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APHIA*PLUS* IMARISHA PROJECT

MID TERM EVALUATION REPORT

A Maternal Shelter at the Kisima Model Health Facility in Samburu County

Donkey Ambulance Cart in use by the Griftu Support Group

A Sample of a Safe Motherhood Voucher

AUGUST 2015

This publication was produced by AMREF Health Africa as an obligatory requirement of the cooperative agreement by the United States Agency for International Development. It was prepared by AMREF Kenya

USAID KENYA APHIA*PLUS* IMARISHA

MID-TERM EVALUATION REPORT

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ACRONYMS

AIDS	Acquired Immuno-deficiency Syndrome
ANC	Antenatal Care
AMREF	African Medical Research Foundation
AOR	Agreement Officer Representative
ART	Antiretroviral Therapy
BCC	Behavior Change and Communication
CBTS	Community Based Treatment Support
CCC	Comprehensive care Clinic
CHEW	Community Health Extension Worker
CHMT	County Health Management Teams
CHS	Community Health Strategy
CHV	Community Health Volunteer
CME	Continuous Medical Education
COP	Chief of Party
CPR	Contraceptive Prevalence Rate
CRH	County Referral Hospital
CRS	Catholic Relief Services
CU	Community Unit
DHIS	District Health Information System
FBO	Faith Based Organization
FGD	Focused Group Discussion
FP	Family Planning
GoK	Government of Kenya
HCW	Health Care Worker
HIV	Human Immuno-deficiency Virus
HTC	HIV Testing and Counseling
ICC	Inter-agency Coordination Committees
KAIS	Kenya Aids Indicator Survey
KDHS	Kenya Demographic Health Survey
KII	Key Informant Interview
LIP	Local Implementing Partners
LOL	Land O' Lakes
MNCH	Maternal, Newborn ad Child Health
MOH	Ministry of Health
MOU	Memorandum of Understanding
MTE	Midterm Evaluation
NAL	Northern Arid Lands
OJT	On-Job-Training
OVC	Orphans and Vulnerable Children
PAC	Project Advisory Committee
PLHIV	People Living With HIV
PMTCT	Prevention of Mother to Child Transmission
RH	Reproductive Health
SBA	Skilled Birth Attendant
SCHSF	Sub-county Health Stakeholder Forum
SOP	Standard Operating Procedure
SOW	Scope of Work
TAC	Technical Advisory Committee
TB	Tuberculosis
TOT	Trainer of Trainers
USAID	United States Agency for International Development
VIP	Ventilated Improved Latrine
WASH	Water Sanitation and Hygiene
US	United States

EXECUTIVE SUMMARY

INTRODUCTION

AMREF Health Africa is pleased to present the *Mid-Term Evaluation Report* conducted between March – April, 2015 for the United States Agency for International Development (USAID) funded APHIA*plus* IMARISHA Project. APHIA*plus* IMARISHA project is implemented by AMREF in Kenya under USAID Award No: AID-623-A-12-00015. The project's prime implementing partner is AMREF Kenya and is supported by 3 other consortium partners that include Catholic Relief Services; Land O' Lakes and; the University of Maryland, Baltimore.

The Purpose of the Mid-Term Evaluation: The purpose of the midterm evaluation was to assess the progress of the APHIAplus IMARISHA project towards meeting its intended results and develop recommendations based on evaluation findings for project implementation through 2017.

Description of the Project Evaluated: APHIA*plus* IMARISHA project is a five-year (March 15, 2012 - March 14, 2017) USAID funded integrated health project to improve health outcomes and impact through sustainable country-led programs and partnerships in eight counties in Northern Arid Lands of Kenya. The goal of the project is to contribute to a sustained improvement of health and well-being for all Kenyans. The project supports integrated service delivery in technical areas of HIV/AIDS, Reproductive, Maternal, Newborn and Child Health, Family Planning, Tuberculosis and MNCH, plus selected interventions related to the social determinants of health comprising of Household Economic Strengthening ,Nutrition and Food Security, access to Water and Sanitation, education with emphasis on life skills, as well as care of Orphans and Vulnerable Children.

Health Situation in Kenya: The HIV prevalence in Kenyan is 5.6 percent and 71% of the population has been tested for HIV at least once in their lifetime; 55.7% of these reported being tested within the past 12 months for HIV and know of their HIV status. The contraceptive prevalence rate has increased steadily over the years from 27 percent in 1989 to 58 percent in 2014. Maternal mortality ratio of 400 is still very high despite the drop from 488 in 2009. The under-five mortality and infant mortality are 52 deaths per 1,000 births and 39 deaths per 1,000 births respectively. About two-third of children are fully vaccinated while 58 percent and 62 percent of women make at least four antenatal care visits and delivered with assistance of a skilled birth attendant respectively. About one-quarter of Kenyan children are stunted, while 4 percent are wasted. Exclusive breastfeeding among children younger than age 6 months is currently at 61 percent.

METHODOLOGY

Data Collection: Both quantitative and qualitative methods were used to answer the evaluation questions. The evaluation team collected data using desk review, content analysis, focus group discussions, key informant interviews and mini-surveys. The desk review and content analysis was used to retrieve meaningful information from key project documents. Focus group discussions and key informant interviews were conducted with project beneficiaries, technical management staff.

Sampling: Purposive sampling was used to select counties, health facilities and respondents for purposes of including each evaluation component in the data collection process.

Triangulation of findings:, Triangulation of information collected from different sources was done to augment the validity and reliability of evaluation findings.

Limitations of evaluation methods: The use of purposeful sampling strategy limited representativeness of respondents. Individual interviews were also subject to personal biases, opinions and recollection.

Data Analysis: The evaluation team applied both quantitative and qualitative data analysis techniques. Contribution Analysis: was used to reconstruct baseline and mid-term key project documents. Comparative analysis was used to determine the overall change in key quantitative indicators. Grounded theory analysis was used to build well-grounded body of evidence from the insights, perceptions and observations from the participants using NVivo *ver*. 10 for analysis on FGD/KIIs interview notes. Content and triangulation **a**nalysis was used to identify key thematic and categories for triangulation with evidence from the quantitative data and other sources of data.

EVALUATION FINDINGS

Effectiveness: Overall the performance of the project improved over the past three years for most of the indicators. By prioritizing high burden, high volume facilities, the project made significant strides in all indicators of HIV/AIDS and TB management, MNCH, RH/FP, Nutrition and WASH despite a slow start in the first year. So as to improve on delivery of quality health services in NAL, the project focused on mentorship of health care workers through multidisciplinary teams. To address the perennial human resource constraints in the region, the project supported task-shifting by working with certified lay counselors which improved HTC coverage and enrolled into care and treatment. Expert clients were also engaged to support treatment preparation, adherence and defaulter management at the CCC. Community health volunteers were also engaged to improve demand for MNCH, RH/FP and nutrition services at community level and facilitate referrals to the facilities for these services. To reduce risky sexual behaviors, youths and female sex workers were trained as peer educators on HIV risk factors, HIV prevention and referral for biomedical services using evidence based interventions. Despite the improved performance, defaulter tracing for HIV/AIDS and TB as well as MNCH/RH/FP services was found to be experiencing both operational and behavioral challenges.

Quality of Services: There was significant improvement in quality of services at the comprehensive care clinics and MCH clinics. The quality of service dimensions of waiting time including patient flow, availability of services and medicines, provider-client relationship, sharing of information and confidentiality did improve. Efforts to integrate RH/FP services within the MCH and the CCC were also noted and need to be strengthened. The improved quality of services was attributed to mentorship of health care workers, continuous medical education, task-shifting, lab networking, supply chain management and data management and reporting. However, lack of sufficient food and lack of disclosure by CCC clients was a major contributing factor to drug adherence.

Coordination and Partnerships: APHIA*plus* IMARISHA has MOUs and sub-agreements with all its key partners. They are re-negotiated and adjusted accordingly every year. The project has a functional Project Advisory Committee that meets quarterly to discuss and address emerging issues. The annual participatory planning process provides the opportunity to reflect and strategize. Funding for the Community Health Strategy (CHS) remains a challenge at community level as this is still heavily reliant on partners. The funding challenges led to high CHV attrition and de-motivation for those who decided to remain in the program.

Factors of Success: the key factors of success included: smooth and timely transition from previous partner, engagement of expert clients, engagement of community health volunteers to follow up on MNCH and RH/FP interventions, establishment and support of support groups for people living with HIV including linking them to economic strengthening initiatives, establishment of mother to mother support groups to improve child care and nutrition, implementing innovative approaches to improve access to services and, working in multi-disciplinary teams in providing technical assistance. The integration across the different service areas also provided a holistic approach to improving the health outcomes of the NAL communities

Obstacles to Success: the obstacles to success were mentioned as exorbitant cost of services in faith based organizations, human resource gaps, lack of inclusivity in decision-making at service delivery points, stigma and discrimination, food insecurity, poor health seeking behavior/conservative cultural behaviors, nomadic lifestyle of the community, social and gender inequalities, vastness of the project area, frequent bouts of insecurity as well as institutional and organizational challenges of transitioning to devolved system of government.

Sustainability: the ongoing sustainability measures include capacity strengthening of local implementing partners using organizational development systems strengthening tool; capacity strengthening of health care workers and develop a pool of master mentors/Trainer of Trainers within each service delivery component

RECOMMENDATIONS

The key recommendations made based on the findings include:

- Capacity strengthening of sub-CHMTs and CHMTs to systematically take over provision of technical assistance to health facilities, health care workers and local implementing partners for all service delivery areas so as to sustain the gains made by the project as part of the exit strategy.
- Adopt more adult learning methodologies to build capacity of CHV/expert clients and enhance their effectiveness at community level.
- Implement appropriate BCC strategies to address stigma and discrimination and enhance uptake of key interventions across the HIV/AIDS and TB, MNCH, RH/FP, Nutrition and WASH components
- Lobby with county governments to absorb some of the CHVs and expert clients and start budgeting for them.
- Mobilize, organize and train CHVs on IGAs and link them to the existing household economic strengthening and microfinance initiatives within as well as outside the project as a sustainability strategy.
- Strengthen support groups for people living with HIV, pregnant women and mothers with young children as well as OVC caregivers and continuing to link them to economic strengthening, food security and nutrition initiatives
- Advocacy to scale up some of the best practices and innovations like maternal shelters, *BOMA* model, container clinics, domiciliary midwives and re-orientation of Traditional Birth Attendants. The costings and the outcomes of these innovations should be documented and shared with the counties for their uptake and replication.
- Support the CHMTs to reinforce commodity security by: strengthening commodity delivery systems for all service delivery areas and by ensuring timely reporting of consumption data and proper ordering, receipt, storage, and use of commodities.
- Continue to use water as an entry point to the NAL communities and provide integrated WASH-MNCH/RH/FP-Nutrition-HIV services to create demand for and deliver holistic health service to the community.

- Map the counties of Garissa, Wajir and Mandera into secure and insecure areas and continue to implement activities in a targeted manner until that time when the security situation will improve.
- Agreement modifications to extend the time for submitting quarterly reports to 45 days after the end of the quarter.

CHAPTER ONE: INTRODUCTION

BACKGROUND

Health Situation in Kenya: The prevalence of HIV infection among Kenyan adults (men and women age 15-64) was 5.6 percent in 2012, representing a decline from the prevalence of 7.2 percent reported in 2007 (KAIS, 2012). Overall, 71% of the population has been tested for HIV at least once in their lifetime and 56% of them were tested within the past 12 months (*ibid).*

Contraceptive prevalence rate (CPR) in Kenya has increased steadily from 27 percent in 1989 to 58 percent in 2014 (KDHS, 2014). Twenty-two counties have a CPR above the national average (58 percent).Counties with the lowest CPR are predominantly from northern Kenya and include: Mandera and Wajir (2 percent each), Garissa (6 percent), Turkana (10 percent), and Marsabit (12 percent).

The under-five mortality and infant mortality is 52 deaths per 1,000 births and 39 deaths per 1,000 births respectively. The infant mortality rate has decreased from 52 in 2008-09 while the under-five mortality rate has decreased from 74 in 2008-09 (KDHS, 2014).

Overall, 68 percent of children are fully vaccinated with BCG, measles, pentavalent, polio, and pneumococcal vaccines. Regarding coverage for specific vaccines, 97 percent of children have received the BCG vaccine, 98 percent received the first pentavalent dose, 97 percent received the first polio dose (polio 1), and 94 percent received the first dose of pneumococcal vaccine and 87 percent children are vaccinated against measles. Key Maternal health indicators show that 58 percent of women make at least four antenatal visits and 62 percent of births are attended to by a skilled birth attendant.

About one-quarter (26 percent) of Kenyan children are stunted, while 8 percent are severely stunted. 4 percent of Kenyan children are wasted and 1 percent are severely wasted. Wasting is concentrated in the north: Garissa, Wajir, Mandera, Marsabit, Turkana, West Pokot, and Samburu. More than 11 percent of children are wasted in these counties, topping out at 23 percent in Turkana. Children younger than age 6 months who are exclusively breastfed has markedly increased from 32 percent in the 2008-09 KDHS to the current 61 percent.

Overview of the APHIAplus IMARISHA Project: APHIA*plus* IMARISHA project is a five-year (March 15, 2012 - March 14, 2017), $49,985,210 million cooperative agreement between the Government of Kenya and USAID. The project is tasked with improving health outcomes and impact through sustainable country-led programs and partnerships in eight counties in Northern Arid Lands (NAL) of Kenya. Each of the eight counties (Tana River, Garissa, Wajir, Mandera, Marsabit, Isiolo, Samburu and Turkana) presents a distinct health and development situation and the zone collectively covers 43 sub-counties. The common characteristics of the sub-counties are poor health indicators that are mostly far below national averages, poor transport infrastructure, harsh terrains, predominantly pastoralist cultures with nomadic lifestyles, high rates of both poverty and adult illiteracy and, insecurity. The APHIA*plus* IMARISHA project goal is to contribute to a sustained improvement of health and well-being for all Kenyans. Its strategic objective is improved health outcomes and impact through sustainable country-led programs and partnerships with specific focus on Result 3 and Result 4 (***Result 3:*** increased use of quality health services, products and information; ***Result 4:*** Social determinants of health addressed to improve the well-being of the community, especially marginalized, poor and underserved populations).

The project supports integrated service delivery in technical areas of HIV/AIDS, Reproductive, Maternal, Newborn and Child Health,, Family Planning, Tuberculosis plus selected interventions related to the social determinants of health comprising of Nutrition and Food Security, access to Water and Sanitation, education with emphasis on life skills as well as care of Orphans and Vulnerable Children. APHIA*plus* IMARISHA emphasizes service integration at all levels as a build-up to sustainability and all its planned activities are aligned with current GoK policies and strategies.

To enhance the achievement of its ambitious targets and deliverables, the project collaborates closely with GoK, development partners and stakeholders at different levels: inter-agency coordination committees (ICC) and technical working groups (TWG) at the national level; County Health Management Teams (SCHMTs) at county level; the Sub-county Health Stakeholder Forum (SCHSF) at the sub-county level; Facility Health Management Committees at the facility level and; Community Health Committees at the community level.

APHIAplus IMARISHA Project Partners: The project's prime implementing partner is AMREF Kenya and is supported by three sub-partners. The roles and responsibilities of sub-partners are summarized in Table below:

Table 1: Roles and Responsibilities of Partners

Partner	Roles
AMREF	- Increasing demand for and availability of an integrated package of quality high-impact interventions at facility and community level - Increasing access to WASH - Systems strengthening - Increasing adoption of healthy behaviours - Introducing and tracking innovative approaches used across NAL to increase project effectiveness and impact - CHMT and sub-CHMT capacity building strategy development and facilitation
University of Maryland	- Increasing availability of integrated, high quality and impactful interventions at facility level - Technical leadership in the development of the service delivery model for quality HIV and AIDS, TB, MNCH, FP/RH and malaria services
CRS	- Economic security initiatives for marginalised groups - Food security and nutrition for marginalized, poor and underserved populations - OVC support
Land O'Lakes	- Economic security initiatives focusing on pastoral communities - Improving food security and nutrition for underserved populations focusing on livestock value added chains

Table 2 below shows the number of APHIA*plus* IMARISHA supported health facilities by county while Table 3 presents the packages of support for supported facilities by priority level. The project supported 536 sites of which 103 were ART sites. 55 of the ART sites were directly supported with regular mentorship and on-the-job training. The other 48 facilities were being supported indirectly through the sub-county health management teams.

Table 2: Number of Facilities by County and Priority Level

Priority/County	Garissa	Isiolo	Mandera	Marsabit	Samburu	Tana River	Turkana	Wajir	Grand Total

Priority 1	8	1	8	4	8	5	2	7	43
Priority 2	23	5	11	13	10	14	4	24	104
Priority 3	66	35	41	61	41	38	41	66	389
Grand Total	**97**	**41**	**60**	**78**	**59**	**57**	**47**	**97**	**536**

Each facility received a package of support as detailed in Table 3 below. The specific strategies and approaches used to achieve our objectives are as elaborated below.

Table 3: Packages of Support for NAL Supported Facilities by Priority Level

Package of Support for Priority 1 facilities	Package of support for Priority 2 facilities	Package of support for Priority 3 facilities
Regular TA (OJT, CMEs) at least two weeks per quarter.	Regular TA (OJT, CMEs) at least one visit per quarter.	Support provided through mentorship and support supervision provided by CHMT and APHIAplus staff where feasible.
Establish Electronic Medical Records (EMR)	Establish EMR where possible	ART satellite sites linked to central sites for consistent supplies.
PMTCT integrated into MNCH services	PMTCT integrated into MNCH services	PMTCT integrated into MNCH services
Data quality Audits	Data quality Audits	Aim for 100% PITC and linkage to care
Lab supported / networked for effective diagnosis	Lab supported /networked for effective diagnosis	Lab supported /networked for effective diagnosis
PMTCT cohort analysis (8 County Hospitals in year3)	Service integration as per the MOH guidelines where feasible.	Link desk active, with clear chart of the supporting CUs.
Service integration as per MOH guidelines	Link desk active, with clear chart of the supporting CUs.	Provision of job aids, manuals, SOPs.
Link desk active, with clear chart of the supporting CUs.	Provision of job aids, manuals, SOPs	Staff benefit from CMEs and relevant trainings at level 1 and 2 sites
Provision of job aids, manuals, SOPs.	Outreaches to other facilities.	Some of the sites supported for integrated outreaches
Aim for 100% PITC and linkage to care		WASH and other R4 interventions visible within and around the surrounding community
Outreaches to other facilities.	WASH and other R4 interventions visible within and around the surrounding community	
WASH and other R4 interventions visible within and around the surrounding community		

EVALUATION PURPOSE

The USAID/Kenya Office of Population and Health (OPH) recommends that implementing mechanisms perform internal Mid-Term Evaluation (MTE) of their funded projects to: a) assess progress made toward achieving project objectives, targets and milestones; b) recommend modifications to project activities or priorities, as necessary, to address implementation issues, apply lessons learned, or capitalize on new opportunities; and c) identify relevant issues that require discussion and resolution at a level higher than the implementing mechanism.

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The purpose of the evaluation was to perform an internal mid-term evaluation to assess the progress of the APHIA*plus* IMARISHA project towards meeting its intended results. As stated in the evaluation scope of work (SOW), the evaluation team is required to provide information on project progress; to develop recommendations based on evaluation findings for project implementation through 2017; and to frame issues to debate, discuss, and resolve at a level higher than the project. The team is expected to guide the development of three to five key recommendations for every evaluation question that are well-thought out, action-oriented and practically possible to implement. Recommendations were to be based around thematic areas such as sustainability, promising strategies for scale up, management, coordination/collaboration and partnerships among other emerging areas.

To fulfill the evaluation purpose and address the evaluation questions, the team responded to all the questions that correspond to the required evaluation theme, which include the following: Effectiveness; Financing; Factors of Success; Obstacles to success; Sustainability; Beneficiary Relations; Linkages, Coordination, and Leveraging; Partnership; Performance Monitoring and; Management Systems within the Project;.

CHAPTER TWO: METHODOLODY

The evaluation team used both quantitative and qualitative methods to answer the questions under the evaluation themes required by the evaluation SOW.

Evaluation Team: The evaluation field team consisted of the Team Leader and multi-disciplinary team members drawn from AMREF and consortium partners. The team leader was the AMREF M&E Manager. The MTE team was divided in four small teams of four members each team being assigned one of the sampled counties.

DATA SOURCES

The evaluation team collected data using the following methods:

Desk Review: The evaluation team conducted an extensive desk review of data and reports from national surveys, MOH databases and APHIA*plus* IMARISHA reports for comparison of quantitative data achievements between baseline and midterm.

Content Analysis: The evaluation team conducted content analysis to retrieve meaningful information in the activity agreements, national program guidelines, annual work plans and implementation strategies developed in the course of activity implementation. The information was analyzed to determine the extent to which technical strategies and national policy/guidelines documents informed work plan development and implementation. It also included review of the key documents such as baseline assessment reports, quarterly and annual progress reports, and programmatic quality assessment reports.

Focus Group Discussions (FGD): The Research Assistants (RA) facilitated the following FGDs in each county that the team visited: FGDs with health facility beneficiaries (1 MNCH group and 1 CCC) from supported health facilities; FGDs with OVC Care Givers attached to each sampled Local Implementing Partner (LIP), FGDs with HIV prevention youth peer educators and, FGDs with

Community Health Volunteers (CHVs)/expert clients. These FGDs were facilitated using semi-structured focus group guidelines that are provided in *Annex 1*.

Key Informant Interviews (KII): The evaluation team conducted individual and group key informant interviews (KIIs) with Implementing partner technical staff; Health facility in-charges and departmental heads; County and sub-county health management team members, Project Advisory Committee (PAC) members and project technical staff. Please see Annex 2 for a full list of key informants. The total number of KIIs depended on how many people the evaluation team identified for follow up interviews to address emerging issues after FGDs.

Mini-surveys: The evaluation team conducted mini survey using a few set of specific questions in the form of a short quantitative questionnaire for every target group to collect data on knowledge, attitude and practices that directly answered priority outcome indicators and administered the questionnaire to project beneficiaries.

SAMPLING

Sampling: The evaluation team purposively selected counties to visit. To ensure that the breadth and depth of each evaluation component was included in the data collection process, different sampling strategies were used for different points of data collection as detailed below:

1) **County, sub-county, health center and dispensaries:** The sampling frame included all county referral hospitals, former provincial general hospitals, sub-county hospitals, high volume health centers/dispensaries (ANC/PMTCT clients between 300 - 1000+/year) and dispensaries (ANC/PMTCT clients 100 - 300+/year). All county referral hospitals and former provincial general hospitals were purposively included in the sample. The evaluation team stratified facilities in each county into sub-county hospitals, health centers and dispensaries. Given the time and available resources, the evaluation team randomly sampled one sub-county hospital from each county and then used systematic random sampling to sample two health facilities (health Centre/dispensary) from each county. Through this sampling process, the sample size covered between 10 – 50% of the high volume facilities. Because of the US Kenya Embassy travel restrictions to the Coast and North Eastern Kenya, health facilities in the four counties of Tana River in Coast and Garissa, Wajir and Mandera in North Eastern were not included in the sample frame.

Table 4: Number of Sampled Sites

APHIAplus IMARISHA Counties	**Total Facilities Selected by Counties**	**Sample Size = 11 (19%)**
Isiolo	4	25%
Turkana	3	14%
Marsabit	4	13%
Samburu	4	50%

2) The total number of sampled health facility beneficiaries ranged from 10 – 15 depending on the region and facility type. The evaluation team determined which sampling interval to use in systematic sampling of beneficiaries depending on the average number of patients that were expected to visit sampled facility on the day of the visit.

3) Local Implementing Partners (LIPs) supporting Orphans and Vulnerable Children (OVC) were purposively selected based on 1) total time the LIP has been working with APHIA*plus*

IMARISHA on OVC programing; 2) total number of OVC the LIP supports, 3) geographical location to ensure good representation of APHIA*plus* IMARISHA's geographic coverage..

4) Collaborating/partner institutions/county MOH program representatives were selected based on the length of time in months/years that they have closely worked with APHIA*plus* IMARISHA. Those that worked with APHIA*plus* IMARISHA for a period of more than 2 years were accorded high priority in the selection process. The evaluation team made determination on the level of efforts after consulting with APHIA*plus* IMARISHA Management team. Respondents from the collaborating/partner institutions were selected using a purposive sampling method guided by the potential number of key respondents with relevant knowledge about APHIA*plus* IMARISHA's performance on thematic areas of interest. The evaluation team used its own technical judgment on the right mix of respondents for Focus Group Discussions (FGD) and Key Informant Interviews (KII) sessions.

DATA COLLECTION AND ANALYSIS

The Research Assistants were trained by the evaluation team to verify these eligibility criteria of FGD participants before initiating discussion sessions. FGD participants were identified with assistance from facility staff as well as staff members from APHIA*plus* IMARISHA, the LIP management and CHMT. Research Assistants conducted discussions in the language preferred by the group/informants. FGDs/KIIs were recorded, and transcription made in English and sent to the MTE team for developing themes and coding. For open-ended questions similar responses were grouped under the same code. The grouped responses were entered in ENVivo *Ver 10* for analysis. FGD/KII results were not summarized statistically; the findings were used to describe where salient results emerged in response to close-ended questions.

Triangulation of findings: To assure the validity and reliability of evaluation findings, the evaluation design included triangulation of information collected from different sources (desk review, respondents from different levels of care in the four counties, and representatives of different stakeholder groups), methodological triangulation (application of different data collection methods), and triangulation of findings from different evaluation team members with different areas of expertise accumulated from AMREF and consortium partners. KII findings based on interviews conducted at health facilities were triangulated with focus group findings, based on discussions conducted at health facility and in the community.

LIMITATIONS OF EVALUATION METHODS

There are some limitations to the evaluation design. The team employed a purposeful sampling strategy for selecting counties and sites to visit, as well as FGD participants and key informants. Geographical accessibility was one of the criteria for the selection of counties in order to reach participating remote facilities within a reasonable travel time. This factor limited the representativeness of respondents, given that more accessible facilities tend to receive more support. The team triangulated information collected from the document review and data analysis from KIIs and FGDs. As these data sources were collected from individuals, information from interview data was subject to personal biases, opinions and recollection.

LIMITATIONS OF PROJECT IMPLEMENTATION

One of the key limitations faced by the project was the deterioration in the overall security situation in the NAL leading to a slowing or stoppage of planned activities in selected areas. The NAL region is a zone that is prone to various forms of insecurity ranging from banditry and lawlessness to ethnic conflicts and terrorist attacks.

- In Marsabit, Wajir, Mandera and Tana River Counties insecurity has been as a result of inter-clan fighting periodically making Moyale, north eastern parts of Wajir and north western parts of Mandera and Tana Delta inaccessible.
- In Samburu County, banditry has been common along the Wamba route with inter-tribal clashes flaring repeatedly in the Baragoi area
- In Turkana County, recurrent conflicts with the Pokot community render parts of the South inaccessible especially around Kapedo
- In Garissa, due to the terrorist attack at the University, the security situation there has deteriorated. This is the same case in Wajir and Mandera and currently the non local staff are working out of the three counties.

In order to ensure that the project is able to work in this region while maintaining the safety of the staff, security plans have been developed for each region with the guidance of the AMREF Security Manager and instituted arrangements for emergency evacuation should they be required. The project remains aware of the other areas in the region were insecurity has occurred in the past and continues to flare up from time to time such as parts of Turkana and Isiolo. The project has continued to be sensitive to these incidences and ensured that project implementation continues as much as possible in these areas while ensuring that the safety of our staff and property is not compromised. The project is also familiar with the political, social and cultural features of the region and hence has been able to adapt accordingly.

It is generally expected that the same security situation will continue in the coming months despite efforts by the government in the form of security operations in the said areas as the underlying drivers of insecurity still remain unaddressed. However the project has identified ways to work within the NAL region and still proceed with project implementation despite the fluid security situation. This is captured in the recommendations section.

CHAPTER THREE: FINDINGS

EFFECTIVENESS

The evaluation team assessed APHIA*plus* IMARISHA's performance through a comparative analysis of midterm achievements: last quarter prior to midterm (Oct – Dec 2014) to baseline values (quarter one of project implementation (April – June 2015) as presented in Table 5 below. Overall, the performance improved over the past three years for most of the indicators. This shows high output level performance by APHIA*plus* IMARISHA for most services delivery areas. The assessment team established that APHIA*plus* IMARISHA implemented the new service delivery strategy for sustainability of integrated technical assistance and mentorship within the county health systems. By prioritizing high burden, high volume facilities, the project made significant strides in most indicators of HIV/AIDS and Tuberculosis (TB) management; Maternal Newborn and Child Health (MNCH), Family Planning and Reproductive Health (FP/RH) and Nutrition despite a slow start in the first year. During the assessment period, the integrated community activities focused on targeted demand creation of health services and Community Based Treatment Support (CBTS) for patient retention in care for all health services.

The values in Table 5 below were determined from different data sources as determined by the Footnotes.

Table 5: Indicator Tracking Table

Priority Indicators	Baseline (April – June 2012)			Midterm (Oct - Dec 2014)			Variance
HIV Retention in Care & Treatment[1]	Num	Deno	Percent	Num	Deno	Percent	-/+
% HIV+ tested for TB	122	210	58	251	293	86	+28
Isiolo	61	124	49	89	89	100	+51
Samburu	35	37	95	20	34	59	-36
Marsabit	15	26	58	27	34	79	+22
Turkana	11	23	48	115	136	85	+37
% TB/HIV co-infected enrolled into care	62	62	100	58	58	100	0
Isiolo	35	35	100	27	27	100	0
Samburu	18	18	100	10	10	100	0
Marsabit	1	1	100	2	2	100	0
Turkana	8	8	100	19	19	100	0
% HIV+ patients enrolled into care	336	632	53	306	475	64	+11
Isiolo	110	135	81	89	182	49	-32
Samburu	132	257	51	93	118	79	+28
Marsabit	62	157	39	61	82	74	+35
Turkana	32	83	39	63	93	68	+30
% eligible HIV+ patients started on treatment	159	478	33	243	311	78	+45
Isiolo	42	95	44	94	127	74	+30

[1] Data abstraction from 435 randomly sampled patient files/records maintained at CCC (6% of the 7245 patients current on ART)

Priority Indicators	Baseline (April – June 2012)			Midterm (Oct - Dec 2014)			Variance
Samburu	35	257	14	42	47	89	+75
Marsabit	61	71	86	44	44	100	+14
Turkana	21	55	38	63	93	68	+30
MTCT rate at 18 – 24 months[2]	**Num**	**Deno**	**Percent**	**Num**	**Deno**	**Percent**	**-/+**
Proportion of exposed infants testing at 8 weeks	18	66	27	47	66	71	+34
Isiolo	8	18	44	23	23	100	+56
Samburu	0	12	0	1	6	17	+17
Marsabit	8	24	33	10	18	56	+23
Turkana	2	12	17	13	19	68	+51
Retention at 9, 18, 24 months	28	33	85	35	40	88	+3
Isiolo	13	13	100	23	23	100	0
Samburu	12	12	100	6	6	100	0
Marsabit	-	-		-	-		
Turkana	3	8	38	6	11	55	+17
Proportion of HIV+ mothers supported on feeding infants & young children	52	95	55	39	74	53	-2
Isiolo	13	13	100	23	23	100	0
Samburu	23	23	100	3	6	50	-50
Marsabit	10	44	23	8	24	33	+10
Turkana	6	15	40	5	21	24	-9
Proportion of exposed infants that received regular follow up care	28	61	46	49	58	84	+38
Isiolo	13	13	100	23	23	100	0
Samburu	5	12	42	6	6	100	+58
Marsabit	8	24	33	9	18	50	+17
Turkana	2	12	17	11	11	100	+88
OVC[3]	**Num**	**Deno**	**Percent**	**Num**	**Deno**	**Percent**	**-/+**
Wellbeing of OVC based on Child Status Index (CSI).	12,977	18,184	71	12,462	15,288	82	+11
Isiolo	6,203	7,038	88	4,745	5,680	84	-4
Samburu	2,455	5,106	48	3,296	3,781	87	+39
Marsabit	3,587	3,688	56	1,503	2,723	55	-1
Turkana	732	2,352	31	2,918	3,104	94	+63
Enrolment, attendance and progression	14,678	20,894	70	9,690	11,692	83	+13
Isiolo	6,245	7,042	89	1,821	2,089	87	-2
Samburu	2,646	5,107	52	3,301	3,777	87	+35
Marsabit	4,589	6,393	72	1,668	2,721	61	-11
Turkana	1,198	2,352	51	2,900	3,105	93	+42

[2] HEI Cohort Analysis

[3] Review of Child Status Index findings during baseline and midterm

Priority Indicators	Baseline (April – June 2012)			Midterm (Oct - Dec 2014)			Variance
Adequate shelter, child under good adult care	10,758	20,874	52	10,349	15,290	68	+16
Isiolo	5,066	7,036	72	3,645	5,681	64	-8
Samburu	1,959	5,104	38	2,937	3,781	78	+40
Marsabit	3,105	6,383	49	1,262	2,723	46	-3
Turkana	628	2,351	27	2,505	3,105	81	+54
Maternal and Child Health[4]/Family Planning[5]/Nutrition	Num	Deno	Percent	Num	Deno	Percent	-/+
% of births attended by skilled health care worker	750	3,578	21	640	2,529	25	+4
Isiolo	230	590	39	85	202	42	+3
Samburu	117	585	20	117	468	25	+5
Marsabit	149	710	21	91	350	26	+5
Turkana	254	1,693	15	347	1,509	23	+8
ANC 1st Visit Coverage among pregnant women							
Isiolo	272	296	92	58	60	96	+4
Samburu	308	400	77	79	107	74	-3
Marsabit	390	582	67	64	84	76	+9
Turkana	900	1,000	90	214	235	91	+1
ANC 4th Visit Coverage among pregnant women							
Isiolo	150	375	40	58	116	50	+10
Samburu	192	447	43	79	152	52	+9
Marsabit	150	357	42	64	149	43	+1
Turkana	331	1,182	28	214	437	49	+21
DPT1 coverage							
Isiolo	283	363	78	20	21	96	+18
Samburu	199	327	61	81	87	93	+32
Marsabit	467	525	89	16	17	92	+3
Turkana	735	1,131	65	23	24	94	+31
DPT3 Coverage							
Isiolo	258	363	71	20	21	94	+23
Samburu	177	327	54	81	93	87	+33
Marsabit	420	525	80	16	19	86	+6
Turkana	478	1,131	44	23	27	86	+42
Measles Coverage							
Isiolo	211	363	58	20	23	87	
Samburu	137	327	42	81	113	72	
Marsabit	368	525	70	16	21	77	
Turkana	588	1,131	52	23	34	72	

[4] Comparison of Baseline survey (AMREF DANIDA project, 2012) and KDHS 2014

[5] Comparison of KDHS 2009 and KDHS 2014

Priority Indicators	Baseline (April – June 2012)			Midterm (Oct - Dec 2014)			Variance
Contraceptive Prevalence Rate (CPR)							
Isiolo	40	111	36	17	65	26	-10
Samburu	13	47	28	17	83	20	-8
Marsabit	10	148	7	8	76	11	+4
Turkana	13	252	5	21	214	10	+5
Prevalence of stunting (<-2 z-score)							
Isiolo			17.1			24.4	+7.3
Samburu			-			24.9	-
Marsabit			26.5			28.4	+1.9
Turkana			25.2			23.9	-1.3
Prevalence of underweight (<-2 z-score)							
Isiolo			16.7			21.3	+4.6
Samburu			-			27.4	-
Marsabit			-			24.1	-
Turkana			-			32.3	-
Vitamin A supplementation coverage (12 – 59 months twice)							
Isiolo			69.7			70.4	+0.7
Samburu			21.7			54.7	+33.0
Marsabit			16.6			45.5	+28.9
Turkana			41.4			28.9	-12.5
Exclusive Breastfeeding:							
Isiolo			64.0			80.3	+16.3
Samburu			68.1			71.4	+3.3
Marsabit			28.7			68.2	+39.5
Turkana			57.4			31.6	-25.8
Complementary Feeding (infants 6-9 months)							
Isiolo			64.5			87.5	+23
Samburu			51.9			74.6	+22.7
Marsabit			48.9			53.8	+4.9
Turkana			51.4			60.4	+9.0
Maternal Iron/Folate Supplementation (at least 90 days)							
Isiolo			36.7			52.4	+15.7
Samburu			61.1			7.7	-53.4
Marsabit			35.6			17.0	-18.6
Turkana			2.1			13.0	+10.9
Health care workers Knowledge, Attitude and practices	Num	Deno	Percent	Num	Deno	Percent	-/+
% health care workers reporting improved knowledge, attitude and practices	0	52	0	20	110	18	+18
Isiolo	-	-		-	-		

Priority Indicators	Baseline (April – June 2012)			Midterm (Oct - Dec 2014)			Variance
Samburu	-	-		-	-		
Marsabit	-	-		-	-		
Turkana	0	52	0	20	110	18	+18
% health facilities where TNA was conducted & TNA report available	0	121	0	64	201	32	+32
Isiolo	-	-		-	-		
Samburu	0	0	0	5	58	9	+9
Marsabit	0	76	0	24	79	30	+30
Turkana	0	45	0	35	64	55	+55
% health care workers that received in-service training by program area (Care & Treatment, PMTCT, MNCH, Nutrition, Records Keeping/Data Use)	22	690	3	569	924	62	+59
Isiolo	-	-		-	-		
Samburu	0	250	0	200	393	51	+51
Marsabit	17	395	4	319	467	68	+64
Turkana	5	45	11	50	64	78	+67
% health facilities that received Activity-supported DHMT/CHMT supportive supervision	71	124	57	171	204	84	+27
Isiolo	-	-		-	-		-
Samburu	0	0	0	61	61	100	+100
Marsabit	66	79	83	70	79	89	+6
Turkana	5	45	11	40	64	63	+52
% health facilities with programs performance review forum/committee that meets regularly with meeting records available	77	121	64	122	201	61	-3
Isiolo	-	-		-	-		-
Samburu	0	0	0	7	58	12	+12
Marsabit	73	76	96	75	79	95	-1
Turkana	4	45	9	40	64	13	+4
HIV Prevention[6]	**Num**	**Deno**	**Percent**	**Num**	**Deno**	**Percent**	**-/+**
% youths 15 – 24 reporting improved HIV knowledge and healthy behaviors (health seeking behavior for HTC, seeking STI treatment, condom negotiation and use, linkage to care and treatment)	0	0	0	56	131	43	+43
Isiolo	-	-		-	-		-
Samburu	0	0	0	2	16	13	+13
Marsabit	0	0	0	4	25	16	+16
Turkana	0	0	0	50	90	56	+56
% targeted youths 15 – 24 that successfully completed conducted EBI sessions/activities	0	0	0	188	651	29	+29
Isiolo	-	-		-	-		-
Samburu	0	0	0	16	132	12	+12

[6] Mini Survey and Project Progress Reports

Priority Indicators	Baseline (April – June 2012)			Midterm (Oct - Dec 2014)			Variance
Marsabit	0	0	0	112	429	26	+26
Turkana	0	0	0	60	90	67	+67
% completion rate of planned EBI activities based on the yearly work plans	0	0	0	20	136	15	+15
Isiolo	-	-		-	-		-
Samburu	0	0	0	16	132	12	+12
Marsabit	-	-		-	-		
Turkana	0	0	0	4	4	100	+100
Existence of established and functional systems/structures for program quality improvement at health facility[7]	Num	Deno	Percent	Num	Deno	Percent	-/+
Existence of Quality Improvement Multi-Disciplinary Committee	0	121	0	16	201	8	+8
Isiolo	-	-		-	-		-
Samburu	0	0	0	7	58	12	+12
Marsabit	0	76	0	5	79	6	+6
Turkana	0	45	0	4	64	6	+6
Use of performance measurement data to improve quality of services	0	121	0	29	201	14	+14
Isiolo	-	-		-	-		
Samburu	0	0	0	7	58	12	+12
Marsabit	0	76	0	2	79	3	+3
Turkana	0	45	0	20	64	31	+31
Use of national guidelines/protocols by health care workers	73	116	63%	100	145	69%	+6
Isiolo	-	-		-	-		
Samburu	58	58	100%	58	58	100%	0
Marsabit	13	13	100%	23	23	100%	0
Turkana	2	45	4%	19	64	30%	+26
Use of program data for developing work plans, plan supportive supervision by health managers	14	49	29%	107	126	85%	+56
Isiolo	-	-		-	-		
Samburu	0	0	0	58	58	100%	+100
Marsabit	4	4	100%	4	4	100%	0
Turkana	10	45	22%	45	64	70%	+38
Water, Sanitation and Hygiene	Num	Deno	Percent	Num	Deno	Percent	-/+
People accessing safe drinking water within the project's zones of influence				83	114	73	
Isiolo	-	-	-	56	82	68	
Samburu	-	-	-	13	13	100	
Marsabit	-	-	-	14	19	74	

[7] Mini Surveys

Priority Indicators	Baseline (April – June 2012)			Midterm (Oct - Dec 2014)			Variance
People accessing improved sanitation facility within the project's zones of influence				45	112	40	
Isiolo	-	-	-	33	82	40	
Samburu	-	-	-	9	13	69	
Marsabit	-	-	-	3	17	18	

HIV/AIDS AND TB

Linkage of HIV positive clients to care and treatment services improved from 53% in April – June 2012 to 64% in Oct – Dec 2014. The assessment team wanted to understand from expert clients why 36% of clients testing HIV positive were immediately not linked to care. It was found that clients take time to make the decision for various reasons that include: they feel healthy and therefore no need to enroll into care, self-stigma, disclosure to spouse and, anticipation of negative reaction from a partner in the form of relationship breakup or physical violence.

There was a significant increase in eligible HIV positive patients started on ART from 33% in April – June 2012 to 78% in Oct – Dec 2014. Interviews with health care workers revealed that dropout of eligible clients before initiation was a key contributor. The assessment team however found that a more delayed ART initiation appointment also contributes.

Despite improved diagnosis of TB among HIV positive clients from 58% in April – June 2012 to 86% in Oct – Dec 2014, the assessment team observed poor coordination between the TB and the HIV/AIDS programs across all counties frustrating TB control efforts. It was observed that once an HIV patient is diagnosed with TB, they are sent to a TB clinic with little further interaction with the HIV/AIDS specialists even in the same health facility. There is also poor documentation and reporting of TB services within the HIV setting.

APHIAplus IMARISHA contribution: There was noticeable shortage of health care workers in the region with some health facilities having community health workers as service providers despite their limited competencies in clinical care. With devolution in place, counties have intervened by employing new staff, who need orientation on the new clinical guidelines. To address the perennial human resource constraints in the region, the project focused on supporting task-shifting by working with certified lay counselors which improved HTC coverage. Expert clients were also engaged to support treatment preparation, adherence and defaulter management at the CCC; and other community health volunteers (CHVs) to improve demand for HIV services.

According to HCWs who participated as key informants, they said that, APHIA*plus* IMARISHA facilitated mentorship of HCWs on data collection, records keeping and care and treatment of clients at CCC. They were also facilitated to hold monthly meetings, CD4 test sample collection and defaulter tracing, provided job aids, new guidelines and data collection and reporting tools. They believe facilities have now integrated services which have helped to reduce the workload and loss of clients along the referral paths. A CCC in-charge in Isiolo County enumerated some of the significant changes that have occurred in the last three years as a result of APHIA*plus* IMARISHA support*: "I am now more skilled in giving ARVs."*

APHIA*plus* IMARISHA was able to identify, train and engage and train community health volunteers (CHVs) and expert clients to provide community based health services on HIV care and treatment, maternal and child health, nutrition and family planning. During the assessment one CHV in a FGD in Samburu said, "*IMARISHA is the only one that is really concerned with us as CHVs, because the little motivation we are getting they are the ones giving us at the end of every month.*" The CHVs have been effective in ensuring there is continuum of care at the community by establishing and coordinating the activities of community support groups. Responses from CHVs summarized in Text Box 1 illustrate their understanding of their roles. Among the key achievements by CHVs is defaulter tracing of HIV positive and MNCH clients and enrolling them back to care. The CHVs said during the FGDs that one of their key achievements is improved drug adherence among their clients. However, the major challenge their clients experience is lack of sufficient food. One CCC respondent in a FGD in Turkana County shared her experience on the effect of taking ARVs without eating well: *"When you come to the hospital you are advised on how to take the medicine but when you get home you are hungry, your children are hungry and looking up to you, and there is no work you can do, when you take the medicine they become too strong for your body and it gets to a point when you ask yourself why you are taking the medicine and there is no other help you are receiving."*

To reduce risk behaviors among youth, APHIA*plus* IMARISHA trained peer educators on HIV risk factors, HIV prevention and care and treatment. The peer educators had one-on-one and small group sessions with their peers. They also counselled and referred their peers for biomedical services. Female sex workers said that they have learned how to protect themselves and also negotiate for safe sex. They have also been able to receive guidance and counselling, nutrition trainings and ARVs at the health facility.

Most respondents mentioned health care workers and radio as the main sources of information on HIV prevention and management. However, some years ago their main source was community gatherings, said a CHV: *"sometimes back, when you got to the Chief's baraza you could find an HIV positive person talking about HIV transmission and prevention but now you won't hear about that. Even when you got MPs meetings in the arenas, they don't touch on the issue of HIV…. It's not there anymore"*

Despite the achievements by CHVs in defaulter tracing, they experience logistical challenges and community resistance. To address these challenges the CHVs suggested that APHIA*plus* IMARISHA facilitates them with airtime to help them in defaulter tracing and mobilization for community outreaches. They also said they should be given other incentives like certificates of recognition after under-going training and kits like modern B.P machines and weighing scale.

Other factors that contributed to the above achievements were effective planning, timely execution of work plans and performance tracking, said one HCW in Isiolo county, "*The factors that facilitated the project activities that were implemented on target and on time included: Team work from the facility staff, supervision support and provision of supplies at the facility from the Ministry of Health and the CCC clients were cooperative and followed advice from the staff.*"

At the project level, APHIA*plus* IMARISHA conducts quarterly planning and review meetings at the national level to review

Text Box 1: Roles of CHVs

RESPONDENT 2: As a CHV for my community, my role first and foremost is to facilitate referral. If I identify chronic case that I cannot manage, I must refer. If there is an expectant mother I have to refer. So my first role is to refer.

RESPONDENT 3: My role as CHV for Kambimiti is to register all the community households e.g. if one is sick, if there is pregnancy, newborn, things like that. We then refer to the hospital.

RESPONDENT 4: My role as a CHV in the community is to

accomplishments and challenges in relation to the set targets. This is conducted with representation from all the field teams who are in turn expected to cascade the information to the rest of the team. However, review of project documents at the county level showed that this is not consistently done at the county level. This is already been strengthened and all counties have a quarterly calendar which sets aside time for review meetings and these are forwarded to regional offices and then the head office for follow up and support. After the national quarterly meetings, the county teams also meet to discuss the deliberations and follow up on the action points. Time has been set aside on a quarterly basis to meet with the CHMTs regular so that they too can be kept informed on the progress with project implementation and the areas that require their support and active engagement. The project was also able to leverage and collaborate well with other AMREF projects like DANIDA and other development partners working on the ground and using the existing government structures to deliver services.

According to HCWs in Samburu County Referral Hospital, the installed Electronic Medical Records system has improved client management and reporting: *"We now have a new reporting system supported by APHIAplus IMARISHA"* said a CCC in charge in Samburu *"we are able to report on time because of IQCare system."* However, most health facilities in the region still rely on manual data systems which do not generate accurate and timely data for decision making, said one PAC member.

Quality of HIV Services: The quality of services offered at the CCCs has significantly improved over time. Most CCC clients in Marsabit County unanimously agreed that they no longer wait on queue for long hours during clinic days. In another FGD in Turkana County, CCC clients said that the needed services are always available at health facilities: *"....there is no day that you can come here and miss drugs, as long as you know your dates. We usually come and take the drugs."* CCC clients said that HCWs usually advice patients on how to take the drugs. However, they are never informed about the expiry date. Health Care Workers (HCWs) at the CCC have positive attitude towards the CCC clients as confirmed by one FGD respondents from St. Patrick Kanamkemer CCC in Turkana county "*It's easy to get these CCC services because the doctors are friendly and we laugh with them, we do not fear them and it makes it easy*." Another respondent was satisfied with the comprehensive care and patient flow system in the facility: *"When you come to the facility your weight is measured and then you are directed to the next room where a very friendly nurse attends to you."* CCC clients in Marsabit county confirmed during an FGD that the information shared by HCWs during counseling sessions is very useful "*we get counselling on how to use the drugs, to be faithful to our partners, and in case you want to, you have to use a condom, timings to take our ARVs, not to use alcohol and other alternative drugs and herbs."* The client information is kept confidential by HCWs, said CHV.

The improved quality of services is partially attributed to the support provided by APHIA*plus* IMARISHA as attested by one health care worker during key informant interviews in Isiolo County *"Since the project started supporting CD4 sample testing and follow-up up for DBS results, we are currently better off in terms of starting patients on ARVs after being trained; the facility also got a CD4 machine and files to be keeping records of the clients."*

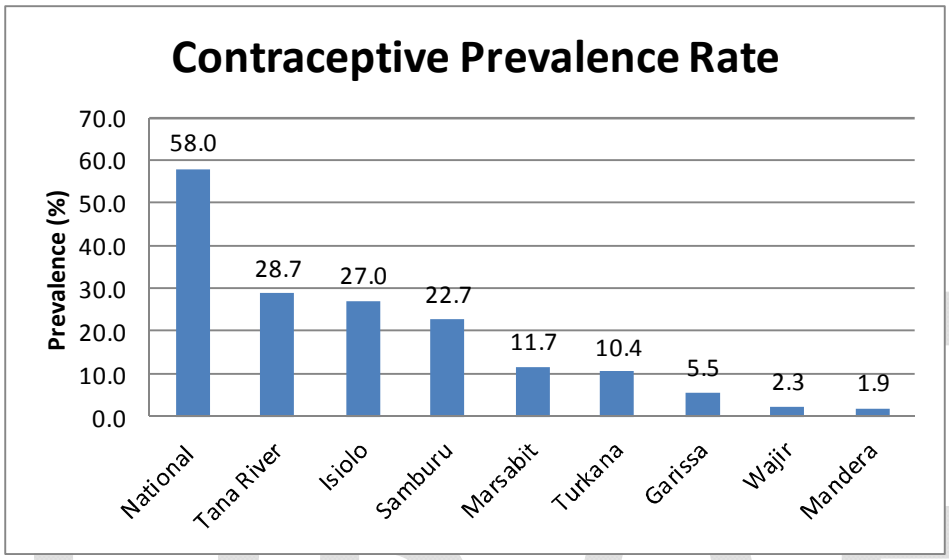
REPRODUCTIVE HEALTH/ FAMILY PLANNING

Apart from the Constitution, Kenya has a number of policies and strategies that seek to promote access to Family planning services, which include the National Reproductive Health Policy, 2007 to be implemented through the National Reproductive Health Strategy 2009-2015; the Adolescent Reproductive Health and Development Policy, 2003; the National Condom Policy and Strategy (2009-2014; the Contraceptive Policy and Strategy (2002-2006); the Contraceptive Commodities

Procurement Plan (2003-2006); the Contraceptive Commodities Security Strategy (2007- 2012); the National Road Map for Accelerating the Attainment of the MDGs Related to Maternal and Newborn Health in Kenya, August 20109.

Despite all these efforts, Contraceptive Prevalence Rate (CPR) is still very low in all the 8 counties of NAL varying between 1.9% and 28.7% as demonstrated Graph 1 below. The CPR in all the counties of NAL is below the national CPR of 58% and the rational target of 56% by 2015.

Graph 1: Contraceptive Prevalence Rate in Northern Arid Lands (KDHS, 2015)



The assessment team established that all the CHMTs have all the information on family planning programing in Kenya. It was however clear that their prioritization on FP and RH needs is still low.

Contraceptive utilization: The assessment further revealed that the most commonly used contraceptives were injection (42%), condoms (39%), pills (11%), implants (5%) and IUD (1%). Most respondents in the FGDs indicated that their main reason for family planning uptake is the need to have a smaller family they can provide for especially in health and education. A male respondent in Isiolo said *"The fact that I only have ten acres of land and five sons is worrying me a lot, what will they inherit? Will they manage to pass on land to their children? We don't question what God gave us but I wish I had fewer sons, I would have been able to take them to school and give them a better future."*

Human Resources: the assessment showed that the project support to communities to change their mind set from the "white coat doctors" to trained community workers is still very low. Communities need to be be more sensitized so that they are receptive to receiving information on FP from CHWs The has project supported CHMTs to train 1,121CHWs to provide FP counseling and services and this s number is insufficient to cover the expansive 400,000km^2 or 70% of Kenya's surface area to create meaningful impact and hence the need to train more CHWs.

FP attitudes and awareness: during a FGD with women users of contraceptives in Marsabit and Turkana, all of them knew of at least two method of family planning but the majority within the group preferred using injectables. This was corroborated by a nurse at Marsabit County Referral hospital who mentioned that most clients preferred injectables; a negligible percentage uses long term pills and emergency pills (mostly youths). The coil is very little known and thus its usage is not accounted for. The usage of the mentioned methods is as a result of availability where injectables are freely accessible in public health facilities. Among the male respondents, their main method of contraceptive is condom though they confessed that they do not use them at home *"it is a sign that you*

don't trust your wife." Though they are aware of the existence of the long term method – vasectomy, it is not popular and most of them indicated that it is not a method they would uptake for reasons such as divorce and the need to sire more children. Also mentioned was that once a man undergoes vasectomy and it is known by the public, other men within the community deemed him as a lesser man. On the other hand, women respondents indicated that men use condoms but with their other sexual partners and not their wives.

Causes of unmet Family Planning needs: A substantial proportion of women in NAL still have an unmet need for family planning. The assessment sought to understand the reasons/barriers faced by women in using family planning or intent to use so that the project can be able to address the barriers in a targeted way. The following reasons were established:

- **Facility Factors determining the use of Family Planning Services:** Majority of the FGD respondents obtain FP services from health facilities. Regarding quality of the contraceptives, about 60% of respondents in a mini-survey were uncertain of the quality or were of the opinion that the quality of family planning services provided was not good. In terms of availability, most of the respondents were in agreement that family planning services were available except in faith-based health facilities. In regard to proximity of the Family Planning provider, the assessment revealed that distance accounts partly for the use of contraceptives amongst women in NAL. Health providers were accused by the respondents of not taking time to educate clients on the best methods for use. Follow-up interviews with health care workers to validate the claim revealed that the problem was limited number of health providers serving a vast area. According to the sexual and reproductive health coordinator for Samburu County, *"there is huge deficit of health workers in our health stations."* Respondents also have mistrust of the quality of the modern family planning methods. Some respondents said, *"There is failure of the health care providers to provide proper counseling and alternative family planning methods to us making us choose the method by ourselves which might not be appropriate for us."* It is noted in the literature review that improper counseling can lead to mistrust of the healthcare system. A quote from one respondent: *"I used an IUD for a year. The string fell out, and I needed surgery to remove the IUD. The doctor told me that the IUD I had used was of a poor quality."*

- **Fertility related issues and desire to become pregnant:** Experiences within the communities on contraceptive use are that women take longer to get pregnant after using pills and injectables. The fear of delayed childbirth leads to use of traditional family planning methods such as withdrawal and safe days.

- **Lack of Support by Men:** This was singled out by women respondents as one of the biggest hindrance to family planning uptake. FGD respondents said that there is covert use of contraceptives among women due to factors such as social pressure from spouses, religious opposition or mere embarrassment.

- **Health concerns:** Many women indicated that there is a lot of fear of side effects arising from the use of FP such as continuous bleeding, low libido, stomach and back ache and giving birth to deformed children. The role of the side effects of the family planning methods in affecting women's use of family planning was evident in the assessments. The side effects were one of the commonly mentioned factors that led to women's' disfavor of the modern family planning methods and play a significant role in their underuse. Some women noted that IUD caused complications: *"I've used an IUD for five months and I had several complications such as: severe infection, increasing amount of blood during menstruation, and ovarian cysts. The period of menstruation became 11 days at the beginning of the month and 11 days at the end of the month!"* It

is noteworthy to mention that from the field assistants' observations of the interactions between women in the focus group discussions, some women were affected by other women's perceptions. This indicates that some women might prefer not to use the modern contraceptives method because of their potential side effects. It also showed that the experience of one woman might affect the motivation of another even if she has no direct experience with these methods.

- **Norms and Traditional practices**: the pastoralist commodities believe in having many children so that incase misfortunes strikes they will be left with a few children. A key informant told the assessors that in patriarchal societies, such as among the Samburu, the women's main tasks are reproduction and accordingly women have their value enhanced by producing many children. One FGD participant said *"Women's status in the family improves according to the number of children they have and especially giving birth to boys."* Majority of the participants (health care providers and women) in the assessment reported that the social norms which favor male children influenced women and their husbands' choices of using family planning methods, whether natural or modern, as exemplified in the following quote: *"If you gave birth to a girl, they will tell you: "You should become pregnant to have a baby boy". If you had a baby boy, this is also not enough... you will be asked by people to bring another brother or sister to your children. If you give birth to another girl, they will force you to keep trying till you give birth to a male child. You are satisfied with having girls and whatever God gave you, but because of the pressure of people around, you will start thinking of becoming pregnant again to please them or to shut them out despite of your disagreement".* It is understandable from this quote that most women lack the power to make decision about their reproductive life. As a result of this patriarchal ideology, men (particularly the husbands) are in charge of women and they can and do make decisions on behalf of women; husbands have authority in deciding whether, when and what type of family planning methods women should use. Mother-in-laws are also primary decision-makers in the family as mentioned by majority of the participants. *"Most women are not decision makers when it comes to family planning and number of children to have. The decision lies with their husbands and mothers-in-law, whose approval is crucial for whether a woman uses family planning services or not."* Some of the participants also mentioned that mothers-in-law do threaten women of polygamy if they use contraceptives or even if they give birth to female babies indicating that mothers-in-law have influential power over their daughters-in-law and their sons.
- **Religion:** The people of NAL are predominantly Muslims and Christian Catholics. The two religions do not advocate for family planning. They strongly believe the biblical saying that, "*God gave man the mandate to go and procreate and fill the world*" and therefore practicing family planning is going against scriptural teachings. This is heightened by the high presence of faith-based health facilities in the region.

Family Planning Integration

Record review in the County Referral Hospitals confirmed an existing unmet need for family planning services among women living with HIV and MNCH clients. There was general agreement among FGD and key informants that integrated services can help women realize their fertility intentions and meet their contraceptive needs. The project has supported efforts towards FP integration in the MCH and CCC clinics although it is still not as expected and some of the identified gaps in FP integration include: insufficient screening of FP needs among sexually active clients; weak referral systems between HIV and family planning service delivery points, particularly when a full range of FP methods is not feasible to provide at the CCC; lack of youth-friendly services; religious or community opposition to family planning.

APHIAplus IMARISHA Contribution: The project has invested in the mentorship of HCWs on Reproductive Health and Family planning as well as engaging with the CHMTs and community gate keepers so as to raise awareness on the importance of reproductive health. HCWs have also been trained to provide FP methods and especially the long acting methods as so there has been a slow increase in the FP uptake across the NAL. The project has also trained CHVs in the counties on reproductive health and FP so that they can pass along the correct messages at household level, stimulate demand and facilitate referrals to the health facilities for these services.

The project has plans to continue training and mentoring more HCWs and CHVs on FP as well as have more community engagement on RH/FP issues. As a result, the uptake of long acting methods is expected to continue increasing.

MATERNAL, NEWBORN AND CHILD HEALTH

Antenatal Care

The antenatal period presents an opportunity to provide pregnant women with interventions that improve the health and wellbeing of mothers and their children and identify risks in the lead up to delivery. The 2014 KDHS shows that among the six counties in Kenya with less than 90% of pregnant women attending at least one ANC visit, five are from NAL (Mandera, Wajir, Samburu, Marsabit, Garissa).

About three-quarter (78%) of pregnant women in NAL receive at least one antenatal care (ANC) check-up with a doctor or nurse during pregnancy (see **Graph 2**). This is considerably lower than the estimated national coverage of 96%. There was wide variation across counties; almost all (96%) women received at least one ANC check-up in Isiolo County compared to just 51% of women in Mandera County. The assessment did not establish the contributing factors to the differences between counties. However, insecurity, social cultural factors and concentration of non-governmental/faith based organization have a relationship with the variations. For example, Garissa, Wajir and Mandera have experienced recurrent bouts of insecurity compared to any of the other counties. Trends in use of antenatal care in the three counties of Garissa, Wajir and Mandera show that the proportion of women who had antenatal care from a skilled health professional declined slightly from 69% to 65% from 2009 and 2014 (KDHS, 2014).

Receiving one ANC check-up does not guarantee that women will receive adequate interventions. The recommendation from WHO is that pregnant women receive a minimum of four ANC check-ups as this increases the likelihood of receiving effective maternal health care. The 4th ANC coverage (44%) for NAL is below the national average of 58% (see **Graph** 2) and the percentage of women attending four or more ANC visits varies from 20% in Mandera to 52% in Samburu.

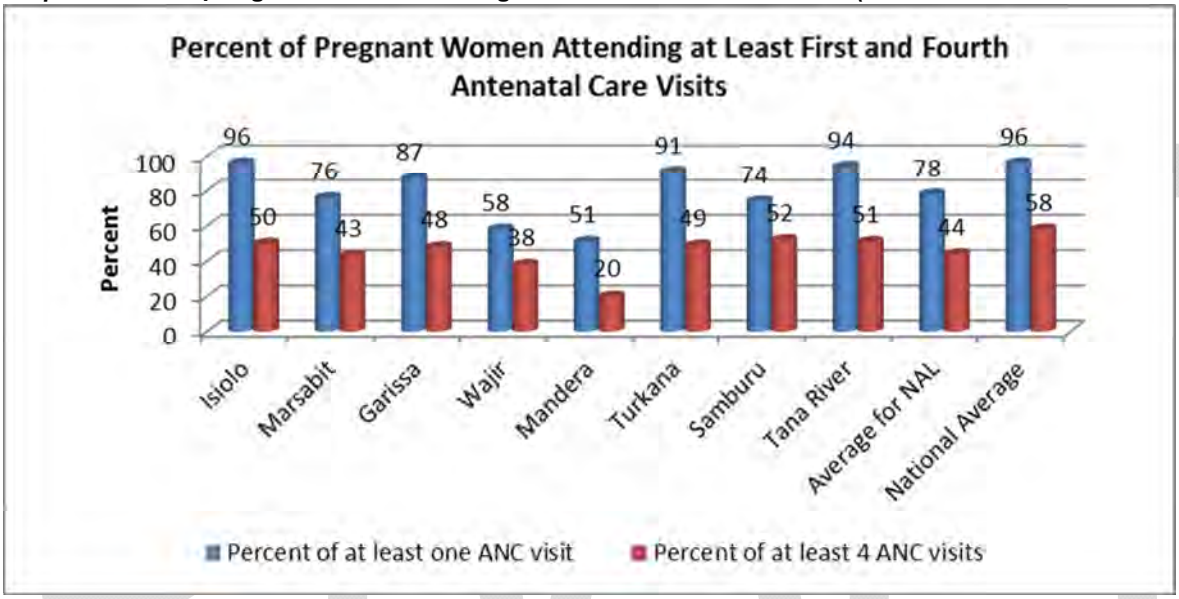
A mini survey of women in Suguta Mar Mar in Samburu County showed that 55% of the women received at least two tetanus toxoid (TT) injections during their last pregnancy, which is lower than the national average of 75% (KDHS, 2014). The implication is that 45% of babies in Samburu County are not prevented from neonatal tetanus.

In addition to the antenatal care the women receive from formal health care providers, a substantial proportion of women in NAL also receive care from TBAs during their pregnancy. Similarly, the FGDs suggested that TBAs play a key role in ascertaining pregnancy, and performing massage to check the balance and position of the baby. In Samburu tradition, pregnant women are advised to eat less food than they normally would. FGDs with TBAs revealed that they advise pregnant women to restrict their diet to just porridge and water to ensure a smaller baby for an easier delivery. Discussion

with other community members confirmed that the amount of food a pregnant woman is supposed to eat is reduced to ensure that the baby is kept small, and vomiting is induced in the event that the woman is perceived to have overeaten. These discussions confirmed the need for the project to continue investing in community and household awareness on maternal and child health issues as well as the importance of training more CHVs so that they can be able to reach out to their communities with the right health messages and practices.

Some of the health system challenges affecting the provision of quality ANC services are the frequent shortage of reagents that affects ANC profiling in Garbatulla sub-county hospital in Isiolo county as well as lack of adequate beds in some maternity units.

Graph 2: Percent of Pregnant Women Attending the Recommended 4 ANC Visits (KDHS,2014



APHIAplus IMARISHA Contribution: The project contributed to the sustained ANC coverage in NAL by training and engaging CHVs (CHWs, community midwives and TBAs) to increase awareness of the available antenatal care services including the benefits of attending antenatal care clinic, identifying pregnant women in the community through household visitation and referring them to health facility for antenatal care services. The CHVs supported antenatal clients during the antenatal visits to get comprehensive services and followed up on those who defaulted. The project has attached some CHVs in high volume MNCH facilities to intensify community referral systems.

The project facilitated quality improvement trainings in Isiolo, Turkana, Marsabit, and Samburu counties. In total, 26 MOH staff were trained in Turkana, 28 in Marsabit, and 29 in Samburu.

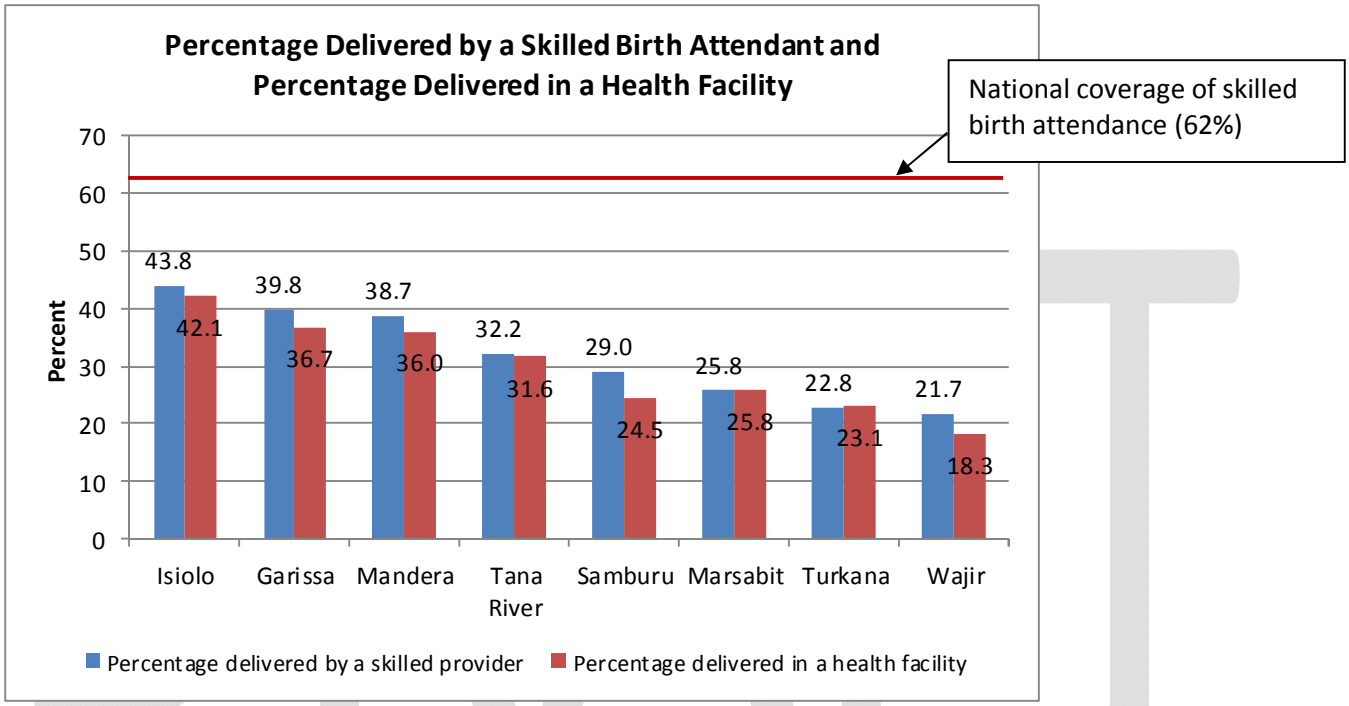
Delivery Care

The Government of Kenya has a target of skilled birth attendance for 90% of deliveries by 2015. However, skilled birth attendance in NAL is still very low at 32% overall. The reality of practices is that deliveries still predominantly occur in the home with care provided by community members and traditional birth attendants (TBAs).

In five counties in NAL, less than one-third of live births were attended by a skilled provider or were delivered in a health facility (Tana River, Wajir, Marsabit, Turkana and Samburu) and all the eight counties were below the national average of 62%.

The 68% home deliveries places the babies in NAL at increased risk of a tetanus infection since the deliveries are characterized by unsterile conditions and poor umbilical cord care practices. A key informant in Samburu County said, *"Sealing the baby's umbilical cord with ash, cow dung, soil, or herbs to stop bleeding is a common practice."*

Women were asked to name the warning signs of a problem during labour (see **Figure** 10) and the most commonly mentioned warning signs were a long lasting labour (66%) and bleeding before the baby (53%). Excessive postpartum bleeding is a leading cause of maternal mortality and this was mentioned by 19% of women.



There are a range of complex issues that affect the decisions regarding where babies are delivered in these pastoralist communities. Distance, lack of transport and cost are the most commonly mentioned barriers to accessing formal health care but the attitudes of women to facility delivery also impact on decision making. Cultural factors on women's decisions about where to deliver was also mentioned as a factor. Abrupt delivery was also cited by respondents, reflecting lack of birth preparedness.

Most respondents said they prefer to deliver with the assistance of a family member or TBAs because they are an available and affordable source of support through pregnancy, delivery and post-delivery period. A key informant in Samburu County alluded to the fact that TBAs have unique strengths to offer: they are part of the cultural life of the community; have a high social standing; exert influence on local health practices; and often have many years of experience in supporting mothers and their babies. Group discussion with TBAs revealed a range of practices that are employed to manage complications during delivery. They identified obstructed labour and excessive bleeding as the main complications. They use all sorts of traditional methods to induce labour, replace the lost blood in the event of excessive bleeding and, resuscitation of unresponsive newborn and that referral of the mother to a hospital is considered the last resort.

The key concerns by health workers during key informant interviews about the role of TBAs lie in their use of traditional practices, some of which may be harmful, their lack of engagement with the formal health system, and the associated delays in seeking skilled care for women in difficult labour.

Health system challenges affecting maternal care included shortages of health workers, supplies and equipment, poor health worker competencies and weak referral systems. Inadequate or delayed financing of health services including apathy of health care workers due to delayed salaries immediately the health function was devolved are some of the underlying reasons for many of these health system challenges.

APHIAplus IMARISHA Contribution: The project has supported the uptake of the high impact interventions for improved maternal and reproductive health namely: Focused Antenatal Care, Individual Birth Planning, Skilled Bith Attendance, management of maternal complications, Postnatal care, health timing and spacing of births, ASRH and cessation of FGM by advocating for alternative rites of passage for girls and will continue to work closely with the CHMTs and sub-CHMTs to scale up their uptake within each of the NAL counties.

Active engagement of TBAs: As a result of concerns regarding the contribution of TBA practices to sustained maternal and perinatal mortality, and acknowledging that their role is still significant in the communities we are working with, APHIA*plus* IMARISHA is working with the TBAs to re-orient them to birth companions so that they can also support increased uptake of skilled delivery by referring and escorting clients to the health facilities. The project is also working with domiciliary midwives (retired midwives) in Tana River and Wajir Counties to improve skilled birth deliveries in the communities as they are a huge untapped resource. .

Safe-motherhood voucher scheme: The assessment team found the innovative strategy of safe-motherhood voucher scheme adopted by the project to address financial barriers to maternal and newborn health care to be very effective in enabling the poorest women in Garissa county to access services at subsidized rates and improve the responsiveness and quality of services.

Task shifting: CHVs for MNCH have been placed in priority MNCH facilities to follow up pregnant women and their children to ensure they receive the required MNCH services. Mothers who miss their appointments are traced through phone calls or home visit by the community health volunteers (CHVs).

Training of CHWs: The project has trained CHWs in the counties on community based maternal and newborn care to orient mothers on birth preparedness, identifying of danger signs and referral for delivery to health facility.

Increased community mobilization: In Samburu County, implementation of the UMATI concept where the program and MoH HCWs take advantage of community gatherings and functions to sensitize communities and avail the services e.g. Health education emphasizing on the importance of ANC has created awareness and increased demand and uptake of health services. Additionally, the project has continued to train and work with CHVs attached to community units to increase community mobilization for health services. The project also initiated the BOMA (settlement) model in Samburu County to ensure that pregnant mothers are identified by the CHWs and referred for ANC services.

Making facility delivery services more attractive: APHIA*plus* IMARISHA continued to provide mentorship, OJT and CMEs to HCWs in order to improve quality of care in the health facilities. Through collaboration with the DANIDA MNCH project, there were HCWs refresher trainings to improve their skills to provide quality care to the mothers and children and especially neonates.

Defaulter tracing mechanisms: The program has anchored CHVs in MCHs to facilitate defaulter tracing. Mothers who miss their appointments are traced through phone calls or home visit by the community health volunteers (CHVs).

Maternal shelters: The vibrant Community Unit (CU) and the maternal shelter constructed at the Kisima Model Health Centre continued to contribute to the scale up of skilled deliveries. From an initial average of less than 5 deliveries per month before the setup of CU and maternal shelter, skilled deliveries have increased to an average of 36 deliveries per month. This has led to the setting up of more maternal shelters in Samburu-Longewan and Seketet and is also being scaled up to the other counties.

Mitigating distance barriers to accessing skilled delivery: The project continued to support the standby taxi in Habaswein,Wajir County to refer women in labour to the health facility which led to a marked increase in skilled birth. However, the imposed curfew restricting night travels triggered by insecurity has had an effect on the strategy. This innovative approach has been appreciated by the county who are now in the process of seeing how to scale it up and cover more areas in the county. The project has also adopted the use of donkey carts in Wajir County to transport women in labour to the health facility

Basic Emergency Obstetric and Newborn Care (BeMONC): APHIA*plus* IMARISHA distributed key BEmONC job aids and mentored health care workers in Wajir, Mandera and Samburu County on BeMONC with particular attention to the signal functions. BEmONC trainings have been conducted for HCWs and mentors have been identified and facilitated to improve quality of care and scale up provision of CEmONC in Wajir County referral Hospital.

Postnatal Care

A mini survey of mothers in Samburu County who delivered their most recent baby at home showed that only 2.5% attended postnatal care in a health facility within 2 days of delivery. The majority (82.7%) of women who delivered their most recent baby at home identified family as the main provider of care to women and babies in the first week after delivery (see **Graph 3**). TBAs were also identified by 43.5% of these women as providers of post-delivery care.

Graph 3: Types of People providing Post-delivery Care within 2 days after Delivery, among those who Delivered at Home

Discussions in the focus groups highlighted a range of cultural practices following delivery. For example, immediately after birth both mother and child may be given sugar four times *"enkitaalipoto"* using a calabash (a small gourd-like dish) before eating anything else, and the child remains in the house until the cord falls off. At this point, the mother's head is shaved and she and the baby can visit other households. The majority (80.3%) of women surveyed avoided drinking cold water during the first month after delivery, instead taking fluids such as soup, tea and milk. These beliefs and practices highlighted the need for continuous engagement with the community to educate them on the proper care of the mother and the baby after delivery and the need to ensure that they go for post natal care after deliver. Through the trained CHVs and the community gatekeepers, the project will continue to

advocate for better practices at household level and update of health services to ensure better maternal and child outcomes.

Child Health

Vaccination Coverage: Table 10 below present information on vaccination coverage for children aged 12-23 months based on KDHS, 2014. The results are based both on the vaccination card record and information provided by the mother through recall. About two-third (68%) of the children in NAL were fully had vaccination card. There is a huge variance of percentage of children with immunization cards across the counties with only 17% in Mandera County and as high as 89% in Isiolo County.

Table 6: Percentage of Children Aged 12-23 Months who Received Specific Vaccines by County, KDHS, 2014

County	BCG	DPT3	Polio3	PCV3	Measles	Fully Immunized	Not Vaccinated	Percent with Vaccination Card
Tana River	97	90	81	85	78	61	3	72
Garissa	80	92	76	85	81	54	6	61
Wajir	91	79	65	74	65	38	7	59
Mandera	72	49	36	49	62	28	28	17
Marsabit	93	86	86	85	77	67	1	81
Isiolo	96	94	88	92	87	79	1	89
Turkana	95	86	76	83	72	57	4	87
Samburu	97	87	84	85	72	63	1	79
Average for NAL	90	83	74	80	74	56	6	68
National Average	97	90	81	85	87	68	2	75

Overall, 56 percent of children are fully vaccinated with BCG, measles, pentavalent, polio, and pneumococcal vaccines and 6 percent of children have not received any vaccines. Regarding coverage for specific vaccines, 90 percent of children have received the BCG vaccine, 83 percent of children received the recommended three doses of pentavalent, 74 percent receive all three doses of polio, and 80 percent receive all the three doses of pneumococcal vaccine. For series vaccinations, coverage declined with subsequent doses. The decline in coverage levels reflects dropout rates of 9 percent for pentavalent, 18 percent for polio, and 10 percent for pneumococcal vaccine. The dropout rate represents the proportion of children who receive the first dose of a vaccine but do not go on to get the third dose. The dropout rate for NAL for the three respective series vaccinations is 1 percent below the national dropout rates. In regards to dropout by county, Mandera County has the highest dropout rate for of pentavalent, polio, and pneumococcal vaccine respectively at 19 percent, 35 percent and 21 percent. The proportion of children vaccinated against measles is 74 percent. In Turkana County, there were eight reported cases of measles between July - December 2014.

Childhood Morbidity: According to outpatient morbidity data for children under 5 years reported in 2014, acute respiratory infection (ARI), diarrhea and malaria are the major causes of child morbidity in the eight counties of NAL. The health facility outpatient morbidity data corroborates with KDHS, 2014 on common childhood illnesses. KDHS, 2014 asked from the mothers who indicated their child had an illness in the last 2 weeks if treatment or advice was sought from a health facility or provider. For children with diarrhoea, the mother was asked additional questions about treatment given to the child (see **Table 11**).

Table 7: Treatment for Acute Respiratory Infection Symptoms, Fever, and Diarrhoea By County, KDHS, 2014

County	**Percent of children with ARI whom treatment was sought from a health facility/provider**	**Percent of children with fever whom treatment was sought from a health facility/provider**	**Percent of children with Diarrhoea whom treatment was sought from a health facility/provider**	**Percentage with Diarrhoea given ORT**	**Percentage with Diarrhoea given fluid from ORS packet**	**Percentage with Diarrhoea given Zinc**	**Percentage with Diarrhoea given ORS and Zinc**
Tana	73	65	48	60	54	16	16

County	Percent of children with ARI whom treatment was sought from a health facility/provider	Percent of children with fever whom treatment was sought from a health facility/provider	Percent of children with Diarrhoea whom treatment was sought from a health facility/provider	Percentage with Diarrhoea given ORT	Percentage with Diarrhoea given fluid from ORS packet	Percentage with Diarrhoea given Zinc	Percentage with Diarrhoea given ORS and Zinc
River							
Garissa	-	41	29	68	81	11	11
Wajir	34	55	57	70	72	8	7
Marsabit	67	63	66	71	64	5	3
Isiolo	64	76	57	82	75	5	5
Turkana	-	63	77	45	46	14	4
Samburu	-	55	49	62	58	3	3
Average for NAL	60	60	55	65	64	9	7
National Average	66	63	58	74	65	8	8

About six in every ten children in NAL with such symptoms were taken to a healthcare provider for treatment, including 60 percent of children with ARI, 60 percent of children with fever, and 55 percent of children with diarrhoea.

Oral rehydration therapy (ORT), which involves a prompt increase in the child's intake of fluids, is a simple and effective response to diarrhoeal illness. Mothers in NAL reported that 65 percent of the children with diarrhoea were treated with some form of oral rehydration therapy, and 64 percent were given a solution prepared using a packet of oral rehydration salts (ORS). The Kenya Policy on Management of Diarrhoea in children under age five recommends the use of zinc with ORS. The 2014 KDHS survey shows that 9 percent of children with diarrhoea in NAL were given zinc and 7 percent were given both ORS and zinc. A study conducted in Samburu County in 2012 showed that 88% of households use traditional herbs whilst 56% used homemade or bought (18%) oral rehydration solution to treat diarrhoea. A small proportion (4.0%) of households did nothing to treat diarrhoea. The use of zinc for treatment of diarrhoea in North Eastern province (Garissa, Wajir and Mandera) has increased from 3 percent in 2009 to 9 percent in 2014.

Despite the above achievements and contribution, outbreaks of terrorism, political and ethnic violence are difficult to predict. Violence and conflict cause significant impact, making it hard for health care workers to work in affected areas and to reach affected or displaced populations, interrupting service delivery and, in some cases, creating the perception that some groups are favored over others.

APHIAplus IMARISHA Contribution: The project has provided technical assistance to HCWs through mentorship and on job training to improve provision of child health services. HCWs with the support of the project have been emphasizing the importance of immunization during ANC, postnatal

clinics and at the CWC. The project has also trained CHVs on child health and they are able to pass relevant health messages at household level as well as identify and refer immunization defaulters. The project has continued to support integrated outreaches that provide child health services to communities that are far flung and not able to access regular services from health facilities. The project has also continued to support the uptake of the high impact interventions for improved child health namely: clinical and community IMCI, early and exclusive breastfeeding, immunization, growth monitoring, BEmONC, ORT and Zinc for management of diarrhea and will continue to work closely with the CHMTs and sub-CHMTs to scale up their uptake within each of the NAL counties.

NUTRITION

Malnutrition places children at increased risk of morbidity and mortality and is also shown to be related to impaired mental development. A comprehensive nutrition situation analysis conducted across NAL counties in February 2015, indicates a concerning yet stable nutrition situation in Turkana, Marsabit and Samburu compared to July 2014. However deterioration has been noted in Wajir, Garissa and Isiolo. Tana River County remains stable.

According to nutrition survey results of 2015, Wajir West reported the highest GAM and SAM rates, at **22.6%** (17.7-28.3) and **7.1%** (4.9-10.3), these results indicate a deterioration in the severe acute malnutrition rates reported from the previous survey conducted in the area in June 2014, indicating a ***Very Critical*** nutrition situation. The results estimate that ***1 out of 14 children is severely malnourished*** in Wajir West. The deterioration in the malnutrition situation is mainly attributed to the negative effects of consecutive poor rainfall performance on food security in the area. This has resulted to reduced household food security and low household milk consumption and production. In Wajir East/South the nutrition situation remains ***Critical*** with GAM and SAM rates at **17.4%** (14.2-21.0) and **3.4%** (2.0-5.6). Survey results for northern Garissa indicate a ***Critical*** nutrition situation, with GAM of **15.2%** (11.9-19.1) and SAM **2.7%** (1.7-4.2). Isiolo county survey results indicate a GAM and SAM of **13.2 %** (10.8-16.0) and **1.0%** (1.0-3.0) respectively, indicating a ***Serious*** nutrition situation, further analysis shows that a high number of malnutrition cases were noted in Merti and Sericho bordering Wajir West and Northern Garissa county. The main factors aggravating acute malnutrition in these areas is the declining food security situation caused by the negative impact of the underperforming October to December 2014 short rains season coupled with chronic vulnerabilities such as poor infant and young child feeding and care practices, high morbidity and limited access to clean water and appropriate sanitation. The food security situation in parts of Wajir, Isiolo and northern Garissa has deteriorated and been classified as *Crisis*. In Tana River county, the nutrition survey conducted in February 2015, recorded a GAM and SAM rate of 9.9% (6.8 - 14.2) and 1.0% (0.4-2.5) respectively, indicating a *Poor* nutrition situation according to WHO classification, however the situation is stable compared to the same time last year. The food security situation in the county has been classified as ***Stressed***i n the northern parts of the county bordering Garissa, and ***Minimal*** in the southern part of the county.

Analysis of nutrition information in Turkana, Marsabit and Samburu indicates an improving trend in the nutrition situation compared to July 2014. In July 2014, comprehensive nutrition surveys conducted in Turkana, Marsabit and Samburu confirmed a declining nutrition situation due to the negative impacts of the poor performance of the long rains 2014 season, with Turkana North, East/South and Central, Marsabit (North Horr/Loyangalani) reporting GAM rates above emergency thresholds ranging between 20.5-29.2%. Across the three counties, MUAC data from National Drought Management Authority (NDMA) sentinel sites between the months of August to December 2014 generally indicate a decreasing trend (Oct- Dec 2014) of the children at risk of malnutrition compared to the previous season. Although there is an improvement, acute malnutrition still remains

high and above emergency thresholds especially in Marsabit and Turkana. The overall food security situation in Turkana, Marsabit and Samburu is classified as ***Stressed***, an improvement from the previous season where pockets of ***Crisis*** were identified in parts of Turkana and Marsabit. The main factors affecting the food security situation include poor temporal and uneven distribution of the short rains season, human and livestock diseases, high food prices, human wildlife conflict, livestock migration and insecurity related to resource based conflicts and cattle rustling. Morbidity incidences were on the increase across the three counties but within the seasonal ranges.

The assessment found that most clients in NAL depend on the monthly food rations to meet their food and nutrition needs. This is because of consistent food insecurity in the region. The assessment team also established that there is irregular supply of Food by Prescription (FBP) commodities and low skills of health care workers in clinical nutrition. The low skills of the HCWs is the main factor attributing to the poor documentation of nutrition services in most health facilities. However, all children attending Child Welfare Clinic (CWC) were assessed for malnutrition and linked to appropriate interventions in all the assessed facilities.

Vitamin A supplementation: The coverage of vitamin A supplements for children under the age of 5 varied between 28.9% in Turkana County to 70.4% in Isiolo County. There was significant increase in Vitamin A supplementation in the three counties of Isiolo, Samburu and Marsabit between 2012 and 2014.Despite the increase, the coverage for all the counties is still below the 80% WHO acceptable level.

Review of facility records showed high Vitamin A supplementation coverage for children aged less than 12 months and very low for children aged over one year. The main reason for the low coverage for children over one year is non-attendance of child welfare clinics upon completing immunization.

Exclusive Breastfeeding (EBF): The three counties of Isiolo, Samburu and Marsabit have exclusive breastfeeding coverage above the national average of 61% and they had a marked improvement compared to 2012. Mothers EBF in Turkana County dropped from 57.4% in 2012 to 31.6% in 2014. Almost all women (99.2%) in Turkana County breastfeed their children and 69.8% of the children are breastfed immediately after birth or in less than 1 hour (KAP Survey Report, 2014). The traditions, myths and misconceptions about exclusive breastfeeding are that the child may become malnourished; babies are to be given the traditional milk cream within the first four days after birth and; alcohol consumption by lactating mothers induces production of more breast milk. While the rural poor residents recognize the WHO recommendations for breastfeeding, actualizing these recommendations is seen as impractical due to factors related to the ecological setting including socio-economic and structural barriers. Livelihood issues where women have to resume daily livelihood ventures or domestic chores shortly after birth in such pastoral communities where men are out herding; high levels of food insecurity while many people believe that lack of adequate food leads to inadequate breast milk, thus affecting breastfeeding practices; high levels of HIV in Turkana County where there is mixed understanding regarding breastfeeding and HIV, with exclusive breastfeeding often being thought to be a reserve of HIV positive women which affects breastfeeding practices overall due to HIV stigma; poor professional and social support in a setting where many mothers deliver at home denying them an opportunity for professional counseling on breastfeeding offered around the time of birth at the health facility, many have no domestic help so resume household chores immediately after delivery.

Complementary Feeding: complementary feeding practices in Turkana County are classified as inadequate (KAP Survey Report, 2014). The status of complementary feeding practices is as follows:

- 60.4%of children aged 6 to 8 months are introduced to appropriate complementary foods;

- 9.5% of children aged 6 to 23 months receive appropriate child dietary diversity (4 or more food groups);
- 45.3% of breastfeeding children aged 6 to 8 months have a minimum meal frequency (2 times);
- 45.3% of breastfeeding children aged 9 to 23 months have a minimum meal frequency (3 times);
- 51.8% of children aged 6 to 23 months receive appropriate complementary feeding (fed solid and breastfeeding);
- 6.3% and 6.8% of children aged 6 to 8 months and 9 to 23 monthsrespectively receive minimum acceptable diet.

The low acceptable diet level is because of lack of dietary diversity attributed to food insecurity. The coping strategies to the food insecurity situation include: relying on less preferred & less expensive food, borrowing of food and dependence on food aid, limiting of portion sizes, restricting consumption of food by adults in preference of young and reduced number of meals.

Maternal Iron/Folate Supplementation: Compliance to Iron folate supplementation by pregnant women in Turkana in generally poor as illustrated below (KAP Survey Report, 2014):

- 62.9% of pregnant women are given iron and folic acid supplements during pregnancy
- 16.1% of pregnant women do not take the supplements
- 55.1% of pregnant women take iron foliate supplements for 30 days or less

The reasons for the low uptake of iron folate supplements are mainly because of failure to attend ANC, long distance to health facility and cost, low value attached to the supplements, the unfriendly smell and side effects (nausea and vomiting).

APHIAplus IMARISHA Contribution: The project has contributed to the implementation and uptake of the High Impact Nutrition Interventions in the assessed health facilities. The promotion of exclusive breastfeeding and complementary feeding is being done through Mother to Mother Support Groups as well as at household level by the CHVs. There is the delivery of key messages at various fora e.g. at the health facility where mothers attending MNCH clinics are sensitized on the importance of using iodized salt, iron/folate supplementation, zinc/ORS for diarrhea management, hygiene and sanitation including hand washing. Through supporting National Health campaigns like the annual Malezi Bora and World Breastfeeding weeks, the project has been able to reach more people with the appropriate messages as well as services.

The project has continued to mentor health care workers on the management of acute under nutrition as per the IMAM guidelines as well as supporting the integration of nutrition services in the CCC/MNCH/TB clinics resulting to scaled up case finding at facility and reduced lost opportunities and defaulters. Focused technical assistance has been provided to the health facilities on the delivery of Nutrition Assessment, Counseling and Support (NACS) as well as the dissemination of Job aids and nutrition service registers to health facilities. Good progress has been made in improving food security at household level and this has been made possible through the integration of nutrition in livelihoods, OVC/HCBC, WASH, Education and community support programs as well as the promotion of nutrition sensitive agriculture.

WATER, SANITATION AND HYGIENE

Review of project documents shows that 18,973 and 10,315 beneficiaries have been enabled to access safe water supply and improved sanitation facilities respectively. These absolute numbers for people accessing safe drinking water in the project identified zones of influence represent 68%, 74% and 100% in Isiolo, Marsabit and Samburu counties respectively. Proportion of people accessing improved sanitation facilities in the projects zones of influence is 18%, 64% and 69% for Marsabit, Isiolo and Samburu counties respectively. The reasons for the low coverage of improved sanitation facilities are:

- People abandon their homesteads/settlements to safer grounds due to insecurity and drought. This interferes with construction of toilets in triggered villages sometimes calling for re-triggering when the communities settle back.
- Matters of sanitation generally take second priority when the community is dealing with issues such as scarcity of water, lack of food and drought.
- There is gradual acceptance of non-subsidized sanitation approach in the region. These communities were used to subsidies for sanitation resulting in slow uptake of the non-subsidy approach. Notably, CLTS as the national approach for sanitation promotion is premised on non-subsidy for sustained behavior change.
- The process of national certification has been slow and there are no county ODF certifiers with the MoH National CLTS Hub in the region.

The findings on sanitation are a reflection of poor waste disposal in the counties and pose a serious threat to disease outbreaks and contamination of water sources leading to high prevalence of water borne disease

The developed WASH sites are summarized in Table 6 below;

Table 8: Number of WASH Sites Developed Since Project Inception

County	Boreholes (New and Rehabilitated)	New and rehabilitated shallow wells	VIP constructed	Number of villages triggered	Rain water harvesting systems	WMCs trained	Pipelines extended	Spring Protection
Garissa				21	13			
Mandera								
Wajir	2	6	27	86	6	89	3	
Marsabit	-	-	3	5	6	-	3	-
Isiolo	1	1	6	13	3	-	-	-
Turkana	-	2	8	10	5			
Samburu	1	1	4	11	3	43	-	1
Tana River		2	31	71	15	89		
Total	**4**	**12**	**79**	**217**	**54**	**221**	**6**	**1**

Sanitation in institutions: The assessment findings revealed that the types of sanitation facilities constructed in institutions are Ventilated Improved Latrines. Review of project reports showed that a total of 79 VIP latrines were constructed in schools and health facilities across the 8 counties. The facilities are estimated to be serving 5,000 pupils (an average of 63 pupils per facility). Through observation, the assessment team found that all the assessed toilet blocks are well located away from the classrooms and boundary walls. However, seven out of eight (87.5%) institutions have a fence to prevent the community from using the facility. The assessment further revealed that 75% of the toilet facilities are physically separated for girls and boys and spaced sufficiently apart to ensure that girls do not feel embarrassed but secure when approaching and using the facilities.

One out of eight (12.5%) hand washing facilities had water and soap in each toilet block: the facilities were either spoilt or placed far away close to the administration block or water was missing or had water but soap was missing. Despite the infrastructural gaps, it was found that appropriate hygiene education had been provided to pupils by either the school health club patron and/or by the public health officer. The drainage system was well designed in all the sites to ensure that rain water does not flood the pit except in one school in Isiolo County.

Roof Water Harvesting: During the long rain season, the rainfall intensity in all the catchment areas is sufficient to fill the installed tanks though the harvested water could not be sustained to the next season. Some sites had improvised by connecting to existing water reticulation. Table 7 below establishes whether the essential components of rain water harvesting system were in place in the assessed sites.

Table 9: Were the Following Essential Components for Rain Water Harvesting System in Place?

Essential Component	Yes	Percent
The school had sufficient roof catchments made of galvanized corrugated iron sheets from which water could be harvested and used as long as there is rain falling	9	100%
The gutters and down pipes were well fitted to convey harvested water from the roof to the storage container	7	78%
Gutters and down pipes had filters to remove solid materials	0	0%
The slope for gutters and down pipes were well fitted to avoid leakage at bends that could lead to loss in the harvested water and/or damage/stain the wall of the school building	8	89%

To establish whether standards for the storage tanks were observed, the assessment team found that all the sites had installed the 10,000 litre tanks. It was also found that the elevation of all the tanks was well placed to maximize water harvesting, the tanks were well branded with USAID Logos and the gutters were well fitted to direct the water. However, in one of the sites in Marsabit County, the installed plastic tank was not suitable for the climate due to the harsh heat. To ensure durability, the tank had been connected to an existing water reticulation to ensure there water throughout the year

Shallow Well: Table 8 below tried to illustrate from one of the shallow wells in Samburu County whether the shallow well observed the standard requirements for providing and maintaining clean drinking water.

Table 10: Were the Following Elements for Ensuring Clean Drinking Water Observed?

Essential Elements	Score
The surface area is covered	Yes
The upper part of the well shaft above the water level is water tight sealed from any runoff or dirt entering the well	Yes
The water source is accessible to the community or if in community is accessible to school	Yes
The estimated water demand per day for the school is met at peak hour.	Yes
The water source is protected from potential source of pollution or contamination	Yes well protected
The excess or drainage water is directed to a soak – away pit or underground cistern	Yes there is drainage channel

Water quality tests are made to ensure public safety during the drilling, construction and later on a regular basis as per the required public health requirements	Not done, but after construction the water is disinfected by means of chlorine tabs, the community is also issued with chlorine tabs for household water treatment

Management and sustainability of school WASH facilities: Table 9 below tried to show whether the assessed institutions had put in place management and sustainability elements of WASH facilities.

Table 11: Were the Following Management and Sustainability Elements Put in Place?

Management and sustainability of school wash facilities	Assessment
Institutionalizing management: there are key members of school/health facility administration with clearly assigned roles and responsibilities for the management of school WASH facilities	All sites had key members clearly assigned roles and responsibilities
Participation: there are participation of pupils, teachers, head teacher and PTA in the management of WASH facilities in the school	Yes, the pupils, teachers and Head Teacher participation is there and active
Contribution: there is contribution by the community in terms of cash, labor, time and decision making in construction and maintenance of the established facility.	There is no contribution at all from the community
School management: ensure that the students understand how to use WASH facilities to avoid the unintentional soiling of toilet compartments and unnecessary waste of water	Yes, this is regularly done on parades and health clubs
Responsibility for daily and weekly cleaning: there is a roster for cleaning the toilets and supervised by a teacher	Yes, there is a weekly schedule for each class under the supervision of the teacher on duty. Health facilities have a subordinate employed to clean

Monitoring School WASH Facilities: the assessment team established that:

- All the latrines, urinals and hand washing facilities were cleaned daily by pupils under the supervision of a teacher
- There was at least a member of the school (cleaner, pupil, teacher) assigned the responsibility of inspecting the water supply system and sanitary facilities (latrine, urinal and hand washing) for any malfunction, crack, damage that could occur during use.
- Repairs and maintenance are not made immediately in most of the incidences where the water supply system, latrine slab, seat vent pipe break down since consultations and expenditure approvals have to be made by the school management committee
- Most institutions have a designated trained artisan to do repairs and/or maintenance. However, others outsource for the private sector

Integration of WASH, MNCH, RH/FP and Nutrition: Safe drinking water, sanitation and hygiene (WASH) are critical to people's health and well-being, and especially to maternal, newborn and child health (MNCH). Almost 10% of the global burden of disease is attributable to unsafe WASH and women and children are most affected by the consequences of poor access to these services. As such, improvements in WASH are key to improving women and children's health in high burden areas. A stronger WASH sector, and better coordination between the health and WASH sectors, is essential to

achieving this goal. The assessment team found efforts by the project to integrate WASH, MNCH and Nutrition services at community level.

FACTORS OF SUCCESS

The smooth and timely transition from previous partner ensured continuity of care to beneficiaries, sustained gains made and leveraged on the already established systems, structures and relations. APHIA*plus* IMARISHA constituted a start-up team to manage the transition and managed to put in place rapid start-up implementation team before staff were hired. One of the PAC members said *"What was really good when the project started is that AMREF very quickly put together a start -up team before we even had the project staff like our self on board".* Previous presence and experience of the prime working in Northern Arid lands was an added advantage, said a PAC member *".....it is a challenging area to work and I think one needs to have roots and organizations like AMREF have roots in that area .... Before I would have considered to be a prime but now I would never consider working there as a prime"* The assessment team also found that partners have gone their way to leverage their own resources to support this grant to be able to achieve results.

The decision to train and use HIV positive clients from the same community as expert clients has reduced stigma and discrimination in the community. One of the CCC FGD respondents said: *"there is a time we were being led by those who were not infected and they were like a barrier before us, so they are the ones who could pass any information to the community about our HIV status."* Another CCC respondent said the following on discrimination: *"the issue of tradition/culture is not so much.....before if one got infected with HIV his people would separate him and build him a house aside from the others"*

Support groups for people living with HIV (PLHIV) are effective forums for members going through similar life experiences to express and help members of the group and those stigmatized in the community. A respondent in an FGD with CCC clients in Samburu CRH mentioned that it is through the support groups that they are able to manage the numerous challenges they face as PLHIV. It was found that it is easier to fight stigma and improve on uptake of services when expert clients share personal experiences with community members who had fears. An expert client in a FGD in Samburu said: *"They come because they were counseled by us...we find even the one that is afraid, we go to his/her house and we try to explain to him/her how he/she will live and we inform him/her that we were also afraid like them but when we started using them (ARVs) our health improved...we bring many people, some have started medication, just like that."*

The innovative approaches implemented by the project to address some of the barriers to access and utilization of services helped to improve uptake of services. A PAC member said "*there are a few innovations that we are undertaking, one of them for example is the maternal shelter in Samburu has increased deliveries by skilled birth attendants and can be replicated in other areas."* The county government of Turkana embraced and supported some of the innovative approaches to improve access to health services, said a PAC member, *"... the Turkana county government has really seen that as a useful approach and have committed funds from the county to begin container clinics elsewhere..... it has influenced the county to use this approach to reach the migratory populations."* Other innovations by the project such as the support for transport for pregnant mothers in Wajir, use of domiciliary midwives in the community, the *BOMA* model and the use of safe motherhood vouchers have improved the MNCH outcomes in the project areas.

The technical teams are fairly well integrated with multi-disciplinary competencies and when they move to a site to provide TA they move as a team. Due to the vastness of the NAL and the physical challenges of covering almost 70% of the land mass in Kenya over difficult terrain, the approach used by the project to prioritize implementation and identify areas where the project directly offered

technical support and those where the project indirectly supported through the CHMTs and sub-CHMTs bore fruit and is an approach that should continue to be used.

The integration approach used by the project to support uptake of the health services has contributed to the improvement in the health indicators and so that project will continue to scale up this approach. Examples of various integration models used by the project are as follows: integration of nutrition into ECD centers, integration of FP into CCC and MCH clinics, integration of WASH-MNCH/RH-Nutrition interventions at community level, integration of nutrition and household economic strengthening activities among others. The results seen with the use of these approaches show that they need to be further scaled up for better health outcomes.

OBSTACLES TO SUCCESS

The distance, cost of services, stigma and discrimination were mentioned as some of the barriers to access service. Exorbitant fees charged by Faith Based Organizations (FBOs) were mentioned as one of the factors hindering access to health services. This was mainly attributed to cost of drugs. Stigma and discrimination has led to patients seeking health services from far facilities as mentioned by CCC FGD respondents in Marsabit County "*Where we live, you don't want people to know that you are HIV positive, so you have to go for medicine in another far away facility where people don't know you. You get there late because you don't have money to hire transport and tired.*" In some instances as mentioned by CCC clients in Turkana County, disclosure of HIV status is a problem especially when the client becomes too sick and cannot send someone to pick drugs for them. Disclosure is also a problem among youths for fear of breaking their relationship: *"if my boyfriend finds out about my HIV status, he will leave me. So we are forced to hide our status, and spread the disease other than controlling it."*

CHVs in Turkana have the opinion that utilization of services is still very low because of stigma, said one respondent, "*Very few use this service because they fear being insulted and secondly they fear taking the medicine."*

There is lack or minimum participation of PLHIV on decision making within the CCC and health facilities. This came out very strongly in an FGD with CCC clients in Samburu county *"this office and the one heading it does not bring us any news and we know very well that all groups helping PLHIV pass through them..... It is like there is no clear communication between us and him. We therefore get the drugs and go, we do not care about the rest of the things"*.

Poor health seeking behavior of community members was mentioned as one of the obstacles in a FGD with CHVs in Samburu County. A respondent complained that some parents have a tendency of not taking their children to the health facility when they are referred.

There is mistrust of community members towards CHVs. Because of the mistrust, some community members do not divulge household information to CHVs or make demands that the CHVs are not able to fulfil. A CHV respondent in an FGD in Turkana mentioned this as the challenge she experiences: *"If you ask an individual the name of his child, they question what you want to do with the child's name. Another thing they ask is whether you have brought some assistance, if not; they will not give you the information. They retort that only the CHVs eat and they (community members) do not benefit from the information they give."*

A key informant from a health facility in Isiolo County mentioned lack of established mechanism for defaulter tracing and a referral system that is not working due to logistical challenges as some of the obstacles to the success of the program.

The vastness of the project area with poor infrastructure is one of the obstacles to success, said one of the key informants *" you know we cover 70% of Kenya and travelling alone takes a full day from one*

facility to another.....the teams are over stretching themselves." The nomadic lifestyle and conservative culture of the communities is also a challenge in providing community services in an efficient and effective manner, said a CHV during a FGD in Samburu *"...the way our people live, they live in Manyattas which are far apart and when I visit I get the woman alone, husbands and children are always not there....you have to make many trips to reach all household members."*

The fluid security situation in the NAL is also a main challenge faced. When there is a flare up, the project is forced to adjust project implementation until the situation calms down. When there is insecurity, the communities we work with often run away from the area and come after a long while and this therefore affects our continued engagement with them. However, the project has been able to adapt to the challenges on the ground and still maintain a level of project implementation even though on a smaller scale while ensuring security of our staff and assets. The continued presence of the project on the ground has been greatly appreciated in the counties and is evidence of commitment to improving the health of the NAL communities despite the challenges.

The social and gender inequalities within the region and a hierarchical clan system continue to be one of the significant challenges faced by the project. The health of women and children lies in the hands of their husbands, fathers, brothers and hence engagement with the men and other community gatekeepers to raise awareness and increase uptake of health services remains the main focus of this project so as to improve maternal and child health outcomes.

During the first year of project implementation, consortium partners had different policies and procedures on human resources which took time to be harmonized. The reporting lines were not clear to most staff and this affected activity implementation and field coordination. A key informant from the PAC said *"as usual when the project is beginning and you have so many consortium partners, it takes a bit of time for you to get to know one another and to be able to have a proper coordination mechanism as well as getting to know each other and beginning to work as a team. So, I think that was an issue"*.

The assessment team established from project technical staff during key informant interviews that the original implementation strategy through the regional teams was good though marred with coordination Challenges. However, the creation of county based teams was a good step and would allow the project to effectively support counties. The deployment of staff within the counties has been based on prioritization of HIV/AIDS interventions within the project as guided by USAID. APHIA*plus* IMARISHA has made efforts to ensure that the competencies that are available regionally are also well shared out within the respective counties.

Timeline for compiling and submitting quarterly report is very short to prepare and submit quality report. According to a PAC respondent, the 30 days given to compile and submit narrative reports after the end of the quarter is not sufficient for the teams to receive data from the partners, review data and compile reports. Since the project relies on MoH reporting systems and NAL has unique challenges which leads to late reporting, these factors to under reporting and the report writing period is rushed as data keeps on flowing in even after the deadline.

Staffing and workload is a challenge across NAL. The health facilities lack enough HCWs to offer the required quality services in most of the service areas. *"I would like that they employ more staff, because the doctors are very few and they are not able to handle all of us, it's too much work for them and for us too"* said a CCC client in Turkana. This was also reiterated by the project team as lack of adequate staff is one of the main challenges faced in the health facilities.

COORDINATION AND PARTNERSHIPS

AMREF, as the prime, is responsible for managing and coordinating partnerships with the MOH at the national and county levels, local implementing partners (LIPs) and the consortium partners. MOUs represent the formal linkages between APHIA*plus* IMARISHA and MoH while sub-agreements represent the formal linkages between AMREF with LIPs and consortium partners. These MOUs and sub-agreements serve as a reference point for discussing respective roles, responsibilities, and progress in achieving a common agenda. They are renegotiated and adjusted accordingly every year. To date, APHIAplus IMARISHA has signed MOUs and/or sub-agreements with 8 CHMTs, 28 LIPs and 3 consortium partners.

The project has come a long way from the beginning when the systems were being set up and mechanisms for internal communication and coordination were being established. APHIA*plus* IMARISHA has established governance structures for managing the project which involves all the consortium partners. The MOUs signed with the MOH and the sub-agreements with the LIPs provide the basis of the partnership with the MOH and the LIPs and the review of progress is gauged against what was signed. APHIA*plus* IMARISHA has a Project Advisory Committee (PAC) that meets quarterly to guide project implementation, and ensure there is cohesive strategic partnership, said a PAC member, "*it is a forum for us to essentially bring in issues that we face during delivery of our scopes and those have always been discussed bilaterally between partners..... they have resulted in program-wide changes in strategy or in structures that have made the program more effective.*". Another PAC member was satisfied with project management and the role the PAC has played in guiding the partnership, she said, *"I think joint work planning has been very important in identifying/reviewing partner responsibilities. This has helped to foster the partnership and ensure that the partners have a common purpose.....I also appreciate that the forum gives partners an opportunity to discuss and seek solutions to consortium challenges."*

The participatory work planning process is done annually by the project staff. This has been very effective, said a PAC member, *"it provides an opportunity to reflect and say, "how did the year go?", "what did you do?", "what worked well?".....*"how can you build on the lessons learnt from the previous year?" ....."

From a consortium of 6 organizations at the beginning of the project, APHIA*plus* IMARISHA is now being implemented by 4 organizations. With the various funding changes that have occurred over the last two year as well as the changes in project implementation and focus areas in the NAL, two partners opted to leave the consortium. However, because there were existing partners who were carrying out similar roles, the project was able to transition the roles and the necessary technical staff to the remaining partners with minimal disruption to project implementation. "*Consortiums that have partners with duplicated competencies create conflict on the implementation of strategies which presents challenges when you try to work as a team*," acknowledged one PAC member.

Funding for the Community Health Strategy (CHS) remains a challenge at community level as this is still heavily reliant on partners. However, county governments are now getting involved in this and are beginning to set aside funds to support their work. The project re-oriented its support for the CHS by focusing on activities that lead to increase uptake of healthy behaviors' at household level such as HTC, ANC, SBA, FP, Immunization, reduction in treatment defaulting, improved WASH etc. The project identified specific CHWs who were assigned to high volume priority facilities with roles as either expert patients' for the HIV clients or lead CHVs for MNCH who will specifically follow up on all the identified pregnant women and ensure that they come for ANC and have a skilled birth. These CHWs work closely with the CHWs in the surrounding community units where they exist and are the main link between the community and the facilities.

With the new strategy, some CHVs at community level relinquished their services or those who remained became de-motivated when their allowances were reduced, one CHV said, "*they used to give us a monthly stipend of Ksh. 2,000 this was reduced to Ksh. 500. I feel that if they can increase the allowance, we will continue with the work because not every one of us has income earnings.*"

SUSTAINABILITY

APHIA*plus* IMARISHA's strategic approach to sustainability was in-built from the start of the project. All support was and will continue to be provided in collaboration with the GoK departments at the national and county level within the existing systems and structures.

Community Ownership and Commitment: APHIA*plus* IMARISHA trains and mentors local implementing partners to strengthen their management and financial systems. They also facilitate them to build the capacity of CHVs to create awareness in community and involve the communities to identify opportunities and address their own health needs. One CHV in a FGD in Turkana County said "The *impact lasts long. Whenever you show the community how to do something, they will continue to do it even if you are not there. They will say this is what the CHV told us…you dig pit, put rubbish in, take children to clinic, children need immunization. Such things last longer.*" One CHV thinks they can continue to apply the knowledge and skills attained: *" I think the activities will go on because we have knowledge and skills to run these activities even without the partner."* One CHV in a FGD was confident that the county governments will take up community based activities supported by APHIA*plus* IMARISHA when life of the project comes to an end: *"The community will sustain the activities because now there is county government who are helping on the side of community. So even if the partner withdraws, there are steps that the county government will take to help the community. The government cannot abandon its people to suffer"*

APHIA*plus* IMARISHA facilitated the CHVs to form community based organizations (CBOs) and took them through practical trainings on economic strengthening initiatives as mentioned by one of the respondents "*We were taught IGA by John Kutwa and Teresa….. we were taught practically…..we planted a farm next to the water source (pipe). We fetched soil, mixed it with fertilizer and planted crops."* Another CHV from Samburu county said, *"If this project goes and fades away what we can say is thanks to the trainings they have taught us and we have seen its fruits……..we have registered our CBO and opened an account…."*

Facility Level Sustainability: APHIA*plus* IMARISHA facilitates facilities and counties during their annual planning and budgeting processes. During these sessions members of staff are taken through participatory planning and budgetary processes and are involved in the decision-making process. A key informant in Isiolo County said: *"All members of staff are involved in the process of planning, assignment of duties and information flow….the senior facility management is involved with the budgeting and procurement"*

Other than providing mentorship, APHIA*plus* IMARISHA is working with the county governments to develop a pool of Trainer of Trainers (TOTs) as stated by a project staff during key informant interviews: *"we have helped HCWs get skills to improve maternal health to understand basic emergency obstetric and neo-natal care…..clearly once we are out the staff will be able to continue with the services… we are also working very closely with the counties to develop TOTs who will then continue training other health care workers."*

CHAPTER FOUR: RECOMMENDATIONS

1. WE **RECOMMEND** that APHIA*plus* IMARISHA continues to use appropriate community entry processes whenever they initiate community based interventions for acceptance, effective implementation and community ownership as they have been shown to work. Community gate keepers should be made aware of the potential benefits of community programs and engage them to mobilize the community on the work of the CHVs. This can be done through chiefs' *barazas and* religious meetings with facilitation of the community health extension worker. The gatekeepers and CHEWs should also be facilitated to hold community meetings and/or hold individual meetings with community members resisting to adhere to appropriate health seeking practices.

2. WE **RECOMMEND** that APHIA*plus* IMARISHA continues to focus on building capacity of the sub-CHMTs and CHMTs to systematically take over the provision of technical assistance to health facilities, HCWs and LIPs for all service delivery components so as to enable them take charge and sustain the gains made by the project as part of the exit strategy.

3. WE **RECOMMEND** that APHIA*plus* IMARISHA continues to collaborate with local implementing partners to continue to establish and strengthen existing support groups for people living with HIV.

4. WE **RECOMMEND** that APHIA*plus* IMARISHA strengthens the collaboration between TB and HIV/AIDS programs in each of the supported counties whose activities target the reduction of HIV burden amongst TB patients and reduction of TB burden amongst People living with HIV/AIDS.

5. WE **RECOMMEND** that APHIA*plus* IMARISHA scales up its food security and nutrition program to target more households for PLHIV, and OVCs by training caregivers and support groups on how to build resilience on food security shocks in northern arid lands.

6. WE **RECOMMEND** that APHIA*plus* IMARISHA adopts more adult learning methodologies to build capacity of CHV/expert clients. Exchange visit was one of the recommended adult learning approaches suggested by a CHV in one of the FGDs in Samburu County. The project should also explore how to best engage the CHVs/expert clients at facility level in decision making as part of strengthening the facility-community linkages.

7. WE **RECOMMEND** that APHIA*plus* IMARISHA strengthens and implements the appropriate BCC strategy to address stigma and discrimination in NAL. These interventions should be broadened and cut across HIV, MNCH and RH/FP areas.

8. WE **RECOMMEND** that APHIA*plus* IMARISHA starts lobbying with county governments to absorb some of the CHVs/expert clients and to budget for their allowances.

9. WE **RECOMMEND** that APHIA*plus* IMARISHA continues to scale up the various useful innovations that have been done within the project to improve health outcomes such as the maternal shelters, BOMA model, container clinics, domiciliary midwives, re-orientation of Traditional Birth Attendants among others. The costings and the outcomes of these innovations should be documented and shared with the counties for their uptake and replication.

10. WE **RECOMMEND** that APHIA*plus* IMARISHA diversifies the incentives they give to CHVs other than monthly allowance and these should include certificates of participation and recognition, uniforms and bicycles where possible.

11. WE **RECOMMEND** that APHIA*plus* IMARISHA continues to mobilize, organize and train CHVs on IGAs and link them to the existing household economic strengthening and microfinance initiatives within the project as a sustainability strategy.

12. WE **RECOMMEND** that APHIA*plus* IMARISHA continues to work closely with the CHMTs and HCWs to actively engage communities to create awareness of MNCH, Reproductive Health and Family Planning and stimulate demand for their uptake

13. WE **RECOMMEND** that APHIA*plus* IMARISHA continues to involve male, religious leaders, chiefs, mother-in-laws and other key community stakeholders to address myths and misconceptions on Reproductive health and FP to increase uptake of family planning and especially the long acting methods.

14. WE **RECOMMEND** that APHIA*plus* IMARISHA supports the CHMTs to reinforce commodity security by: strengthening commodity delivery systems for all service delivery areas and by ensuring timely reporting of consumption data and proper ordering, receipt, storage, and use of commodities.

15. WE **RECOMMEND** that APHIA*plus* IMARISHA promotes Growth Monitoring and Promotion, Vitamin A supplementation and deworming through teachers to target children older than 12 moths at Early Childhood Development (ECD) Centers.

16. WE **RECOMMEND** that APHIAplus IMARISHA continues to work closely with other USAID and non-USAID funded implementing partners to scale up food security and nutrition activities in the NAL as well as scaling up PD-Hearth in counties with poor maternal, infant and young child feeding indicators

17. WE **RECOMMEND** that APHIAplus IMARISHA continues to support communities with rainwater harvesting technologies. More use of the larger capacity masonry tanks 30m3 and less of plastic tanks which have a smaller storage capacity and are affected by the excessive heat in the NAL is encouraged. The installation of rain water separators to remove solid materials is also recommended.

18. WE **RECOMMEND** that APHIAplus IMARISHA continues encouraging community participation in all stages of project development from identification to completion through own labour and materials.. The development of local governance structures (WSMCs) for effective management of WASH resources is a critical aspect and promotes ownership and sustainability of WASH services.

19. WE **RECOMMEND** that APHIAplus IMARISHA fast tracks the training of county level 3rd party certifiers to support villages ODF certification process so as to address the challenge of the slow process of National Certification of ODF .

20. WE **RECOMMEND** that APHIAplus IMARISHA continues to use water as an entry point to the NAL communities and provide integrated WASH-MNCH/RH/FP-Nutrition-HIV services to create demand for and deliver holistic health service to the community.

21. WE **RECOMMEND** that APHIA*plus* IMARISHA to map Garissa, Wajir and Mandera into secure and insecure areas of operation as the security situation is projected not to improve in the next one to two years. The mapping will demarcate areas that the project will be able to directly support and those that will be indirectly supported by the project though the CHMTs and sub-CHMTs.

22. WE **RECOMMEND** that USAID considers an Agreement modifications to extend the time for submitting quarterly reports to 45 days after the end of the quarter instead of 30 days to allow the project time to receive data from health facilities (through DHIS), review the data and write quality report.