospital in Bomi, Hope for women International Hospital Redemption, C. B.

Dunbar, JDJ Hospital, and Star of the Sea Health Center.

- Two SGBV safety nets were established in Montserrado and Lofa Counties.
- 54 health professionals (PAs, CMs, RNs, and Nurse Midwives) from Montserrado and Bong were trained on the use of Partograph.
- 1,500 participants including six Superintendents, Town Chiefs and Commissioners were educated and sensitized on fistula prevention in six counties, few hard to reach communities and schools (Grand Kru, Maryland, River Gee, Grand Gedeh, Rivercess, and Grand Bassa).
- Six patients were surgically managed or repaired in Bong County at the Phebe Hospitals for obstetric fistula.
- The program also reviewed and adopted policies, strategies and guidelines related to adolescents' reproductive health, family planning and maternal and new born health. Among these were; Adolescent Sexual Reproductive Health (ASRH) Strategy and Standards, SGBV Training Manual, Reproductive Heath Commodity Security Strategy, Family Planning Training Manual and Job Aid, Home Based Maternal and Newborn Care Training Manual, , Chlorhexidine and Kangaroo Mother Care Guidelines.

2.2.2 Nutrition Division

The Nutrition Division is the central level coordinating office for nutrition services and support. The Division promotes cooperation among partners working in the field of nutrition, and regulates all nutrition activities in the health sector. It also has numerous partners under the umbrella of the National Nutrition Coordinating Committee which is comprised of the government ministries, NGOs and other development partners. Major activities and achievements of the Division are as follows:

- Conducted two rounds of Vitamin A and De-worming campaigns integrated with Polio in April and October with support from partners. During these campaigns, 834,232 children under-5 received Vitamin A Supplements (94% targeted children 6 – 59 months) and 740,025 (99% of targeted children) children 12 – 59 months were de-wormed.
- Trained 901 health workers (doctors-18; Nurses-372 and Physician Assistants and Certified Midwives-511) in Integrated Management of Acute Malnutrition (IMAM) and providing nutrition care services in 17 In-patient facility (IPF) and 93 Out Patient Program (OTP) sites in 15 counties.
- Developed ENA implementation plan and trained masters trainers from both central and county levels.
- Trained 653 health workers and 670 community volunteers from 235 facilities in 9 counties in nutrition counseling and ENA
- Developed nutrition messages in six local dialects (Gio, Grebo, Krahn, Kru, Gola, and Mano) and aired these messages on 15 radio stations across the country.

These interventions (capacity development, public education on nutrition practices especially for children, and integrated Vitamin A supplements and deworming) contribute to the improving nutritional status of vulnerable population in Liberia.

2.2.3 Expanded Program on Immunization (EPI)

The Expanded Program on Immunization (EPI) Division is responsible for all vaccinations in the country. The division with support from partners continues to improve the immunization status of children as evidenced by zero case of Wild Polio Virus (WPV) and the reduction in the outbreak of measles cases according to the HMIS and AFRO Polio monthly updates. The EPI's objective is to reduce morbidity and mortality due to vaccine preventable diseases among children from birth to five years.

This section of the report looks at all of the system and support components of Immunization and strategies in the context of the Reaching Every District (RED) and other pioneering child survival strategies. The major deliverables of the program include the following.

- Supported the conduct of Routine Immunization (RI) and outreach at 506 health facilities around the country
- 10% of the total health facilities (51) doing routine immunization were randomly selected and visited nationwide by central level staff every quarter.
- Data quality assessment showed gradual improvement in submitted data.

Supplemental Immunization Activities (SIAs) - Three rounds of polio NIDs were successfully conducted in 2013. During the NIDs 940,527 (99% coverage) children under the age of five years (0-59 months) were vaccinated with potent and efficacious oral polio vaccine (OPV). Analysis from Independent Monitoring process showed that 95% of children vaccinated were marked correctly.

2.2.4 National Health Promotion

The National Health Promotion Division is an integral part of the MOHSW. The core functions of the Division are; to create public awareness, facilitate community involvement and participation, promote activities that foster and maintain healthy behavior and advocate for an environment that enables individuals, families and communities to translate health information into desired action to promote health. During the year under review, the Division implemented the below activities:

- Trained 578 gCHVs in five counties on Routine Immunization (RI) Communication (River Gee- 84 gCHVs, Maryland- 162, Grand Kru-112, Grand Bassa-110 and Sinoe- 110) and 100 gCHVs in CHEST kit usage.
- Conducted TOT training for 18 health workers from Lofa, Bong, and Nimba in Journey of Hope CHEST KIT and IPC and 24 Central level staff in Behavior Change Communications Skills.
- Developed EPI communication plans for Pneumo vaccine and NCDs
- Six audio messages on child abuse, rape and dealing with children in conflict or contact with the law. Stickers and reminder cards were also developed.
- Six audio on substance and drug abuse in adolescent, youths and adults (in and out of school youth) were developed and disseminated. Also, brochures on drug and substance abuse including stickers were produced.

- Jingle on nutrition entitle, good food makes good health was developed and aired.
- Six audio messages on child right and the children's law were produced and aired.
- Flyers and message on the importance of pharmacies in Liberia was developed and distributed.
- Brochures on pre-natal care, family planning, teen age pregnancy and fistula were produced. Additionally, reminder cards on kangaroo mother care and fistula, including posters on anti-natal care, danger signs, care for baby, Breast feeding, condom use, abstainers, nutrition were produced.
- Audio messages on kangaroo mother care chlorhexidine and male involvement in reproductive health were developed and aired.
- Health for Sports activities were conducted in collaboration with programs and partners (about 10,000 pieces of IEC materials distributed, 210,000 pieces of condoms distributed, 481 volunteers tested for HIV, health talks conducted at various booths and a showcase of health services).
- Coordinated the conduct of the Health Fair where: 132 people were tested for HIV, 323 clients received various family planning commodities, and 18,000 pieces of condoms distributed.
- Published the quarterly newsletter (First, second, and third quarters 2013).

2.2.5 National Malaria Control Program

The National Malaria Control Program (NMCP) is responsible for the implementation of malaria control and prevention activities. The overall objective of the program is to reduce morbidity and mortality caused by malaria and subsequently eliminates the spread of the disease. The program has four strategic approaches to controlling the spread of malaria. They are; the provision of prompt and effective treatment, the effectuation of integrated vector management and the use of information, education and behaviour change communication.

In 2013, the National Malaria Control Program implemented several activities geared towards achieving its national goals and objectives of controlling and or preventing the spread of malaria. The program ambitiously set a target to reduce morbidity and mortality caused by malaria by 75% by 2015. Against this background, the following activities were implemented and deliverables achieved:

- 1. Distributed 100,000 LLINs to ANC clinics across the country.
- Conducted a Post Distribution Survey activity in seven counties; Montserrado (Rural), Nimba, Bong, Lofa, Bomi Grand Bassa and Bomi to determine net coverage from the last major mass net distribution campaign. Preliminary results show high net ownership of 92% and net utilization of 87% in these surveyed counties.
- 3. Trained 2,275 professional health workers in malaria case management, malaria diagnosis, drug dispensary and malaria in pregnancy.
- 4. Treated 6,000 children under the age of five in hard to reach area with antimalarial drugs (ACTs) in inaccessible communities to increase access to quality health services.
- 5. Treated 2,100,000 people nationwide with antimalarial drugs (ACTs) through facility based care (both public and private health facility) across the country.

- 6. Treated 16,500 patients with ACTs through private pharmacies and medicine stores in selected district in Monrovia. Expansion into other districts is being considered.
- 7. Conducted Nationwide Health Facility Survey, final report to be launched shortly.
- 8. Conducted IRS campaigns in parts of Bong County covering over 40,000 structures.
- 9. Conducted a Post IRS Campaign Audit to validate the two rounds of spraying campaign that protected approximately 200,000 people.
- 10. Held advocacy meetings with local leaders across the country on the need to encourage people to sleep under the mosquito nets.
- 11. Finalized and launched the formative research report that identified gaps in malaria control and prevention interventions that is geared towards updating the malaria communication strategy.
- 12. Conducted several studies including, a data surveillance study aimed at authenticating data recording processes and data flow to determine consistency or discrepancies from the source to the HMIS; the feasibility of introducing Subsidized RDTs and ACTs in the private sector;
- 13. Hosted monthly Integrated Vector Management (IVM) Meetings with relevant stakeholders including other line Ministries, Agencies, technical partners and donors on IVM implementation.
- 14. Developed the Malaria Operating Plan with PMI for continued funding in 2014.
- 15. Submitted the Malaria Phase Two Request for Continued Funding to the Global Fund and conducted two rounds of periodic reviews on the submitted Request.

2.2.6 National Leprosy and TB Control Program

The National Leprosy and TB Control Program (NTLCP) is responsible to organize and coordinate all leprosy and tuberculosis related activities within Liberia. To address these diseases, Liberia endorsed and adopted the Global STOP TB and the DOTS Strategies and developed a five-year strategic plan (2007-2012) aimed at reducing the national TB burden. Liberia subsequently established a partnership with the Global Fund to finance a 5-year plan (2008-2013) aimed at; (1) reducing the burden of TB by 50%; (2) promoting the "STOP TB" partnership targets for increasing case detection rate by 70%, and (3) increasing treatment success rate by 85%.

The control of Tuberculosis remains a serious public health problem in Liberia, recognizing the challenges related to Multi Drug Related-TB. The NLTCP plans to implement and strengthen Directly Observed Therapy Short Course (DOTS) Strategy, institutionalize Programmatic Management of Drug Resistant TB (PMDT), and establish appropriate TB Infection Control measures in the country. Strengthening DOTS implementation will minimize the emergence of drug resistant TB (DR-TB), and institutionalizing of PMDT will enable the program to promptly enroll and manage any MDR-TB cases that will be detected. In addition, TB infection control measures, if appropriately implemented, will minimize the spread of drug susceptible as well as drug resistant TB. The major achievements of the program in the year under review are:

- Conducted National TB Program review with major stakeholders.
- Developed National TB Strategic Plan for the period 2014 2018 with support from WHO and KNCV Tuberculosis Foundation

- Submitted phase 2 renewal documents to the Global Fund.
- TB culture and DST laboratory finally functional with samples being cultured and drug sensitivity being done.
- Procured second line anti TB drugs for 14 patients and placed 10 confirmed MDR-TB patients on second line anti-TB treatment.
- Procured and installed 2 GeneXpert machines, equipment for the rapid diagnosis of rifampicin resistance at TB Annex Hospital and Ganta Rehab Center.

Leprosy remains a major public health problem in Liberia. Liberia is one of the few countries that have not attained the global target for leprosy elimination of less than 1 case per 10,000 population. The present prevalence rate of leprosy in Liberia is 1.7%. The country data over the last three years show a trend of continuous transmission of the disease.

The National Leprosy & TB Control Program (NLTCP) continues to provide leprosy services. However, very few health facilities in the counties have the capacity to diagnose and treat leprosy cases. Leprosy cases are reported in all counties and the highest notifications are from Nimba, Grand Kru, Grand Gedeh and Grand Bassa Counties. Current interventions focused mainly on high burden counties and the primary means of case detection is facility based. Multi drug therapy (MDT) is provided with support from WHO to facilities that detects positive cases.

2.2.7 National AIDS and STI Control Program (NACP)

The National AIDS and STI Control Program (NACP) is responsible for coordinating and monitoring the provision of quality care and treatment and support services for people affected and infected with HIV and AIDS. The major program objectives include: (1) prevent new infections in the general population and from mother to child transmission; (2) provide quality care to those affected and infected by the HIV/AIDS; and (3) mitigate the impact caused by HIV and AIDS. In order to achieve these objectives, HIV Counseling Testing, Prevention of Mother-to-Child Transmission, and Antiretroviral Therapy (ART) interventions were introduced.

Access to HIV/AIDS services is a critical aspect of prevention and control of the disease. The major accomplishments of the program over the period are:

- Counseling and testing facilities increase from 79 centers in 2007 to 369 sites in 2012,
- PMTCT sites increase from 18 centers in 2007 to 335 in 2012 while ART centers increase from 15 in 2007 to 46 in 2012. Figure 2.18 shows HIV/AIDS services centers trend since 2007.
- Participated in the regional workshop on the World Health Organization (WHO) new HIV and AIDS treatment guidelines held in Accra, Ghana for ECOWAS countries.
- In partnership with ESTHER (a pair-based organization), the program is conducting an ARV associated resistance and treatment failure survey (surveillance monitoring), and has installed viral load and DNA/PCR laboratory equipment.
- To enhance the program planning and service delivery, there are HIV/AIDS related researches ongoing to provide the epidemiological and behavioral pattern of HIV in the country. These

surveys are; the Integrated Bio-Behavioral Surveillance Survey (IBBSS) among high risk population, ART cohort study, Mode of Transmission (MOT) Study, Stigma Index Study, ANC survey, and the Demographic and Health Survey (DHS).

In the midst of these accomplishments, the program is face with numerous challenges. These challenges include; very high rate of patients denial, stigmatization, discrimination, neglect, lost to follow-up, weak laboratory services, weak data collection and reporting systems, and weak supply chain management and distribution systems. Also, delay in the release of funds from the Global Fund to implement planned activities hindered the program performance.



2.2.8 Mental Health Unit

The Mental Health Division is the policy and technical arm of the Ministry that is responsible to ensure that the Mental Health National Policy and Strategies are implemented. The National Mental Health Policy mandates that mental health services be integrated into existing PHC system in Liberia, using a decentralized approach to ensure that health workers receive mental health training to enable them manage people with psychological problems visiting their facilities.

To implement this aspect of the Policy, the Carter Center, one of the mental health implementing partners has trained 100 mental health clinicians. Moreover, the Peter C. Alderman Foundation, Medicine Du Monde and Tiyatien Health also provided mental health in-service training for several health workers. These mental health workers are currently assigned in the 15 counties of Liberia to assist with the integration of mental health services within the Primary Health System.

Activities and achievements in 2013 by the Unit are:

- Conducted supportive supervision visits to 9 counties (Lofa, Bong, Nimba, Grand Cape Mount, Bomi, Gbarpolu, Grand Bassa, Rivercess and Sinoe)
- Conducted mental health public awareness through Radio Talk Shows
- Collaborated with the Carter Center to train RNs and PAs to become mental health clinicians;
- Developed a Training Manual for gCHVs on mental health
- Developed a standardized Monitoring and Evaluation tool for Mental Health Services for facilities providing mental health services in Liberia
- Celebrated World Suicide Prevention Day in collaboration with Grand Bassa County Health and Social Welfare Team and IPs
- Celebrated World Mental Health Day in collaboration with Grand Bassa County Health and Social Welfare Team and IPs in Buchanan City on October 10, 2013
- Developed Mental Health Quick Impact Project to provide mental health and psychosocial support services with focus on trauma healing and counseling to refugee hosting communities and refugees in Grand Gedeh, Nimba, Rivergee and Maryland Counties.
- Costed the National Mental Health Strategic Plan

2.2.9 Environmental and Occupational Health

The Division of Environmental and Occupational Health is mandated to ensure better environmental health programs to improve the health of Liberians, including ensuring water quality control for all public water points, food safety, food safety and quality control, basic sanitation/environmental sanitation, Occupational health and Safety among all occupations in Liberia, proper health care waste management practices and sanitation of all public buildings and places including hospitality industries, schools, health facilities. Activities implemented and accomplishments are indicated below:

- Conducted health facilities waste management assessment in 9 out of 200 targeted facilities to improve sanitation and the quality of care at health facilities
- Developed a Draft Hygiene Promotion Guidelines
- Developed a Draft Occupational Health & Safety Guideline
- Conducted risk monitoring of health care waste facilities in 4 targeted hospitals: Tellewoyan, J.J. Dossen, J.F.K. and Redemption Hospitals.
- Conducted Community –Led total Sanitation triggering and ODF monitoring and declared 183 communities of 332 targeted Open Defecation Free
- 2,500 protected water points treated/chlorinated in all 15 counties and 1,000 water points tested for microbial and chemical contaminant around the country. Necessary actions were taken to treat wells that were contaminated.
- 100 food establishments' managers trained in food hygiene and safety in Grand Bassa and Montserrado Counties.
- Developed and printed 2,500 copies of Food Safety brochures and distributed 250 copies of National food Safety Guidelines to relevant ministries/agencies, educational institutions, major food establishments, and other stakeholders to create awareness
- National CLTS guideline developed, printed and distributed among WASH actors and other Stakeholders.

2.2.10 Community Health Services

The Community Health Services Division is responsible for setting standards, developing policy and coordinating community health programs nationally. Facility based health workers and community health providers are responsible for implementing the EPHS at the community level. Community health activities are rapidly being scaled up in all counties with the intent to increase access to basic health care services.

- 1. The revised policy and strategy is therefore intended to address all issue raised and embedded in the EPHS document. Major achievements of the Division are:
- Conducted community health volunteers mapping to document CHVs across the country. The assessment documented 8,052 CHVs of which trained traditional midwives accounts for highest proportion (46.3%) of CHVs.
- 3. Developed operational and Training Manuals for CHV reporting. This will enable the HMIS Unit capture community activities into the national HMIS system
- 4. Revised, print and distribute 600 copies of integrated Community Case Management (iCCM) for diarrhea, ARI and malaria. These manual are used to train gCHVs.
- 5. In collaboration with national Health Promotion Unit, 540 gCHVs were trained in 5 routine immunizations in five counties (Rivergee-84; Sinoe-97, Grand Bassa-108; Maryland-144, and Grand Kru-107).
- 6. 173 gCHVs were trained in Malaria, ARI and Diarrhea diagnosis and treatment in four counties (Maryland, Lofa, Grand Gedeh and Gbarpolu).
- 7. 12,122 children under five years were diagnosed and treated for childhood illnesses by gCHVs. A total of 9,164 children were treated for malaria, 2072 for diarrhea and 886 for ARI.

2.2.11 Neglected Tropical Diseases, National Eye Care and Non-Communicable Diseases

The Neglected Tropical Diseases Division is responsible for setting standards, developing policy and coordinating activities of the programs at the central and county level.

In realization of the danger posed by the NTDs in the fight against poverty, the MOHSW included the control, eradication or elimination of NTDs of public health importance in Liberia i.e Onchocerciasis, lymphatic Filariasis, Soil transmitted Helminthes, Schistosomiasis and Leprosy among the priority diseases to be addressed in its National Health Plan (2012 – 2021).

The MOHSW collaborated with partners to develop an integrated NTDs master plan based on evidence gathered on the burden, prevalence and co-endemicity from nationwide epidemiological mapping of the different NTDs namely Onchocerciasis, lymphatic Filariasis, schistosomiasis and soil transmitted Helminthes in the country. The Master plan includes activities for ongoing Guinea worm surveillance, leprosy control and Buruli ulcer. Mapping will be conducted for HAT, Trachoma, Rabies, Snake bites, Buruli ulcer and yaws.

The goal of the NTDs program is to reduce the burden of targeted NTDs to level that is no longer a public health problem through an integrated control programme, contributing to the socio-economic development of Liberia.

The achievements of the program include:

Neglected Tropical Diseases

- Community Self Monitoring was conducted to empowered community to oversee and monitor the performance of Ivermectin and Albendazole distribution in three counties (Grand Cape Mount, Bong and River Gee). ,48 out of the 65 communities targeted implemented the program.
- 3,123 communities within 10 counties (Grand Bassa, Bomi, Rivercess, Margibi, Grand Cape Mount, River Gee, Sinoe, Maryland, Grand Kru and Grand Gedeh) were surveyed during a Geographical Coverage Survey
- 272 health workers and 2,688 Community Drugs Distributors (CDDs) were trained to administer Ivermectin and Albendazole in seven counties (Bomi, Grand Bassa, Montserrado, Bong, Sinoe, Margibi and Maryland).
- Mass Drug Administration of Ivermectin and Albendazole is ongoing and is targeting 2 million persons nationwide.
- Phase 1a onchocerciasis epidemiological evaluation was conducted in the Northwest Community Directed Treatment with Ivermectin (CDTI) project in October 2013.
- Conducted Mapping for Buruli Ulcer in twelve counties (Montserrado, Bomi, Gbarpolu, Grand Cape Mount, Margibi, Grand Bassa, River Cess, Sinoe, Grand Kru, Maryland, River Gee and Grand Gedeh). The mapping exercise shows evidence of Buruli Ulcer in seven of the twelve counties.
- Twelve health workers were trained as Buruli Ulcer Master trainers and 6 medical doctors were trained to surgically manage Buruli Ulcer cases that may develop surgical complication.
- 172 health workers were trained in three counties (Bong, Lofa and Nimba counties) on the prevention and control of Buruli Ulcer disease and 225 gCHVs on Buruli Ulcer early case identification, surveillance and channel of referral.
- Conducted Schistosomiasis and Soil Transmitted Helminthes mapping in 6 counties (Grand Bassa, Bomi, Gbarpolu, Rivercess, Grand Gedeh and Rivergee) to determine the prevalence of the two diseases.
- Monitoring and Epidemiology Evaluation of Schistosomiasis & Soil Transmitted Helminthes is ongoing in three counties (Bong, Nimba and Lofa) to monitor the large scale distribution of praziquantel and Albendazole and evaluate the impact of health, disease intensity and disease transmission.

Non Communicable Diseases

• Developed a draft National Strategic Policy and Plan for Non Communicable Diseases (NCDs).
• In collaboration with National Health Promotion Division, messages on Diabetics, Hypertensions and Obesity were developed in various vernaculars (Lorma, Gbandi, Mandigo, Gio, Mano, Kpelle and Bassa) and aired in Montserrado, Bong, Lofa, Nimba and Grand Bassa Counties.

Eye Health

- 5,762 patients were screened for various eye conditions at hospitals and clinics and 4,880 of the total screened were treated in the South East counties (Grand Gedeh, RiverGee, Maryland, Grand Kru, Sinoe).
- Surgical outreach was conducted in the South Eastern counties to restore sight to patients blind from cataract. 571 cases were operated during the process.
- 3,064 students were screened at primary schools in the South East counties for eye health problems and 1,132 students were treated for different eye problems such as conjunctivitis and refractive error.
- At the community level, 6,731 persons were screened 3,495 persons were treated for different eye conditions in the South East counties.
- 150 health workers and 175 teachers from Grand Gedeh, RiverGee, Maryland, Sinoe, Grand Kru Counties, were trained to identify minor eye conditions and do prompt referral.
- Celebrated the World Sight and White Cane Safety Day in Kakata, Margibi County. Awareness for blindness and 30 surgeries for cataract were performed.

2.2.12 Pharmacy Division and Supply Chain Unit

The Pharmacy Division is one of the several units under the Health Services Department. The Division reports to the Deputy Minister for Health Services through the Assistant Minister for Curative Services.

- Finalized and published the National Medicine Policy of Liberia (NMPL).
- Distributed 2,220 copies of the National Standard Treatment Guidelines combined with the Essential Medicine List of Liberia (NSTG & EMLL). The distribution of this important reference document covered all the fifteen (15) counties of the Liberia triggering down to all the hospitals, health centers, clinics, and health training institutions nationwide.
- Finalized the National Donation Guidelines of Liberia (NDGL). This document outlines four guiding principles under which Liberia can receive donated drugs and medical supplies, the acceptable shelf life for donated items, etc;
- Drafted the National Formulary of Liberia (NFL). This document provides basic information on the usage of medicines covering indications, adverse drugs reactions, contraindications, and basic instructions on the usage of medicines to the patients.
- During the year under review, the Division prepared two important authoritative instruments under the signature of the Chief Medical Officer (CM0). The two authoritative instruments include the following:
 - 1. Mandate to the fifteen County Health Officers to initiate the Popular Interim Approach to safe guard the security of public health commodities nationwide. This mandate which

forms the basis of the Interim Approach was issued in response to diversions of public health commodities.

The Interim Approach is designed to facilitate on the spot supply of health commodities to county depots in the presence of a county reception committee. The County Reception Committee (CRC) then cascade the distribution of the health commodities in health facilities in collaboration with the Supply Chain Management Unit (SCMU). The Interim Approach (IA) has been implemented in all the fifteen (15) counties in the first round and the second round starts in January 2014.

- 2. The second authoritative mandate was issued to the Liberia Medicines and Health Products Regulatory Authority (LMHRA) to confiscate public health commodities found in commercial pharmaceutical institutions i.e., pharmacies and medicine stores operating in Montserrado County for now. The issuance of the mandate to the LMHRA was in response to constant diversions of public health commodities to commercial shops. Acting on this mandate, the LMHRA has confiscated huge quantities of medicines. Prior to the issuance of the CMO's mandate to the LMHRA, the Division in mid April 2012, had organized a task force, under the auspices of the LMHRA inspect and confiscate public health medicines from commercial shops. As a result of that exercise, the task force confiscated huge quantity of medicines valued over \$100,000,00USD from these commercial pharmacies and medicine stores.
- The Division, in collaboration with the LMHRA, approved a total of 265 pharmaceutical products for official registration in the commercial of Liberia. This number is inclusive of all the pharmaceutical products certified by the LMHRA to be within the commerce of Liberia.
- The Division planned and executed a consultative workshop on strengthening supply chain systems both at central and county levels. The consultative workshop brought together sixty-five (65) participants inclusive of all the fifteen (15) County Pharmacists, five Assistant Ministers of Health, head of the Global Fund Program, heads of the vertical programs (National AIDS Control Program, National Malarial Control Program and National TB Control Program) respectively. At the end of the consultative workshop a joint communiqué was issues outlining the progress, challenges and recommendations for use by the governing authority of the Ministry of Health and Social Welfare.
- The Division planned and executed one-week long program commemorating the National Pharmacy Week, July 1-5, 2013 under the theme: "Safe Pharmaceutical Practices for Improved Impact on Patients".
- Held Pharmacy retreat in collaboration with the pharmaceutical Association of Liberia under the theme: "Enhancing Pharmaceutical Practices in Liberia". The retreat was held in Gbarnga City, Bong County, June 28-30, 2013 and it brought together more than fifty (50) practicing pharmacists.
- The Division, collaboration with Pharmacy Board of Liberia implemented the following activities:
 - a) Administered the Pharmacy State Board Examinations to twenty-five (25) intern pharmacist who have completed their internship in their respective places of assignments under the

tutorship of assigned preceptors; These twenty-five interns were subsequently licensed as Registered Pharmacists (RPh) and deployed in the different sectors of the Liberian economy.

- b) Deployed 12 intern pharmacists in medical, pharmaceutical, and regulatory institutions.
- c) Administered Dispensers State Board Examinations (DSBE) to 147 dispensers who have graduated from the Arthur S. Lewis Institute for Dispensers and Pharmaceutical Dispensing School respectively. The result of the DSBE will be published after which the successful candidates will be duly licensed by the Pharmacy Board of Liberia;

The Division in collaboration with the LMHRA registered 1,053 retail pharmacies and medicine stores nationwide in collaboration with the Pharmacy Board of Liberia. See break down by county in Annex A.

Supply Chain Management Unit (SCMU)

During the period under review, the Supply Chain Management Unit implemented the following activities:

- Trained 1,603 health workers (OICs, Dispensers, Pharmacists and Clinical supervisors, Drug Deports Focal Persons, DAs, and Storeroom keepers) from 526 health facilities in LMIS Tools. This training has enhanced the capacity of service providers and lead to an increase in LMIS reporting rate from less than 10% to 80%.
- Drafted Tracer commodities list.
- Developed an integrated data capturing tools of the National LMIS System for the Mental Health, NTDs and NDU programs.
- Developed and distributed eSBRR Excel based Spread Sheet tool for capturing health care commodity consumption data from health facilities. The Unit also develop key supply chain indicators list for monitoring commodities.

2.2.13 Nursing and Midwifery Division

The Nursing & Midwifery Division of the Ministry of Health & Social Welfare is responsible to monitor nursing and midwifery practices, set standards and guidelines t in Liberia. In 2013, major activities implemented by the Division include:

- Licensed 4,423 nurses and midwives including 24 foreign nurses;
- Vaccinated 2,030 travelers with yellow fever vaccines and issued 3,535 yellow books;
- Collaborated with the Liberia Board of Nursing and Midwifery to trained nurses at J.F.K Medical Center on Nursing Ethics, patients' documentation and reporting.

2.2.13 County Health Services Division

The County Health Services (CHS) Unit was established in 2010 as the Ministry's focal point for coordination and provision of technical assistance to County Health and Social Welfare Teams (CHT). The key components and functions of the Division are to provide oversight on quality assurance in health facilities and communities, support capacity building of CHSWTs, coordinate prison health activities with

the CHSWTs, and ensure the availability of standards, protocols and guidelines to improve service delivery. During the period under review, the CHSD achieved the following:

- Conducted a comprehensive capacity assessment in six counties (Grand Gedeh, Maryland, Rivercess, Grand Kru, Gbarpolu and Nimba), to identify national and county capacity gaps and provide evidence-based strategy to address needs.
- Conducted four quarterly supportive supervisions in the 15 counties at 358 public health facilities.
- Conducted the second annual health facilities assessment 342 primary health clinics, 31 health centers and 24 hospitals OPD in the 15 counties.
- Established 11 prison facilities to provide healthcare for inmates in ten counties (Montserrado, Bomi, Nimba, Margibi, Grand Gedeh, Bong, Gbarpolu, Grand Bassa, Lofa, Grand Cape Mount, and Sinoe counties).
- Developed in-patient standards to improve quality services at hospitals and health centers.
- Trained 25 national monitors to collect data using a standardized checklist on; Pediatrics, Malaria, Tuberculosis, Leprosy, HIV/AIDS, Obstetrics and Newborn, Surgical & Medical Emergencies in 30 health centers and 20 hospitals in the fifteen counties.

2.2.14 National Public Health Reference Laboratory

The National Public Health Reference Laboratory is working towards obtaining accreditation to carry out the acceptable test in our sub-region and at the International levels (the United States–CLIA/International Standard), by 2014. The first and most important steps is to immediately setup and carry out the required Quality Assessment and Control Program on our respective sections in the Laboratory/Program. The increased focus on quality in all of healthcare has spawned many related terms, including Quality Assurance (TQM), Continuing Quality Improvement (CQI) and Process Improvement (PI)., Implementing a comprehensive Quality Assessment (QA) program in our Laboratory will improve the services we deliver. By assigning acceptable performance thresholds to measurable indicators, we can track performance outcomes and document them for future use. A comprehensive program will monitor and evaluate the ongoing and overall quality of all aspects of the testing process (pre-analytic, analytic and post-analytic), establish quality standards with goal of ensuring the accuracy reliability and timeliness of patient and test results regardless of where the test if preformed.

- Conducted 12 blood drives that yielded 569 units of blood in Montserrado County and 7 drives in Bong that yielded 220 units of blood
- Collected 25 units of blood was from walk-in donors at our Blood Donation Center in Monrovia and 22 units at the Phebe site
- Sixteen (16) health facilities in 5 counties benefited from 619 units of safe blood from the two Regional Blood Bank and Donation Centers
- Completed the installation of all major laboratory equipment at the NPHRL
- Established molecular unit of the NPHRL for PCR testing procedures;
- Initiated the TB culture and drug susceptibility testing;

- Collected and analyzed various blood samples for the MOHSW and for the Liberia Demography and Health Survey
- Repaired and serviced one PIMA CD 4 Analyzer at TB Annex Hospital Lab
- Repaired and serviced Digital X-ray unit at C. H. Rennie Hospital, Margibi County.
- Repaired and serviced two bench top centrifuges successfully at C H Rennie Hospital.
- Successfully repair and serviced BD FACS Count CD 4 analyzer at the Redemption Hospital
- Conducted FACS Calibur CD 4 analyzer users training for National Public Health Reference Lab staff.
- Conducted Phlebotomy training at Redemption Hospital for the Lab staff. The training was conducted by BD Clinical Resource Consultant / Pre analytical System.

2.2.15 National Blood Safety Program

The National Blood Safety Program (NBSP) of the Ministry of Health & Social Welfare has the responsibility to provide safe, sufficient and timely supply of blood and blood products for patients requiring transfusions. This is in line with the Ministry's efforts to transition from paid blood donation to voluntary unpaid blood donation. Two regional blood banks and donation centers were established to facilitate the processes; staffs are involved with sensitizing volunteers, collecting, screening, storing, and distributing safe blood units to health facilities across the country. In fulfilling these responsibilities, the NBSP also take all possible steps to ensure that the act of blood donation is safe and does not cause harm to the donor and products derived from donated blood are efficacious and have minimal risk of any infection that could be transmitted to a patient through transfusion.

In 2013, the Programs' goals and objectives were not fully met as we were faced with major financial and budgetary constraints. Most of the Programs' activities focus on outreached into the communities. In the absence of finances our voluntary blood donation drives were greatly hindered and we only relied on our walk-in donors volunteers.

In 2013, the program gathered 836 units of blood from walk in volunteers and at the two regional blood banks in Montserrado and Bong Counties. All blood units were tested for five disease markers based on the National Guidelines. These diseases are; Malaria, Hepatitis B, Hepatitis C, Syphilis, and HIV1/2. Malaria is tested for at the site of blood donation whilst the remaining four disease markers are tested for at the regional blood banks. The use of automated machines at the regional blood banks is an added advantage to ensure that blood units are 100% safe.

Serological test results from the two regional blood banks and donation centers in Montserrado and Bong shows that 4,206 voluntary blood donors were tested for HIV, Hepatitis B and C, Syphilis and Malaria. The laboratory test show 92.6% (n=3,893) negative for these diseases. However, 14.6% of those tested for Hepatitis B were confirmed positive.

The serological test results show an increase in Transfusion Transmissible Infections (TTI) amongst voluntary blood donors. It is obvious as we live in a malaria endemic area that this disease marker is the highest, Hepatitis B continues to be on the increase, follow by HIV1/2, Hepatitis C, and Syphilis.

After thorough testing of blood units, those units that are 100% safe (not found with any of the five disease markers) were distributed to health facilities in country. A total of 16 health facilities in five counties (Montserrado, Margibi, Bomi, Bong and Lofa) benefited.

The overarching function of the Disease Prevention and Control Programme is to track and document patterns, trend and burden of diseases of epidemic potential including emerging and re-emerging infectious diseases to reduce or avert its impact. It also monitors the status of implementation of International Health Regulations in the country with special emphasis to disease surveillance at Ports of Entries (Air, Sea and Land Crossing Points) and provide credible and timely international alert for decision making.

2.2.16 Disease Prevention and Control

During the year the programme implemented several relevant activities in keeping with its plan: Major activities accomplished over the year 2013 included but not limited to Investigation and response to outbreaks, development of technical guidelines and other relevant to tools, supportive supervision and training among others.

Surveillance of infectious diseases and prompt intervention are very important where infectious diseases are the major causes of morbidity and mortality. This is particularly true for diseases that have epidemic potential and for which there are effective and affordable public health interventions available to control them. These include: Acute Flaccid Paralysis (AFP), measles, acute watery diarrhea (possibly cholera), bloody diarrhea, meningitis, neonatal tetanus, yellow fever, and hemorrhagic fever (Lassa fever), etc.

During the reporting period the program accomplished the following:

- 165 suspected cholera cases including zero death. Laboratory investigation and analysis confirmed 1 positive of O1 VibroCholerae compared to 18 in 2012 and 8 deaths. The reduction can be attributed to the timely prepositioned of Cholera kits in 15 counties, training of over 300 health professionals and scaled-up health promotion interventions.
- The number of dog bite cases recorded in 2013 was 317 double the number in previous year and four times as many as in 2011. Case fatality is 4%. Children below 15 years accounted for 55% of the cases reported.
- Outbreaks of over 150 cases of Lassa Fever were investigated and responded to, covering the 4 endemic counties (Bong, Nimba, Bassa and Lofa). These outbreaks claimed the lives of 17 persons including 2 Military officers of the United Nations Mission in Liberia. Case fatality rate is 11%. In response, over 300,000 doses of Ribavirin was procured and distributed to the affected counties including PPEs and 200 health professionals trained. The table below show epidemic diseases and the number of cases in 2013.

Surveillance of Vaccine Preventable Diseases (VPDs)

- Non-polio AFP rate: The non-polio AFP rate was generally good in 2013 with only Grand Bassa being silent throughout the year. Though the rate appeared encouraging, 11 counties had a rate of >2 (Bomi, Gbarpolu, Margibi, Montserrado, Nimba, Grand Cape Mount, Grand Kru, River Gee, Rivercess, Grand Gedeh, Lofa, Bong, and Sinoe) and Maryland had <2 rate.
- Acute Flaccid Paralysis (AFP): Fifty cases of AFP cases were report with zero confirmation and no death.
- **Neonatal Tetanus:** Five cases of neonatal tetanus were reported of which 4 were clinically confirmed positive with one attributable death (20% case fatality rate).
- Measles: twenty two (22) suspected cases of Measles were reported from Gbarpolu (4), Lofa (3), Maryland (4), Rivercess (1) and Nimba (5) respectively. All of these cases were clinically managed with CFR 0%. Laboratory (LIBR) investigations are still pending. In addition, the non Measles febrile illness rate (0.5) is poor at national level and four counties (Bong, Gbarpolu, Maryland and Rivercess) attained a rate of 2 and above, while Lofa and Nimba were below 2 and nine counties were silent or had zero reporting (Bomi, Bassa, Cape Mount, Grand Gedeh, Grand Kru, Margibi, Montserrado, River Gee and Sinoe).
- Lassa fever: 153 cases of Yellow Fever cases were reported, investigated, and blood sample collected. Eleven confirmed positive clinically, and with 17 attributable deaths (4% case fatality rate).
- Yellow fever: Seven cases of yellow fever were report with one attributable death (14% case fatality rate).
- **Cholera:** 165 cases of Cholera were reported with one confirmed case and zero death.
- Acute Watery Diarrhoea: 4,071 cases were reported, no confirmation and 4 attributable deaths (CFR 0.1%).
- Conducted 2 IDSR supportive supervisions in 15 counties
- Responded to 345 emergency calls for ambulance referral service, predominantly resulting from labour and delivery and Road Traffic Accidents
- Screened and issued 3,144 immunization clearances to travellers

Section 3: Department of Social Welfare

3.1 Family Welfare Division

The Division of Family Welfare is responsible for all welfare institutions in Liberia. The division regularly monitors these institutions to ensure that they are providing social services to orphans or vulnerable children meet the minimum standards required by the Ministry of Health and Social Welfare. Moreover, it also provides support to dysfunctional families that need parenting skills and other support necessary to keep children in families. The achievements of the division during the period were:

- Assessed 73 out of 133 reunified children across 7 counties;
- Assessed 40 orphanages in Montserrado, Grand Bassa and Rivercess; 10 accredited, 20 placed on probation and 10 closed;
- Monitored and supervised 25 welfare institutions in Montserrado;
- Conducted family tracing and reunification of 94 children;
- Established two offices for the Emergency Recovery Program for Refugees in Nimba and Grand Gedeh counties with a focus on provision of services for Ivorian refugee children in Liberian host communities.
- Monitored and supervised orphanages nationwide.
- Trained child placement committee
- Assessed 46 homes nationwide in collaboration with IAC (Independent Accreditation Committee).
- Set up administrative guidelines and develop strategies to create awareness on sexual exploitation and abuse of children in conflict and contact with the law.
- Conducted FTR (Family Tracing and Reunification) activities
- Monitored "Gate Keeping" measures put in place to mitigate the recruitment of children into orphanages
- 3,357 children were provided care and support in orphanages. Table 3.1 presents the current number of children in orphanages and their locations:

Table 3.1: Orphanages	and children pro	vided care and	support	
County	Orphanages	Children	Percent	
Bomi	4	182	5.4	
Bong	9	409	12.2	
Gbarpolu	1	15	0.4	
Grand Bassa	10	257	7.7	
Grand Cape Mount	1	23	0.7	
Margibi	8	400	11.9	
Nimba	8	303	9	
Montserrado	41	1728	51.5	
Rivercess	1	40	1.2	
Total	83	3,357	100	

The number of children in orphanages reduced from 3,637 children in 2012 to 3,357 children in 2013. This reduction of 280 children is attributed to the reunification program.

3.2 Community Services Division

The Community Welfare Services Division provides ageing and psychosocial services. During the year 2013, the division implemented the following activities.

- Trained 200 psychosocial counselors in eight counties.
- Counseled 1,220 survivors including 400 young mothers in basic psychosocial counseling services
- Established psychosocial workers taskforce.
- Developed, printed and distributed IEC/BCC materials on the preventions of alcohol and substance abuse.
- Trained 25 staff from safe homes and fistula project to provide basic counseling services to SGBV survivors in Bong County.
- Conducted assessment in three Counties (Bassa, Lofa and Bong) on the situation analysis of the elderly.
- Provided food and non food assistance to the elderly.

3.3 Division of Rehabilitation

The division provides oversight for services provided to persons living with disabilities nationwide. Activities implemented during the period are as follows:

- Conducted Needs Assessments of Persons With Disabilities (PWDs) in 8 counties;
- Provided assorted food and non-food items to 175 PWDs in Grand Bassa and Sinoe;
- Distributed assorted materials to PWDs in two counties in collaboration with the Monrovia Rehabilitation Center; funded by Handicap International;
- Conducted sensitization and awareness workshop on Substance Abuse and its Prevention in Sinoe and Bomi with youth groups, social workers, nurses and police officers;
- Developed Guidelines and Regulations for institutions/organizations providing disability services;
- Conducted Workshop on the Guidelines and Regulations tools with 15 social welfare supervisors.

3.4 Organizational and institutional development

This program oversees internal and external capacity development of the Department, formulates policies and conducts accreditation of institutions providing social services.

- Conducted Capacity Needs Assessments in Bong, Grand Bassa, Bomi, Margibi, Sinoe, Montserrado, Nimba, Gbarpolu, Grand Cape Mount and at Central MOHSW;
- Developed a social welfare indicator matrix;
- Distributed 170 copies of EPSS to CHSWTs and partners;
- Introduced EPSS to the 15 CHSWTs.

Section 4: Department of Planning

4.1 Bureau of Planning

The Bureau of Planning is headed by an assistant minister who supervises three directors and focal persons. Major activities include overseeing the county planning process in 15 counties and the successful conduct of the national health conference. As part of its core functions, the bureau provides oversights in the following areas; policy and planning, aid coordination and health financing, and human resources development. Activities and achievements of the various Units are presented below:

4.1.1 Human Resource Division

The Human Resource (HR) Division within the Ministry of Health & Social Welfare (MOHSW) has a mandate to develop and implement various HRH components to meet the demands of the Ministry's 10 years National Health & Social Welfare Policy and Plan (2011-2021). To carry out this mandate, the Division collaborates with other departments, the County Health and Social Welfare Teams, development partners and UN agencies, Universities and health training institutions to address the human resources needs of the sector at all levels of health service delivery.

Noticeable accomplishments of the Division in 2013 are:

- Developed MOHSW HR procedures manual (draft);
- Developed job descriptions and CHSWT organizational chart (draft);
- Provided health insurance to 3,578 employees health insurance through Secure Risk Insurance Company;
- Developed integrated human resource information system (iHRIS). Health workers information are being gather and enter into the HR information system;
- Provided 169 local and 9 international scholarships to students at various universities and health training schools.

4.1.2 Division of Policy & Health Financing

The Division provides technical guidance during the formulation of subsector policies and plans and coordinates health financing activities. In 2013, the Division worked with external consultants and partners to implement two major activities: 1). the conduct of the Health Resource Mapping Exercise for FY 2013/2014 and 2). the development of the MoHSW draft operation plan for FY 2013/2014.

Health Resource Mapping: A survey of the GoL and 17 donors currently supporting the health sector in Liberia was completed under the Resource Mapping (RM) exercise for FY 2013/2014. List of donors surveyed include USAID, EU/EC/ECHO, UNICEF, Global Fund, UNFPA, WHO, GAVI, Irish Aid, DFID and other development partners. Findings from the exercise depict a total of USD 179 million committed to the health sector for the FY 2013/2014. Of this amount, 73 percent comes from international donors. It was

found that US\$ 92 million of the total resource envelope was allocated at the county level. Commitments per capita were highest for Lofa County (USD 43.00) with the lowest being in Rivercess (USD 4.00). The mapping exercise shows that USAID is the largest donor. The Government of Liberia is the second largest contributor to the health sector. Allocations from the GOL include, direct-recipient institutions such as JFK and Phebe Hospitals and LIBR, Jackson F. Doe Memorial Referral Hospital, etc. The aggregate GFATM contributions sum to a little over US\$ 30 million—the decrease in GFATM commitments was anticipated due to procurement patterns of certain commodities; for example, commodities such as bed nets are procured in certain years but not others. Both USAID and GFATM resource commitments decreased from last fiscal year.

4.1.3 External Aid Coordination Unit

The National Health and Social Welfare Policy and Plan articulated the Ministry's commitment to strengthen coordination mechanisms between the Government, donors, Non-For Profit, and Private For Profit organizations, including the Health Sector Coordinating Committee (HSCC), and various technical committees. According to the National Health Policy document, strengthening coordination will be achieved by systematizing collaboration in common planning exercises and resource allocation (by level, by county). Some of the achievements in this area include:

- Successful conduct of the six consecutive National Health Review Conference under the theme Universal Health Coverage- Health and Social Protection for All.
- Conducted Health Sector Coordination Committee meetings
- Contracts review and award to PBF implementers

4.2 Bureau of Vital Statistics

The Bureau of Vital and Health Statistics is headed by an Assistant Minister with three directors (Research, HIMS, and M&E), a Principal Registrar, and two coordinators (Birth Registration, and HMIS, M&E and Research). The bureau has the mandate to produce birth and death certificates, collect, compile and disseminate health information (data), supervise health research, and monitor health programs in the country.

4.2.1 Monitoring and Evaluation

The Monitoring and Evaluation Policy and Strategy articulate the approach to monitoring and evaluation of the Ten Year Health and Social Welfare Policy and Plan. The M&E Strategy and its three years operational plan are implemented with visible outcomes. The Ministry's M&E system is developing and getting stronger and better by the day.

Routine Monitoring: The M&E Unit monitors the implementation of the National Health Policy and Plan in line with the M&E Strategy. To measure the performance of key indicators, regular assessment of health programs, projects at the communities and health facilities are conducted quarterly, while health facilities

data are analyze monthly. During the period, a total of 230 health facilities, 460 communities and 6 NGOs were monitored.

Data Verification and Validation: assessments of health facilities data in 2013 revealed that data quality is gradually improving. However, there are systems, organizational and individual or behavior issues that contribute to poor data quality. To improve the quality of health facilities data, quarterly supervision and verification exercises are regularly conducted. These exercises are supported by the USAID's FARA project, the health sector pool fund and global fund. During the year, 222 health facilities' data on key indicators were verified and validated. Additionally, all County Health Team were supported through an MOU initiated by the M&E Unit to verify data from all health facilities with funding from the Global Fund. These interventions have contributed to improvement in data quality.

Access to information and data use: The power of the DHIS-2 (online database) is being put to work to ensure that information are made available in real time to facilitate information use in health services management and system strengthening. With the support of USAID through the RBHS project, the DHIS-2 was customized for easy access to program managers, division heads and County Health Managers to get updated reports including tables, chats and maps on key indicators on line for use.

Capacity Building: Capacity building for M&E officers is a priority in the M&E Strategy. County M&E officers were trained in basic data analysis, data use for action, data collection and reporting. All County's M&E and Data Officers were trained in data validation to strengthen data quality.

Additionally, four County M&E Officers from Lofa, Maryland, Montserrado and Nimba including one Central M&E Assistant attended an international M&E training courses in Ethiopia and Kenya with support from RBHS, MEASURE Evaluation and UNICEF. Also, one central M&E staff acquired a master degree in public health in South Africa, with support from MEASURE Evaluation.

An outcome monitoring training in the use of Lot Quality Assurance Sampling for Central M&E, HMIS and Research Units and six counties health teams carried out by MEASUE Evaluation with USAID support. The M&E unit in collaboration with the Research unit conducted an Outcome Monitoring Study in Rivercess and Sinoe Counties respectively.

4.2.2 Research Unit

The mandate of the Research Unit of the Ministry of Health and Social Welfare is to govern, manage and coordinate the health and health related research in Liberia. During the calendar year (2013), the Research Unit was involved with the following:

Protocol Development: The Unit worked with the National Malaria Control Program (NMCP) to develop the protocol for the Health Facility Survey. The unit also coordinated with the National Leprosy & TB Control Program (NLTCP) and the Community Welfare Division of the Social Welfare Department to develop protocols for the "Initial Defaulter" and "Substance Abuse among School-Age Children", and protocols for

Micronutrient Powder KAP survey, the Lot Quality Assurance Sampling (LQAS) and Data Quality Self Assessment.

Field Surveys: The Research Unit in collaboration with the Governance Commission successfully conducted the Sectoral Governance Assessment Community Score Cards for Health and Education in five counties; Bomi, Grand Bassa, Montserrado, Nimba and Rivercess. The Unit in addition, worked with the NMCP and NLTCP for the conduct of the Health Facility Survey and the Initial Defaulter Study respectively. Additionally, the unit participated in the Substance Abuse Study organized by the Community Welfare Division of the Social Welfare Department.

The Unit also participated in the Lots Quality Assurance Sampling (LQAS) survey Practicum conducted by Measure Evaluation in Lofa County. Other studies coordinated are; the perception of the quality of health care delivery in Bong, Grand Gedeh and Nimba Counties and Micronutrient Powder KAP in Grand Cape Mount, Grand Gedeh, Maryland, Montserrado and Nimba Counties. Research Unit participated in the LQAS survey in Rivercess and Sinoe Counties and the EPI Data Quality Self-Assessment in the fifteen (15) Counties.

Capacity Building: With technical support from the West African Health Organization (WAHO) and the Council on Health Research for Development (COHRED), the Unit in addition, organized a training workshop on Health Research Web (HRWeb). Twenty-one (21) persons, including representatives of ethics committees benefited from the training. The aim of this training was to provide knowledge on a platform that enables ethics committees as well as the Research Unit of the MOHSW to archive all research for health conducted in Liberia. In collaboration with RBHS, the unit organized a training workshop on Behavioral Change Community Data Analysis and information use. This training was attended by Monitoring and Evaluation Officers from Bong, Lofa and Nimba. Additionally, staffs from the Central MOHSW and RBHS were present.

Governance: A Research for Health Multi Stakeholders' meeting was organized by the Research Unit, with financial support from WAHO. The aim of this meeting was to foster better coordination among research for health stakeholders in Liberia. In attendance were representatives from ethics committees, programs and international partners. Outcomes from this meeting were an updated Research for Health Mapping for Liberia, a draft National Research for Health Policy and an action plan for research for health strengthening in Liberia.

4.2.3 Health Management Information System

Health Management Information System (HMIS) is responsible for the provision of data for decision making and interventions. The National Health Policy avowed that HMIS will be strengthened in order to better collect, organize and maintain relevant data in a timely fashion. The system will have the capacity to produce reports related to health sector development, including the analysis of trends, in order to understand the progression of the health sector over time. With the introduction of the District Health Information Software Version 2 (DHIS) and the standardization of reporting instruments, the coverage of routine health facility reporting has increased and data quality is gradually improving.

During the period, the HMIS Unit in its drive to improve data quality collaborated with other units and programs to conduct regular data verification exercises, trained data managers and M&E officers on data use for decision making and provided regular feedback to data managers on submitted data.

4.2.4 Births Registration

Birth registration is fundamental to ensuring a child's legal status, their basic rights and services (UNICEF, 2006; United Nations General Assembly, 2002). Liberia is a signatory to the UN Convention on the Right of the Child and the African Charter on the Right and Welfare of the Child. In fulfillment of these legal obligations, the Ministry has decentralized the registration of births to increase access and coverage. However, the registration of births is face with numerous challenges that require urgent attention to achieve universal coverage within five years.

The Bureau of Vital Statistics has the responsibility to produce and issue birth certificates to persons born in Liberia regardless of their economic and social status. The low registration is a result of the over two decades of highly centralized birth registration system, and limited resources (Human, logistics, and financial) for birth registration. However, with the support of partners there are potential for increase access and coverage.

To achieve universal birth registration coverage, several measures have been instituted that include, routine registration of children at various public health facilities, regular birth registration campaigns, collaboration with other institutions, and awareness creation.

In 2013, the Ministry with support from partners supported each county to conduct birth registration and sensitization. The Ministry also worked with UNIHCR to register over 3,000 refugees' children in Nimba, Grand Gedeh and Maryland Counties. These initiatives have contributed to increasing number of registered children.

Births certificates production trend at central MOHSW continues to show a significant increase. Although there has been a major increase in registration over the past 6 years, Liberia's progress is little compared to the proportion of unregistered persons in the Country. A total of 168,072 certificates have been produced from 2007 to 2013. Figure 4.1 presents birth certificates issued from 2007 to 2013.



The decentralization of birth registration for children started in 2010 with three counties; Bomi, Gbarpolu and Grand Gedeh and currently covered all 15 counties. The Ministry made remarkable progress in 2012 by establishing birth registration centers in the 15 counties of Liberia and these centers are registering children less than 13 years. Over the three years, 135,492 children under 13 years have been registered through the decentralized system across the counties. In 2013, 45,492 children under 13 years were registered in all counties through the decentralized birth registration process.



4.2.5 Death Registrations

The Liberian Public Health Law of 1976 mandates the MOHSW to register all deaths within 24 hours after their occurrence. This regulation has not been implemented to its fullest by the Ministry due to limited access to death registration services and information on the importance and need for death certificates. As a result of inadequate access, the coverage of registration has always been low. Apart from the mentioned plausible reasons for low registration of deaths, traditional and religious practices contribute to low registration in Liberia. Death certificates are usually processed in Liberia with the intent to obtain insurance benefits, to settle inheritance issues and not as a requirement for burial and documentation of cause of death. The registration of deaths continues to fluctuate over the past six years. In 2007, 548 deaths were registered compared to 624 in 2011 and 549 in 2012. In 2013, 659 deaths were registered.

Section 5: Department of Administration

5.1 Bureau of Central Administration

The Bureau of Central Administration has nine subdivisions: Personnel Services, Procurement & Warehouse Services, Information Technology, Health Infrastructure Development, Internal Audit & Compliance, General Counsel, Transportation Services, Maintenance Services, and Housing & Property Control.

5.1.1 Personnel Services

The Division of Personnel is responsible for the recruitment, retention, and retirement of health workers throughout the country and within the public sector. The Division implements rules and regulations governing health workers behavior, attitudes, and performances in accordance with the Civil Service Guidelines.

The Personnel Division carried out following activities in 2013:

- 664 health workers were processed by the Personnel Division and regularize on the Government of Liberia Payroll by the Civil Service Agency (CSA);
- 4,083 employees were covered by health insurance scheme through the Secure Risk Insurance Company;
- 130 employees were pensioned

5.1.2 **Procurement Services**

The function of the division is to procure goods and services in accordance with the Public Procurement Concession Commission (PPCC) regulations. The division provides timely and efficient procurement of civil works, goods and services for the Central Ministry of Health & Social Welfare, County Health & Social Welfare Teams, and donor funded projects.

The Ministry of Health & Social Welfare continue to maintain her commitment to the rules and regulations governing best practices of good governance to meet her international obligations with partners and national commitments of providing sustainable health and social welfare care to the people of Liberia.

The MOHSW procurement system is ensuring best value for money as well as increasing efficiency and effectiveness and reducing potential risk for corruption which has a positive impact on donor's contributions/funding. The procurement system is use by the Ministry as a key indicator for best practices in financial management implementation.

Training and Development: Three staff from the Procurement Unit benefited from short term external training program at the Ghana Institute of Public Administration (GIMPA) and the Regional Center for

Training and Development in South Africa. The training was intended to upgrade their capacity in Public Procurement management.

Procurement of goods and services constitutes approximately 35% of the Ministry's expenditures. Major categories of procurement include;

- Contracted the Nimba and Bong Counties health teams through performance based financial to manage their respective health system at a cost of US\$2,524,006.00
- Initiated professional services (Individual consultants and Firm Based) at a cost of US\$81,092.60
- Constructed and renovated health infrastructure at a cost of US\$145,876.36
- Procured goods such as vehicles, motorbikes, generators and assorted spare parts at a cost of US\$330,122.25
- > Purchased fuel and lubricant worth US\$1,168,334.34
- Procured office supplies and consumables that valued US\$428,489.75
- None consultancy services (ie: communication cards, air ticketing, catering services, internet subscription, printing & binding, vehicle rental & vehicle maintenance) valued US\$ 1,109,479.98.

The total financial execution of the Procurement Unit during the period was over US\$ 4 million, with funding from the Government of Liberia (GOL), GAVI, UNICEF, UNFPA, Pool Fund, Global Fund, Sight Savers, Liverpool, FARA, World Bank, WHO, WAHO, APOC, SIDA etc.

5.1.3 Infrastructure Development

The Infrastructure Unit is responsible for all health infrastructure related activities within the sector. Key functions of the Unit are; monitoring of constructions (e.g., clinics, health centers, hospitals, drug depots, incinerators, etc), design of health facilities standards, and infrastructure policy. The infrastructure network building blocks which goal is to expand access to quality of health services, achieved the following with support from her partners:

- Completed the construction of five microscopic laboratories in five counties (Liberia Government Hospital-Bomi, Martha Tubman Memorial Hospital-Grand Gedeh, Liberia Government Hospital-Grand Bassa, Phebe Hospital-Bong and James Davies Memorial Hospital-Montserrado);
- Installed 53 Solar Panels at health facilities in 6 counties (Bong, Nimba, Grand Gedeh, River Gee, Maryland and Montserrado) to provide electricity.
- Constructed 8 incinerators to improve waste management and sanitation at 8 health facilities (1 -Baconee Health Clinic, Grand Bassa County; 1-Tellewoyan Hospital and 1-Konia Health Center Lofa County; 1-Phebe Hospital and 1-Belefanai Health Center, Bong County; 1-Nyennwliken Clinic, Sinoe County; 1-Pleebo Health Center, Maryland County and 1-Nyaaken Clinic, River Gee County).

In 2013, the Ministry completed the construction of four clinics, one health center (Wensue Clinic in Bong County, Jarkaken and Putuken Clinics in River Gee, Gozohn Clinic and Boegeezay Health Center in River Cess County) and two staff housing (Gboleken Clinic and Gbarzon Health Center in Grand Gedeh County).

Three maternal waiting homes (Worhn and Velley -Ta in Margibi County and Duotiayee in Nimba County) and maternal wings (Polar Clinic, Gbarzon Health Center, Kumeh Town Clinic and Zai Town Clinic in Grand Gedeh and Salala and Phebe in Bong County), to improve delivery under skilled birth attendants for pregnant women with poor geographic access to health facilities. In addition to these health infrastructure developments, a National Health Infrastructure Policy was developed and infrastructure design work for the construction of a new National Drug Services (NDS) central warehouse was finalized.

5.1.4 Internal Audit and Compliance Units

Internal Audit Unit: The Ministry has made frantic effort and has initiated measures towards promoting transparency, accountability and anti-corruption, which are fundamentals for good governance. These measures are geared towards the prevention and reduction of the risks of corruption in light of the Government Decentralization process. Towards this endeavor, the Ministry established an Internal Audit Unit which includes the Office of Compliance.

The Internal Audit Unit periodically review the organization of financial management; assess the adherence to all financial management procedures and processes prescribed, its regulations and instructions issued by the Minister; evaluate the adequacy of management checks and balances, and controls in the financial management practices within the MOHSW.

Compliance Unit: The prime responsibility of the Office of the Principal Compliance Officer is to coordinate, review and ensure implementation of Internal and External Audits. The office manages External Audit Engagement Processes and design, implement and maintain internal controls. The office ensures administrative and financial compliance with agreements, polices, procedures, etc.

During the year under review, the Office of the Principal Compliance Officer carried out the following activities:

- Followed-up on Internal Audit Findings and Recommendations of the following organizations: Nimba County Health Team, Bong County Health Team, Bong Mines Hospital, Margibi County Health Team and Gbarpolu County Health Team,
- Followed-up on External Audit Findings and Recommendations of the following organizations: Global Fund, GAVI HSS/ISS, Health Sector Pool Fund,

To ensure smooth conduct of the current GAC audit, the Office of the Principal Compliance Officer is managing the audit engagement process ensuring documents requested by GAC are collated and submitted. The office is actively participating in the overall MOH&SW Risk Mitigation Process and contributed to the first quarter Risk Mitigation Actions report writing.

5.1.5 Office of General Counsel

The Office of General Counsel (OGC) is the legal arm of the Ministry. It was established in 2008 by the authority of the Minister of Health & Social Welfare with a sector wide cooperation from the Ministry of Justice. The OGC has the mandate to provide legal services to the Ministry that include; the review of the

Health and Social Welfare Laws, representation of the Ministry at all legal proceedings, act as the Ministry's liaison with the Ministry of Justice with respect to requests for legal opinions and advice on all judicial litigation involving the Ministry.

During the period under review, the OGC was engaged in activities pursuant to its functions:

Agreements: The OGC, for the period under review drafted forty-two (42) agreements between the Ministry and service providers, independent contractors and partners which values exceeded US\$20,703,121.09.

Dispute Resolution: Further to the above, the OGC was involved in five cases of dispute resolutions in the year 2013. See detail in attachment.

Conferences/workshops: The OGC represented the Ministry at several conferences/workshops for the period under review. Some of such conferences/workshops include: WAHO's sensitization workshop geared towards strengthening the capacities of West African States on WTO's (world Trade Organization) TRIPs (Trade Related Aspect of Intellectual Property) agreement and the implementation of ECOWAS TRIPs Policy /Guidelines or Legislation held in Bobo Diolasou, Burkina Faso, LMDC workshop for the validation of code of professional ethics for Health Workers and Governance Commission workshop geared towards validating daft Local Governance Act.

Litigation: the Unit facilitated the arrest of Mr. Wilmot Yalata, Manager of Moweh Construction Company that failed to complete health infrastructure projected awarded and abandoned by this company (filed resistant to bond) and represented the National Aids Commission in a law suit alleging placement of the Plaintiff's photo on a HIV signboard without her consent (filed relevant answers to averments contained in the Plaintiff's Complaint). Also, file responsive pleading at the 6th Judicial Circuit Court for Montserrado County in an Ejectment action; **"Rose Monga vs. Ministry of Health & Social Welfare"**

In the area of legal interpretation, the OGC was engaged in interpreting and explaining the provisions of the Ministry's regulation on the use of Tobacco and Tobacco products in four south-easting counties via local radio stations.

5.2 Bureau of Fiscal Affairs

The Bureau of Fiscal Affairs consists of the Office of Financial Management. It has the responsibility of managing National Government Budget, grants and project funds.

5.2.1 Office of Financial Management

The Office of Financial Management (OFM) has the responsibility for the internal financial administration and accountability of the MOH&SW.

During the year 2013, the OFM embarked on several activities aimed at enhancing financial management performances at the central level and at the county level to support the ongoing decentralized financial management framework. The core activities carried out by OFM included: regular preparation of monthly,

quarterly and yearly financial statements and donor specific reports for distribution to senior management, government and donors; upgraded the Ministry's accounting system to a higher version (6.1) to enable more efficient and effective financial accountability and administration; refreshed staff in the new version of the system to increased productivity; developed excel-based electronic financial management system for improved county accounting and reporting and more convenient comparative analyses of county financial management information; conducted regular supervision and mentorship of CHTs and Health institutions to assist accounting personnel in an effort to continuously improve the MOH&SW's Decentralized Financial Management System and procured and installed appropriate ICT infrastructure for 38 county institutions to facilitate efficient use of the electronic system for timely and accurate reporting

National government budgetary allocations to the health sector continue to show a gradual increased over the past seven fiscal years (2006-2013). The health sector budget has increased from 10.9 million in fiscal year 2006/2007 to 54.9 million in fiscal 2012/2013. Although the Ministry's budget has increased by approximately US\$ 44 million from over the past seven fiscal years, this increment has not fulfilled the government's commitment to the Abuja Declaration of 15% of National Budgetary allocation to the health sector. However, these increments in budgetary allocations reflect the government's commitment to improve the health status of the population and move towards the fulfilment of commitments made regionally to provide 15% of national budget to health by the Abuja declaration made by African governments in 2000. Figure 5.1 displays government's budgetary appropriation to health. Table



The per capita health expenditure is encouraging, although Liberia is still far from achieving the required target that will influence the attainment of the MDGs 4, 5 and 6. In 2006, the per capita health expenditure was US\$ 3.30 person compare to US\$ 14.50 per person in 2013, excluding donors' funds. Investments by the government and her partners have contributed to the improvement of the health sector indicators, especially MDGs 4, 5 and 6. Figure 5.2 presents government's allocation as a percent of the total national budget and the per capita health expenditure in relation to the government's appropriations.



Over the years, there have been gradual increased in government's allocation to the Ministry of Health and Social Welfare. However, what have been appropriated during the five years period has never been received by the Ministry. For example, in fiscal 2009/10 the amount of US\$ 20.15 million was allocated for the Ministry by only US\$ 13.32 million was disbursed by the Ministry of finance. The disparities between government allocation actual disbursements is partly attributed to the delay in the approval and disbursement of the National Budget and the bureaucracy associated with the processing of payments and release of quarterly allotments.

The Ministry received funds from various sources that include, Global Fund, UN agencies, Global Alliance for Vaccines and Immunization (GAVI), USAID, West African Health Organization, the European Union, Foundations, Bilateral and Multilateral Institutions among others. The actual amount of monies received from various funding sources against expenditures is shown below in annex B Table 5.1 and 5.2.

Section 6: Challenges and Recommendations

6.1 Challenges

To achieve the National Health Policy goal and objectives, the international and regional goals such as the Millennium Development Goals (MDGs 4, 5 and 6) and the Roll Back Malaria Targets, the Ministry has to address wide range of obstacles and bottlenecks in the delivery of health services. Paramount among these systems and operational challenges are:

- Erratic stock out of essential drugs and medical supplies at health facilities
- High proportion of unimmunized children and high dropout rate because of limited logistics, cold chain facilities and vaccine management
- Weak referral system as a result of limited GSM coverage and ambulance services
- Inadequate skilled and qualified health work force especially physicians and certified midwives
- Low incentive and salary, leading to low quality of services and high staff turn over
- Fewer health training institutions with uneven distribution that impedes enrollment and production of health workers
- Placing contract health workers on Government payroll
- Poor data quality
- Insufficient national budget to construct additional health facilities and procure adequate drugs and medical supplies.

6.2 Recommendations

The health sector is making significant gains that need to be sustained and further improve to alleviate the disease burden of the Liberian people and trigger the attainment of the health related MDGs. To ensure that progress is maintained and further accomplishments are foster, the below suggestions should be considered:

- The MOHSW must advocate for budgetary support to construct health facilities in under serve areas so as to achieve the health sector goal of universal physical access by 2021. Currently, approximately 28% (over 1 million people) of the Liberian population lives beyond one hour walk to reach a health facility.
- The Government needs to improve the motivation package of the health work force. Motivating the health work force by increase salary, provision of housing accommodation, allowance for rural health workers and transportation facilities will contribute to quality of care and better health outcomes.
- The Civil Service Agency should fast track the employment of over 5,000 contract workers to motivate them to increase their productivity and commitment to service.
- Mobilize resources and strengthen partnership with health training institution to increase production level and quality of the health work force.
- Expand performance based financing (PBF) to all counties and all public health facilities to improve the quality, performance and efficient use of resources in the sector.

_	Coverage by County					
Counti	No. of facilities per	Reports	Expected	Reporting	Reports On	Developed On Times
County	county	Received	Reports	Coverage	Time	Percent On Time
Bomi	24	218	240	91%	177	61%
Bong	39	391	390	100%	205	44%
Gbarpolu	14	137	140	98%	68	40%
Grand Bassa	29	282	290	97%	206	59%
Grand Cape Mt	32	320	320	100%	314	82%
Grand Gedeh	18	168	180	93%	88	41%
Grand Kru	17	170	170	100%	134	66%
Lofa	56	489	580	84%	163	23%
Margibi	33	310	330	94%	228	58%
Maryland	24	222	240	93%	130	45%
Montserrado	240	1673	2550	66%	410	13%
Nimba	63	526	630	83%	314	42%
River Cess	17	170	170	100%	116	57%
River Gee	17	169	170	99%	125	61%
Sinoe	33	319	330	97%	243	61%
National	656	5564	6730	83%	2,921	36%

Annex A: Reporting Coverage and Health Services Utilization Data

Table B: Distributi	on of functional Hea	Ith Centers and	Hospitals by County	and by Reporting	Status in 201	3
	No. of facilities	Actual		Expected	Reports	Percent
Name	per county	Reports	Expected Reports	Report Percent	On Time	On Time
Bomi	1	10	11	91%	7	58%
Bong	3	33	33	100%	17	47%
Gbarpolu	1	10	11	91%	5	42%
Grand Cape Mt	3	42	44	95%	25	52%
Grand Bassa	4	31	33	94%	27	75%
Grand Gedeh	3	23	33	70%	11	31%
Grand Kru	1	11	11	100%	8	67%
Lofa	7	54	77	70%	10	12%
Margibi	8	86	88	98%	62	65%
Maryland	3	26	33	79%	14	39%
Montserrado	9	62	165	38%	9	5%
Nimba	11	84	121	69%	52	39%
River Cess	1	10	11	91%	24	67%
River Gee	3	32	33	97%	8	67%
Sinoe	1	10	11	91%	4	33%
Liberia	59	524	715	85%	283	36%

Table C: In	-patients Ac	dmission by	Causes a	and by Co	ounty 20 ⁻	13						
							Pelvis Inflam	RTA	Other			
County	Malaria	Anemia	ARI	UTI	STIs	Hypert	Disease	(car/bike)	Injuries	Typhoid	Others	Total
Bomi	1,518	277	255	15	30	101	20	188	180	46	1,059	3,689
Bong	3,114	959	249	83	20	98	44	85	274	40	5,793	10,759
Gbarpolu	363	37	33	20	0	10	4	11	15	3	169	665
G. Bassa	3,297	612	890	58	7	249	73	188	317	576	3,299	9,566
G. C. Mt	1,070	248	96	17	16	72	23	43	12	76	261	1,934
G. Gedeh	1,207	291	68	16	6	37	15	127	54	14	2,464	4,299
G. Kru	143	25	0	3	2	15	7	9	11	3	498	716
Lofa	3,322	572	301	69	54	173	99	216	180	157	3,761	8,904
Margibi	5,373	915	974	84	261	488	352	597	555	1,157	8,678	19,434
Maryland	1,677	186	56	23	7	82	31	72	102	7	1,424	3,667
Monts.	12,320	3,374	4,029	219	2,840	3,613	2,208	2,230	2,090	853	13,543	47,319
Nimba	8,542	2,329	551	398	96	312	103	291	296	533	6,112	19,563
R. Cess	532	33	41	1	1	21	3	17	24	7	692	1,372
R. Gee	141	39	32	28	5	3	1	4	11	3	120	387
Sinoe	564	152	56	40	6	42	17	67	30	10	652	1,636
National	43,183	10,049	7,631	1,074	3,351	5,316	3,000	4,145	4,151	3,485	48,525	133,910

Table D: In-patien	Table D: In-patient admissions and deaths by county in 2013										
				Inpatient Deat	hs		Proportion of				
			5 yrs and	Neonatal			maternal				
County	Admission	< 5 yrs	above	deaths	Maternal	Total	deaths				
Bomi	3,689	120	65	7	5	197	2.5				
Bong	10,759	192	244	74	47	557	8.4				
Gbarpolu	665	5	11	37	33	86	38.4				
Grand Bassa	9,566	287	140	6	0	433	0.0				
Grand Cape Mt	1,934	30	11	10	4	55	7.3				
Grand Gedeh	4,299	90	180	23	24	317	7.6				
Grand Kru	716	6	22	10	3	41	7.3				
Lofa	8,904	100	182	36	15	333	4.5				
Margibi	19,434	86	187	37	42	352	11.9				
Maryland	3,667	122	45	13	13	193	6.7				
Montserrado	47,319	1,339	696	256	121	2,412	5.0				
Nimba	19,563	1,276	667	30	52	2,025	2.6				
River Cess	1,372	38	33	12	5	88	5.7				
River Gee	387	79	14	6	7	106	6.6				
Sinoe	1,636	13	26	7	2	48	4.2				
Liberia	133,910	3,783	2,523	564	373	7,243	5.1				

Table D.1: In-patient admissions and deaths by county	in 2013	
Hospitals	Private	Public
Curran Lutheran Hospital	1679	
Benson Hospital	2278	
Bensonville Hospital		979
Bong Medical Hospital		2947
CH Rennie Hospital		2924
Charles B Dunbar Hospital		3045
Chief Jallahlon Medical Center		883
Du-side Hospital	3639	
E S Grant Mental Hospital		
ELWA Hospital	2118	
F J Grante Hospital		1627
Fish Town Health Center		1191
Foya Boma Hospital		2518
Ganta Methodist Hospital		3912
Ganta Rehabilitation Health Center		26
GW Harley Hospital		2588
Jackson F. Doe Memorial Hospital		2907
James N. David Memorial Hospital		10671
JF Kennedy Medical Center		4578
JJ Dossen Hospital		2161
Kolahun Hospital		2095
Liberia Agriculture Company Hospital	4252	
Liberia Government Hospital (Bomi)		5199
Liberia Government Hospital (Buchanan)		3674
Martha Tubman Memorial Hospital		3560
National TB & Leprosy Hospital		67
Phebe Hospital		5165
Rally Time Hospital		746
Redemption Hospital		33972
SDA Cooper Memorial Hospital	833	
St Francis Hospital		633
St Joseph's Catholic Hospital	1520	
St Timothy's Hospital		752
Steven Tolbert Memorial Hospital (ArcelorMittal)	489	
Tellewoyan Memorial Hospital		2235
National	16,808	101,055
Note: This table is base on number of persons while the		

Table E: Immuniza	Table E: Immunization Coverage by Antigens and by County in 2013									
County	BCG	OPV1	OPV2	OPV 3	Penta1	Penta 2	Penta 3	Measles	YF	Fully Imm.
Bomi	82	110	100	87	110	100	86	77	71	76
Bong	106	112	92	103	112	92	103	91	84	90
Gbarpolu	72	92	85	81	112	85	80	67	61	67
Grand Bassa	108	104	79	84	104	79	84	65	60	50
Grand Cape Mt	71	111	98	102	111	98	102	83	76	77
Grand Gedeh	69	79	73	82	78	73	81	78	71	68
Grand Kru	88	109	96	87	109	96	87	82	75	79
Lofa	60	79	72	83	82	71	83	61	56	58
Margibi	87	94	79	73	95	80	72	63	57	63
Maryland	71	91	83	89	91	83	89	58	53	53
Montserrado	73	76	61	68	77	61	69	63	57	61
Nimba	93	104	95	101	103	95	101	75	69	67
River Gee	67	79	81	93	79	81	93	71	65	62
River Cess	89	102	83	93	99	84	92	81	74	68
Sinoe	89	91	89	93	92	88	93	71	65	63
Liberia	82	91	78	84	92	78	84	70	64	65

Table F: Selected Under 5 Diseases by County in 2013										
					Diseases					% of
County	Malaria	Diarrhea	Pneumonia	Malnut.	ARI	Anemia	Injuries	Others	Total	Malaria
Bomi	17,426	1,392	8,408	999	11,267	1,498	209	8,861	50,060	34.8
Bong	41,303	4,320	11,136	1,831	15,982	1,069	564	20,213	96,418	42.8
Gbarpolu	6,988	493	5,352	7	4,556	412	26	5,055	22,889	30.5
Grand Bassa	95,791	888	2,055	666	14,117	1,049	571	13,554	128,691	74.4
Grand Cape Mt	21,864	1,006	12,333	120	12,473	2,574	179	12,529	63,078	34.7
Grand Gedeh	16,622	209	697	905	3,366	67	51	4,455	26,372	63.0
Grand Kru	13,073	544	202	20	5,017	204	180	4,516	23,756	55.0
Lofa	38,491	5,552	12,850	1,402	15,461	2,678	276	14,433	91,143	42.2
Margibi	26,602	3,184	9,886	1,222	12,115	2,269	357	19,589	75,224	35.4
Maryland	19,630	1,299	1,119	274	7,037	590	256	4,961	35,166	55.8
Montserrado	161,730	7,744	13,216	10,492	52,318	11,020	3,010	73,595	333,125	48.5
Nimba	78,369	10,336	31,785	4,163	27,523	6,385	601	41,951	201,113	39.0
River Cess	15,741	896	991	594	5,870	118	175	4,437	28,822	54.6
River Gee	10,393	1,522	2,721	38	4,299	302	280	6,303	25,858	40.2
Sinoe	13,874	1,008	664	30	6,001	378	237	4,875	27,067	51.3
National	577,897	40,393	113,415	22,763	197,402	30,613	6,972	239,327	1,228,782	47.0

Table G: Vitamin A Supplement Administered to Children under-one and Postpartum Mothers by County									
	Und	er 1 yr	Post par	tum Women					
	Number	Percent	Number	Percent					
Bomi	1510	44	1224	31					
Bong	9408	69	6920	44					
Gbarpolu	1541	45	985	25					
Grand Bassa	1835	20	2149	21					
Grand Cape Mt	2394	46	2182	37					
Grand Gedeh	2413	47	2332	40					
Grand Kru	1228	52	903	33					
Lofa	2266	20	5216	40					
Margibi	2979	35	3107	32					
Maryland	1846	33	1258	20					
Montserrado	2227	5	7976	15					
Nimba	7951	42	9887	46					
River Cess	1197	44	1597	51					
River Gee	924	32	1266	38					
Sinoe	1131	27	1221	25					
National	40,671	29	48,223	30					

Table H: Under fiv	le Deaths by Co		13							
					Under {	5 deaths				Prop of Malaria
County	Consultation	Malaria	Diarrhea	Anemia	ARI	Injuries	Malnut.	Others	Total	deaths
Bomi	86,664	23	1	15	12	1	5	63	120	4.2
Bong	168,032	83	3	27	1	0	1	77	192	0.5
Gbarpolu	30,728	1	0	0	0	0	0	4	5	0.0
Grand Bassa	125,154	39	1	45	46	12	4	140	287	1.4
Grand Cape Mt	82,383	27	1	0	1	0	0	1	30	0.0
Grand Gedeh	55,981	22	1	21	0	1	18	27	90	20.0
Grand Kru	46,807	2	0	2	0	0	0	2	6	0.0
Lofa	157,648	46	3	22	8	0	6	15	100	6.0
Margibi	159,431	21	0	5	1	10	0	49	86	0.0
Maryland	72,336	67	3	4	2	2	7	37	122	5.7
Montserrado	743,583	150	22	63	82	262	45	715	1,339	3.4
Nimba	305,959	122	7	48	11	5	8	1,075	1,276	0.6
River Cess	54,629	21	0	2	1	2	2	10	38	5.3
River Gee	43,446	35	3	11	5	2	0	23	79	0.0
Sinoe	54,642	4	1	2	0	1	0	5	13	0.0
National	2,187,423	663	46	267	170	298	96	2,243	3,783	2.5

Table I: Antenatal C	Table I: Antenatal Coverage by County in 2013									
	Catchment	Est. Pregnant	ANC 1st	ANC 4th+	% of ANC	% of ANC				
County	Population	Women (5%)	Visit	Visit	1st visit	4th+ visit				
Bomi	93331	4667	4032	2670	86.4	57.2				
Bong	369998	18500	16386	10377	88.6	56.1				
Gbarpolu	92519	4626	1551	1373	33.5	29.7				
Grand Bassa	245969	12298	8589	8213	69.8	66.8				
Grand Cape Mt	140991	7050	4361	3428	61.9	48.6				
Grand Gedeh	138974	6949	3777	3867	54.4	55.7				
Grand Kru	64255	3213	2125	1796	66.1	55.9				
Lofa	307180	15359	9256	7693	60.3	50.1				
Margibi	232911	11646	7927	6691	68.1	57.5				
Maryland	150824	7541	4186	4341	55.5	57.6				
Montserrado	1240693	62035	42296	30005	68.2	48.4				
Nimba	512620	25631	34299	18442	133.8	72.0				
River Cess	74102	3705	1811	1669	48.9	45.0				
River Gee	79340	3967	2554	2189	64.4	55.2				
Sinoe	113604	5680	2954	2109	52.0	37.1				
National	385,7309	192,865	146,104	104,863	75.8	54.4				

Table J: Postnatal Vi	Table J: Postnatal Visits by County in 2013									
County	2013 Expected Deliveries	2013 Actual Deliveries	# of PNC Visit	% of PNC						
Bomi	4,200	2,721	1,474	35.1						
Bong	16,650	11,706	7,200	43.2						
Gbarpolu	4,163	1,112	840	20.2						
Grand Bassa	11,069	5,684	3,420	30.9						
Grand Cape Mt	6,345	2,502	2,325	36.6						
Grand Gedeh	6,254	2,809	2,292	36.6						
Grand Kru	2,891	1,296	1,150	39.8						
Lofa	13,823	7,912	4,639	33.6						
Margibi	10,481	7,084	3,386	32.3						
Maryland	6,787	2,827	1,504	22.2						
Montserrado	55,831	24,134	19,548	35.0						
Nimba	23,068	16,264	7,225	31.3						
River Gee	3,335	1,703	1,781	53.4						
River Cess	3,570	1,663	1,162	32.5						
Sinoe	5,112	2,261	1,742	34.1						
National	173,579	91,678	59,688	34.4						

Table K: Family Planning commodities by type and by county								
	Condoms							
	Female				Oral			
County	Condom	Male Condom	IUCD	Depo	Contraceptives	Implant	Total	
Bomi	652	32,703	3	5,367	6,166	280	45,171	
Bong	1,411	87,775	23	14,795	19,458	1,370	124,832	
Gbarpolu	466	17,635	14	3,520	2,713	91	24,439	
Grand Bassa	1,535	56,714	284	10,079	13,590	1,186	83,388	
Grand Cape Mt	22	23,992	5	4,579	8,805	203	37,606	
Grand Gedeh	108	43,313	1	7,554	3,836	361	55,173	
Grand Kru	156	4,647	0	3,126	3,367	116	11,412	
Lofa	3,406	81,920	126	6,220	27,200	3,449	122,321	
Margibi	2,956	167,319	3	8,342	19318	952	198,890	
Maryland	1,671	13,672	0	2,229	7,701	61	25,334	
Montserrado	18,343	610,144	207	61,724	61,184	3,835	755,437	
Nimba	803	183,583	86	14,639	22,983	2,240	224,334	
River Gee	64	660	0	6,634	2542	255	10,155	
River Cess	9	5,187	0	2,736	2672	121	10,725	
Sinoe	350	38,815	13	5,067	8310	274	52,829	
National	31,952	1,368,079	765	156,611	209,845	14,794	1,782,046	

Table: 5.1 Analysis of GOL Budget to the Health Sector (2009-2013)

Receipts	<u>Year to</u> June 2009 US\$	<u>Year to June</u> <u>2010</u> US\$	<u>Year to June</u> <u>2011</u> US\$	<u>Year to June</u> <u>2012</u> US\$	<u>Year to June</u> <u>2013</u> US\$
GoL Funds	12,408,635	13,315,810	24,245,973	34,009,699	47,419,853
Pool Funds	6,838,816	9,646,929	4,091,817	10,454,722	18,809,522
Global Fund	4,119,750	8,364,080	13,578,819	12,488,987	20,952,092
Project Funds	7,315,118	9,946,990	10,787,010	8,652,576	5,561,712
NGOs	918,428	439,141		-	0
Total Receipts	31,600,747	41,712,950	52,703,619	65,605,984	92,743,179
	<u>Year to</u> June 2009	<u>Year to June</u> 2010	<u>Year to June</u> 2011	<u>Year to June</u> 2012	<u>Year to June</u> 2013
Payments	US\$	US\$	US\$	US\$	US\$
Personnel Expenditures	6,139,932	8,545,900	15,488,625	24,663,164	24,951,180
Goods & Services	9,140,041	12,908,618	21,537,062	22,270,012	24,865,377
Transfers & Subsidies	9,339,553	7,016,963	11,627,050	16,997,700	28,483,704
Capital Expenditures	2,549,036	1,713,773	8,391,653	5,408,886	2,646,549
Total Payments	27,168,562	30,185,254	57,044,390	69,339,762	80,946,810

Table 5.2: Comparative Analysis of Receipts & Payments (2008-2013)

	<u>2008/2009</u> US\$	<u>2009/2010</u> US\$	<u>2010/2011</u> US\$	<u>2011/2012</u> US\$	<u>2012/2013</u> US\$
Health Sector Budget	22,906,608	27,122,030	39,771,557	49,199,191	67,307,186
MOHSW	16,628,880	20,146,400	31,205,025	39,778,023	54,911,534
JFK Hospital	5,521,736	6,000,000	6,865,380	6,871,588	6,871,588
Phebe Hospital	391,637	600,000	1,201,143	1,822,180	1,301,143
LIBR	364,355	375,630	500,009	727,400	458,793
Jackson F. Doe Hospital	-	-	-	-	2,731,128
LMHRA	-	-	-	-	250,000
National AIDS Commission	-	-	-	-	783,000
National Budget	298,087,792	347,035,687	369,379,000	516,430,000	649,723,474
% of Budget to Health	7.68	7.82	10.77	9.53	10.36