Joint Appraisal report 2017

The italic text in this document serves as guidance, it can be deleted when preparing the Joint Appraisal report.

Country	Ghana
Full Joint Appraisal or Joint Appraisal update	Full Joint Appraisal
Date and location of Joint Appraisal meeting	17-21 July 2017, MoH & ELLKING Hotel Conference Room, Accra
Participants / affiliation[1]	Provided as annex
Reporting period	1 January 2016 to 30th June 2017
Fiscal period[2]	1 January to 31 December 2016
Comprehensive Multi Year Plan (cMYP) duration	2015 – 2019

1. SUMMARY OF RENEWAL AND EXTENSION REQUESTS

As part of the ongoing grant cycle, Gavi reviews and renews its support to the country annually (referred to as "renewal"). If a country's new and underused vaccine support (NVS) is coming to an end and the country is still eligible for Gavi support, it may submit a request to extend the support (referred to as "extension").

Below tables 1.1 to 1.4 will be pre-populated by the Gavi Secretariat based on the country information submitted through the Country Portal on 15 May and four weeks before the Joint Appraisal meeting. If there are any changes to be made, these changes should be discussed during the Joint Appraisal and flagged in the Joint Appraisal report.

1.1. New and Underused Vaccines Support (NVS) renewal request(s)

Type of support (routine or campaign)	Vaccine	End year of support	Year of requested support	Target (population to be vaccinated)	Indicative amount to be paid by country (US$)	Indicative amount to be paid by Gavi US$
Routine	Pentavalent, 10 dose vial, LIQUID	2019	2018	**1,100,328**	**761,000**	**921,000**
Routine	Yellow Fever, 10 dose vial, LYOPHILISED	2019	2018	**1,077,641**	**443,00**	**781,500**
Routine	Inactivated Polio Vaccine, 10 dose vial, LIQUID	2018	2018	**TBD**	**TBD**	**TBD**
Routine	Meningococcal A Conjugate Vaccine, 10 dose vial, LYOPHILISED	2019	2018	**941,518**	**316,000**	**603,500**

[1] If taking too much space, the list of participants may also be provided as an annex.
[2] If the country reporting period deviates from the fiscal period, please provide a short explanation.

1.2. New and Underused Vaccines Support (NVS) extension request(s)

If 2017 is the last year of an approved multiyear support for a certain vaccine and the country wishes to extend Gavi support, please do so by requesting an extension of the vaccine support. The extension can be requested maximum for the duration of the Comprehensive Multi-Year Plan (cMYP), which must be submitted to Gavi.

Type of Support	Vaccine	Starting year	Ending year
Routine	Pneumococcal (PCV13), 4 dose(s) per vial, LIQUID	2018	2019
Routine	Rotavirus, 1 dose(s) per vial, LIQUID	2018	2019

1.3. Health System Strengthening (HSS) renewal request

Gavi commits to Health System Strengthening grants up to a five year period, with the first tranche approved with the approval of the proposal. In subsequent years, the country should submit a renewal request for the approval of the following HSS funding tranche.

*Below table summarises key information concerning the amount requested for the next year. Please note that funds previously requested and approved may be pending disbursement and do **not** require further approval.*

Total amount of HSS grant	US$ 18,059,296.0	US$
Duration of HSS grant (from…to…)	2014 – 2018	
Year / period for which the HSS renewal (next tranche) is requested	Year 4 (2017)	
Amount of HSS renewal request (next tranche)	US$ 3,440.000	US$

1.4. Cold Chain Equipment Optimisation Platform (CCEOP) renewal request

Similar to the Gavi HSS support, the Cold Chain Equipment Optimisation Platform provides phased support for a maximum duration of five years, which is subject to an annual renewal decision.

Below table summarises key information concerning the amount requested for the next year.

Total amount of CCEOP grant	US$	
Duration of CCEOP grant (from…to…)		
Year / period for which the CCEOP renewal (next tranche) is requested		
Amount of Gavi CCEOP renewal request	US$	
Country joint investment	**Country resources**	US$
	Partner resources	US$
	Gavi HSS resources[3]	US$

1.5. Indicative interest to introduce new vaccines or request Health System Strengthening support from Gavi in the future[4]

[3] This amount must be included either in an earlier HSS approval or else in the current HSS renewal request in section 1.4 above.

[4] Providing this information does not constitute any obligation for either the country or Gavi, it merely serves for information purposes.

Indicative interest to introduce new vaccines or request HSS support from Gavi	Programme	Expected application year	Expected introduction year
	Yellow fever preventive campaign (EYE)	2017	2019
	CCEOP	2017	2019

Background

*Gavi's support to a country's immunisation programme(s) is subject to an **annual performance assessment**. The Joint Appraisal is a key element of this performance review. It is an annual, country-led, multi-stakeholder review of the implementation progress and performance of Gavi's support to the country, and its contribution to improved immunisation outcomes.*

*To inform the Joint Appraisal discussion, the country is expected to post all reporting documents on the Gavi Country portal not later than **four weeks ahead of the Joint Appraisal meeting**.*

*This includes reporting against **key requirements**:*

- *Update of the grant performance framework (GPF) for indicators which are due*
- *Periodic financial reports, annual financial statements and audit reports (for all types of direct financial support received, with specific submission deadlines depending on a country's fiscal year)*
- *End of year stock reporting (which is compulsory to be submitted by 15 May of each year to calculate future vaccine requirements)*

Other critical information to be posted on the Country Portal four weeks prior to the Joint Appraisal include:

- *Immunisation financing and expenditure information*
- *Data quality information (including annual desk review and progress report on the implementation of immunisation data quality improvement plans)*
- *Annual progress update on the Effective Vaccine Management (EVM) improvement plan*
- *Campaign reports (if applicable)*
- *HPV specific reporting (if applicable)*
- *HSS end of grant evaluation (if applicable)*
- *Post Introduction Evaluation (PIE) reports (if applicable)*
- *Expanded Programme on Immunization (EPI) reviews (if applicable)*
- *Gavi and/or polio transition plans or asset mapping information (if applicable)*

Other information that will inform the Joint Appraisal discussion include:

- *Report by WHO and UNICEF on their technical assistance milestones funded through the Partners' Engagement Framework that should be updated four weeks in advance of the Joint Appraisal*
- *Analysis on coverage and equity and other relevant programme aspects, as informed by the Joint Appraisal Analysis Guidance (if available)*
- *Full Country Evaluation report (if applicable)*
- *Other evaluation of Gavi programmes*

***Note: Failure to submit the relevant information described above on the country portal four weeks ahead of the Joint Appraisal meeting (except for the vaccine renewal request, which is to be submitted by 15 May) may impact the decision by Gavi to conduct the Joint Appraisal meeting and renew its support**.*

2. CHANGES IN COUNTRY CONTEXT SINCE LAST JOINT APPRAISAL

Comment on changes which occurred since the previous Joint Appraisal, if any, to key contextual factors that directly affect the performance of the immunisation system and Gavi grants (such as natural disaster, political instability, displaced populations, inaccessible regions, etc., or macroeconomic trends or disease outbreaks).

Please indicate if the country has been formally identified by Gavi as fragile and specify if flexibilities in grant management are being requested.[5]

1. **Change in Government:** Ghana conducted a successful election in December 2016 that resulted in the old government giving way to a newly elected one. Ghana has thus, had a change in government since January 2017.
2. **New Minister for Health:** With the change in government, a new Minister of Health, with two (2) deputies have been appointed since the beginning of 2017. A new Director General (DG) has also been appointed for the Ghana Health Service as the tenure of the previous DG elapsed.
3. **Change in Donor profile:** There have been changes in health donor/partner profile since the last Joint Appraisal. For example, key health partners such as the Danish International Development Agency (DANIDA) and UK's Department for International Development (DFID) which hitherto provided direct health budget support no longer directly provide such support to the Ministry of Health; the Korean International Agency (KOICA) which previously provided support through other partners now directly implements health interventions in country, mainly supporting maternal and child health
4. **Fall in Gross National Income (GNI):** Ghana recorded GNI per capita of US$1,380.00 for 2016[6]. The country's GNI has progressively declined from US$1,620 in 2014 through US$1,480.00 in 2015. The resultant 3-year average GNI per capita of $1,493 (2014-2016), falls below the Gavi eligibility threshold of US$1,580.00 as shown in the table below.

GNI per capita, Ghana 2009-2016 (as published on 1 July 2017)							
2009	***2010***	***2011***	***2012***	***2013***	***2014***	***2015***	***2016***
$700	**$ 1,240**	**$ 1,410**	**$ 1,550**	**$ 1,760**	**$ 1,620**	**$ 1,480**	**$ 1,380**

5. **Disease outbreaks:** The country recorded focal outbreaks of cholera (mainly in the Central Region), meningitis (in selected districts in regions in the northern part). However, these outbreaks did not cause significant disruptions in health delivery and/or health systems.

These key contextual factors directly affect the performance of the immunisation system and Gavi grants. Specifically, the fall in the GNI has direct effect on Ghana reverting to preparatory transition and subsequently, change in co-financing requirement. The country has however, not been formally identified by Gavi as fragile and no flexibilities in grant management are being requested.

3. PERFORMANCE OF THE IMMUNISATION SYSTEM IN THE REPORTING PERIOD

This section should provide a succinct analysis of the performance of the immunisation system, including a thorough analysis of immunisation coverage and equity, as well as a review of key drivers of poor coverage. It should focus on the evolution/trends observed over the past two to three years and particularly changes since the last Joint Appraisal took place.

[5] For further information refer to http://www.gavi.org/about/governance/gavi-board/minutes/2016/7-dec/minutes/08a---fragile-settings,-emergencies-and-displaced-people/

[6] World Bank 2017?

Information in this section will substantially draw from the recommended analysis on coverage and equity and other relevant programme aspects which can be found in the Joint Appraisal Analysis Guidance (http://www.gavi.org/library/gavi-documents/guidelines-and-forms/joint-appraisal-analysis-guidance/).

3.1. Coverage and equity of immunisation

Please provide an analysis of the situation related to coverage and equity of immunisation in the country.

*Provide a summary of the difference in **coverage across various geographical areas, populations and communities** and the evolution over the past years. Relevant information includes: overview of districts/communities which have the lowest coverage rates and/ or the highest number of under-vaccinated children, number of vaccine preventable diseases (VPD) cases observed in various regions/ districts etc.*

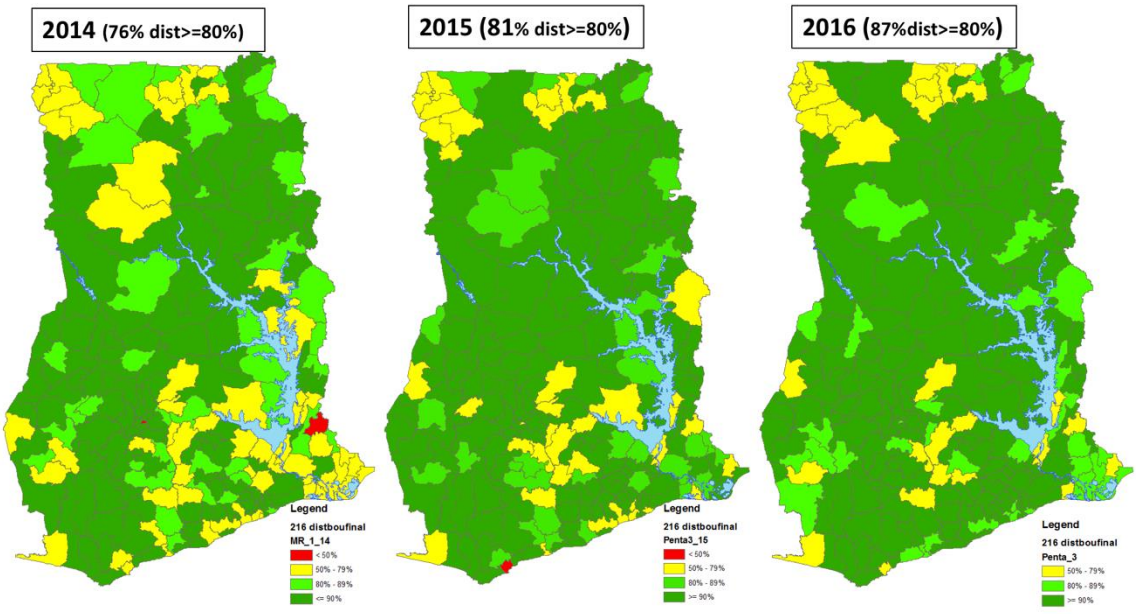
Countries are strongly encouraged to include heat maps or similar to show immunisation coverage trends over time. Examples of such analysis are available in the Joint Appraisal Analysis Guidance (available via http://www.gavi.org/library/gavi-documents/guidelines-and-forms/joint-appraisal-analysis-guidance/)

3.1.1 Coverage across various geographical areas, populations and communities:

A total of 1,060,178 children were *vaccinated for Penta3 in 2016 compared* to 1,012,362 in 2015 implying 47,816 additional children were reached. Ghana improved markedly in immunization coverage rates for all Gavi supported antigens. The country attained the 99% coverage for Penta-3 in 2016. 153 (70.8%) districts achieved Penta-3 coverage of 90% and above, 34 (15.7%) districts had coverage rates between 80-89%, 29 (13.4%) districts had coverage rates between 50-79%. No district had coverage rate below 50% (Ghana JRF, 2016). The district that recorded the lowest coverage together with other districts with challenges were provided with technical and financial support to improve performance. In 2015, these districts participated in Bottleneck Analysis (BNA) workshop which was geared towards identifying and addressing major bottlenecks impeding immunization performance (EPI Annual Report, 2015). The districts were supported by the National EPI Programme and a consultant to develop improvement plans. Technical and financial support were provided to these to carry-out activities proposed in the BNA Improvement plans.

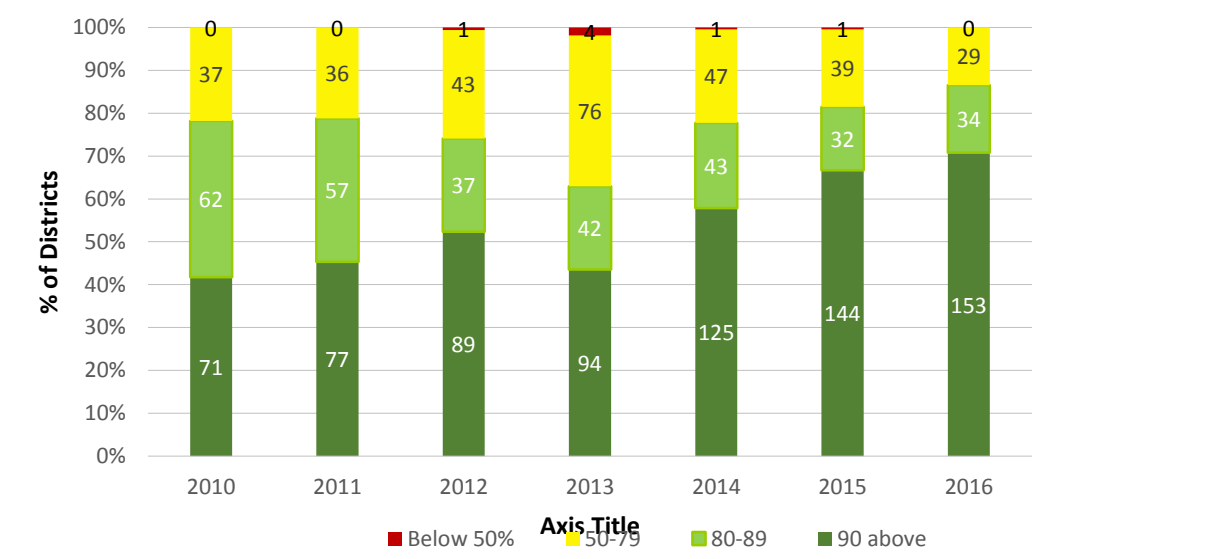
As a result, no districts recorded Penta-3 coverage rate of 50% or below in 2016. The number of districts with Penta-3 coverage of 80% and above increased from 81% in 2015 to 87% in 2016. Though, this was a marked improvement over previous years, Ghana could not achieve the Gavi and Global Vaccine Action Plan (GVAP) target of 90% of districts achieving Penta-3 coverage of 80% and above.

Figure 1: Trends in Penta3 Coverage by district, 2014-2016



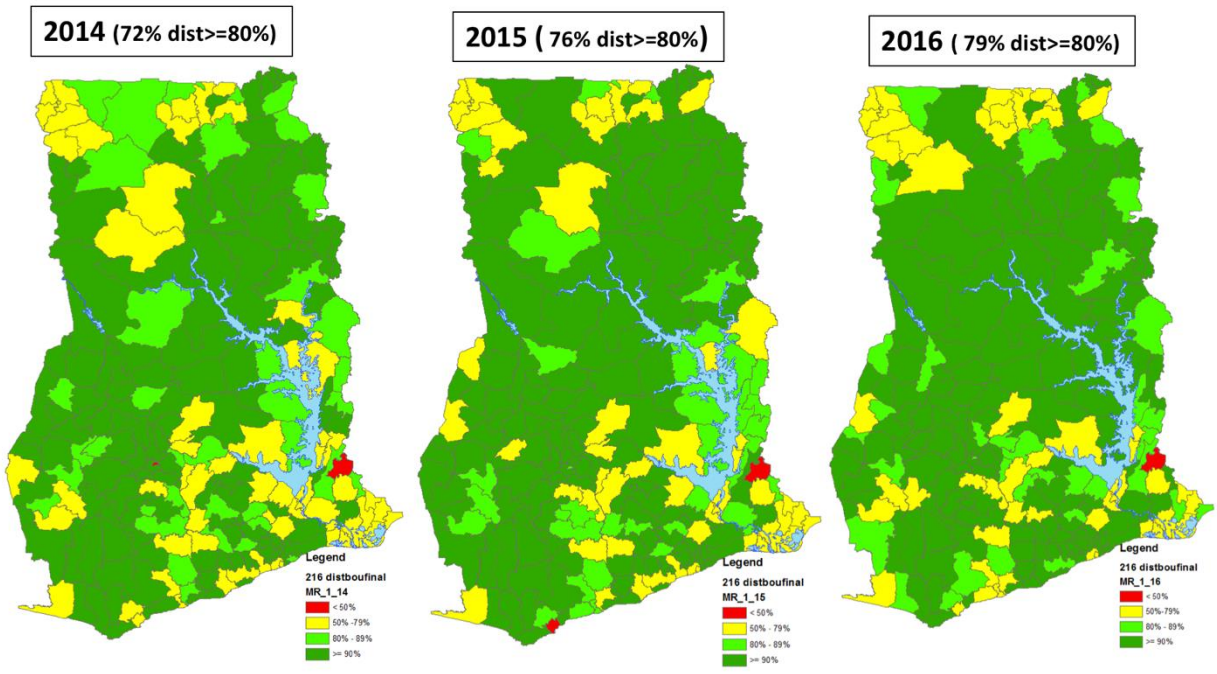
Though the country has seen significant improvements in the performance of districts, there continue to be clusters of low performing districts as shown in Figure 1 above. Strategies will be put in place to address the clustering of low performing districts. Where there is a need to delve deeper and investigate, the Ghana Health Service will liaise with partners and conduct appropriate studies.

Trends in the number of Districts achieving specific Penta-3 Coverage Category, EPI GHS 2010 – 2016



The figure above shows the distribution of districts' Penta-3 performance by coverage category. From the figure, the number of districts achieving Penta-3 coverage of 90% and above have been increasing since 2011. 2016 saw a marked increase in this indicator as the number of districts with Penta-3 coverage of 90% or above increased from 144 in 2015 to 153 in 2016 (Ghana JRF, 2014-2016).

Figure 2: Trends in Measles-Rubella 1 Coverage by district, 2014-2016



Measles-Rubella Vaccination also saw improvements from previous years. In terms of equity, the proportion of districts achieving MR-1 coverage of 80% and above increased from 72% in 2014 to 76% in

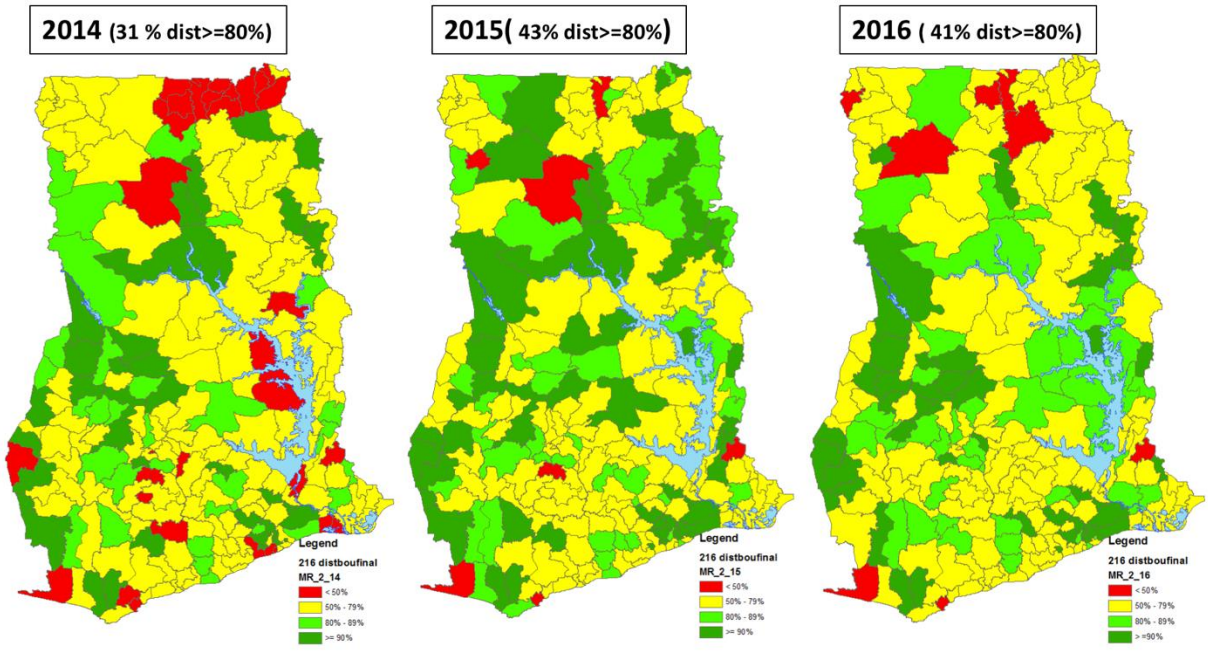
2015 and 79% in 2016. The national coverage rate for MR-1 also increased from 94% to 95% (Ghana JRF, 2014-2016).

However, the number of districts achieving MR-2 coverage of 80% and reduced from 43% in 2015 to 41% in 2016. Figure 3 shows the geographical distribution of MR-2 by districts. On the positive side, the national coverage for MR-2 increased from 72% in 74%. The country, with the support of CDC, will work assiduously to ensure the achievement of the measles-rubella elimination targets.

The following strategies are/will being/be employed to bridge the gap between MR-1 and MR-2;

- Defaulter tracking tool (Child Health Register) is being printed for distribution to all facilities and vaccination sites to serve as source documents for tracking defaulters
- Training have been conducted in 4 out of 10 regions which focused on immunization basics. Key among the topics treated was defaulter tracing. The remaining six (6) regions would be trained in the 4th quarter of 2017.
- The Ghana Health Service, through CDC/2YL support, has partnered with the Ghana Red Cross Society and the Ghana Coalition of NGO's in Health to do house-to-house search of children who have defaulted and vaccinate them.
- Community sensitization and social mobilization on the need to take MR-2 in the second year of life is ongoing in Volta, Greater Accra and Northern regions.
- Communication materials highlighting measles-rubella second dose vaccination have also been printed and distributed nationwide.

Figure 3: Trends in Measles-Rubella 2 Coverage by district, 2014-2016



The 2014 Ghana Demographic and Health Survey (Ghana DHS 2014) showed that 90.3% of females surveyed received Penta-3 whereas to 86.8% of males. This represents a decline is sex disaggregated immunization coverage rates compared to what the country achieved in the GDHS 2008; where the coverage rate for both males and females was 88.8%.

With regards to rural/urban dichotomy, 88.1% of children in urban centers received Penta-3 whilst to 88.8% of children in rural areas. In the 2008 GDHS, 87.2% of children in urban areas received Penta-3 whilst 89.8% of children in rural areas had the vaccine. This represents an improvement in bridging the gap in vaccination coverage among children in urban and rural communities.

The EPI Programme also made some gains in addressing inequities in vaccination coverage associated with wealth quintiles. Though the GDHS 2008 showed a difference of 5.3 percentage points between the highest and the lowest wealth quintiles, the 2014 GDHS showed a decrease. About 87.4% of children in the lowest wealth quintile received Penta-3 whilst 91.9 of children in the highest wealth quintile had the vaccine.

The EPI Programme will pay particular attention in addressing these inequities in order to achieve universal access and subsequently improve the national coverage. Strategies to address these gaps include;

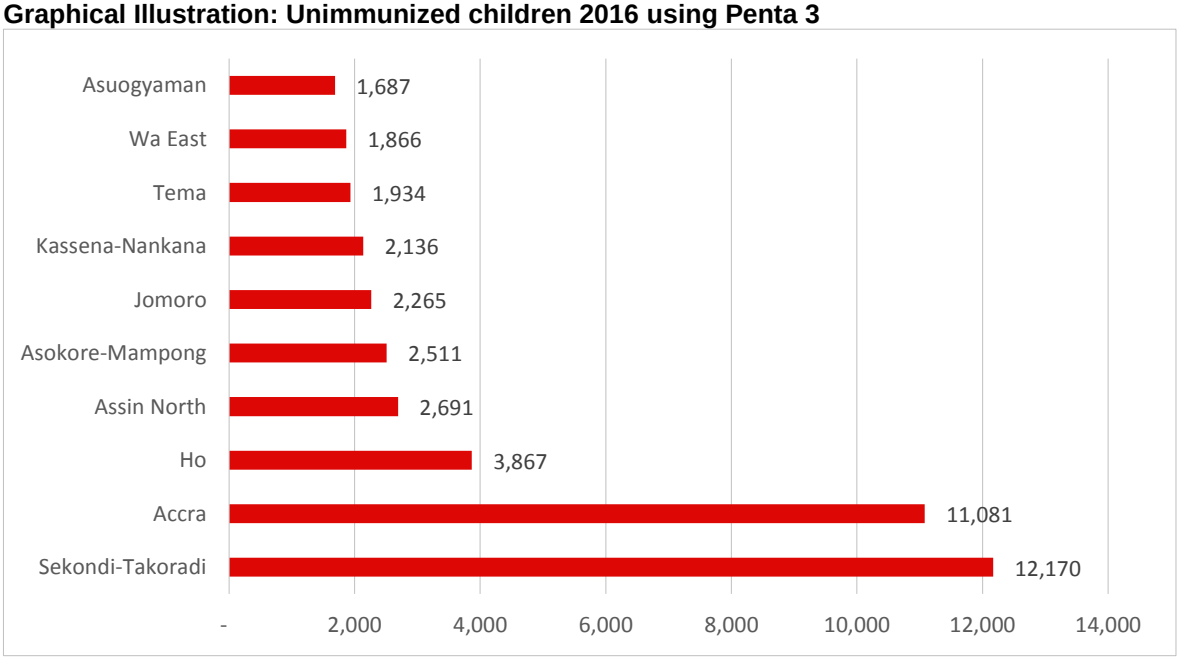
- Strengthening the use of Child Health Register to ensure all children are registered and provided with all required vaccinations
- Periodically conducting coverage surveys in high risk areas to assess the level of inequities and address them

For example, the 90.3% of females surveyed were received Penta-3 compared to 86.8% of males.

3.1.2 Top ten (10) Districts with the lowest Penta-3 Coverage

Region	District	Nature	2016 Penta3
Volta	Ho	Urban	50.20
Western	Sekondi-Takoradi	Urban	52.79
Upper East	Kassena-Nankana	Rural	54.91
Upper West	Lawra	Rural	56.44
Upper West	Wa East	Rural	59.39
Upper West	Jirapa	Rural	59.92
Eastern	Asuogyaman	Rural	60.47
Central	Assin North	Rural	61.42
Upper East	Builsa North	Rural	61.95
Upper West	Nandom	Rural	63.22

Graphical Illustration: Unimmunized children 2016 using Penta 3

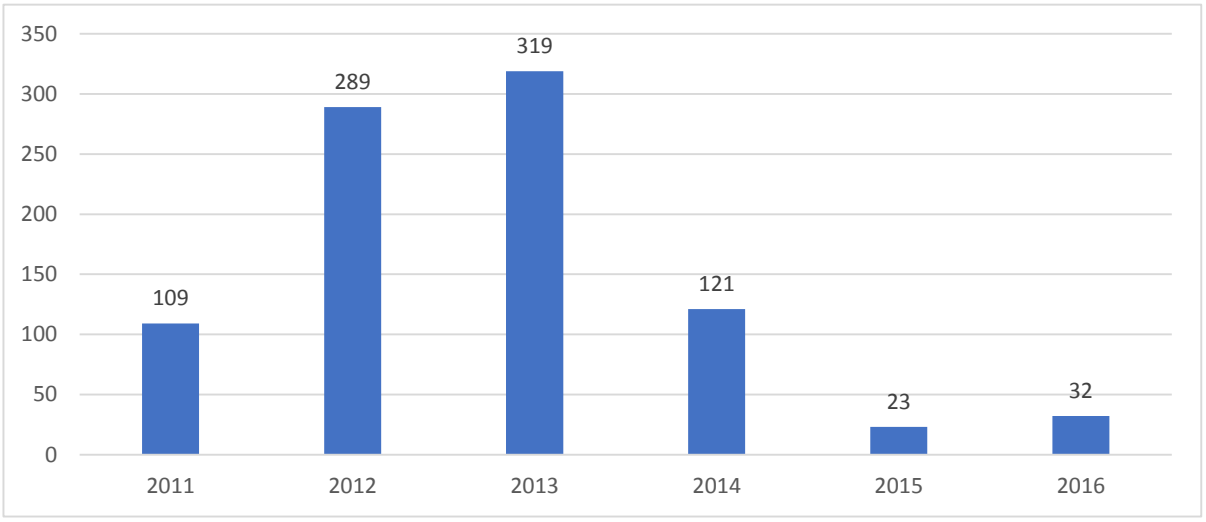


3.1.4 Confirmed Vaccine Preventable Diseases (2016)

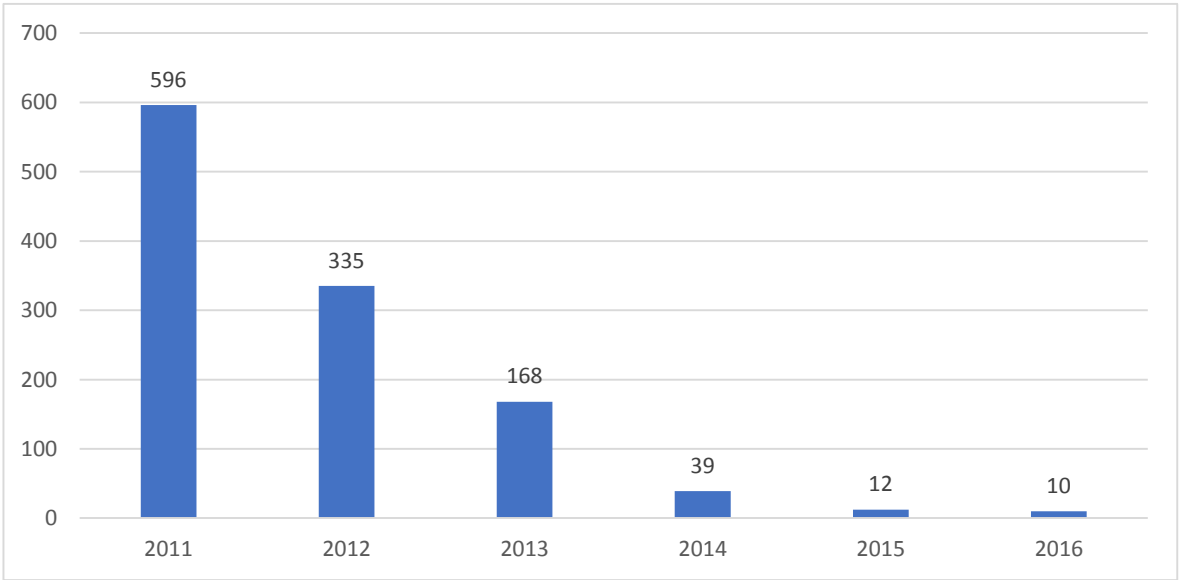
Region	Measles		Rubella		Yellow Fever		NNT
	Susp.	Confirmed	Susp.	Confirmed	Susp.	Confirmed	Confirmed
Ashanti	106	1	105	1	45	0	2
Central	411	18	393	6	222	3	0
Eastern	69	1	68	0	31	0	2
Greater Accra	169	4	165	1	53	0	0
Greater Accra	94	2	92	2	21	0	0
Upper East	25	1	24	0	43	0	1
Upper West	51	0	51	0	53	1	0
Volta	26	0	26	0	3	0	0
Western	138	4	134	0	64	1	0
Western	160	1	159	0	66	0	0
Ghana	1249	32	1217	10	601	5	5

Source: Disease Surveillance Department (DSD), Ghana - 2016

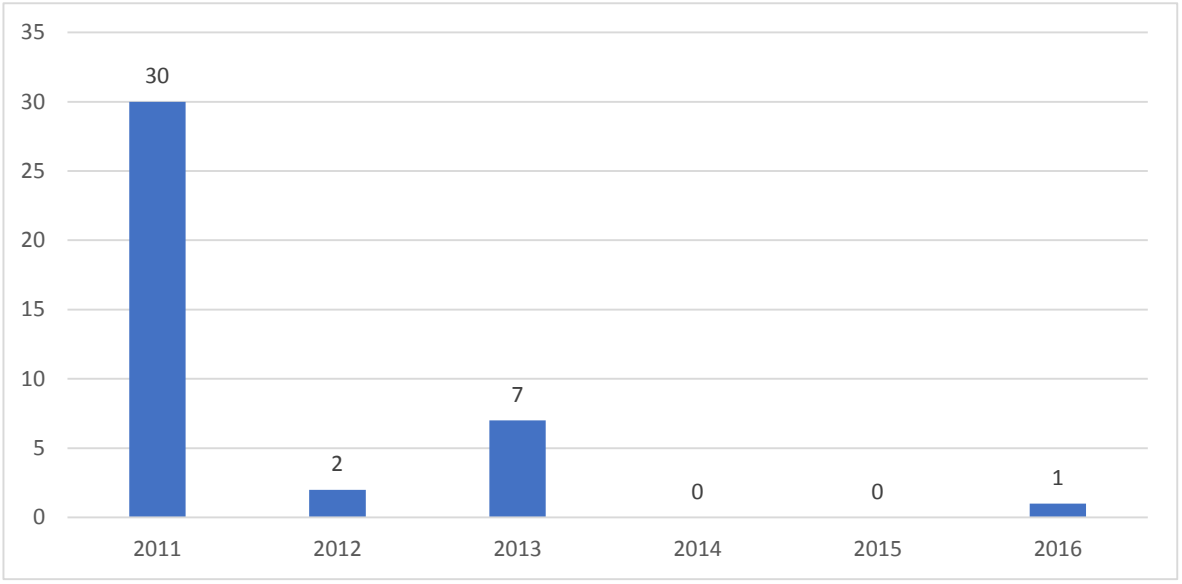
Trends in confirmed measles cases 2011-2016



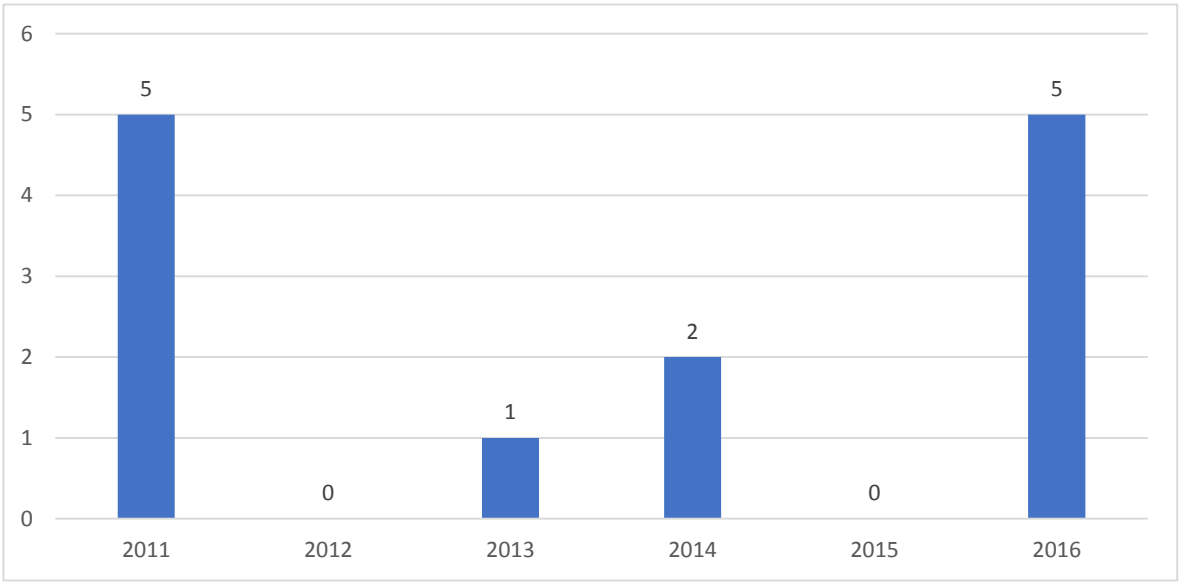
Trends in confirmed rubella cases 2011-2016



Trends in confirmed Yellow Fever Cases



Trends in neonatal tetanus cases



3.2. Key drivers of low coverage/ equity

*Please highlight key drivers of the low levels of coverage and equity highlighted in the section above. For those districts/communities identified as lower performing, explain the **key barriers** to improving coverage.*

- ***Health Work Force**: availability and distribution of health work force.*
- ***Supply chain**: key insights from latest EVMs and implementation of the EVM improvement plan.*
- ***Demand generation / demand for vaccination**: key insights related to demand for immunisation services, immunisation schedules, etc.*
- ***Gender-related barriers**[7]: any specific issues related to access by women to the health system.*
- ***Leadership, management and coordination**: leveraging the outcomes of the Programme Capacity Assessment and/or other assessment, please describe the key bottlenecks associated with management of the immunisation programme; this includes the performance of the national/ regional EPI teams (e.g. challenges related to structure, staffing and capabilities), management and supervision of immunisation services, or broader sectoral governance issues.*
- ***Public financial management:** the extent to which funds requested are made available in a timely fashion at all levels, highlighting particular bottlenecks in the disbursement process.*
- ***Other critical aspects**: any other aspect identified, for example based on the cMYP, EPI review, PIE, EVM or other country plans, or key findings from available independent evaluations reports[8].*

Nationally, the country achieved a high coverage rate for the third dose of the Pentavalent vaccine (99%). However, there are variations in coverage rates among regions and districts. As indicated, 29 districts representing 13.4% recorded Penta-3 coverage rates of less than 80%. This may be attributable to a number of factors.

- **3.2.1 Health Workforce:** The deployment and retention of health workforce remains a challenge. Though the Government of Ghana has trained a considerable number of work force over the years, the distribution of staff continues to pose a challenge. Members of staff tend to refuse posting especially to rural and less endowed districts. There are currently no incentive packages for staff posted to such areas. Also, in a bid to further their education, some staff also take leave of absence and go to school. A few others are reported to enrol in distant and weekend courses, which directly or indirectly affect their output.

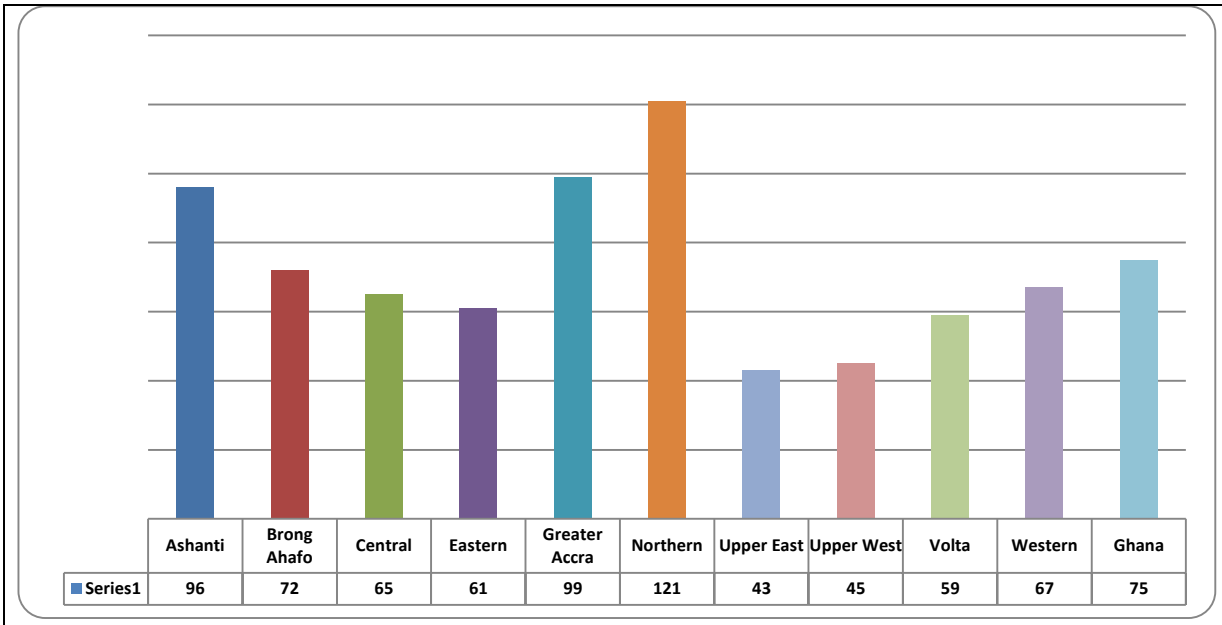
  Contrary to the perception that health workers are over-crowded in the two major regions of Ghana, available data shows otherwise with respect to frontline immunisation staff. There is uneven distribution of community health nurses in Ghana in relation to the targeted number of children for vaccination. The chart below shows children under 1-year-old to community health nurse (CHN) ratios by region. Nationally, this ratio is 75 to 1 with a range of 43 per CHN in Upper East Region to 121 per CHN in Northern Region. (Human Resource Division, GHS, 2015).

  Notably, the two major regions of Ghana (Greater Accra and Ashanti Region) which have most urbanized communities as well as urban slums have higher ratios of children under 1-year-old per CHN. Also, Northern Region, which has the largest land size, scattered population and difficult terrain has the highest children under 1-year-old per CHN ratio. These regions will be prioritized for health workforce intervention to help improve immunization coverage and to reduce un-immunized children.

  The Human Resource Division of Ghana Health Service is developing policy guidelines to address the issue. The policy will be used to guide the Service to deploy and retain health workforce especially in the deprived and hard to reach communities including urban and peri-urban slums.

Number of Children under one year per Community Health Nurse by region, HRD, 2015

[7] Gender-related barriers are obstacles (for access and use of health services) that are related to social and cultural norms about men's and women's roles. Women tend to be the primary caretakers of children, but sometimes lack the decision-making power and resources to access or use available health services.
[8] If applicable, such as Full Country Evaluations (relevant for Bangladesh, Mozambique, Uganda and Zambia) and Technical Assistance evaluations (conducted for Gavi Partners' Engagement Framework tier 1 and tier 2 priority countries).



- **3.2.2. Supply Chain**

Ghana has been using an efficient supply chain system over the years. Though there have been improvements in some components of the supply chain as for example in the use of both manual and electronic ledger records, transportation, capacity of managers etc. the system still has many challenges. For example, The most recent update of the national cold chain inventory shows a lot of cold chain gaps especially at the service delivery level.

There is insufficient cold space at the national cold room. The analysis of the 2017 cold chain inventory showed a gap of 80m3 capacity at the National level. Approval has been granted by Gavi to re-programme part of HSS support to fund the construction and installation of the cold room.
In the meantime, the programme is going make use of the excess cold chain capacity (80m3) at the Greater Accra Regional cold room to support the national capacity when the need arises.

All regional vaccine stores are equipped with walk in cold rooms with adequate storage capacity to accommodate the MR campaign vaccine.

Facilities offering Immunization services and CCE availability, Ghana, 2016

Region	Total facilities	Facilities without CCE		Breakdown of facilities without CCE		
		Number	%	CHPS	Private facilities	Clinics/Health centers
Ashanti	461	220	47.7	117	64	39
Brong-Ahafo	412	164	39.8	127	20	17
Central	428	168	39.3	121	39	8
Eastern	621	298	48.0	262	22	14
Greater Accra	301	165	54.8	22	131	12
Northern	410	175	42.7	155	7	13
Upper East	317	156	49.2	147	5	4
Upper West	307	86	28.0	86	0	0
Volta	488	158	32.4	137	6	15
Western	614	379	61.7	291	74	14
Grand Total	4359	1969	45.2	1465	368	136

Cold Chain Equipment Inventory, GHS, 2016

The table above shows that, nationally, 45% of health facilities providing immunization services do not have refrigerators with a range of 28% in Upper West Region to 62% in Western Region. In such health facilities, CHOs have to travel long distances to collect vaccines and again to their outreach points.

Ghana operates close to client health services through the CHPS concept. However, the needed logistics (refrigerators and vaccine carriers) are not adequately provided. New CHPs compounds are built without provision of cold chain equipment. This has contributed to the cold chain gaps at the lower level. Provision of cold chain equipment to these facilities will help improve the overall immunization coverage of the country. The MoH will tap into the opportunity being offered by Gavi through CCEOP to close this gap.

There are only two teams at the national level capable of repairing cold chain equipment in the country. This has been identified as a major gap in servicing delivery. The two teams are woefully not enough to maintain and repair all refrigeration equipment. The EPI Programme will roll-out a comprehensive training for regional level technicians on cold chain maintenance and repairs. This will help improve the time between when a cold chain problem is reported and when the problem will be addressed.

The country conducted its last effective vaccine management assessment (EVMA) in 2014. Based on the results of the assessment, cold chain improvement plan was drafted. Most of the improvement activities have been implemented. The outstanding activities are being implemented e.g. installation of Multi-loggers in walk-in-cold rooms at national and regional cold stores are currently on going.
The national level has two cold chain maintenance teams which visit regional cold stores quarterly to undertake planned preventive maintenance of cold chain equipment.
The country will conduct the next effective vaccine management assessment (EVMA) in 2018. The EPI Ghana will include the 2018 EVM assessment in its programme of work for implementation.

3.2.3 Demand generation/ Demand for vaccination

Some key challenges identified are

- Insufficient demand creation for routine immunization: weak links with communities
- Insufficient demand creation on immunization services available in the second year of life
- Staff knowledge gaps in immunization basics and policy

The Centres for Disease Control and Prevention (CDC), Atlanta, USA is partnering the Ghana Health Service to address these and many other challenges through the Second Year of Life platform (2-YL). Some key activities being undertaken to create demand are as follows:

- Development and airing of TV and radio spot commercials on immunization
- Development and printing of posters and flip charts
- Supporting Red Cross, coalition of NGOs in Health and Health Promotion Department of Ghana Health Service to roll-out communication and social mobilization activities to create demand

UNICEF has supported the programme to review its immunization policy and field guide. These documents are being used to improve staff knowledge through trainings and supportive supervision at health facilities

3.2.4 Gender Related Barriers

The 2014 Ghana Demographic and Health survey showed that, there is no apparent gender related barrier to immunization. According to the survey, 78.1% and 76.6% male and female children respectively received all basic vaccinations. This difference is not significant.

3.2.5 Leadership, management and coordination

Gaps in management of immunization services especially at the district level and below as well as knowledge gaps across all levels have been identified. As a result, the Service is conducting middle level managers (MLM) training for staff at all levels. It is expected that training will help bridge the leadership and managerial gaps that have been identified.

3.2.7. Public Financial Management

The Ghana Health Service has a robust financial management system with excellent control systems for managing public funds. The Service will continue to work on the occasional delays which directly or indirectly affect programme implementation.

3.3. Data

*Provide a succinct review of key challenges related to the availability, quality and use **of immunisation data**. This section should at least cover insights on coverage data (target populations, number of children vaccinated) and could also cover topics such as vaccine supply chain data, VPD surveillance data, AEFI data.*

Please take the following aspects into account:

- ***Compliance** with Gavi's data quality and survey requirements (the requirements are detailed in the general application guidelines available on www.gavi.org/support/process/apply/). If you are not compliant, explain why.*
- *Highlight key **challenges** pertaining to data availability, quality and use, referring to results from most recent annual desk review, any recent assessments and implementation of immunisation data quality improvement plan. For example, are you aware of key limitations / weaknesses related to the quality of the data and data analyses you have used to inform this Joint Appraisal.*
- *Main **efforts / innovations / good practices** focused on improving data system strengthening and addressing key issues.*

In 2016, Ghana complied with the data quality and survey requirements of Gavi. The EPI Programme, with technical and financial support from the CDC, conducted data quality desk review and data quality assessment to identify strengths and weaknesses in data management. Key findings from the survey are discussed below;

Inaccuracy of numerator and denominator:

The denominator: Ghana continues to have problems with the population base (denominator). Whilst the national denominator for children under 1 year appears to be realistic, that of lower levels remain a challenge. The country last conducted population and housing census in 2010. The figures produced by the Census Secretariat are based on projections and may not reflect the actuals on the ground. In addition to this, in 2012, two years after the census, 46 new districts were curved out of existing districts. There was disproportionate distribution of population between the parent districts and the new districts. Results from coverage surveys in recent past have shown that, areas with low administrative coverage rates tend to achieve higher coverage rates during surveys. This suggests that population estimates for such areas have been overestimated.

The numerator: In the year under review, the country run out of most of the recording tools including tally sheets. Vaccinators resorted to recording vaccinations on improvised materials other than tally sheets. This has the likelihood of affecting the quality and accuracy of the numerator.

Lack of data entry tools, monitoring and internet access: The District Health Information Management System (DHIMS) is the data repository and management system of the Ghana Health Service. Immunization data is reported through the DHIMS. It is a web-based system and immunization data is entered at the peripheral level. Data aggregation is automatically done by the system. The DHIMS Platform also includes several analyses available for use by staff at all level. However, the system and its use are have many challenges. Quite considerable number of health facilities do not have computer to enable them enter data directly into the system. As a result, most facilities send their monthly data to the district level for a health information officer at that level to enter the data on their behalf. The challenge with this arrangement is that the facility will not know how accurately their data were entered since there is no means of verification. Again, as a result of this arrangement, data entry is often delayed and this defeats the real-time value of the system. Also, many facilities are only able to assess their performance based on information available in their hard-copy report and not the official data repository which may sometimes differ due to a number of reasons (e.g. wrong entry, past reports not updated etc.).

The issues of poor internet connectivity remain a challenge in most places. Internet connectivity is required to enter data as well as access data in the DHIMS. Lack of connectivity not only affects data entry but also the data availability.

Shortages of Recording Materials: In 2016, there were shortages of key recording materials such as tally book, child health register and child health records. Lack of these materials, especially the tally book, invariably affected the numerator and subsequently the quality of the data.

Irregular review and validation of data: Though, the Ghana Health Service has instituted monthly data validation and quarterly data reviews at all levels, the quality of these reviews is questionable. This was evident when data from facilities were reviewed at the national level. Whilst most facilities reported immunization data throughout the year, there were clear gaps in reporting for some facilities. In addition to this, some questionable data (outliers) were identified from some facilities. Most often, these gaps were identified when the database (DHIMS) had been locked after a 90-day grace period.

Inadequate use of data for decision making: There is limited capacity at the lower levels to analyse and use data to make decisions. As such, the peripheral level, which generates the data, mostly sends the data to the next higher level without recourse for its use in improving on their performance. In addition to this, feedback from higher levels to lower levels is often not regular and untimely.

Efforts in Addressing Challenges

The EPI Programme, together with partners, have developed data quality improvement plan to help improve the quality of immunization data and strengthen data use. The child health register has been revised and standardised, and awaiting printing. This will be distributed to all districts and peripheral levels. With the support of partners (CDC, Systems for Health and UNICEF), child health record books have been printed and distributed. Tally books are also in print.

Regional and district teams have been taken through data management training. However, sub-district and facility level staff are yet to be trained as a result of lack of funds.

Trainings of trainers' workshop has been planned for 2017. Subsequently cascaded trainings will be rolled-out to all levels.

3.4. Role and engagement of different stakeholders in the immunisation system

Please provide relevant information on the role and engagement of the various stakeholders:

- ***National Coordination Forum*** *(ICC, HSCC or equivalent): the extent the forum meets the Gavi requirements (please refer to http://www.gavi.org/support/coordination/ for the requirements).*
- ***Civil society****: the role and engagement of civil society in the immunisation system in the past year (service delivery, demand generation etc.).*
- ***Other donors****: the role and investments of other bilateral and multilateral donor in the immunisation system. Please include information on possible reductions in non-Gavi donor support that influence the overall system capacity (e.g. reductions in Global Polio Eradication Initiative funding).*
- ***Private sector****: public-private sector collaboration, indicating possible vaccine supply between Government and private sector and the percentage of children receiving immunisation through the private sector.*
- ***Cross-sectoral collaboration****: e.g. collaboration between health and education programmes.*

National Coordination Forum

The Health Sector Working Group (HSWG) also referred to as the Health Sector Coordinating Committee (HSCC) is the highest decision making body of the health sector. The HSCC is chaired by the Honourable Minister of Health. This committee oversees the overall implementation of Gavi support to Ghana. It is made up of representatives from MOH and its Agencies, Development Partners (DPs), CSOs, private sector and other stakeholders in the health sector.

The Inter-Agency Coordinating Committee (ICC) for immunization provides leadership and direction for the immunization programme. ICC membership includes representatives from MOH, GHS, Ghana Coalition of NGOs in Health (GCNH) and DPs including WHO, UNICEF, USAID, JICA, Rotary Club, the Church of Jesus Christ of Latter Day Saints and Red Cross. The Director General of the Ghana Health Service chairs ICC meetings. Activity budgets for HSS implementation are presented to the ICC for approval before funding is secured.

Civil Society

Civil Society Organizations played a pivotal role in immunization activities in 2016. The Ghana Coalition of NGOs in Health is an implementing partner with regards to the HSS Support. Member organizations of the GCNH implemented activities, through Gavi HSS Support, to create demand at the community level. The Ghana Red Cross Society also supports immunization activities by mobilizing caregivers to vaccination sites.

Other Donors

In the year under review, the Centres for Disease Control and Prevention (CDC), Atlanta, partnered the EPI Programme in implementing the Second Year of Life (2YL) Project. This project aims at strengthening child health interventions, especially immunization services, provided in the second year of life.

The Church of Jesus Christ of Latter Day Saints (LDS) supported in printing of data collection tools, procured cotton wool and supported social mobilization for the 2016 Meningitis Mini Catch-up Campaign which was conducted in Upper East, Upper West and Northern regions.

3.4.4 Private Sector

The EPI Programme collaborates with the private sector in the delivery of immunization services. Private health facilities are used as outreach points especially in areas where no public facility exists. In some instances, vaccine refrigerators are kept in private facilities for the delivery of services. However it is difficult to quantify the proportion of vaccinations provided by the private sector since this is not captured by any primary data collecting tool.

3.4.5 Cross Sectorial Collaboration

There is an established collaboration between the Ministry of Education and the health sector. There are school health education programme (SHEP) coordinators in every school who give health talk, screen children, provide first aid and support health workers in delivering services in their respective schools. They supported in mobilizing children in schools during the Meningitis campaign.

In a bid to improve immunization services in the second year of life, the EPI Programme with support of CDC partnered with the Social Welfare Department of the Ministry of Children, Women and Social Protection. Through this arrangement, the Programme was able to meet with proprietors of pre-schools in urban areas in Greater Accra Region. The proprietors were taken through the importance of immunization and the need to screen the child health records of children to identify those who are under-vaccinated and advise their caregivers accordingly.

4. PERFORMANCE OF GAVI GRANTS IN THE REPORTING PERIOD

4.1. Programmatic performance

*Provide a succinct analysis of the performance of Gavi grants for the reporting period. Describe **how Gavi support is contributing to advancing the performance of the overall immunisation programme** and health sector strategies (with a particular focus on those districts/communities with lower coverage), and how the barriers identified in section 3 above are being addressed, stating -as relevant- **good practices and innovations.***

This analysis should cover all Gavi support received, including NVS, HSS and CCEOP. This section must address the following:

- ***Achievements against agreed targets**, as specified in the grant performance framework (GPF), and other grant-related activity plans. If applicable, reasons why targets as specified in the GPF have not been achieved, identifying areas of underperformance, bottlenecks and risks.*
- ***Overall implementation progress** of Gavi grants including **NVS**, **HSS** (incl. performance based funding **PBF**) and **CCEOP**.*
- *Past performance for measles and rubella (immunisation coverage analysis and rubella surveillance, performance[9]) and progress against the country's **measles-rubella 5 year plan**.*

*Please mention any other **relevant initiative not supported by Gavi** that addresses the key drivers of low coverage (described in section 3).*

Achievements against agreed targets:
The Gavi HSS objectives have been aligned to the overall health sector goal of having a healthy population and productive population that reproduce itself safely. These objectives align adequately with the systemic bottlenecks to achieving and sustaining high immunization coverage.

Summary of Key GPF targets
The table below shows three-year trends in targets and achievements as outlined in the Gavi Grant Performance Framework (GPF).

From the table, the country achieved most of the coverage rate indicators outlined in the GPF with the exception of Measles-Rubella-2 and Yellow Fever. With regards to Yellow Fever vaccination which is administered at the same time as Measles-Rubella-1, the target could not be achieved because of vaccine shortage. There was a global shortage of Yellow Fever vaccines which affected supplies to the country.

With regards to Measles-Rubella-2, there is general lack of understanding of the second year and catch-up vaccinations on the part of health workers. Thus, caregivers are not well informed about 2YL interventions. Leading high drop-out rate. Fortunately, the country is collaborating with the CDC in strengthening immunization interventions in the 2nd Year of Life (2YL). It is expected that, interventions that will be implemented as part of this partnership will help improve the MR-2 coverage.

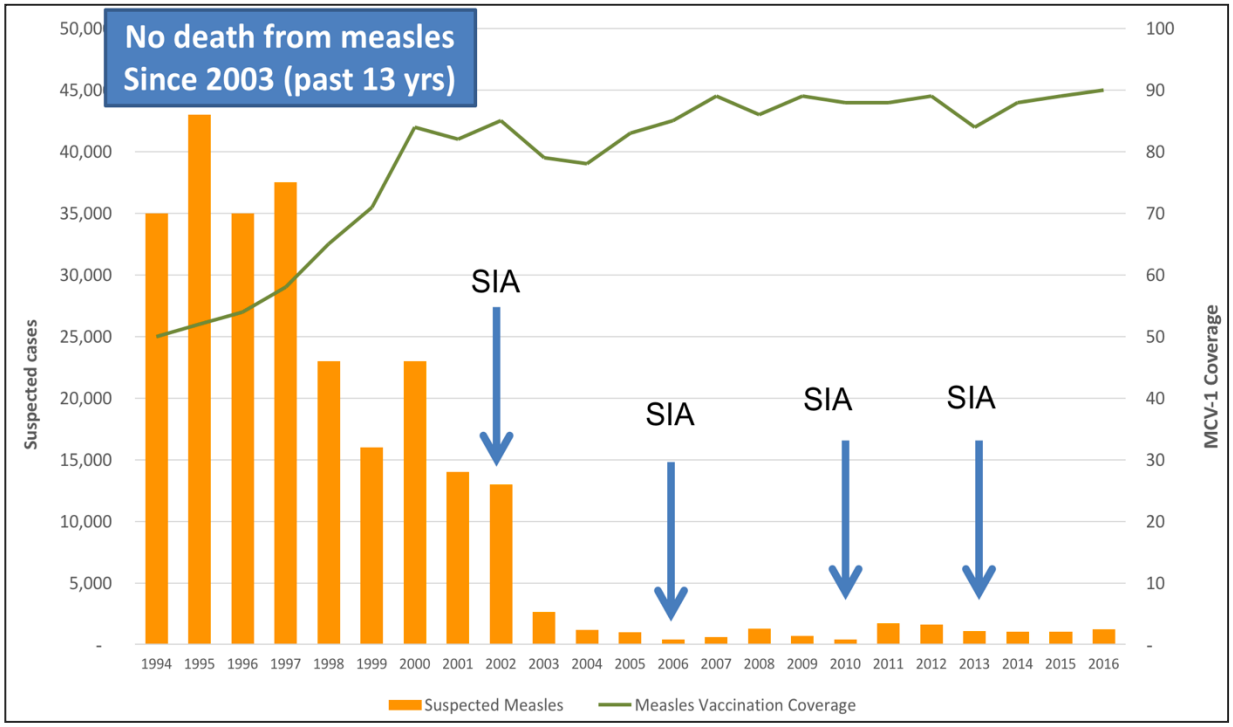
Ghana achieved all the equity indicators agreed in the GPF.

Indicators for Joint appraisal, 2016				
Indicators	Target (%)	2014 (%)	2015 (%)	2016 (%)
Penta-3 Coverage	94	95	95	99
PCV-3 Coverage	94	95	96	99
Measles-Rubella-1	94	93	94	95
Measles-Rubella-2	85	67	72	74
Rota-2	94	94	94	96
Yellow Fever	94	92	95	85
Drop-out rate between Penta1 and Penta3	2	3.0	2	2.3
Drop-out rate between PCV1 and PCV3	2	2.5	2	2.1
Drop-out rate between MCV1 and MCV2	10	27.6	23	22.3
Drop-out rate between RV1 and RV last dose	2	3.8	4	4.5

[9] Please include analysis of MCV1 and MCV2 routine immunisation and MCV campaign coverage at national and sub-national levels (admin and survey data), information on case distribution by age, geography, vaccination history, etc. for measles and rubella (including CRS), including outbreaks, at national and sub-national level.

Percentage of districts or equivalent administrative area with Penta3 coverage greater than 95%	>=60	48.6	54	60.7
Percentage of districts or equivalent administrative area with Penta3 coverage greater than 80%	>=80	75.9	81	86.6
Percentage of districts or equivalent administrative area with Penta3 coverage between 50% and 80%	<=20	23.6	19	13.4

Trends in Measles/Measles-Rubella Vaccination Coverage and Suspected Measles Cases



4.1.2 Overall Implementation Progress (NVS & HSS):

- Objective 1: To strengthen and scale-up community health interventions aimed at improving access and quality of primary health care services

The first objective is to strengthen community health systems to improve quality of primary health care services with a focus on immunization services. As part of the process of achieving the objective and also reducing the disparities in access to maternal and child health services, CHPS implementation is being strengthened to compliment the efforts of service delivery and health financing. The launch of the new CHPS policy and implementation guidelines serves as a catalyst to achieve this objective. The following are the key activities undertaken in the year under review and the progress made:

Procurement

The second year focused on procurement of 200 additional motorbikes from outstanding funds in year one has been delivered to the districts/sub-districts to support access to service delivery especially in the hard to reach areas and deprived communities. Other procurements undertaken include the procurement of vehicles (1 Saloon, 2 Station Wagons & 7 Nissan Pickups) to improve access.

Other equipment at various stages of procurement includes:

- The procurement of 500 voltage stabilizers for refrigeration equipment and the cold chain equipment made up of 11 TCW2000 refrigerators is at specification development stage.
- The UNICEF procurement system was used to procure spare parts for cold chain equipment. These spare parts have been shipped but the programme is yet to receive the items.
- Contract has been awarded for the procurement of three pieces of 50KVa & one piece of 100KVa generators for Regional and National cold rooms respectively. .
- An inventory of incinerators and cold chain equipment has been undertaken nationwide. Based on this, the selection of sites for the construction of 25 incinerators is being done and the actual construction is planned for the 4th quarter of 2017.
- Initial designs have also been received for the construction of national cold room and the procurement process is ongoing to commence work.
- The provision of these equipment and other improvement in the health system has contributed to the increase in coverage especially for PENTA 3.

Service Delivery

- Gavi Alliance funds for HSS provided support to 53 low performing and hard-to-reach districts in all Regions to undertake outreach activities and improve coverage. The funds were used for the purchase of fuel, maintenance and repair of motorbikes and other lower level operational activities.
- The 2016 child health promotion week (CHPW) was commemorated to create awareness on the provision of integrated child health services to children under five (5) years of age. The annual CHPW is dedicated to improving coverage of essential preventive services for children under five and also to enhance the provision of services for children who are not adequately covered in routine services. The essential services which were offered during the2016 CHPW included Immunization against childhood diseases, vitamin A supplementation, growth monitoring, birth registration of children under one year, nutrition counseling and bed nets for children aged 18 months. These services were delivered free of charge to encourage patronage. Also the opportunity was used to educate mothers and caregivers on available interventions and practices that will improve the health of children.

Monitoring and Supervision

- The annual integrated monitoring was conducted at the regional, district, sub-district levels and the CHPS Zones as part of its performance review process to ensure the provision of quality health care delivery at all levels of the Service. In all forty selected facilities were visited by the integrated monitoring team.

- Objective Two: To strengthen health worker capacity and distribution so as to address equity issues at the district level

Performance Based Financing

- The second year activities for objective two includes developing performance based financing systems and strengthening management capacity at sub-district and community levels. The health sector is currently implementing a pre-pilot performance based financing system through another programme (Maternal Child Health Nutrition Project – MCHNP) with the World Bank. This is on experimental basis and the results and experience from this pilot will be used to modify the scope and design for the performance based financing system to improve coverage in equity in immunization services at the district level. However, a sensitization of district health teams on community performance based financing has been undertaken. Participants included District Directors of Health Services, Public Health Nurses, Community Health Nurses/Officers (CHNs/CHOs) from implementing districts and Regional CHPS coordinators.

Review of Sub district manual and Training of CHOs in Management

The sub-district management manual which covers service provision, administrative functions, planning and budgeting, procurement activities, financial management and auditing, which was developed in 2010 has been reviewed to fill in the gaps identified and also to reflect on the current changes in the service. The manual is intended to serve as a training guide for trainers and managers at the regional, district and sub-district levels in particular. It further serves as a reference point and guidance for step-by-step service delivery and operational management. The training in the sub district management manual has been scheduled for 3rd and 4th quarter of 2017.

- Objective 3: To improve storage distribution and management of logistics and ensure the availability of potent, quality and safe vaccines, medicines and devices

Supply chain management activities
The major activities undertaken to improve supply chain management and data visibility include the following:

- Training workshop for supply chain managers to develop Records Management Tool, deploy the new file classification scheme, records decongestion, cataloging and data entry, digitization of records center documents for the Stores Supply and Drug Management Division. In all, 16 participants benefited from this training.
- Review meeting held in June 2017 to upgrade the Procurement Management Software taking cognizance of the Procurement Amended Act 619.
- Regional Medical Stores (RMS) LMIS software (transactional tool) review and re-training of users and IT Personnel (42 Regional supply chain participants) from the regional level.
- Technical Working session on DHIMS2 LMIS transactional tool integration for 17 participants.
- RMS LMIS transactional tool roll out plans and data assessment workshop held for 50 participants from National and Regional levels.
- Facility visits to Volta, Eastern; Greater Accra Regions to assess the possibility improving data visibility between RMS and facilities. Currently Eastern and Greater Accra Regions are conducting Last Mile Distribution of commodities at the RMS using the Report, Requisition, Issue and Receive Voucher (RRIRV) reporting tools. Volta Region is yet to start the full implementation using the RRIRV.

- Objective 4: To empower civil society for increased demand creation for health service at the community level
  - Objective four milestones looks at strengthening Civil Society Organizations and empowering them to increase demand for immunization services. CSOs have over the period contributed to increasing immunization coverage through the engagement of community and local governance systems to support service delivery. They deployed strategic community systems strengthening methodologies to engage hard–to–reach communities and urban slums to bridge equity and increase coverage.
  - Implementing partners (IPs) working under the Ghana Coalition of NGOs in Health (GCNH) employed the services of retired midwives in some very deprived and neglected communities where there are no midwives to support immunization service delivery.
  - As part of the 2016 implementation plan, capacities of IPs were built in community entry and mobilization, sensitization, project management and reporting among others. They organize campaigns and sensitization outreaches, and supply of basic logistics such as weighing scales, rain coats and benches among others for CHNs/CHOs and caregivers to support community level service delivery.

- Objective 5: To strengthen governance and health information management for improved health service delivery.

The key activities implemented under this objective were as follows:

Strengthen Planning Systems
In strengthening planning systems, a planning manual is being developed to serve as a management guide and training module to strengthen and build capacity in the development of plans and budgets. The aim is to improve the efficiency and effectiveness of the planning process and to serve as a reference point for planning and budgeting, monitoring and evaluation of plans and budgets implementation management. The planning manual training is scheduled for the second and third quarter of 2017.

Health Management Information Systems
- Upgrade DVD-MT & FMIS and integrate with DHIMS

The process to upgrade the DVD-MT and the Financial Management Information System (FMIS) and integrate with DHIMS 2 is currently ongoing.

- Orientation of district and sub district staff in HMIS

Training and orientation for district staff was undertaken in the Eastern Region. There was onsite orientation of all facilities and sub-districts in e-Tracker implementation districts in Central Region.

- Support quarterly technical and financial data validation at districts and sub-district levels

All Regions were supported to undertake quarterly technical and financial data validation for districts and sub districts.

- Support operational research and document best practices in general and particularly in immunization

There is an ongoing research into low coverage of 2nd dose of Measles-Rubella vaccine in Kintampo South and North.

- Develop sub district micro-plans

Two Regions, Northern and Upper West have been supported with funds to undertake their sub-districts micro planning. This will be scaled up to other Regions.

- Provide technical support for the use of upgraded management information system at sub district level.

Technical support was provided for the use of upgraded management information system at sub-district level on e-Tracker android version.

- Build capacity in planning, project management, monitoring and evaluation at national level
  - One (1) Staff trained in Health Management, Planning and Policy. This has equipped the participant to take a proactive role in problem-solving, critically reviewing evidence and arriving at informed decisions.
  - Two (2) staff trained in Results Based Monitoring & Evaluation. This training course strengthened their ability in the area of monitoring & supervision and their capacity was built to analyze data and draw meaningful conclusions to improve the quality, speed and content of reporting for better decision-making.
  - 1 staff supported to undertake training in Public Financial Management & Good Governance. The course improved the professional skills of the participant by enabling them to have a deeper understanding and strengthening their skills in financial management and good governance.
- Organize and coordinate standardized training programme for district and sub-district health teams and technical managers
  - Under the human resource agenda, the Ghana Health Service organize and coordinated standardized training programme for district and sub-district health teams and technical managers and (2) monitor human resource training and capacity building programmes at the respective levels of service delivery. The specific activities undertaken include:
  - Monitoring and supportive visits to the Regions to assess key human resource training indicators. In all ten regions. Many lapses such as poor HR data management, poor records keeping, lack of in-service training plans and documentation, lack of pre/post impact assessment of training, and absence of welfare systems for staff were unearthed. These findings were shared with the regions and guidelines on how to remedy the lapses discussed and adopted.
  - Follow up on quality assurance monitoring and assessment of In-service training (IST) programmes and Coordinators undertaken in the Regions.
  - As part of efforts aimed at correcting the inequitable HR distribution, there is a plan to conduct training on HR Gap Analysis in the affected Districts in the Volta, Upper East and Western Regions. The training shall equip the respective Regional and District Human Resource Practitioners with the required skills to analyze and establish HR gaps in the various Districts and health facilities using the staffing norms to develop a comprehensive database of Regional HR gaps.
- Develop health account
  - The Health Accounts development process using the SHA framework is ongoing. This will be completed at the end of the third quarter 2017.
- Support GHS and other providers in joint annual sector performance review.
  - Regional Review Process was undertaken. During these reviews, all Budget Management Centers (BMCs) at the National, Regional and District level are expected to organise performance review sessions, which eventually culminates in annual reports by regions and divisions. This forms part of the Health Sector Performance monitoring process. All these reports feed ultimately into the Holistic Assessment report of the Health Sector.

- GHS Headquarters Review held to review all levels of service delivery to assess performance in accordance with the agreed performance framework.
- National Senior Managers Review was held. The review brought together senior health managers from GHS institutions, from Districts, Regions and Headquarters as well as health partners and stakeholders in the health sector to review performance of sector-wide indicators including immunization indicators and set targets for the year under review. This helps to identify gaps, recognize achievements and lessons learnt to inform the setting new goals and objectives for the ensuing year.

- Support overall MTDP monitoring and evaluation of the MoH and joint annual sector reviews with partners sector at MoH level.
  The Health Sector Holistic Assessment report is completed and published on the Ministry of Health website.
- Conduct Service Availability and Readiness Assessment survey (SARA)
  Yet to be updated.
- Programme management
  - Joint Appraisal process undertaken
  - Transition process coordinated
    Other Programme Implementation meetings and
  - Gavi operational activities held.

Other Support

1. WHO provided additional support to selected districts and regions to strengthen routine immunization services
2. WHO also donated one Toyota Hilux Pick up to one district to strengthen integrated child survival interventions.

4.2. Financial management performance (for all cash grants, such as HSS, vaccine introduction grants, campaign operational cost grants, transition grants, etc.)

Provide a succinct review of the performance in terms of financial management of Gavi's cash grants. This should take the following aspects into account:

- *Financial **absorption** and utilisation rates[10];*
- ***Compliance** with financial reporting and audit requirements;*
- *Major issues arising from cash programme **audits** or programme capacity assessments;*
- *Financial management **systems**[11].*

4.2.1 Financial absorption and utilisation rates

Ghana received approval for the health systems strengthening cash support in 2014 and received the first disbursement in August of the same year. The second disbursement of US$3,440,096 was received in June 2016 with average utilization rate of 63% (US$2,103,392) as at June 2017. The outstanding 37% of the year two activities will be implemented in 3rd and 4th quarter 2017. This is made of Procurement activities, 22% and other ongoing activities 15%. Detailed absorption and utilization rates are provided under the Activity Financial report in Appendix.

[10] If in your country substantial amounts of Gavi funds are managed by partners (i.e. UNICEF and WHO), it is recommended to also review the fund utilisation by these agencies.
[11] In case any modifications have been made or are planned to the financial management arrangements please indicate them in this section.

Gavi HSS 2 Year 2 Financial Report as at 30th June 2017

Ref	Activity name and description	% Utilized
OBJ 1	To strengthen and scale-up community health interventions aimed at improving access and quality of primary health care services	**58%**
OBJ 2	To strengthen health worker capacity and distribution so as to address equity issues at the district level	**72%**
OBJ 3	To improve storage distribution and management of logistics and ensure the availability of potent, quality and safe vaccines, medicines and devices	**56%**
OBJ 4	To empower civil society for increased demand creation for health service at the community level	**60%**
OBJ 5	To strengthen governance and health information management for improved health service delivery	**75%**
GRAND TOTAL		**63%**

Gavi HSS 2 Year 2 Financial Report as at 31st December 2016

Ref	Activity name and description	% Utilized
OBJ 1	To strengthen and scale-up community health interventions aimed at improving access and quality of primary health care services	**99.13%**
OBJ 2	To strengthen health worker capacity and distribution so as to address equity issues at the district level	**100.00%**
OBJ 3	To improve storage distribution and management of logistics and ensure the availability of potent, quality and safe vaccines, medicines and devices	**100.01%**
OBJ 4	To empower civil society for increased demand creation for health service at the community level	**100.00%**
OBJ 5	To strengthen governance and health information management for improved health service delivery	**100.13%**
GRAND TOTAL		**100%**

See annex for details

4.2.2 Compliance with financial reporting and audit requirements;

Two bank accounts are used to manage the Gavi HSS funds- a Dollar and a Cedi account at ECOBANK GHANA LTD and UNIBANK Ghana Limited respectively. The dollar account is the receiving account in which the funds are lodged from source. The Cedi account is the operational account. Funds are transferred from the dollar account to the cedi account for general home currency transactions.

Ghana has no outstanding funds for the HSS 2 year 1 implementation except to effect the refunds requested by GAVI in the year 2015 GAVI audit. The refund has been effected by crediting GAVI ledger and therefore the funds are available for use per the activity plan. For the HSS 2 year 2, an amount of US$3,440,096 was received in June 2016 for the year 2015 activities according to proposal work plan and timelines submitted. Due to the late release of the 2015 funds, the 2015 activities were implemented late 2016 and still ongoing in 2017. The outstanding balance as at June 2017 for HSS 2 year 2 was US$ 966,764 for GHS and US$169,940 for CSO. In terms of expenditure, the GHS had spent 63% and CSO had spent 60% of the total amount received as at the end of June 2017.

The status of completion of activities under HSS 2 Year 2 are shown below: Table of actual vs. planned expenditure

4.2.3 Major issues arising from cash programme audits or programme capacity assessments

The Programme Capacity Assessment was undertaken in 2016 to that review the country programme (EPI) management, existing financial mechanisms and vaccines management system in order to identify possible gaps that would need to be addressed before Gavi make next disbursements to Ghana or during

the implementation of the Gavi programme. The MOH received the GAVI final decision on the outcome of the 2015 GAVI Cash Audit Reports in October 2016 and below are the status of the major issues raised:

1. Commi**tment to reimburse the misused funds amounting to US$850,470.**
   Part payment of USD 637,108.00 was paid in August 2017 and the outstanding of USD 213,368.32 will be paid on or before end of December 2017.
2. **Evidence that an amount of US$116,975 in respect of expenditures not related to grant activities.**
   The GHS has credited GAVI HSS ledger with the amount making it available for use as per the approved GAVI Activity work plan for 2014.
3. **Expenditure questioned on the basis of asset allocation ($360,000 and US$4,500)**
   The Pick-up vehicles kept at the national level have all been sent to various districts as per the recommendation of the audit. Letter together with evidence to this effect has been provided in earlier correspondence.

A plan for implementation of remedial actions to improve budgeting and financial management, expenditures and allocation of assets, oversight and procurement management with timelines and deliverables.

Subsequently, the country received the Grant Management Requirement (GMR) based on the report of the Programme Capacity Assessment. This GMR governs the oversight of vaccines and related supplies and financial support provided by Gavi to the Government of Ghana. The main requirements were in the following areas:

1. Requirements to be met before next disbursement is made
2. Other Programme Management Requirements
3. Other Financial Management Requirements and
4. Vaccine and cold chain management

4.2.3 Financial management systems

The Health Sector has in place a robust legal and institutional framework for Public Financial Management (PFM) across all levels of the sector. The recent passing of the Public Financial Management Act 2016, Act 921 and the Public Procurement Amendment Act 2016, Act 914 by Parliament are expected to improve PFM practices and a significant step towards strengthening the PFM systems to ensure fiscal discipline and the effective and efficient use of public resource for the delivery of improved public services. The act makes provision for enhanced sanctions against public sector officers who have been found to have engaged in financial malpractices or acts of omissions established to be fraudulent. Presently the Ministry of Health (MOH) Accounting, Treasury and Financial Reporting, Rules and Instruction manual (ATF) has been reviewed and awaiting approval and training. The review has considered DPs interest in the area of traceability and visibility of donor funds to the Health Sector in financial reporting at all levels. The MOH has also reviewed its Internal Audit Manual to strengthen internal audit processes; ensure accountability and value for money for all resources received. The Ghana Audit Service and Private Audit firms appointed by DPs also continue to carry out their periodic independent review of financial statements to provide assurance to stakeholders on the use of resources. Other specific areas where improvement has been done after the Gavi cash audit include the following:

1. Accounting for donor funds: Standard Operating Procedures (SoPs) have been developed and disseminated. Trainings on these SoPs have been undertaken at the Regional levels.
2. Reporting on donor expenditure: The donor specific accounting systems at the national and sub-national levels as in the draft revised Accounting Treasury, Financial Rules and Regulations Manual (ATF) is being piloted.
3. Linkage of activity codes to budget: All activities are detailed at all levels starting with the year two HSS support to ensure consistency and uniformity.

4. Unclear basis for charging indirect costs: The document on the proposed expenditure on indirect cost has been developed awaiting finalization.
5. Weaknesses in supporting documentation: Standard Operating Procedures (SOPs) for the retirement of funds (payment and attendance sheets) for program related activities such as trainings, workshops and conferences has been developed and being used.
6. Procurement planning: Steps have been taken to ensure that all GAVI purchases for a fiscal year are incorporated into the procurement plan according to Section 21 of the Public Procurement Act of Ghana. The Entity Tender Committee has been reconstituted with representation from the Ghana Health Service, Ministry of Health and the Attorney Generals Department
7. Tender Process: The procurement process have been streamlined to ensure that the Public Procurement Act is strictly adhered from solicitation of bids through evaluation to payment.
8. Procurement Records Management: Filing of procurement documents has been streamlined in conjunction with the GHS records/archives unit.

4.3. Sustainability and (if applicable) transition planning

Provide a brief overview of key aspects and actions concerning the sustainability of Gavi support to your country. Please specify the following:

- ***Financing of the immunisation programme****: key challenges related to the financing of the immunisation programme, including co-financing requirements.*
- ***Gavi transition planning****: if your country is transitioning out of Gavi support, specify whether the country has a transition plan in place. If no transition plan exists, please describe plans to develop one and other actions to prepare for transition.*
- *If a transition plan is in place, please provide information on the following:*
  - *Implementation progress of planned activities;*
  - *Implementation bottlenecks and corrective actions;*
  - *Adherence to deadlines: are activities on time or delayed and, if delayed, the revised expected timeline for completion;*
  - *Transition grant: specify and explain any significant changes proposed to activities funded by Gavi through the transition grant (e.g., dropping an activity, adding a new activity or changing the content/budget of an activity);*
  - *Submit a consolidated revised version of the transition plan.*
- ***Polio transition planning****: If your country is transitioning out of immunisation programme support from other major sources, such as the Global Polio Eradication Initiative, specify whether the country has a transition plan in place. If such a transition plan exists, please briefly describe it. If no transition plan exists, please describe plans to develop one and other actions to prepare for polio transition.*

4.3.1 Financing of The Immunization Programme

Financing of Traditional vaccines and co-financing for vaccines remains a challenge to Ghana as it is highly dependent on the timelines of disbursements of budget allocations to Ministries, Departments, and Agencies (MDA's) by Ministry of Finance. Government has taken a bold step to ensuring that adequate budget allocation is made in the appropriations budget yearly for the purposes of co-financing of vaccines. Within the 2017 Budget, Government allocated approximately USD 16.30 million for dollars for vaccines procurement and this will be sustained within the next three (3) years. The 2017 National Health Insurance allocation formula has also been approved by Parliament which has allocated 4.7 million USD to ARV Medicines and other Counterpart funds. Discussions are also on-going towards the restructuring the NHIA benefit package to include preventive services that includes immunization services in the short to medium term. Efforts are being made towards Public-Private Sector partnership into the future as part of Health Sector Medium Term Development Plan HSMTDP to ensure sustainable financing of the entire health sector.

The challenge is how timely the budget allocations would be disbursed to enable MoH meet co-financing obligations within agreed timelines.

The Government of Ghana has met fully its traditional vaccine financing responsibilities as well as its vaccine co-financing obligations of 2017. There are plans underway to ensure that c-financing obligation is fully met on or before end of December 2017.

Whilst significant efforts and strides have been made, Government has initiated steps towards creating fiscal space and financial sustainability for the entire health sector to include financing of immunization programme and to that effect is seeking technical assistance from the World Bank. The first step of a dialogue with key players of the health sector and stakeholders towards creating fiscal space and financial sustainability led to a meeting at Senchi Hotel in March 2017 to which GAVI representatives participated.

4.3.2 Transition Planning

In 2016, MoH and its partners alongside Gavi representatives developed a transition plan to guide the Transition period beginning 2017. This plan is however still in draft form as Gavi has requested a sustainable financing strategy for EPI Programme during the Transition period and beyond as a trigger to approving the plan for implementation. However, the 2017 GNI fall has changed the transition phase of Ghana and there is the need to review the draft plan in line with current trends and challenges towards focussing on capacity and system strengthening to ensure financing sustainability during and beyond transition. MoH would engage GAVI Alliance to undertake needs assessment and develop a terms of reference (TOR) towards engaging technical assistance service to review and finalize the transition plan.

MoH is currently undertaking stakeholder consultation towards setting up NITAG by end of year 2017 to provide technical guidance and direction to support the advocacy for sustained, adequate and increased funding for immunization services during the transition and beyond. The transition plan would make provision for workshops and retreats to enable NITAG members appreciate and understand the TOR of their assignment and the expectations thereof.

4.3.3 Polio Transition Planning

Gavi and /or polio transition plan or asset mapping information –

1. Draft copy of Gavi transition plan was developed with support of both internal and external partners in 20y15. It is still being reviewed for necessary update and finalization
2. Polio asset mapping has been completed and shared with WHO-AFRO. A plan to develop polio transition plan has been initiated on request from WHO-AFRO. Asset mapping for polio: an official letter on the polio transition plan with guidelines and assurance for both financial and technical support from WHO has been given to the Minister of Health. A team is yet to be constituted to develop the transition plan. It would be prudent to align and synchronise the Polio Transition Plan and that of GAVI/ EPI so as to leverage on expertise and other resources.

4.4. Technical Assistance (TA)

Briefly summarise key insights generated during the appraisal of Gavi supported Targeted Country Assistance (TCA) activities and milestones.[12] Specify whether amendments to the currently planned and ongoing Technical Assistance activities and milestones are envisaged (short term). If changes are envisaged please provide a justification.

Note: New Technical Assistance requirements for the next calendar year should be indicated in section 6 rather than this section.

[12] A summary of Technical Assistance approved under Gavi's Partner Engagement Framework (PEF) for the year under review and reporting status can be accessed via the PEF portal by registered users, or by contacting the Gavi Secretariat.

1. One EPI (M &E officer) sponsored to Data quality capacity workshop in Uganda
2. Three-member team from the rotavirus sentinel surveillance site in Kumasi sponsored to data quality orientation workshop in Togo
3. Supported WHO participation in the 2017 African Vaccination week national launch and field activities
4. Supported WHO participation in national health system strengthening workshops
5. Supported Vaccine Safety and Pharmacovigilance (AEFI) monitoring workshop organised by the Food and Drugs Authority

5. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Provide the status of the prioritised strategic actions identified in the previous Joint Appraisal[13] and any additional significant IRC or HLRP recommendations (if applicable).

1. Strengthen routine immunization through the Reaching Every District/ Child (RED/REC) Approach	Ongoing, there is currently an ongoing trainings at all levels on MLM including RED/REC
2. Improve monitoring and supervision	Monitoring and evaluation has been improved at all levels. There are regular visits to lower levels to assess and guide programme implementation
3. Strengthen the uptake of immunization services in the 2nd Year of Life	The GHS is partnering with CDC and CSO in creating demand for services in the 2YL as well as build capacity of staff in identifying and tracing defaulters
4. Polio Eradication Transition Plan	Preliminary discussions have been held and technical working group has been put up. The Plan will be ready by 4th Quarter 2017
5. Men A Vaccine Introduction	Men A has been introduced nationwide. This was done in November 2016
6. Yellow Fever Preventive Campaign	The campaign could not be conducted because of the global shortage of vaccines. The country will adjust the target and submit to Gavi for approval. The campaign will be conducted in 2018.
7. Establish congenital rubella syndrome surveillance	The CRS surveillance has been established in four sentinel sites in the country
8. Strengthen measles and rubella elimination surveillance and vaccine safety monitoring	Efforts have been made to strengthen VPD surveillance in the country including measles and rubella diseases. Trainings have been conducted at all levels. Safety monitoring trainings have also been carried out across the country as part of MLM training.
Middle level management capacity building	Middle level managers across the country are being taken through WHO-MLM training modules to build their managerial skills
Conduct Cold Chain Inventory	Ghana conducted cold chain equipment inventory in the 1st Quarter of 2017. The assessment showed that about 45% of facilities providing immunization services do not have cold chain equipment. Plans will be made in the country's CCEOP to supply equipment to all identified facilities

[13] Refer to the section "Prioritised Country Needs" in last year's Joint Appraisal report

Establishment of National Immunization Technical Advisory Group (NITAG)	The process of establishing NITAG started in 2014. All documentations have been completed including stakeholder mapping. However, the process was stalled due to change of government. Currently, the new administration has taken it up and will be inaugurated before the end of 2017.
Additional significant IRC / HLRP recommendations (if applicable)	**Current status**

If findings have not been addressed and/or related actions have not taken place, provide a brief explanation and clarify whether this is being priorities in the new action plan (section 6 below).

6. ACTION PLAN: SUMMARY OF FINDINGS, ACTIONS AND TECHNICAL ASSISTANCE NEEDS IDENTIFIED AND AGREED DURING THE JOINT APPRAISAL

*Briefly outline the **key activities to be implemented next year** with Gavi grant support.*

*In the context of these planned activities and based on the analysis provided in the above sections, describe the five **highest priority findings and actions to be undertaken to enhance the impact of Gavi support**, indicating timelines and Technical Assistance needs.*

Please indicate if any modifications to Gavi support are being requested, such as:

5 *Changes to country targets as established earlier, either from the agreed Grant Performance Framework (GPF) or as part of the NVS renewal request submitted by 15 May;*
6 *Plans to change any vaccine presentation or type;*
7 *Plans to use available flexibilities to reallocate budgeted funds to focus on identified priority areas.*

Note: When specifying Technical Assistance needs, do not include elements of resource requirements. These will be discussed in the context of the Targeted Country Assistance (TCA) planning, which will be informed by the needs indicated here.

Overview of key activities planned for the next year:

The Service will procure the needed cold chain equipment to support service delivery including refrigerators, Freezers, Cold boxes, Vaccine Carriers, Fibre boats for the riverine areas, voltage stabilizers for refrigeration equipment, spare parts for cold chain equipment maintenance. Funds will be transferred to the Districts and sub districts to undertake their outreach activities as well as the celebration of the annual child health promotion week.

The funds earmarked for the rehabilitation of the Regional medical stores will be reallocated to renovate the storerooms for EPI logistics and offices for the EPI programme.

Health Management Information systems will continue to be strengthened through the provision of technical support and orientation of district and sub district staff.

Financial management also strengthened through the quarterly technical and financial data validation at districts and sub-district levels.

The overall health sector monitoring and evaluation, which takes place at all levels, will also be strengthened with funding support for annual sector performance reviews and overall monitoring of the health sector medium term development plan.

The funds for programme management will cater for the annual Joint Appraisals and progress reporting, Inter Agency Coordinating Committee Meetings (ICC) and other Gavi related programmatic meetings.

Reallocation of HSS Funds:
Ghana is one year behind the implementation of the Gavi Health Systems Strengthening support. In the quest to catch up on initial work plan and to ensure that the HSS funds are implemented over the five-year period, the Service is requesting for the 2016 and 2017 (Year three and four) funds to be disbursed in one tranche totalling USD 6,879,650.

Ghana is first of all requesting for the reallocation of the HSS funds to pay for the co-financing component of the Gavi Cold Chain Optimization platform application amounting to 50% of the total cost for the purchase of the cold chain equipment.

Secondly, Ghana is also requesting for a reallocation of these funds to cater for the critical need to procure vehicles and motorbikes to bridge the gaps and improve geographical access to service delivery especially at the peripheral levels. This will help to boast coverage and ensure continuous outreach and aid the country in primary health care efforts as the Service seeks to increase and maintain the immunization coverage for all childhood antigens to 95% and above. An assessment of the motorbike needs across the country is 4,000 hence an average need of 350 to 400 motorbikes per Region. 240 pickups will also be procured and each 216 district will be provided with one pickup. For the remaining 24 pickups, each of the ten Regions will be provided with 2 pickups and the remaining 4 will be maintained at the national level for monitoring and supportive supervision.

Key finding 1	Inadequate cold chain storage capacity at national, districts and health facilities
Agreed country actions	Rehabilitate the national cold chain infrastructure
Associated timeline	June – Dec 2017
Technical assistance needs	Yes. Preparation of the Cold Chain Application
Key finding 2	Weak immunisation data management and use for decision making
Agreed country actions	Implement the immunisation data improvement plan
Associated timeline	September–December 2017
Technical assistance needs	Yes
Key finding 3	Inequitable vaccination coverage
Agreed country actions	Implement strategies to improve coverage in urban and peri-urban areas Use Geographic Information System to identify areas of low coverage for intervention.
Associated timeline	September – December 2017
Technical assistance needs	Yes
Key finding 4	Low uptake of vaccines in the second year of life
Agreed country actions	Build capacity of staff and establish a system for tracking children beyond one year at the facility and community levels

Associated timeline	Jan-Dec 2017
Technical assistance needs	Yes
Key finding 5	Insufficient demand creation for Routine Immunisation
Agreed country actions	Improve advocacy, communication, social mobilisation and home visit
Associated timeline	Jan – Dec 2017
Technical assistance needs	Yes. Communication materials development
Key finding 6	Weak monitoring and supervision at the district and sub-district levels
Agreed country actions	Conduct supervision at all levels
Associated timeline	Quarterly
Technical assistance needs	No
Key finding 7	Inadequate in-service training on immunisation in practice for mid-level managers and frontline workers
Agreed country actions	Conduct EPI Mid-Level managers' training. Support Pre-service health training institutions to revise the EPI curriculum
Associated timeline	June – December 2018
Technical assistance needs	Yes
Key finding 8	**Weak systems to monitor the impact of Pneumoccocal and Meningococcal conjugate vaccines**
Agreed country actions	Conduct pneumococcal and meningococcal carriage studies
Associated timeline	January-December 2018
Technical assistance needs	Yes: Protocol preparation, training and lab support
Key finding 9	Delayed accelerated control of Yellow Fever preventive campaign
Agreed country actions	Review the 2015 application and prepare a new application for the remaining districts.
Associated timeline	August- September 2017
Technical assistance needs	Yes: Application preparation and submission
Key finding 10	Increase numbers of susceptible persons for measles over the four years
Agreed country actions	Prepare towards the Measles rubella SIA

Associated timeline	Jan – December 2017
Technical assistance needs	Yes: Application preparation and submission
Key finding 11	Inadequate AEFI reporting: less than the recommended 10 reports per 100,000 surviving infant
Agreed country actions	Improve AEFI system
Associated timeline	Jan –Dec 2017
Technical assistance needs	Yes: Revision of AEFI Guidelines; Preparation of AEFI job aids; Refresher training on Causality Assessment; Simulation exercise on AEFI investigations and risk communication.

7. JOINT APPRAISAL PROCESS, ENDORSEMENT BY THE NATIONAL COORDINATION FORUM (ICC, HSCC OR EQUIVALENT) AND ADDITIONAL COMMENTS

Briefly describe how the Joint Appraisal was reviewed, discussed and endorsed by the relevant national Coordination Forum (ICC, HSCC or equivalent), including key discussion points, attendees, key recommendations and decisions, and whether the quorum was met. Alternatively, share the meeting minutes outlining these points.

If applicable, provide any additional comments from the Ministry of Health, Gavi Alliance partners, or other stakeholders.

8. ANNEX

Compliance with Gavi reporting requirements

Please confirm the status of reporting to Gavi, indicating whether the following reports have been uploaded onto the Country Portal.

It is important to note that delayed reporting may impact the decision by Gavi to renew its support.

	Yes	No	Not applicable
Grant Performance Framework (GPF) reporting against all due indicators			
Financial Reports			
Periodic financial reports	Yes		
Annual financial statement	Yes		
Annual financial audit report	Yes		
End of year stock level report			
Campaign reports			
Immunisation financing and expenditure information			
Data quality and survey reporting			
Annual desk review			
Data quality improvement plan (DQIP)			
If yes to DQIP, reporting on progress against it			
In-depth data assessment (conducted in the last five years)			
Nationally representative coverage survey (conducted in the last five years)			
Annual progress update on the Effective Vaccine Management (EVM) improvement plan			
Post Introduction Evaluation (PIE)			
Measles-rubella 5 year plan			
Operational plan for the immunisation program			
HSS end of grant evaluation report			
HPV specific reports			
Transition Plan			

In case any of the required reporting documents is not available at the time of the Joint Appraisal, provide information when the missing document/information will be provided.

Appendix….

Gavi HSS 2 Year 1 Financial Report as at 31-12-16

Activity Code	Activity name and description	Budget In USD	Actual In USD	% Utilization
OBJ 1	**To strengthen and scale-up community health interventions aimed at improving access and quality of primary health care services**	**2,715,700**	**2,386,602**	114%
1.1	Procure cold chain equipment to support service delivery_300 refrigerators	400,000	400,000	100%
1.2	Procure cold chain equipment to support service delivery _100 Freezers	200,000	200,000	100%
1.3	Procure cold chain equipment to support service delivery_1000 Cold Boxes	185,200	185,200	100%
1.4	Procure cold chain equipment to support service delivery 5000 Vaccine Carriers	26,000	19,526	133%
1.5	Procure cold chain equipment to support service delivery_Temparature Monitoring Devices (1150 Fridge Tags, 20 Continuous Temp. Monitoring Device)	150,000	150,000	100%
1.6	Procure Motorbikes to support service delivery (100 Motor Bikes)	1,200,000	881,398	136%
1.7	Procure Boats to support service delivery (2 Fibre Boats)	-	-	
1.8	Procure Vehicles to support service delivery _7 (4X4) Pick UPS, 1 trekking vehicle and 2 saloons	-	-	
1.9	Procure needed logistics to support service delivery_14 Tool Kits for Regional and National Cold Chain Technicians	20,000	20,000	100%
1.1	Procure Voltage stabilizers for refrigeration equipment (500 Voltage Stablizersfor refrigeration equipment)	-	-	
1.11	Procure Generators for regional and national cold rooms _3 Genrators for Regional and National Walk in Cold Rooms)	-	-	
1.12	Procure Spare Parts for cold chain equipment maintenance	-	-	
1.13	Procure Public Address Systems (PA system) to support service delivery _120Public Address Systems)	-	-	
1.14	Procure needed logistics to support service delivery_Printing of 15000 Tally Books	20,000	20,000	100%
1.15	Procure needed logistics to support service delivery_ 6000 Vaccine Ledger	8,000	8,000	100%
1.16	Procure needed logistics to support service delivery_Printing of 300,000 Child Health Record Books	-	-	
1.17	Procure needed logistics to support service delivery_Printing 250000 Immunisation Montiring Charts	2,500	-	
1.18	Construction 50 Incinerators	-	-	
1.19	Renovation of Incinerators 100 Incinerators	-	-	
1.2	Conduct Training in Waste Management for staff	-	-	
1.21	Funds to support subdistrict health teams (including CHOs) to undertake outreach activities	234,000	234,000	100%
1.22	Support National, Regional, district health teams to conduct supervision and monitoring	60,000	59,909	100%

1.23	Condict cold chain inventory	-	-	
1.24	Conduct quarterly EPI review meeting	-	-	
1.25	Procure computers for data management	-	-	
1.26	Conduct Training in MLM for EPI Staff,	-	-	
1.27	Build capacity of Regional EPI Cold chain Technicians	-	-	
1.28	Training CHOs in Cold Chain Management	90,000	90,000	100%
1.29	Upgrade eRegister to include GIS and expand its coverage to include other childhood illness and maternal health	50,000	49,894	100%
	Strengthen Institutional clinical governance and information	50,000	49,851	100%
1.3	Conduct Child Health Promotion Week	20,000	18,824	106%
	To strengthen health worker capacity and distribution so as to address equity issues at the district level	**200,000**	**200,000**	100%
2.1	Develop PBF tools and manual for management	100,000	100,000	100%
2.2	Funds for performance based financing for deprived and low performing districts	100,000	100,000	100%
2.3	Training of CHOs and SDHMT in management	-	-	
	To improve storage distribution and management of logistics and ensure the availability of potent, quality and safe vaccines, medicines and devices	**100,000**	**77,125**	130%
3.1	Supply Chain Management training for managers at all levels	-	-	
3.2	Strengthen LMIS at regional and district hospitals and link with RMS	100,000	77,125	130%
3.3	Rehabilitation of Regional Medical Stores in Volta Region	-	-	
	To strengthen governance and health information management for improved health service delivery	**1,068,000**	**1,057,648**	101%
5.1	Strengthen planning systems at the subdistrict level	-	-	
5.2	Upgrade DVD-MT and integrated with DHIMS11	20,000	20,000	100%
5.3	Upgrade FMIS and integrate with DHIMS 11	20,000	19,859	101%
5.4	Upgrade LMIS and integrate with DHIMS 11	50,000	49,504	101%
5.5	Orientation of district and subdistrict staff in HMIS	-	-	
5.6	Support quarterly technical and financial data validation at districts and sub-district levels	30,000	30,000	100%
5.7	Support operational research and document of best practices in general and particularly in immunisation	-	-	
5.8	Develop sub district micro-plans	200,000	200,116	100%
	Coordinate planning - MoH	43,000	43,000	100%
5.9	Provide technical support for the use of upgraded management information system at sub district level.	-	-	
5.1	Build capacity in planning, project management, monitoring and evaluation at national level	-	-	
5.11	Organise and coordinate standardised training programme for district and subdistrict health teams and technical managers	30,000	27,135	111%
	Monitor HR training and capacity building programmes	25,000	18,735	133%
5.12	Develop health account	100,000	99,348	101%
5.13	Support GHS and other providers in joint annual sector performance review.	-	-	

5.14	Support overall MTDP monitoring and evaluation of the MoH and joint annual sector reviews with partners sector at MoH level MoH	50,000	50,000	100%
5.15	Review and revise existing records management information system (manual and electronic) and expand the use of the hospital electronic information software	-	-	
5.16	Conduct Service Availability and Readiness Assessment survey (SARA) MoH	200,000	200,000	100%
5.17	Conduct EPI cluster survey	250,000	250,000	100%
5.18	Evaluation of HSS grant MoH	-	-	
5.19	Programme management	50,000	49,950	100%
	TOTAL	**4,083,700**	**3,721,375**	110%
CIVIL SOCIETY ORGANISATION		**USD($) REPORTING**		
	To empower civil society for increased demand creation for health service at the community level	**Budget In USD**	**Actual In USD**	
4.1	Quarterly Monitoring of CSO activities by National Secretariat	-	-	
4.2	Organise annual CSO Health Forum	8,000	8,000	100%
4.3	Coordination of CSOs by National Secretariat	20,000	20,041	100%
4.4	Train implementating NGOs in project management, community entry, mobilisation and reporting	5,200	5,200	100%
4.5	Sensitise comunity leaders and men on importance of immmunisation and to support their families.	10,000	10,303	97%
4.6	Partner District Assemblies, DHMTs, Womens' Groups and Traditional Leaders to identify and select satellite points implementation	3,000	3,000	100%
4.7	Provide logistical supports to satellite activities	-	-	
4.8	Provide resources to support volunteers' activities at satellite sites and community levels	18,000	18,000	100%
4.9	CSOs to participate in Regional and DHMT quarterly and annual review meetings	-	-	
4.1	Support CSO to participate in NIDs and other immunisation campaigns	10,000	11,109	90%
4.11	CSOs Regional and District Coordination activities		-	
4.12	Contract retired/private midwives and private community health nurses to support project implementation	-	-	
4.13	Provide logistical support to trained retired/private midwives and private community health nurses to support project implementation	8,000	8,000	100%
4.14	To carry out quarterly community outreach activities	22,500	23,182	97%
4.15	Engage in quarterly community durbars, advocacy activities	18,000	18,545	97%
4.16	Develop IEC materials to support community level activities	20,000	16,129	124%
4.17	Conduct quarterly review meetings with Traditional leaders and community volunteers	3,000	3,091	97%

4.18	Identify and train traditional leaders as immunisation advocates at community levels	-	-	
4.19	CSOs at peripheral levels undertake quarterly monitoring activities	15,000	15,455	97%
4.2	Procure Vehicles to support CSOs activities at national and also for established satellite sites 3 (4x4) Pick Ups	-	-	
4.21	Support vehicle running activities	5,000	5,645	89%
4.22	Provide logistics for CSOs satellite sites and community level activities	50,000	50,000	100%
	TOTAL	**215,700**	**215,700**	100%

Gavi HSS 2 Year 1 Financial Report as at 30-06-17

Activity Code	Activity name and description	Activity cost ($)	Activity Actual ($)	% Utilization
OBJ 1	**To strengthen and scale-up community health interventions aimed at improving access and quality of primary health care services**	**2,715,700**	**2,739,543**	**99%**
1.1	Procure cold chain equipment to support service delivery_300 refrigerators	400,000	400,000	**100%**
1.2	Procure cold chain equipment to support service delivery _100 Freezers	200,000	200,000	**100%**
1.3	Procure cold chain equipment to support service delivery_1000 Cold Boxes	185,200	185,200	**100%**
1.4	Procure cold chain equipment to support service delivery 5000 Vaccine Carriers	26,000	19,526	**133%**
1.5	Procure cold chain equipment to support service delivery –Temparature Monitoring Devices (1150 Fridge Tags, 20 Continuous Temp. Monitoring Device)	150,000	150,000	**100%**
1.6	Procure Motorbikes to support service delivery (100 Motor Bikes)	1,200,000	1,234,339	**97%**
1.7	Procure Boats to support service delivery (2 Fibre Boats)	-	-	
1.8	Procure Vehicles to support service delivery _7 (4X4) Pick UPS, 1 trekking vehicle and 2 saloons	-	-	
1.9	Procure needed logistics to support service delivery_14 Tool Kits for Regional and National Cold Chain Technicians	20,000	20,000	**100%**
1.1	Procure Voltage stabilizers for refrigeration equipment (500 Voltage Stablizersfor refrigeration equipment)	-	-	
1.11	Procure Generators for regional and national cold rooms _3 Genrators for Regional and National Walk in Cold Rooms)	-	-	
1.12	Procure Spare Parts for cold chain equipment maintenance	-	-	
1.13	Procure Public Address Systems (PA system) to support service delivery _120Public Address Systems)	-	-	
1.14	Procure needed logistics to support service delivery_Printing of 15000 Tally Books	20,000	20,000	**100%**
1.15	Procure needed logistics to support service delivery_ 6000 Vaccine Ledger	8,000	8,000	**100%**

1.16	Procure needed logistics to support service delivery_Printing of 300,000 Child Health Record Books	-	-	
1.17	Procure needed logistics to support service delivery_Printing 250000 Immunisation Montiring Charts	2,500	-	
1.18	Construction 50 Incinerators	-	-	
1.19	Renovation of Incinerators 100 Incinerators	-	-	
1.2	Conduct Training in Waste Management for staff	-	-	
1.21	Funds to support subdistrict health teams (including CHOs) to undertake outreach activities	234,000	234,000	**100%**
1.22	Support National, Regional, district health teams to conduct supervision and monitoring	60,000	59,909	**100%**
1.23	Condict cold chain inventory	-	-	
1.24	Conduct quarterly EPI review meeting	-	-	
1.25	Procure computers for data management	-	-	
1.26	Conduct Training in MLM for EPI Staff,	-	-	
1.27	Build capacity of Regional EPI Cold chain Technicians	-	-	
1.28	Training CHOs in Cold Chain Management	90,000	90,000	**100%**
1.29	Upgrade eRegister to include GIS and expand its coverage to include other childhood illness and maternal health	50,000	49,894	**100%**
	Strengthen Institutional clinical governance and information	50,000	49,851	**100%**
1.3	Conduct Child Health Promotion Week	20,000	18,824	**106%**
	To strengthen health worker capacity and distribution so as to address equity issues at the district level	**200,000**	**200,000**	**100%**
2.1	Develop PBF tools and manual for management	100,000	100,000	**100%**
2.2	Funds for performance based financing for deprived and low performing districts	100,000	100,000	**100%**
2.3	Training of CHOs and SDHMT in management	-	-	
	To improve storage distribution and management of logistics and ensure the availability of potent, quality and safe vaccines, medicines and devices	**100,000**	**99,992**	**100%**
3.1	Supply Chain Management training for managers at all levels	-	-	
3.2	Strengthen LMIS at regional and district hospitals and link with RMS	100,000	99,992	**100%**
3.3	Rehabilitation of Regional Medical Stores in Volta Region	-	-	
	To strengthen governance and health information management for improved health service delivery	**1,068,000**	**1,066,619**	**100%**
5.1	Strengthen planning systems at the subdistrict level	-	-	
5.2	Upgrade DVD-MT and integrated with DHIMS11	20,000	20,000	**100%**
5.3	Upgrade FMIS and integrate with DHIMS 11	20,000	19,859	**101%**
5.4	Upgrade LMIS and integrate with DHIMS 11	50,000	49,504	**101%**
5.5	Orientation of district and subdistrict staff in HMIS	-	-	
5.6	Support quarterly technical and financial data validation at districts and sub-district levels	30,000	30,000	**100%**

5.7	Support operational research and document of best practices in general and particularly in immunisation	-	-	
5.8	Develop sub district micro-plans	200,000	200,116	**100%**
	Cordinate planning - MoH	43,000	43,000	**100%**
5.9	Provide technical support for the use of upgraded management information system at sub district level.	-	-	
5.1	Build capacity in planning, project management, monitoring and evaluation at national level	-	-	
5.11	Organise and coordinate standardised training programme for district and subdistrict health teams and technical managers	30,000	29,841	**101%**
	Monitor HR training and capacity building programmes	25,000	25,000	**100%**
5.12	Develop health account	100,000	99,348	**101%**
5.13	Support GHS and other providers in joint annual sector performance review.	-	-	
5.14	Support overall MTDP monitoring and evaluation of the MoH and joint annual sector reviews with partners sector at MoH level MoH	50,000	50,000	**100%**
5.15	Review and revise existing records management information system (manual and electronic) and expand the use of the hospital electronic information software	-	-	**#VALUE!**
5.16	Conduct Service Availability and Readiness Assessment survey (SARA) MoH	200,000	200,000	**100%**
5.17	Conduct EPI cluster survey	250,000	250,000	**100%**
5.18	Evaluation of HSS grant MoH	-	-	
5.19	Programme management	50,000	49,950	**100%**
	Total	**4,083,700**	**4,106,154**	**99%**
CIVIL SOCIETY ORGANISATION		**USD($) REPORTING**		
	To empower civil society for increased demand creation for health service at the community level	**Budget In USD**	**Actual In USD**	**Varaince In USD**
4.1	Quarterly Monitoring of CSO activities by National Secretariat	-	-	
4.2	Organise annual CSO Health Forum	8,000	8,000	100%
4.3	Coordination of CSOs by National Secretariat	20,000	20,041	100%
4.4	Train implementing NGOs in project management, community entry, mobilisation and reporting	5,200	5,200	100%
4.5	Sensitize community leaders and men on importance of immmunisation and to support their families.	10,000	10,303	97%
4.6	Partner District Assemblies, DHMTs, Womens' Groups and Traditional Leaders to identify and select satellite points implementation	3,000	3,000	100%
4.7	Provide logistical supports to satellite activities	-	-	#VALUE!

4.8	Provide resources to support volunteers' activities at satellite sites and community levels	18,000	18,000	100%
4.9	CSOs to participate in Regional and DHMT quarterly and annual review meetings	-	-	
4.1	Support CSO to participate in NIDs and other immunisation campaigns	10,000	11,109	90%
4.11	CSOs Regional and District Coordination activities		-	
4.12	Contract retired/private midwives and private community health nurses to support project implementation	-	-	
4.13	Provide logistical support to trained retired/private midwives and private community health nurses to support project implementation	8,000	8,000	100%
4.14	To carry out quarterly community outreach activities	22,500	23,182	97%
4.15	Engage in quarterly community durbars, advocacy activities	18,000	18,545	97%
4.16	Develop IEC materials to support community level activities	20,000	16,129	124%
4.17	Conduct quarterly review meetings with Traditional leaders and community volunteers	3,000	3,091	97%
4.18	Identify and train traditional leaders as immunisation advocates at community levels	-	-	
4.19	CSOs at peripheral levels undertake quarterly monitoring activities	15,000	15,455	97%
4.2	Procure Vehicles to support CSOs activities at national and also for established satellite sites 3 (4x4) Pick Ups	-	-	
4.21	Support vehicle running activities	5,000	5,645	89%
4.22	Provide logistics for CSOs satellite sites and community level activities	50,000	50,000	100%
	TOTAL	**215,700**	**215,700**	100%

Gavi HSS 1 Refund Financial Report

Obj / Activity Codes	DESCRIPTIONS	USD REPORTING		
		BUDGET (USD)	ACTUAL (USD)	VARIANCE (USD)
Obj. 1	**Strengthening District and sub-districts to support service provision**	**116,975**	**-**	**116,975**
Obj. 1.1	Strengthening management capacity in Leadership and Management	-	-	-
Activity 1.1	Equip national and regional in-service training units to improve in-service training programme by 2011			-
Activity 1.2	Train District Directors and Senior Managers in Leadership and Management			-
Activity 1.3	Train selected NGOs, RHMT AND DDHS in team building			-

Activity 1.4	Develop simplified Financial Management and procurement operational manual for sub-district, CHOs and NGOs			-
Activity 1.5	Train District, sub-district managers and CHO in procurement and Financial management			-
Obj. 1.2	Strengthen District Health Planning, Prioritization & Resource Allocation	-	-	-
Activity 1.2.1	Technical Assistance to update the DHA tools support DSS sites			-
Activity 1.2.2	Train senior managers including National, Regional and District Directors in the use of DHIP and DHA in for priority setting and decision making			-
Obj. 1.3	Strengthen support and supervision systems	**116,975**	-	**116,975**
Activity 1.3.1	Train Districts, sub-districts and NGOs in supportive supervision			-
Activity 1.3.2	Provide fuel and stationery to districts, sub-districts and NGOs to undertake supportive supervision	116,975	-	116,975
Obj. 2	**Expand functional CHPS coverage to deliver essential services especially for MDG 4 and 5**	-	-	-
Activity 2.1	Procure vehicles for Districts/Sub-districts			-
Activity 2.2	Procurement of service delivery kits for CHPS			-
Obj. 3	**Customise and integrate PDA data into existing health management information system**	-	-	-
Activity 3.1	Procure PDA for CHOs			-
Activity 3.2	Train CHOs in the use of PDA equipment			-
Activity 3.3	Customise and integrate PDA data into existing health management information system			-
Obj. 4	**Strengthening information management, M&E and operational and implementation research**	-	-	-
Activity 4.1	Undertake operational and implementation research			-
Activity 4.2	Support national and regional level M&E			-
Activity 4.3	Review and Evaluation of HSS support			-
TOTAL COST		**116,975**	-	**116,975**

Gavi HSS 2 Year 2 Financial Report as at 30-06-17

Ref №	Activity Code	Activity name and description	Activity cost ($)	Activity Actual ($)	% Utilization
	OBJ 1	**To strengthen and scale-up community health interventions aimed at improving**	**2,110,766**	**1,221,117**	58%

		access and quality of primary health care services			
1	1.1	Procure cold chain equipment to support service delivery_300 refrigerators	-	-	
2	1.2	Procure cold chain equipment to support service delivery _100 Freezers	-	-	
3	1.3	Procure cold chain equipment to support service delivery_1000 Cold Boxes	-	-	
4	1.4	Procure cold chain equipment to support service delivery 5000 Vaccine Carriers	-	-	
5	1.5	Procure cold chain equipment to support service delivery_Temparature Monitoring Devices (1150 Fridge Tags, 20 Continuous Temp. Monitoring Device)	-	-	
6	1.6	Procure Motorbikes to support service delivery (100 Motor Bikes)	-	-	
7	1.7	Procure Boats to support service delivery (2 Fibre Boats)	-	-	
8	1.8	Procure Vehicles to support service delivery _7 (4X4) Pick UPS, 1 trekking vehicle and 2 saloons	435,000	409,328	94%
9	1.9	Procure needed logistics to support service delivery_14 Tool Kits for Regional and National Cold Chain Technicians	-	-	
10	1.1	Procure Voltage stabilizers for refrigeration equipment (500 Voltage Stabilizers for refrigeration equipment)	15,000	-	
11	1.11	Procure Generators for regional and national cold rooms _3 Generators for Regional and National Walk in Cold Rooms)	150,000	271	0%
12	1.12	Procure Spare Parts for cold chain equipment maintenance	170,000	170,000	100%
13	1.13	Procure Public Address Systems (PA system) to support service delivery _120Public Address Systems)	24,000	-	
14	1.14	Procure needed logistics to support service delivery_Printing of 15000 Tally Books	-	-	
15	1.15	Procure needed logistics to support service delivery_ 6000 Vaccine Ledger	-	-	
16	1.16	Procure needed logistics to support service delivery_Printing of 300,000 Child Health Record Books	-	-	
17	1.17	Procure needed logistics to support service delivery_Printing 250000 Immunisation Monitoring Charts	2,500	-	
18	1.18	Construction 25 Incinerators	200,000	-	
	1.18b	Procurement of cold chain equipment	80,000		0%
	1.18c	Construction of regional cold room	120,000		0%
19	1.19	Renovation of Incinerators 100 Incinerators	80,000	-	
20	1.2	Conduct Training in Waste Management for staff	-	-	
	1.21	Funds to support sub district health teams (including CHOs) to undertake outreach activities	68,000	67,823	100%

22	1.22	Support National, Regional, district health teams to conduct supervision and monitoring	129,600	96,626	75%
23	1.23	Conduct cold chain inventory	172,800	150,718	87%
24	1.24	Conduct quarterly EPI review meeting	60,000	27,381	46%
25	1.25	Procure computers for data management	-	-	
26	1.26	Conduct Training in MLM for EPI Staff,	-	-	
27	1.27	Build capacity of Regional EPI Cold chain Technicians	42,616	42,616	100%
28	1.28	Training CHOs in Cold Chain Management	341,250	236,354	69%
29	1.29	Upgrade eRegister to include GIS and expand its coverage to include other childhood illness and maternal health	-	-	
		Strengthen Institutional clinical governance and information		-	
30	1.3	Conduct Child Health Promotion/ Africa Vaccination Week	20,000	20,000	100%
OBJ 2		**To strengthen health worker capacity and distribution so as to address equity issues at the district level**	**38,500**	**27,688**	72%
31	2.1	Develop PBF tools and manual for management	-	-	
32	2.2	Funds for performance based financing for deprived and low performing districts	25,000	14,528	58%
33	2.3	Training of CHOs and SDHMT in management	13,500	13,160	97%
OBJ 3		**To improve storage distribution and management of logistics and ensure the availability of potent, quality and safe vaccines, medicines and devices**	**50,000**	**27,810**	56%
34	3.1	Supply Chain Management training for managers at all levels	50,000	27,810	56%
35	3.2	Strengthen LMIS at regional and district hospitals and link with RMS	-	-	
36	3.3	Rehabilitation of Regional Medical Stores in Volta Region	-	-	
OBJ 5		**To strengthen governance and health information management for improved health service delivery**	**815,980**	**571,867**	70%
59	5.1	Strengthen planning systems at the sub district level	50,000	16,724	33%
60	5.2	Upgrade DVD-MT and integrated with DHIMS11	77,480	28,696	37%
61	5.3	Upgrade FMIS and integrate with DHIMS 11	30,000	29,551	99%
62	5.4	Upgrade LMIS and integrate with DHIMS 11	-	-	
63	5.5	Orientation of district and sub district staff in HMIS	36,000	35,668	99%
64	5.6	Support quarterly technical and financial data validation at districts and sub-district levels	42,000	41,979	100%
65	5.7	Support operational research and document of best practices in general and particularly in immunization	50,000	26,306	53%
66	5.8	Develop sub district micro-plans	162,000	94,921	59%

67	5.9	Provide technical support for the use of upgraded management information system at sub district level.	6,000	6,285	105%
68	5.1	Build capacity in planning, project management, monitoring and evaluation at national level	40,000	25,844	65%
69	5.11	Organize and coordinate standardized training programme for district and sub district health teams and technical managers	-	-	
		Monitor HR training and capacity building programmes		-	
70	5.12	Develop health account	100,000	100,000	100%
71	5.13	Support GHS and other providers in joint annual sector performance review.	40,000	28,908	72%
72	5.14a	Support overall MTDP monitoring and evaluation of the MoH and joint annual sector reviews with partners sector at MoH level MoH	92,750	92,750	100%
	5.14b	Support overall MTDP monitoring and evaluation of the MoH and joint annual sector reviews with partners sector at MoH level GHS	39,750		0%
73	5.15	Review and revise existing records management information system (manual and electronic) and expand the use of the hospital electronic information software	-	-	
74	5.16	Conduct Service Availability and Readiness Assessment survey (SARA) MoH	-	-	
75	5.17	Conduct EPI cluster survey	-	-	
76	5.18	Evaluation of HSS grant MoH	-	-	
77	5.19	Programme management	50,000	44,235	88%

Advance to the Civil Society Organisation

Gavi HSS 2 Year 2 Financial Report as at 30-06-17 _ CSO

GAVI HSS 2 YEAR TWO FINANCIAL STATUS REPORT AS AT 30/06/17					
Ref №	**Activity Code**	**Activity name and description**	**Activity cost ($)**	**Activity Actual ($)**	% Utilization
OBJ 4		**To empower civil society for increased demand creation for health service at the community level**	**424,850**	**254,910**	60%
37	4.1	Quarterly Monitoring of CSO activities by National Secretariat	18,000	10,800	60%
38	4.2	Organize annual CSO Health Forum	8,000	4,800	60%
39	4.3	Coordination of CSOs by National Secretariat	20,000	12,000	60%
40	4.4	Train implementing NGOs in project management, community entry, mobilization and reporting	14,000	8,400	60%
41	4.5	Sensitize community leaders and men on importance of immunization and to support their families.	20,000	12,000	60%

42	4.6	Partner District Assemblies, DHMTs, Womens' Groups and Traditional Leaders to identify and select satellite points implementation	3,000	1,800	60%
43	4.7	Provide logistical supports to satellite activities	24,000	14,400	60%
44	4.8	Provide resources to support volunteers' activities at satellite sites and community levels	36,000	21,600	60%
45	4.9	CSOs to participate in Regional and DHMT quarterly and annual review meetings	18,750	11,250	60%
46	4.1	Support CSO to participate in NIDs and other immunization campaigns	10,000	6,000	60%
47	4.11	CSOs Regional and District Coordination activities	35,000	21,000	60%
48	4.12	Contract retired/private midwives and private community health nurses to support project implementation	4,000	2,400	60%
49	4.13	Provide logistical support to trained retired/private midwives and private community health nurses to support project implementation	16,000	9,600	60%
50	4.14	To carry out quarterly community outreach activities	45,000	27,000	60%
51	4.15	Engage in quarterly community durbars, advocacy activities	36,000	21,600	60%
52	4.16	Develop IEC materials to support community level activities	15,000	9,000	60%
53	4.17	Conduct quarterly review meetings with Traditional leaders and community volunteers	12,000	7,200	60%
54	4.18	Identify and train traditional leaders as immunization advocates at community levels	5,100	3,060	60%
55	4.19	CSOs at peripheral levels undertake quarterly monitoring activities	30,000	18,000	60%
56	4.2	Procure Vehicles to support CSOs activities at national and also for established satellite sites 3 (4x4) Pick Ups	-	-	
57	4.21	Support vehicle running activities	5,000	3,000	60%
58	4.22	Provide logistics for CSOs satellite sites and community level activities	50,000	30,000	60%

3.1.3 Top ten (10) Districts with the highest numbers of unimmunized children using Penta3

Region	District	Nature	Surviving Infants	No. Vaccinated	Unimmunized
Western	Sekondi-Takoradi	Urban	25,781	13,611	12,170
Greater Accra	Accra	Urban	73,600	62,519	11,081
Volta	Ho	Urban	7,765	3,898	3,867
Central	Assin North	Rural	6,976	4,285	2,691
Ashanti	Asokore-Mampong	Urban	13,185	10,674	2,511
Western	Jomoro	Rural	6,910	4,645	2,265

Upper East	Kassena-Nankana	Rural	4,738	2,602	2,136
Greater Accra	Tema	Urban	12,580	10,646	1,934
Upper West	Wa East	Rural	4,594	2,728	1,866
Eastern	Asuogyaman	Rural	4,267	2,580	1,687