Joint appraisal report

Country	Liberia
Reporting period	Jan-Dec 2014
cMYP period	2011-2015
Fiscal period	July 1 – June 30
Graduation date	N/A

1. EXECUTIVE SUMMARY *(MAXIMUM 2 PAGES)*

1.1. Gavi grant portfolio overview

Liberia has been in receipt of GAVI support since the approval of its first application in 2001, which includes support for NVS and HSS. A first HSS grant (HSS1) was approved in 2007 for an amount of US$ 4.09 million. It was implemented with much delay over 2007-2009. The last tranche of US$1,022,500 was disbursed in November 2013, the unspent balance of $400,254 has been reprogrammed into Ebola EPI recovery plan in 2015. A balance amount of US$ 231,290 remains from the HSS1 grant and is being utilized as per the proposal.

A second HSS grant (HSS2) was approved in 2012 for an amount of US$ 5,400,000. The first tranche of 1.8M was disbursed in 2014. Disbursement of the approved second tranche of US$ 1,440,000 (80% of the year 2 funds) is pending.

Regarding financial support for new vaccines (ie: Yellow Fever, Penta, Pneumo), the amount of US$ 6.7 million was disbursed by GAVI during 2014-2015 on HPV demonstration project (year 1), IPV and Rotavirus introductions. Also, 314,600 doses of Penta, 169,600 doses of YF, 567,300 doses of PCV and 47,394 doses of HPV were procured by GAVI in 2014 and are in-country. Introductions have been put on hold during the EVD outbreak. HPV first dose is now scheduled for Q4 2015, Rota and IPV vaccine introduction for 2016, depending on vaccine availability and country's readiness.

The EVD outbreak has impacted negatively on the health services' delivery, with a large number of health facilities closed. The average number of children that received all routine vaccines dropped drastically in 2014 and even 1st quarter of 2015 necessitated the postponement of new vaccines (i.e. Rota, IPV) introduction.
In 2014, BCG coverage declined by 14%, OPV -3 and Penta-3 reduced by 26%, Measles 16% and Yellow fever 19%. Apart from immunization services, utilization of other services declined significantly in 2014. All planned SIAs and introductions were canceled. A deeper and even more disruptive effect was due to the lack of confidence of parents and caretakers, who were not bringing their children to HFs for immunization due to fear of any health intervention, and not utilizing EPI outreach services due to fear of "Ebola vaccine" trials.

1.2. Summary of grant performance, challenges and key recommendations

Grant performance (programmatic and financial management of NVS and HSS grants)

Achievements in 2014

HSS

- Procured two Regional walk-in cold rooms to be installed
- Completed the construction of two Regional cold store buildings to improve vaccines management
- Purchased 15 vehicles to strengthen monitoring, supervision and distribution of vaccines
- Procured one refrigerated truck to strengthen Vaccines Supply Chain
- Supported training in data use for decision making to drive data quality
- Supported quarterly supportive supervision and monitoring from national to the county.
- EPI workforce benefitted in receiving IPC training, supplies, and management of waste
- Rapid assessments, stringent pre-testing of message of non-compliant groups, and active rumor tracking to ensure that faulty perceptions were addressed
- Rapid assessments, stringent pre-testing of message among non-compliant groups and active rumour tracking to ensure that faulty perceptions and beliefs are addressed were key to rebuilding confidence for a facility-based measles campaign
- Capacity building followed by intensive community engagement contributed to the high coverage during the

measles and polio campaigns of 2015.

NVS

- Introduced Pneumococcus Conjugate Vaccine in 2014 and immunized 142,294 (90%) children with PCV first dose and 71,144 (45%) with third dose
- Conducted EPI quarterly review meetings
- Immunized 63% of infants with penta-3, 58% with Measles and 46% were fully immunized

Challenges

HSS

- Inadequate number, distribution, and capacity of human resources to implement the grant
- Poor quality and incomplete data at subnational levels (county and facility) due to inadequate support for appropriate implementation requires additional support to be implemented appropriately
- Rebuilding trust of caregivers/mothers across the continuum of communication services to utilize immunization services due to the impact of the EVD crisis
- The level of outreach activities is insufficient to deliver immunization to under-served or high-risk populations (29% of Liberia's population live beyond 5 KM or more of a health facility-lack access to health care).
- Absence of a continuum of communication services from the household, to facility to outreach to community levels

NVS

- Surveillance of priority diseases including VPDs, AEFI needs to be strengthened

Key recommended actions to achieve sustained coverage and equity (list the most important 3-5 actions)

1. Facilitate recruitment and transition of vaccinators onto the Government payroll, which will be subsequently sustained by domestic resources
2. Ensure training of all EPI service providers on the Immunization in Practice curriculum
3. Implement collection of geographic and gender-disaggregated immunization data at all levels Accelerate implementation of EVM IP activities
4. Incentivize outreach and Public/Private Partnerships (PPP) to provide free immunization services (e.g. through provision of Cold Chain Equipment, HR)
5. Implement the EPI-related components for community engagement in the National Investment Plan (see description in country context)

1.3. Requests to Gavi's High Level Review Panel

Grant Renewals

New and underused vaccine support

- Renewal of support for the following vaccines: PCV, Penta, Rota, IPV, and Yellow fever in the existing presentation. An HPV demonstration project will begin in 2015. Additional request of HPV vaccine for the second year of the demonstration (2 counties).

Health systems strengthening support

- Liberia is requesting approval of the last tranche (Y3) of HSS funding of US$ 1.4 million in 2016, with no cost extension.

1.4. Brief description of joint appraisal process

The assessment started with communication between GAVI and the country team to agree on the JA schedule and approach. Following these conversations, a template was send by GAVI to facilitate drafting of the JA Review Report. A team consisting of MOH and partners (WHO, UNICEF, USAID and Liberian Immunization Platform (LIP) filled in the template, circulated the draft document for inputs and finalized the first draft, which was submitted to GAVI for their inputs. While in the process of developing the JA Review Report draft, the MOH organized the JA Review Meeting that was held at the Mamba Point Hotel, located in Monrovia from September 9-11, 2015. Part of the joint mission included a one-day field trip to three sites, observing immunization activities and work-in-progress installation of one of two Regional Cold Stores. The meeting brought together 30 stakeholders from MOH, GAVI Alliance Partners, USAID, GAVI headquarters, UNICEF and WHO regional and HQ offices, UNFPA, EU, Christian Health Association of Liberia (CHAL), Ministry of Internal Affairs, Ministry of Finance and Development Planning and civil society organizations. At the end of a successful 3-days, the document was thoroughly reviewed and endorsed by the ICC members.

2. COUNTRY CONTEXT (Maximum 1-2 Pages)

2.1. Comment on the key contextual factors that directly affect the performance of Gavi grants.

Liberia is located in West Africa with a population estimated around 4.02 million. In 2014, the numbers of health facilities were 657 (both public and private) of which 81% were providing immunization services. The health sector has approximately 10,052 health workers of which 59% are on the government payroll. This government workforce is comprised of 117 public service physicians, 436 physician assistants, 2,137 nurses and 659 certified midwives and the remaining composed of other health service cadre. In addition there are approximately 3727 community health volunteers who provide basic services in the community. Annex with details attached.

I. The Health system

Policies, planning and resource allocations are guided by two strategic documents: The *National Health and Social Welfare Policy and Planning 2011-2021 (NHSP)* adapts WHO's six health sector building blocks to the local context, setting out norms, standards, and major policies for strengthening the following areas of the overall health system, including private providers. These are: i) Human Resources for Health; ii) effective health infrastructures; iii) Coordinated Health Information Systems; iv) Commodities management; v) Financing; and vi) good governance.

The new health *Investment Plan (IP) for Building a resilient health system in Liberia 2015-2021* incorporated lessons learnt from the Ebola Virus Disease (EVD) crisis, adding 3 major areas (*****) to the 6 blocks of the NHSP totaling 9 investment areas:

1. Fit for purpose productive & motivated health workforce to reverse the severe HR shortages and inadequate skills mix; such as 1 MD/300,000 persons, create a needs-based workforce; and regularize staff to improve pay and job –security.
2. Re-engineered health infrastructure: to address issues of 29% population living > 5KM from a facility; that 82% of HFs lack basic functionality (diagnostic's, equipment, medicines) and that 62% HFs closed Jun-Sep 2014, leading to severe gaps in coverage, such as a 65% drop in facility-based deliveries with SBA present.
3. ***Epidemic preparedness surveillance and response system: to proactively plan and coordinate readiness for Ebola and disease outbreak responses at national, local and community levels.**
4. Management capacity for medical supplies and diagnostics: rationalizing and improving their management, including vaccines and related supplies.
5. ***Enhancement of quality service delivery systems: specific investments to meet the needs for Comprehensive EPHS & community based services; improving efficiency; ensuring the Continuum of care & effective referrals; and reorienting towards Performance-Based management**
6. Comprehensive information, research, and communication management: Coordinating and integrating HIS, including surveillance and coverage data from national to service delivery levels, to meet International Health Regulations (IHR) benchmarks, as part of the Emergency Response Framework for prevention, preparedness and response to the Ebola and other disease outbreaks.
7. ***Sustainable community engagement: to ensure a continuum of communication, and increase community oversight of access, quality and other aspects of services provision.** A revised Health Promotion Policy, with 5-year Strategy and costed plan, will address low level of knowledge among caregivers and lack of confidence by communities in the health system through institution of a continuum of communication services from the household- through to facility, outreach to community levels.
8. Leadership and governance capacity: to improve governance, stewardship and move towards performance-based systems.
9. Efficient health financing systems: to achieve sufficient, more predicable funding of services provision, especially to under- and never-reached groups.

II. Immunization Context

The immunization program has made good progress toward achieving coverage targets, improving performance and expanding the immunization schedule and improving access and sustainability of services through 2013. With the support of Gavi the EPI programme has expanded since 2007 with the introduction of YF (2007), penta (2008), PCV (2014). In addition to new vaccine support the country has also received Gavi funds for health systems strengthening. The Ministry of Health in consultation with the HSCC and the ICC manages the HSS grant.

The Government provides co-financing for vaccines procurement to date (2014), monthly salaries and incentives for public health providers, infrastructure for immunization services including distribution and management of vaccines. WHO, UNICEF and USAID supports capacity development, supply chain management, social mobilization and health promotion. The Government of Liberia (GOL) is committed to supporting the national immunization program as evidenced by increasing co-financing allocation and relatively increased in staff salaries. Co-financing is currently waived in this period of reconstruction from the EVD epidemic.

III. Impact of EVD

EVD devastated the entire country including the implementation of planned activities supported by Gavi grants. The outbreak adversely impacted Liberia's health care system, which was striving to improve key health indicators such as institutional delivery, immunization coverage, antenatal care, infant mortality, and diagnostics services. The EVD crisis reduced HRH; led to infrastructure and commodities disruptions; weakened referral systems; and disrupted quality of care including infection control. The impact on three areas are described.

A. Routine Immunization services specifically included:

On Programme management: Planning, coordination, supervision, monitoring, quarterly reviews and evaluation all suffered in 2014, as plans and supervisory visits could not be carried out.

On HRH: Health workers did not receive training on immunization practices; however, received infection-prevention-control (IPC) after the EVD crisis began. Health workers did not feel confident going to work as vaccinators until they received IPC training. There were 378 cases of infection resulting to 192 deaths among health workers as of the 9th of May 2015 when Liberia was declared Ebola free. Of the 192 deaths, there were 35 nurses and midwives and 5 medical doctors including one foreign physician and 4 were vaccinators. This lead to a further decline in the number of skilled and qualified health workers. Margibi County health system nearly collapsed due to EVD infection amongst health workers with very high fatality rate.

On infrastructure: The number of health facilities that remained opened varied from one county to another during the outbreak. While in the Southeast more facilities remained opened, overall utilization was minimal largely due to the fear of Ebola. Montserrado County with over a third of the target population had less than 25% of its health facilities operational at the height of the EVD transmission.

Impact on vaccine stock management: While existing stocks had been adequate, new vaccines shipment and introduction was canceled due to active transmission of EVD. Vaccines quality was compromised due to the closure of health facilities and breakdown of cold chain facilities. There was adequate quantity of vaccines to implement PIRI. A lack of functioning motorcycles restricted immunization outreach. Cold chain equipment breakdown was frequent and repairs could not be carried out on time, due to the shift of resources to EVD response, thereby leading to discontinuation of EPI services. The implementation and utilization of the DVDMT (district vaccine data management tool) software tool was interrupted by the EVD, which prevented additional training and implementation of the software to permit full-scale utilization.

Impact on coverage: Penta-3 coverage declined by 26% from 2013 (89%) to 2014 (63%); Measles coverage dropped by 16% from 2013 (74%) to 2014 (58%) (Administrative coverage). Given the drop in the coverage across the country faced outbreaks of measles (began in Aug 2014 in the same county, Lofa, as the first EVD case) and pertussis (Oct 2014, Maryland County, a remote rural district).

Antenatal care (4 or more) visits declined by 8% while delivery by skilled birth attendants dropped by 7% (MOH Annual Report 2014). Table below presents selected health sector indicator performance in 2014.

Indicators (*Source: Ministry of Health, 2014)*	Pre-Ebola: (Q1 of 2014)	Ebola Crisis (Q3 of 2014)
HMIS completeness	86%	50%
Institutional deliveries	48 %	24%
Fully immunized children	58%	26%
4 ANC visits completed	63%	28%
ANC iron folate distribution	40%	29%
Intermittent preventive treatment of Malaria in pregnancy	52%	20%

Impact on demand for services: The EVD crisis created public distrust in the Government and has led to low utilization of health services including immunization. The negative impact of the EVD crisis on the confidence of caretakers and mothers for health services including immunization was severe. There were substantial increased refusals for service due to misconceptions and fears post-EVD without adequate on the ground presence of strong collaboration and partnership with community and religious leaders, NGOs and civil society organizations to overcome these community perceptions.

B. NUVI impact and surveillance

The outbreak also necessitated the declaration of the State of Emergency around June 2014 at which time all planned RI activities such as outreach, PIE, EVM, HPV demonstration project and the introduction of new vaccines had to be canceled. Also, SIAs that were planned in 2014 were postponed due to the EVD outbreak. Surveillance of VPDs was essentially neglected at the height of the EVD outbreak for a variety of reasons including the suspension of specimen transportation by DHL. The system needs to be reactivated and the EVD surveillance system can be used to strengthen VPDs surveillance.

C. Affects due to the Ebola Vaccine Clinical Trials

2014: Communication and messaging in preparation for the EVD trials fed into the development of rumors that vaccines transmit EVD, particularly since the AEFI are similar in nature to the symptoms of EVD. This led to a distrust in government broadly, and immunization services specifically affecting coverage including PIRI efforts.

2015: A phase I Ebola vaccine trial (Feb 2015-April 2015) exacerbated these rumors.

3. GRANT PERFORMANCE, CHALLENGES AND RENEWAL REQUESTS

(MAXIMUM 3-5 PAGES)

3.1. New and underused vaccine support

3.1.1. Grant performance and challenges

Gains made over the years were hugely affected by the EVD outbreak that led to approximately 20% drop in immunization coverage between 2013 and 2014. Grant performance is summarized in section *1.2 Summary of Grant Performance, Challenges, and Key Recommendation* and detailed in the 2014 APR. Implementation of Gavi grants (NVS and HSS) has experienced numerous challenges as described below into four broad categories.

A. Systems challenges

1. Human resources – Approximately 60 – 75% of immunization service providers (vaccinators) are not on Government of Liberia payroll. Also, incentive provided does not commensurate with current socio-economic reality thus giving raise to staff attrition at all levels. However, employed vaccinators received monthly payment either through Government of Liberia payroll or through incentive from NGOs that are implementing performance based financing through the Pool Fund or FARA mechanisms.
2. Insufficient qualified health workers on Government of Liberia Payroll thereby resulting into high attrition of staff after years of capacity development.
3. Closure of health facilities and the diversion of resources (ie: Human and materials) to the EVD response

B. Operational Challenges

1. Weak coordination and integration– programs are working in silos with inadequate information on planned activities at the all levels. Many times there are activities at the central and county levels involving the same staff and stakeholders with no coordination.
2. Bad road conditions and low tele-communication (including GSM) coverage thereby affecting reporting of coverage, distribution of health commodities including vaccines and impeding repairs of cold chain equipment.
3. Liquidation of funds from the county level
4. Refusal of health services utilization including immunization
5. Establishment of NITAG postponed.

C. Data Quality

There is a well-established system for reporting and monitoring of immunization performance at health facility, county and national levels in Liberia. Amidst this, there are still data quality issues. The most pronounced data quality concerns are:

1. Data timeliness and completeness; and
2. Weak data collection system as a result of limited logistics and Internet connectivity. An assessment of the ICT infrastructure at the county level revealed that majority of the data management staff computers are old (more than 3 years) and their motorcycles have lived out their usefulness (more than 3 years).

Currently the EPI routine data is not disaggregated by sex and there are no gender-related barriers to immunization services. However, Liberia Demographic and Health Survey of 2013 revealed that higher proportion of girls (74%) were vaccinated with DTP3/Penta-3 then boys (69%). Therefore, in an effort to address this variance, awareness creation through vigorous community engagement will be carried out to ensure that every child has access to basic life-saving vaccines through immunization service delivery.

Supply Chain Management

The just completed Effective Vaccine Management Assessment (EVMA), findings revealed that the country under performed for almost all of the nine immunization criteria. The table below describes the health sector immunization performance at all levels under the immunization support categories:

#	Criteria	Levels		
		National	County Depots	Health Centers/Clinics
1	Pre–shipment and arrival procedures	84%	Not applicable	Not applicable
2	Storage temperature	67%	75%	63%

3	Capacity - vaccine and supplies	67%	84%	82%
4	Building, equipment and transport	69%	81%	84%
5	Maintenance	73%	42%	40%
6	Stock management	77%	48%	33%
7	Distribution	63%	51%	26%
8	Vaccine Management	75%	77%	76%
9	MIS and supportive functions	45%	41%	25%

Legend:
6. **80% and above:** EVM expectation, keep it up
7. **61% to 79%:** Intervention with time
8. **60%** and less: Quicker interventions needed

Result precision:
9. All level: 80%
10. Confidence level and Precision: ±10%

Further findings also revealed that stock-out at the national and county level was not an issue. However, inadequacy of cold and dry storage exists both at national and county levels in relation to the introduction of the approved new vaccines. An EVM improvement plan has been developed to address problems identified during the assessment period.

Finally, based on recent reviews, it has been suggested that the below listed interventions be implemented to improve immunization services nationwide:

1. Both ICC & TCC endorsed the introduction of new vaccines into routine immunization and the HPV Demonstration Project (HPV Demo 2015-2016);
2. Expansion of current cold chain capacity at all levels;
3. Capacity building for national, county and health facility levels for EPI service providers;
4. Need to develop both innovative and sustainable approaches toward staff motivation;
5. Intensification and strengthening of supportive supervision;
6. Development of pellucid messages for routine immunization demand creation at community level;
7. Official lunch of the HPV Demonstration Project in North central Liberia (Bong & Nimba Counties) based on the population requirement criteria.
8. Strategies for hard to reach areas or inaccessible communities (ie: Outreach, mobile, etc)

3.1.2 NVS renewal request / Future plans and priorities

In 2016, Liberia will introduce Rotavirus Vaccine and Inactivated Polio Vaccine (IPV) for which VIG was provided for IPV. Human Papillomavirus Vaccine (HPV) demonstration project will begin in Q4 of 2015.

Health systems strengthening (HSS) support

3.1.3 Grant performance and challenges

The last tranche of HSS 1 (1.02M) arrived in Nov 2013 and the unspent balance ($400,254) was reprogrammed in 2015 to support the EPI recovery plan. The first tranche of HSS 2 of 1.8M was received in Jun 2014. The details of the unspent reprogrammed $400,254 will be reported in next year's JA and not described below.

The HSS 2 grant has four objectives:
1) Increase access and utilization of Essential Package of Health Services (EPHS);
2) Strengthen and operationalize a well-coordinated M&E and Health Management Information System;
3) Strengthen financial management systems; and
4) Enhance MOHSW logistical, human resource and technical capacity.

The summary of achievements are in section 1.2, the details are in the *2014 APR*, while a few selected areas and issues are examined below.

Achievements made:

With support from the grant, 15 vehicles were procured for county health teams to improve immunization services

monitoring, supervision and vaccines distribution. Regular monitoring and supervision at health facility level including mentoring, vaccines distribution, onsite education, quality assurance and staff motivation were made possible by the availability of these vehicles. Also, the use of vehicles for periodic visits at health facilities contributed partly to the provision of services during the height of the Ebola crisis and ensures the availability of vaccines for EPI services.

The construction of two regional cold stores that is very essential for improving vaccines distribution and management was also completed with the HSS grant. With the operationalization of these cold stores, availability of vaccines and vaccine related commodities will improved substantially.

The grant supported quarterly data verification exercises to improve the quality of data. Such data are used for evidence-based decision-making and planning. For example, quality immunization data is critical for interventions especially outreach services and micro planning.

Challenges to the implementation of the grant:
The health sector did not accomplish all planned activities in 2014 and most of the health sector indicators dropped due to the Ebola Virus Disease (EVD) crisis. The country was affected by EVD and a majority of health facilities closed for a protracted period due to fear of EVD infection among health workers and the lack of infection prevention control (IPC) materials such as personal protective equipment (PPE). Funds were not fully utilized and activities were not implemented because of the EVD outbreak. Specifically,
1) the SARA was delayed to early 2016,
2) annual accreditation of health facilities was postponed,
3) contracting to private and public facilities with performance based incentives was not performed,
4) strengthening financial management in the 15 counties through annual financial assessments was not performed, and
5) procurement of 15 motor cycles for county M/E was postponed.

Now that the country has been declared Ebola free, implementation of remaining activities will accelerated.

3.1.4 Strategic focus of HSS grant

The main goal of the HSS grant is to complement government's effort to improve the health status of the population of Liberia on an equitable basis especially women and children by implementing interventions which will significantly reduce infant, childhood and maternal mortality and morbidity. It is to strengthen the health and communications systems by increasing access and utilization of available services to underserved populations. This includes access to basic "facts for life" information and counseling. Four objectives have been derived:1) Increase access and utilization of Essential Package of Health Services (EPHS); 2); Strengthen and operationalize a well-coordinated M&E and Health Management Information System; 3) Strengthen financial management systems; and 4) Enhance MOHSW logistical, human resource and technical capacity. The below activities describes the revised focus of the grant, taking into account the EVD crisis:

1. Increase immunization coverage rates to at least 75% and reduce drop-out to 10% by December 2016
2. Continue 100% distribution of bundled vaccines to all counties
3. Recommence the introduction of new vaccines, technologies and policies as outlined in the Recovery and Resilience Framework of Government of Liberia
4. Institute measures to increase demand for immunization uptake by ensuring a continuum of communication services through robust community engagement

Additional support for quality and completeness of data at subnational levels (county and facility) for appropriate implementation.

3.1.5 Request for a new tranche, no-cost extension, re-allocation or reprogramming of HSS funding / Future HSS application plans

GOL is requesting approval of the last tranche of HSS funding of US$ 1.4 million in 2016, with no cost extension.

3.2 Graduation plan implementation *(if relevant)*

Not Applicable

3.3 Financial management of all cash grants

Financial Management Assessment (FMA) was conducted in 2012 that focused on six key areas of: (1) planning, budgeting and coordination; (2) budget execution; (3) procurement; (4) accounting and reporting; (5) internal audit; and (6) external audit for the management of funds including GAVI HSS and ISS. Recommendations emerging from the FMA cumulated into an Aide Memoire (2012) that was signed by both GAVI and the Ministry as a major step towards strengthening financial management.

Annual financial audit is an integral part of the grant condition precedent for disbursement and annual audits have been conducted including the 2015 audit that was completed for 2014. The 2015 audits among others things revealed that internal control structure is adequate to support the project's operations and that the financial statements provided by the Ministry gives a true and fair view of the performance of the GAVI HSS grant.

The NVS and HSS funds are managed using the same financial management arrangements of the MoHSW. The EPI program executes funds with overall approval for expenditures given by the Deputy Minister of Health Services or Chief Medical Officer on the basis of requests from the EPI Manager. Financial management is performed by the finance department of the MOH (the Office of Financial Management – OFM), which records expenditures, posts them in the accounting software and prepares financial reports. The ICC meets regularly to review immunization related issues. For the HSS grant, there is a functioning HSCC, with members including the entire ICC, which are drawn from GAVI's in-country partners. The combined HSCC/ICC signs off on all Gavi proposals and reports.

3.4 Recommended actions

Actions	**Responsibility** (government, WHO, UNICEF, CSO, other partners, Gavi Secretariat)	**Timeline**	**Potential financial resources needed and source(s) of funding**
1. Ensure that annual HSS and NVS audits are submitted in a timely manner	MOH	Completed annually	Budgeted
2. Strengthen HSS grant oversight and funds management	MOH	2015/16	Budgeted
3. Increase the number of health workers (including vaccinators and community mobilizers) as per the national Investment Plan.	GOL, partners	2015/16	Costed but not budgeted
4. Motivate and incentivize health workers to achieve increased access, quality, and performance of immunization service delivery	GoL, partners	2015/16	Costed but not budgeted
5. Enhance the capacity of service providers	GAVI & WHO	2015/16	Budgeted
6. Strengthen surveillance of priority diseases including VPD, AEFI	GOL, GAVI, WHO & UNICEF	2015/16	150,000 for operations cost
7. Support for new vaccines (ie: Rota, IPV) and HPV demonstration (second year)	GAVI, WHO & UNICEF	2015/16	Budgeted except for HPV

6.	Strengthen outreach services, including health promotion/ community engagement	GAVI, WHO & UNICEF	2015/16	Budgeted
7.	Establish National Immunization Technical Advisory Group (NITAG)	MOH	2016	20,000
8.	Improve data quality including disaggregated data to address vulnerable populations and inequity (geography, gender)	MOH	2016	Budgeted
9.	Support to the CSO platform LIP	MOH, Gavi, partners	2015/16	Costed not budgeted

4. TECHNICAL ASSISTANCE

(MAXIMUM 1 PAGE)

4.1 Current areas of activities and agency responsibilities

During the year 2014, there was limited technical assistance assigned to the grant implementation due to the EVD crisis. Specific areas of need include, building a strong public private partnership, introduction of new vaccines, and the use of technology to improve service delivery for strengthening routine immunization. Key partners included UNICEF, WHO, USAID.

Technical support provided in the following areas:
Short term - EVMA and development of EVM improvement plan, National EPI Plan, Planning and implementation and evaluation of integrated measles campaign, community engagement, surveillance of VPDs, implementation of urban strategy and equity approaches, planning for polio switch and IPV introduction.
Long term - logistics and cold chain management, support for social mobilization and communication, day-to-day program management

4.2 Future needs

1). **Capacity Development:** The MOH is soliciting financing resources to recruit additional vaccinators for health facilities with huge workload and develop an in-service training curriculum for EPI service providers. Recruitment and retention of one Cold Chain Technician per County (15 CC Technicians), and one vaccinator per health facility (168 additional vaccinators) is needed. Technical assistance is needed to fully implement the training in Immunization in Practice, and Training on Data for Action.

2). **Immunization Supply Chain Management Improvement:** To facilitate the introduction of new vaccines, reduce stock out, maintain vaccines potency and deliver quality EPI services, UNICEF has supported the EPI/MOH to successfully carry out an EVMA. The EVMA recommendations will be included under the National Improvement Plan, with close collaboration between EPI/MOH, UNICEF, and WHO. The implementation of the improvement plan will depend heavily on the TA supported by UNICEF.

3). **Data quality improvement:** Operational support for data collection and submission. In the short term, TA needed to conduct data quality audits, and quality assurance of data collection. In the long term, TA support to develop National HMIS Policy and Strategy. As part of this TA to assess systems and software to support improved supply chain management and roll out an integrated surveillance platform.

4). **Introduction of technology**: Support to assessing feasible options for piloting and bringing to scale the mHERO platform for validation of information on human resources, GPS mapping of health facilities, use of SMS for data collection, and other relevant innovations.

5). **Community Engagement/Social Mobilization:**
TA on strategies and methods to improve confidence of caretakers/mothers for health services including immunization. In addition, effective practices to improve collaboration and partnership with community and religious leaders, NGOs and CSO around communications, demand generation, and community ownership in quality and accessibility. To regain confidence and trust in the community, harmed by EVD outbreak and the ebola vaccine trial and to reduce the percentage of missed children in the community 3 areas of investment include:

a. formative research to inform health promotion policy review and strategy development
b. capacity assessment and partnership mapping both at national and sub-national levels to inform capacity building and
c. training and engagement to build the technical capacity of community mobilizers.

6) **Revitalization of service delivery:** Improve immunization services at service delivery level, with particular

emphasis on conducting outreach services, community link activities and ensuring availability.

Short- and long-term targeted future needs, aligned with country's annual immunization plan. Liberia is currently drafting the cMYP for 2016 – 2020. The Equity approach is widely accepted and applied, but challenges remain: The 2008 population census with national and subnational 2.1% growth rate still applied. RED approach is applied but immunization service delivery challenge persists in sparsely populated rural areas with fewer health facilities per population (29% of the population live 5 KM away from health facility).

Short term:

1. CCL Strengthening Platform for EVM IP implementation (UNICEF)
    a. Cold Chain Inventory and rehabilitation and expansion plan,
    b. Temperature Mapping of national cold store and 2 regional cold stores,
    c. Temperature Monitoring Study of the Distribution routes throughout all levels of the supply chain,
    d. Cold Chain Equipment Maintenance Plan,
    e. National, County-level capacitation exercises in cold chain and logistics management
2. Planning for NUVI and PIE e.g. IPV, Rota, HPV, SWITCH tOPV - bOPV (WHO)
3. National country level capacitation exercises in immunization service delivery (WHO)
4. Review and revitalization of Urban EPI Strategy (UNICEF)
5. Preparation and implementation of Integrated SIAs, NIDs, PIRIs, AVW (UNICEF/WHO)
6. Evidence-informed advocacy and social mobilization and community engagement for new vaccine introduction and post-Ebola recovery (UNICEF)
7. Coverage survey and external EPI review (WHO)

Long term assistance and capacity building

1. Immunization Supply Chain Management (iSCM) Strengthening (UNICEF)
2. Strengthening of surveillance systems for VPDs and data management (WHO)
3. Application of evidence-based equity approach for coverage improvement (UNICEF)
4. Strengthening involvement of community engagement and civil society in immunization service delivery at national level and subnational levels1 (UNICEF)
5. Capacity building for front line workers and mid-level EPI managers (WHO)
6. Technical assistance to support the MOH (EPI program) in day-to-day program management support, Gavi EPI recovery activities, and strengthening of immunization program to address inequities under the broader HSS platform. [One for WHO and one for UNICEF] Capacity building for front line workers and mid-level EPI managers (WHO/UNICEF)
7. Technical assistance to support the MOH (EPI program) at all stages (UNICEF/WHO)

5. ENDORSEMENT BY ICC, HSCC OR EQUIVALENT & ADDITIONAL COMMENTS

(MAX. 1 PAGE)

Brief description of how the joint appraisal was endorsed by the relevant national coordination mechanism:

A special ICC was held on September 11 chaired by the Honorable Minister of Health; representation from the Ministry of Finance and participation by all ICC members. Following presentation of the findings by the Assistant Health Minister, discussions were held on issues pertaining to the JA. At the conclusion of the deliberations the ICC unanimously endorsed the JA report and accepted the request of the Ministry of Health to submit the same to the Gavi Secretariat for the consideration by the HLRP.

Issues raised during debrief of joint appraisal findings to national coordination mechanism:

1. Ensure that faith based private facilities will be considered as inclusive of outreach activities in the counties and specifically for logistics. This was discussed and it was highlighted that this mechanism is already incorporated in the JA under PPP (recommendation 2). The MoH reconfirmed that all support to counties is inclusive of all facilities (public and private).

2. Ensure linkages of GAVI supported activities to be aligned with broader national investment plans and other ongoing initiatives. The MoH has confirmed that plans in this JA are aligned with national investment plan and other initiatives.

3. Data quality improvement is required at all levels specifically between health facility and county level. The MoH confirmed that data quality plans includes improved linkages with all levels and components.

4. Strengthen coordination across various funding mechanisms and review all grants by one high level mechanism (HSCC). The MoH has agreed to strengthen further coordination and all grants will be reviewed by technical fora under HSCC to avoid duplications and identify gaps.

5. Need to look for innovative approaches to increase human resource capacity e.g. CHVs to be considered to provide immunization services. The MoH has confirmed that it will be looking for innovative approaches to increase human resource capacity.

Any additional comments from

- Ministry of Health: None
- Partners: None
- Gavi Senior Country Manager: None

6. ANNEXES

[Please include the following Annexes when submitting the report, and any others as necessary]

- **Annex A. Key data** (this will be provided by the Gavi Secretariat)

  N/A

- **Annex B. Status of implementation of the key actions from the last joint appraisal and any additional High Level Review Panel (HLRP) recommendations**

Key actions from the last appraisal or additional HLRP recommendations	Current status of implementation
1-Review 2014 vaccine targets and inform GAVI whether, based on this review, any targets will be revised.	Completed. Targets will not be revised.
2-Submit to GAVI the narrative for the M&E framework, which needs to address how M&E activities will be carried out and are aligned with the national health plan results framework; percentage of the HSS grant allocated to M&E, with breakdown by activity; and M&E system strengthening activities to be funded by the grant.	Completed. Submitted in the 2014 APR and aligned with national indicators. **Also available in annex G of the JA Report**.
3-Describe briefly in the narrative how Country will ensure consistency with national and subnational M&E/results frameworks, clarifying the use of indicators, data collection tools, analytical plans and reporting systems. Include how the annual in-country review and reporting processes will serve as the basis for reporting on the results of HSS support provided through the GAVI grant.	Completed. Submitted in 2014 APR.
4-Indicate in the narrative intention to have an end-of-grant evaluation for the current GAVI HSS grant conducted by an independent third party. If the country does not plan to conduct it, or if it proposes to use an existing assessment/evaluation for this purpose, appropriate justification should be provided.	Expressed willingness and intent during JA. Country requests an independent third party end-of grant-evaluation.
5-Indicate in the narrative plans to independently assess the quality of administrative data and track changes in data quality over time, as well as how the HSS grant is used to help implement recommendations or agreed action items coming from previous data quality assessments.	Completed. Submitted in the 2014 APR.
6-Submit the missing information on outcome indicators for the HSS M&E Framework.	APR framework completed. However, new indicators will be submitted under along with the JA Report.
7-Ensure coherence between the revised M&E framework and the log frame of the GAVI HSS grant; any change in the framework should also be reflected in the log frame.	Yes. In process.
8-Funds of $ 155,000 provided by GAVI as NVS (Vaccine Introduction grant) have erroneously been accounted for as ISS funds. Country to revise ISS APR table (6.1) and ISS financial statement and provide to GAVI.	Completed.

9-Country to provide a 2013 NVS financial statement showing opening balance, funds received, detailed expenditure incurred (by activity or economic classification) and closing balance.	Completed.
10-Country to submit bank statement showing the December 31, 2013 closing balance of the GAVI HSS bank account	To be submitted.

- **Annex C. Description of joint appraisal process** (e.g. team composition, how information was gathered, how discussions were held)

The joint appraisal process started with communication with GAVI secretariat on the date and methodology of the JA Review. Following the conversation with GAVI, the Ministry agreed with GAVI on the methodology and scheduled of the JA Review meeting. A core team was formed, comprising of MOH staff, WHO, UNICEF, USAID and the Liberia Immunization Platform, a civil society organization with a mandate to draft the JA report and circulate to GAVI for inputs. The core team worked for two weeks and developed the JA report with inputs from GAVI. The draft report formed the basis for the Joint Appraisal Review Meeting that ran for three consecutive days (September 9-11, 2015) in Monrovia. The JA Review Meeting brought together 30 participants from in country, particularly GAVI Alliance partners, MOH staff and other stakeholders. Members of the GAVI secretariat, WHO and UNICEF regional and HQ offices, USAID headquarters and WHO IST, also graced the Review Meeting. The JA Report was reviewed by stakeholders in groups and plenary and was refined during the process. At the end of the three days JA Review Meeting, the HSCC and ICC members endorsed the JA Report.

Information contained in the JA Report were gathered from multiple sources including, Liberia recent Demographic and Health Survey (2013), the 2014 GAVI Annual Progress Report (APR), the Ministry of Health 2014 Annual Report, the Effective Vaccine Management Assessment Report (EVMA) of July, 2015 and the 2012 EPI Comprehensive Review Report.

Annex D. HSS grant overview

General information on the HSS grant							
1.1 HSS grant approval date			April 12, 2012				
1.2 Date of reprogramming approved by IRC, if any			N/A				
1.3 Total grant amount (US$)			5,400,000				
1.4 Grant duration			3 years				
1.5 Implementation year			June/2012 – June/2014				
(US$ in million)	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
1.6 Grant approved as per Decision Letter	1,022,500	1,022,500	1,022,500	0	1,800,000	1,800,000	1,800,000
1.7 Disbursement of tranches	1,022,500	0	1,022,500	0	0	1,022,500	1,800,000
1.8 Annual expenditure	1,274,0852	541,596	637,379	319,223	221,139	138,785	1,331,381
1.9 Delays in implementation (**yes**/no), with reasons			• Delay in disbursement • Lots of competing priorities • Internal processes • Weak financial management systems at the county level • Insufficient qualified staff				
1.10 Previous HSS grants (duration and amount approved)			4 years (May 12, 2007 – 2011) and US$ 3,689,746				
1.11 List HSS grant objectives *Objective 1:* Increase access and utilization of Essential Package of Health Services (EPHS) Objective 2: Strengthening and making operational a well coordinated M&E and HMIS Objective 3: Strengthen financial management System Objective 4: Enhance MOHSW logistical, human resource and technical capacity							
1.12 Amount and scope of reprogramming (if relevant) The last tranche of HSS 1 (1.02M) arrived in Nov 2013 and the unspent balance ($400,254) was reprogrammed in 2015 to support the EPI recovery plan.							

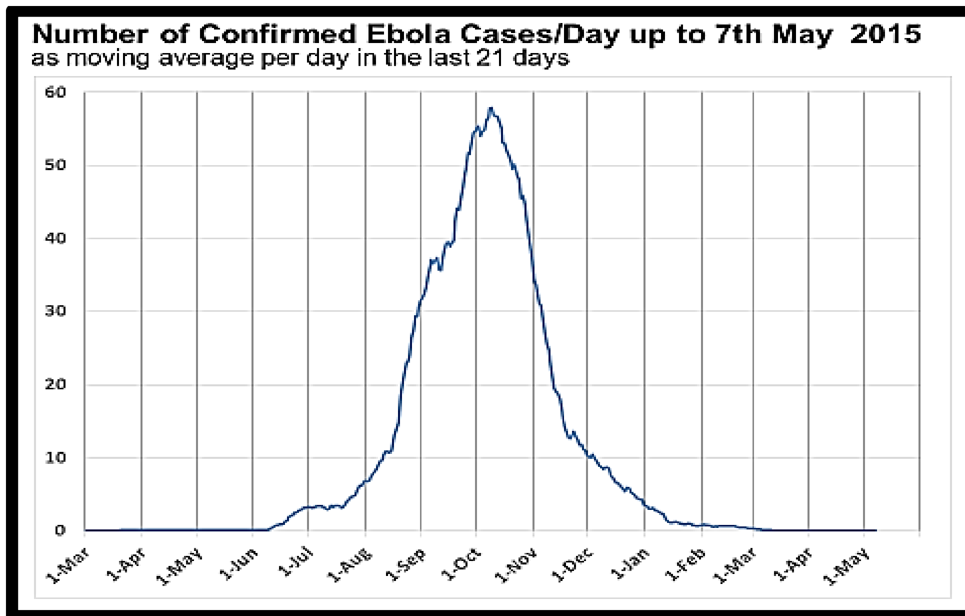
2 GAVI HSS first disbursement of US$ 1,022,500 was made in 2007, thereby increasing expenditure above 2008 disbursement.

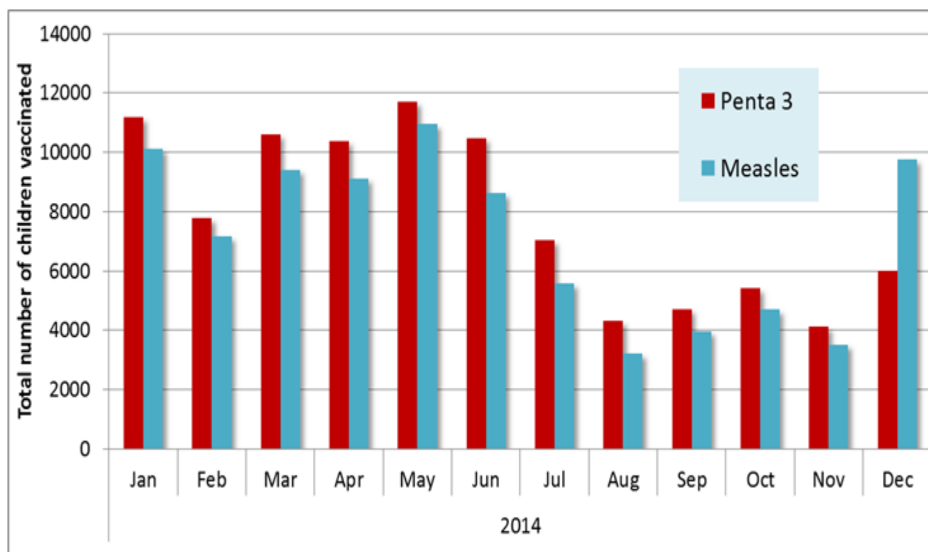
Annex E. Best practices (OPTIONAL)

The Ministry of Health has an integrated health management information system. The health sector has a single monthly health facility-based reporting tool that captures health services utilization data for all preventive and curative services at the end of the month. HMIS reports are managed and analyzed on a common platform, the DHIS-2 with a national central repository. Additionally, data capturing instruments are standardized across the country, and across public and private health institutions. Not many African countries have a single HMIS-reporting system that is fully integrated from the facility level thereby enabling access to HF information at the national level to improve program performance and management.

The impact of EVD provided a strong basis for sustained improvement of infection prevention and control (IPC) practices and community engagement.

Annex F: EVD Curve and Impact on EPI





Annex G: M&E Framework

Monitoring and evaluation is a routine function of the Ministry of Health and Social Welfare. The Ministry conducts regular quarterly data verification exercises, frequent immunization program review meetings, annual county planning exercises that involves, county and health facilities levels performance assessment and regular annual National Health Sector Review conferences to monitor the implementation of the National Health Policy and Plan.

There are M&E teams and Units at the national and county levels that perform quarterly data verification with the TB, HIV and Malaria Programs, to ensure that these programs targets are met and data are of good quality. The central M&E team leads the performance based contracting data verification, base line and targets setting exercises. Also, the Unit is deeply involved with the organization and implementation of the Annual Health Sector reviews. At the county level, the M&E teams are responsible for data collection, management, analysis and reporting, data verification and provision of regular feedback to the health facilities.

The current indicators that are used to measure GAVI HSS grant performance are similar to the National Health Plan monitoring framework and the performance based health financing performance indicators (ie: Penta 3,Measles, TT 2+, Vitamin A, etc). See attached MOH 2014 Annual Report.

There are monitoring mechanisms in place to promote transparency and accountability within the health sector including the use of GAVI funds.

M&E Activities	Y1	Y2	Y3	Total
Undertake quarterly supportive supervision	31,425	31,425	0	62,850
Conduct EPI coverage surveys	0	0	79,885	79,885
Conduct quarterly on-site data verification and validation	51,000	0	0	51,000
Conduct semi-annual programs reviews	70,000	70,535	70,315	210,850
Conduct annual data quality audit (DQA) in compliance with national guidelines.	12,750	12,750	0	25,500
Finalize, print and disseminate research agenda and guidelines	5,250	0	0	5,250
Re-produce registers (e.g., ANC, Deliveries, PNC, etc) for all health facilities	0	100,000	70,000	170,000
Train 1,000 health workers in data analysis and reporting	0	0	0	0
Contribute to annual health conference	53,501	53,500	53,500	160,501
Conduct annual quality assurance and health facilities accreditation assessments in all health facilities	218,517	100,000	100,000	418,517
Procure 8 vehicles for central level monitoring and supervision	-	0	237,600	237,600
Procure 15 motorcycles for county level M&E staff	71,070	-	-	71,070
Total	**513,513**	**368,210**	**611,300**	**1,493,023**

8.3. General overview of targets achieved

Please complete **Table 8.3** for each indicator and objective outlined in the original approved proposal and decision letter. Please use the baseline values and targets for 2013 from your original HSS proposal.

Table 8.3: Progress on targets achieved

Name of Objective or Indicator (Insert as many rows as necessary)	Baseline		Agreed target till end of support in original HSS application	2014 Target						Data Source	Explanation if any targets were not achieved
	Baseline value	Baseline source/date			2010	2011	2012	2013	2014		
1.1 BCG	134933 (82%)	2005	181379 (96%)	159187 (94%)	138414 (74.9%)	167109 (78%)	160687 (85%)	143615 (87%)	123154 (73%)	Administrative (HMIS)	Target was not achieved because of the below reasons: - Health workers strike action; - EVD epidemic; - Temporary closure of almost all health facilities due to panic or fear from all angles; - Lack of funds to conduct regular outreach
1.2 OPV 3	101,278 (77%)	Same as above	148,270 (92%)	138629 (88%)	108,782 (73%)	138,144 (77%)	140,377 (93%)	136,690 (88%)	98353 (62%)	Same as above	Same as above
1.3 DPT 3/ Penta 3	114,572 (87%)	Same as above	148,270 (92%)	138629 (88%)	109,675 (74%)	129,510 (78%)	141,343 (93%)	137,411 (89%)	98726 (63%)	Same as above	Same as above
1.4 Measles	123,641 (94%)	Same as above	145,047 (96%)	133903 (85%)	104,974 (69.9%)	120,876 (73%)	121,703 (80%)	113,939 (74%)	90717 (58%)	Same as above	Same as above
1.5 Yellow Fever	116,649	Same as above	145,047 (75%)	133903 (85%)	98,844 (68.3%)	126,920 (71%)	118,577 (78%)	113,484 (73%)	84474 (54%)	Same as above	Same as above
1.6 TT2+ for Pregnant women	118,055 (72%)	Same as above	151,149 (80%)	159423 (88%)	115,350 (63%)	148,542 (74%)	140,221 (74%)	134,439 (76%)	104342 (58%)	Same as above	Same as above
1.7.1 Vit-A supplement Mothers (<6 weeks from delivery)	25%	Same as above	NA	NA	140,938 (81%)	64,729 (38%)	65,841 (35%)	82581 (56%)	39108 (25%)	Same as above	Target was not achieved because of the below reasons: - Health workers strike action; - EVD epidemic; - Temporary

											closure of almost all health facilities due to panic or fear from all angles; - Lack of funds to conduct regular outreach - Limited stock of vitamin A in country
1.7.2 Vit-A supplement Infants (>6 months)	75%	Same as above	85%	90581 (50%)	92,234 (63%)	98,535 (56.6%)	63,810 (42%)	44,573 (58%)	46446 (26%)	Same as above	Same as 1.7.1
Dropout Rate (Penta)	6,797 (5.6%)	Same as above	6,446 (4.2%)	10%	8,324 (6%)	13,046 (10.2%)	13,347 (8.6%)	13,204 (9%)	17682 (15%)	Same as above	Same as 1.3
Fully Immunized	NA	NA	NA	126026 (80%)	NA	NA	79%	77%	72365 (46%)	Same as above	Same as 1.1 - 1.5
1.8 % of counties/health facilities implementing BPHS/EPHS, which include maternal and newborn health	<40%	Health Plan 2007/2011 & BPHS Document	70%		80.2%	100%	100%	100%		MOHSW Annual Report 2014	
1.9 Under-five Mortality Rate	194	1999/2000 LDHS	170		114	114	114	94		LDHS 2013	NA
1.10 Infant Mortality Rate	117	1999/2000 LDHS	NA		72	72	72	54		LDHS 2013	NA
2.1 % of primary health facilities with functional community-based delivery of operationalized integrated BPHS/EPHS	<5%	N/A	N/A		50%	N/A	75%	75%		Estimated from community mapping exercise	
2.2 % of health facilities with delivery of improved quality of integrated primary health care services at the lower level.	40%	BPHS Accreditation 2009	80%		NA	84.3%	84.3%	90%			
3.1 % of timely and complete reports received	<30%	2007 MOHSW Annual	95%		76%	77%	82%	83%		MOHSW Annual Report 2014	

at national level from counties		Report									
3.2 % of counties implementing quality HMIS and database for smooth management of health information	0%	2007 MOHSW Annual Report	100%		100%	100%	100%	100%		MOHSW Annual Report 2014	
3.3 % of identified and recruited community health workers by the communities two for each health facility and provision of operational support funds to CHW	<500	Community Health Policy and Strategy	1,500		N/A	750 (50%)	3,727	3,727		Community Health Mapping Report 2012	NA