FINAL EVALUATION (DRAFT)

Improved access to clean water, sanitation facilities
and first health quality services in the County of
Isiolo, Merti, Isiolo and Garbatulla Sub-Counties
(MAPS Project

(AID number 010191/LVIA/KENYA)

Project implemented by: LVIA and CCM
In partnership with:

WRMA and Isiolo County Department Responsible for Health

Funded by: Italian Ministry of Foreign Affairs (MAE)

June-July 2017

Hoffman solutions Ltd
(Dr Michael Karanja, James Kamenju, Caxton Murira)

hoffmansolutionsltd@gmail.com
Acknowledgements

The consultants would like to acknowledge the contribution of the following individuals in making the final evaluation exercise a success:

Maurizia Sandrini - Previous LVIA Project Coordinator
Tamara Littamé - CCM Health Activities Coordinator
Heinrich Gorfer - Actual LVIA Project Coordinator
David Kamau - WASH Field Officer for Merti SC
Elizabeth Ncabira - Primary Health Care Supervisor for Garbatula and Isiolo SC
Emma Antonacci - Intern
Ephraim Shamba - Primary Health Care Supervisor for Merti SC
Michael Mugo - County Public Health Officer
M. K. Mbogori - Ag. Asst. Technical Catchment Manager
Abraham Gitonga - Field Monitoring Officer
Nicholas Munene - Project Officer for Merti (ADS organization)
Moses Ngaca - Intern
Sora Gonjobo - Sub County Public Health Nurse for Merti
Daniel Kiptim - LVIA Former Wash Officer, Garbatulla SC
John Kinyanjui - Former WRMA director

We also wish to thank all the Community health volunteers, head teachers and deputy head teachers, pupils who are members of school health clubs and community members who participated in the KII's, FGDs and household surveys.
# Table of Contents

Table of Contents ................................. 4  

**EXECUTIVE SUMMARY** .......................... 7  

**CHAPTER 1: INTRODUCTION** ...................... 17  
  1.1 The Implementing Agencies and Sites ........... 17  
  1.2 Background .................................. 18  
  1.1.1 Project Description ......................... 18  
  1.1.2 Background information of the Consultancy .... 19  
  1.1.3 Project beneficiaries ....................... 21  

**CHAPTER 2: EVALUATION PURPOSE, OBJECTIVES, AND METHODOLOGY** .... 22  
  2.1 Purpose and Objectives ....................... 22  
  2.2 Methodology .................................. 22  

**CHAPTER 3: LITERATURE REVIEW** ............ 25  
  3.1 Water Sector .................................. 25  
  3.2 Health sector .................................. 26  

**CHAPTER 4: FINDINGS** ............................ 28  
  4.1 Key highlights from Household Survey .......... 28  
  4.1.1 HEALTH .................................... 28  
  4.1.2 WASH ...................................... 30  

**CHAPTER 5: EVALUATION RESULTS BASED ON DAC CRITERIA** .......... 34  
  5.1 Relevance ..................................... 34  
  5.2 Effectiveness .................................. 37  
  5.3 Efficiency ..................................... 48  
  5.4 Impact ......................................... 49  
  5.5 Sustainability ................................. 53  

**CHAPTER 6: LESSONS, CHALLENGES, CONCLUSIONS AND RECOMMENDATIONS** 57  
  6.1 Implementation lessons learned ................ 57  
  6.2 Some challenges and constraints .............. 59  
  6.3 Mitigation measures for the constraints ........ 61  
  6.4 Conclusions ................................... 62  
  6.5 Recommendations .............................. 62  

**REFERENCES** ..................................... 64  

**APPENDICES** ...................................... 65
LIST OF FIGURES
Figure 10: Solar Powered Borehole at Biliqo Marara................................................................. 40
Figure 2: OPD data comparing baseline and end of project.......................................................... 51
Figure 3: Chart showing ANC, FP and PNC reach ........................................................................ 52
Figure 4: Immunization coverage ................................................................................................ 52
Figure 5: Elizabeth, an officer from CCM showing some of the maternity equipment donated at Malka Daka Dispensary ................................................................................................. 53
Figure 6: Borehole Protection from floods at Muchuro ................................................................... 54
Figure 7: Burst pipe at Muchuro ..................................................................................................... 55
Figure 8: A baby weighing scale donated by CCM ......................................................................... 56
Figure 9: Tree planting by SHC members at Mata Arba Primary school .......................................... 58

LIST OF TABLES
Table 1: Sites visited and assessment of interventions..................................................................... 9
Table 2: Project Summary Table .................................................................................................... 18
Table 3: Target Groups and tools Used .......................................................................................... 24
Table 4: Results 1 Target Achievement .......................................................................................... 37
Table 5: Results 2 Target Achievement .......................................................................................... 38
Table 6: Results 3 Performance against Targets ............................................................................ 43
Table 7: Community learning from Health Talks by CHVs .............................................................. 46
**ACRONYMS**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANC</td>
<td>Ante-Natal Care</td>
</tr>
<tr>
<td>BoM</td>
<td>Board of Management</td>
</tr>
<tr>
<td>CDF</td>
<td>Constituency Development Fund</td>
</tr>
<tr>
<td>CDF</td>
<td>Climate and Development Foundation</td>
</tr>
<tr>
<td>CEI</td>
<td>Conferenza Episcopale Italiana</td>
</tr>
<tr>
<td>CHV</td>
<td>Community Health Volunteer</td>
</tr>
<tr>
<td>CHC</td>
<td>Community Health Committee</td>
</tr>
<tr>
<td>CHMT</td>
<td>County Health Management Team</td>
</tr>
<tr>
<td>CIDP</td>
<td>County Integrated Development Plan</td>
</tr>
<tr>
<td>CLTS</td>
<td>Community-Led Total Sanitation</td>
</tr>
<tr>
<td>CMM</td>
<td>Comitato Collaborazione Medica</td>
</tr>
<tr>
<td>DAC</td>
<td>Development Assistance Criteria</td>
</tr>
<tr>
<td>DWIEE</td>
<td>Department of Water, Irrigation, Energy, and Environment</td>
</tr>
<tr>
<td>FGD</td>
<td>Focus Group Discussion</td>
</tr>
<tr>
<td>FH</td>
<td>Food for the Hungry International</td>
</tr>
<tr>
<td>HFC</td>
<td>Health Facility Committee</td>
</tr>
<tr>
<td>FP</td>
<td>Family Planning</td>
</tr>
<tr>
<td>ICHD</td>
<td>Isiolo County Health Department</td>
</tr>
<tr>
<td>IWRM &amp; WE Plan</td>
<td>Integrated Water Resources Management and Water Efficiency</td>
</tr>
<tr>
<td>ISS</td>
<td>Integrated Supportive Supervision</td>
</tr>
<tr>
<td>KEMSA</td>
<td>Kenya Medical Supplies Agency</td>
</tr>
<tr>
<td>KII</td>
<td>Key Informant Interview</td>
</tr>
<tr>
<td>KSh</td>
<td>Kenya Shilling</td>
</tr>
<tr>
<td>LAPSSET</td>
<td>Lamu Port-South Sudan-Ethiopia-Transport</td>
</tr>
<tr>
<td>Lppd</td>
<td>Litres per person per day</td>
</tr>
<tr>
<td>LVIA</td>
<td>Lay Volunteers International Association</td>
</tr>
<tr>
<td>MTE</td>
<td>Mid-Term Evaluation</td>
</tr>
<tr>
<td>MCM/YR</td>
<td>Million Cubic Meters per year</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>OJTs</td>
<td>On-Job-Training</td>
</tr>
<tr>
<td>OP</td>
<td>Outpatient</td>
</tr>
<tr>
<td>OPD</td>
<td>Out Patient Department</td>
</tr>
<tr>
<td>ORS</td>
<td>Oral Rehydration Salt</td>
</tr>
<tr>
<td>PNC</td>
<td>Post-Natal Care</td>
</tr>
<tr>
<td>RWHS</td>
<td>Rain Water Harvesting System</td>
</tr>
<tr>
<td>SBA</td>
<td>Skilled Birth Attendance</td>
</tr>
<tr>
<td>SCMP</td>
<td>Sub-Catchment Management Plan</td>
</tr>
<tr>
<td>SC</td>
<td>Sub-County</td>
</tr>
<tr>
<td>TT2</td>
<td>Tetanus Toxoid Two</td>
</tr>
<tr>
<td>U5</td>
<td>Children Under Five Years</td>
</tr>
<tr>
<td>VIP</td>
<td>Vent-Improved Pit</td>
</tr>
<tr>
<td>WASH</td>
<td>Water, Sanitation and Hygiene</td>
</tr>
<tr>
<td>WESCOORD</td>
<td>Water and Environmental Sanitation Coordination</td>
</tr>
<tr>
<td>WRMA</td>
<td>Water Resource Management Authority</td>
</tr>
<tr>
<td>WRUA</td>
<td>Water Resource Users Association</td>
</tr>
<tr>
<td>WSTF</td>
<td>Water Services Trust Fund</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

The project “Improve access to clean water, sanitation facilities and first health quality services in the County of Isiolo, Merti, Isiolo and Garbatulla Sub-Counties (MAPS)” was jointly implemented by CCM and LVIA, with CCM implementing the health component, mainly facilitating the implementation of the community strategy of the Government of Kenya by equipping health institutions, training on-the-job the health staff, conducting community outreach and health awareness through community health volunteers, empowering school health clubs and facilitating supporting supervisions by the County and Sub County health management teams. On the other hand, LVIA provided water and sanitation infrastructure including water tanks, roof harvesting and latrine construction in schools and dispensaries, water sources protection and rehabilitation, borehole construction. LVIA also created and/or trained water management committees. The water management committees were trained on Operations and maintenance (O&M). The 3-year project started in May 2014 and was to end in April 2017. However, during the third project year there were some delays in implementation due to delayed disbursement of funds from donors. A 3-month no cost extension until the end of July 2017 was submitted together with a project amendment and approved by the Donor to enable completion of remaining activities.

The final evaluation was commissioned against a backdrop of a severe drought in Isiolo County where in some places 70% of livestock had died in the worst drought seen in years, and a countrywide nurses strike was still ongoing by the time of this evaluation. Competition for natural resources had caused conflicts with population displacement in some places. People have been affected by the water shortage, with some traveling long distances in search of the commodity. However, the community resilience is evident with schools still running and community going on with their daily activities.

The specific objective of ‘To improve the continuous and sustainable access to clean water and existing hygiene facilities in the three Districts (sub-counties) of Garbatulla, Merti and Isiolo’ has been achieved; by May 2017, 55,242 people have accessed water (100% achievement) while 81,833 people have been sensitized on water and health best practices. Access to women and children to primary health care services increased by 39%. This result was achieved despite the challenges faced especially towards the end of the implementation period. Specifically, 33.962 people accessed water from rehabilitated/protected/constructed water sources, 7.126 students accessing water at school (50.2% girls), 29.036 people at dispensaries, 383 people (local leaders, authorities and water associations’ members were sensitized), 4.928 HH (24.640 people; 246%) accessing drinking water and receiving a 4 months stock of water purs to be used during the most critical period of the year, 133 members (51 women or 38% and 82 men) of 10 water committees trained, 3,045 students accessing latrines of which 53.5% are girls, 5,200 students sensitized on health and sanitation, 15 schools and 15 health facilities clean from activities such as sanitary kit distribution and health education sessions.

In Health sector, provision of equipment, capacity building and health education produced results with new ANC rates improving by 15% and revisits by 18%. New PNC rates increased by 43% and revisits by 51%. Immunization rate also increased with BCG by 19% and PENTA 3 by 18%, although measles and TT2 reduced by -14% and -29% respectively. However, new Family Planning services reduced by -24% although revisits increased marginally by 6%, something that can be attributed to cultural believes. Monthly access to health services increased by 39% from 3193 to 4448 cases. The project has resulted in enhanced access to health for 102,800 people having medical consultations, 1,635 pregnant mothers getting assisted birth and 1,459 children fully immunized. The project created 15 Community Health Committees, CHCs (100%) with a representation of 31.61% women while 45 health promoters (300%) were trained of whom 50% are women. CHCs and CHVs

1 FGD with CHVs in Korbesa
are an important component of the Community Health Strategy of the Government of Kenya. Sanitary kits were distributed to 1,940 HHS (97%). The assets composed of the 60 remaining kits which were distributed to the beneficiaries in the framework of health talks/sensitization activities. The project provided 205 school girls with reusable sanitary towels. A total of 1,356 training sessions (387%) were conducted at health facility level reaching to 22,043 beneficiaries of whom 67% were women. This achievement was also occasioned by sensitization activities during 8 (400%) World Health/Hygiene Days. The project equipped 15 Health Centres/dispensaries with basic medical tools and drugs to provide primary health care to communities. Pursuant to reducing maternal and Under 5 mortality deaths, 50 health workers were trained on childcare protocols, ANC, PNC and SBA. Availability of health facilities and skills led to 2,861 pregnant mothers benefitting from ANC services of which 1,635 pregnant women got assisted birth, a 125% achievement against the target of 1.304. A total of 28,931 medical consultations (94% of target) were provided to Under 5s leading to 1.147 children being fully immunized as mothers adopted exclusive breast feeding of under 6 months old2.

In WASH, specific outputs achieved have included rehabilitation/protection of 21 water sources (100% achievement) including boreholes, pipeline water extensions springs, 9 connections to school/dispensaries, 1 shallow well with solar pump, 1 well perforated and solar panel system installed, then connected to local school and dispensary, 1 river intake rehabilitated, 7 deep wells protected (on 4 of them a solar panel system was installed), 2 sand dams rehabilitated. A total of 24 Roof Water Harvesting (RWHS) (86%) were installed in schools and health centres/dispensaries, less the original target due to a project amendment to concentrate on latrines. More so, the decision was based on the fact that this intervention was synergistic with another similar intervention LVIA implemented in the project area where more RWHS were installed. Progress in catchment management strategies was achieved through the formation of 5 WRUAs (100%) and development of SCMPs. Access to sanitation was spearheaded in schools and health facilities through construction of 34 blocks of latrines (85%) with 100% use of the facilities by the target groups. More so, the project had planned to build 40 blocks of 2 doors (80 doors total) but built 34 blocks for a total of 90 doors hence achievement can be regarded as 113%. Students/pupils were trained on hygiene and sanitation through the formation of 15 School Health Clubs (100%) and provided with 15 sanitation kits (100%) for cleaning school compounds. Additional 15 sanitary kits were distributed to dispensaries for cleaning purposes.

Several factors have affected the expected outcomes: the prolonged drought has resulted in sub-optimal roof water harvesting for the institutions (schools and dispensaries) although if rains come in future it will be beneficial and the safe clean water can be used for prolonged periods; there is high dependency syndrome among the communities who are unwilling to do even minor repairs, which may affect the sustainability of the projects. The water shortage brought about by the drought has also adversely affected expected behaviours from WASH interventions such as hand washing, cleaning of toilets and general hygiene at the household. In some sites such as Malka Galla primary school, there were damaged guttering works and broken tank shades and covers mainly blamed on the heavy winds. Water quality will also be affected due to dust and bird waste collecting in the gutters that can clog and contaminate water unless proper roof water management process is set in place at the institutions. LVIA always did training on the proper management of the RWHSs after building them, as well as a constant follow up. Unfortunately despite these efforts in some locations the systems are still not properly managed.

Other factors outside the control of the project such as nurses’ strike affected health services provision as some dispensaries were closed from December 2016 to March 2016 and again from June 2017,

2 Information from various FGDs with community members (women) and CHVs
including at the time of the evaluation. It was noted that there are low levels of collaboration with Ministry of Water officials who are less committed in working with development partners. Sharing of information or data by County officials to assist in coordination and implementation decisions was inadequate. Other factors that hindered effective implementation included conflict over allowances paid to government officials, cultural and religious myths affecting among others, latrine use for some populations, access to ante-natal care and HIV/AIDS prevention and testing/counselling, habit of not cleaning water collection containers resulting in contamination and diarrhoea cases among the population, lack of consistent water in schools affecting hand washing practices despite the health education, for instance, the leaky tins are empty in many sites. Communities were made aware of the use of PUR and sanitary pads and this created demand among the users, a good sign that behaviour change is taking place, although affordable private sources or Government subsidies are limited. An unstructured network and collaboration among various development partners and the County Government has also in some cases lead to duplication of efforts or lack thereof in major projects at the community which would have yielded better results and sustainability. There was, however, some synergy and complementing of efforts seen in some projects such as efforts made to equip the dispensaries and support to services by ADS, ACF and FH (who donated to the project lots of Purs) among other development partners.

The evaluators visited 14 sites to view the interventions. These sites included Daaba dispensary, Attan primary school, Arimawoi village, Manyatta Zebra primary school, Eremet primary school, the dispensary and school at Biliqo Marara, Malka Galla, Korbesa, Mata Arba, Mulanda Noor, Muchuro, Malka Daka, Duse and Kinna. These sites had each been selected for interventions to address a myriad of water and health challenges (see Table 1 below for details). The evaluators held 15 FGDs with community and CHVs, 92 HHs surveys and 23 KII interviews with LVIA/CCM staff, county and sub-county health staff, community members, CHVs and water management committees to assess any outcomes and impacts as a result of these interventions. Document review has also been used to populate sections of partners not visited.

<table>
<thead>
<tr>
<th>Site</th>
<th>Interventions performed and impacts on community</th>
<th>Reason for relevance/previous situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daaba dispensary</td>
<td>Equipping of dispensary, training of Community Health Volunteers, training of water committee, Installation of water extension from borehole to dispensary and piped water within the dispensary benefiting 853 dispensary users, 8,640 sachets of water pur distributed to 72 HHs</td>
<td>Inadequate provision of health services (dispensary not equipped), lack of water in dispensary, and personal and household hygiene practices risking general wellbeing of the community.</td>
</tr>
<tr>
<td>Attan primary school</td>
<td>Test pumping and equipping borehole with submersible pump powered by newly installed solar system, installation of water extension (from the borehole within school compound) and storage tank to the community, training of school in hygiene and sanitation, formation of health school club (HSC) and provision of sanitary kit for cleaning, training of water committee</td>
<td>Lack of adequate and quality water for the school and community; no cooking in school due lack of water leading to 80 pupils dropping out of school; unhygienic practices within school.</td>
</tr>
<tr>
<td>Site</td>
<td>Interventions performed and impacts on community</td>
<td>Reason for relevance/previous situation</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Arimawoi water supply</td>
<td><strong>Outcomes/Impacts:</strong> Enhanced access to water in terms of quantity and quality, pupils in HSCs adopt hygienic habits and pass messages to fellow pupils and parents enhancing general hygienic practices in the village including clean compounds, local community management capacity build for maintenance of water resources in the settlement.</td>
<td>and the community. Borehole system had failed for 6 months.</td>
</tr>
<tr>
<td>(Borehole system)</td>
<td><strong>Outcomes/Impacts:</strong> Adequate clean water for domestic use and for livestock, return of previously displaced community members after pump broke, cost savings in water pumping, local community management capacity for maintenance of water resources through the village water committee</td>
<td></td>
</tr>
<tr>
<td>Manyatta Zebra primary</td>
<td>Installation of RWHS, construction of latrines, Training of school in hygiene and sanitation, formation of health school club (HSC) and provision of a sanitary kit for cleaning school compound.</td>
<td>Lack of water in school; inadequate sanitation; Inadequate hygienic practices.</td>
</tr>
<tr>
<td>school</td>
<td><strong>Outcomes/Impact:</strong> Availability of clean water from RWHS when it rains, pupils in HSC adopt hygienic habits and pass messages to fellow pupils and also their parents enhancing hygienic practices in the settlement, enhanced use of latrines, enhanced cleanliness in the school.</td>
<td></td>
</tr>
<tr>
<td>Eremet primary school</td>
<td>Rehabilitation of borehole, pump and solar panel installation benefiting 6,000 community members, Installation of water extension and storage tank to the dispensary, 2,400 water pur distributed in 20 HH, Training of school in hygiene and sanitation, formation of health school club (HSC) and provision of sanitary kit for cleaning school compound and training of water committee</td>
<td>Inadequate water access by the community. They walked to Kiwanjaa 5 km away and bought water at Ksh 20 per 20 ltr jerrycan or walked to Natungaa water spring and queued for 2 hours. When borehole failed in 2015, 137 pupils had dropped out of school to help parents to fetch water, and cases of diseases arose (Diarrhoea- 105, trachoma – 10 and scabies – 47). There were unhygienic practices within the community and school.</td>
</tr>
<tr>
<td></td>
<td><strong>Outcomes/Impact:</strong> Adequate access to and clean water for domestic use, cost savings in water pumping through solar, water availability and cleanliness in the dispensary, water treatment, pupils in HSC adopt hygienic habits and pass messages to fellow pupils and also their parents local community management and maintenance of water resources through trained water committee</td>
<td></td>
</tr>
<tr>
<td>Biliqo Marara dispensary</td>
<td>Sinking of borehole, Installation of solar with 6 panels, water extension to school and dispensary and 5,000l storage tank for the dispensary (benefitting 1,350 community members) and 10,000l tank to school (240 pupils). Provision of medical equipment and facilitation of CHVs, Training of school in hygiene and sanitation, formation of health school club (HSC) and provision of sanitary kit for cleaning school compound and training of 12 member water committee. Community pays</td>
<td>Previously used a hand dug well, little unreliable water, travelling 3km for water thus women burdened fetching water, using dirty water from lagga.</td>
</tr>
<tr>
<td>and school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site</td>
<td>Interventions performed and impacts on community</td>
<td>Reason for relevance/previous situation</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Malka Galla dispensary and school</td>
<td>Provision of medical equipment and solar lighting at dispensary benefiting 2.521 dispensary users, facilitation of CHVs; Roof water Harvesting in school – gutters and 6 tanks benefiting 352 pupils (154 boys, 198 girls), construction of 2 blocks of dispensary latrines with 2 doors, 41,040 sachets of water pur in 342 HH, Training of school in hygiene and sanitation, the formation of the health club and provision of 2 sanitary kits for cleaning school and dispensary compound. Sanitary towels for 63 girls, 24 HHs benefit from Family kits. <strong>Outcomes/Impacts:</strong> Enhanced access to adequate and clean water - they have harvested rain water which was used for 1 year, solar system has enabled use of dispensary at night for cases of delivery or other emergency medical cases, behaviour change in the community including use of treated water, more hand washing and improvisation of hand washing equipment, more latrine use, family planning, exclusive breastfeeding, ANC, safe/clean practices during baby feeding, clean compounds, more hospital deliveries, girls remaining more at schools during menstruation, reduced girl absenteeism from schools due to menstruation as a result of provision of sanitary pads. HSC members creating hygiene awareness among other pupils and at home improving hygiene in the settlement including use of rubbish pits.</td>
<td>Distance to water source 6km, shallow well, use of untreated dirty water, temporary collapsing latrines, dispensary lacked equipment, used to go to Merti over 30km away to health centre, home deliveries with TBA, use of torch or hurricane lamps at night in dispensary, poor hygiene in school and households, girls absent from school 3 days in a month during menstruation.</td>
</tr>
<tr>
<td>Korbesa dispensary and school</td>
<td>Provision of medical equipment benefiting 2.917 catchment population and facilitation of CHVs; Roof water Harvesting – 4 tanks of 10.000 l each and gutters, water connection (including the village of Saleti and Rigga), construction of latrines, Training of school in hygiene and sanitation benefiting 571 pupils 376 girls, 195 boys), formation of health school club (HSC) with 30 pupils and provision of 2 sanitary kits for cleaning school and dispensary compound. 90 HHs benefit from family kits and repairs on main pipeline. 30.120 sachets of water pur distributed in 251 HH. <strong>Outcomes/Impacts:</strong> Closer access to quality medical care, access to water from roof harvesting when it rains, behaviour change in the community including purification treatment of dirty water before use, more under 5 vaccination, exclusive breastfeeding, family planning, child spacing, hospital deliveries, saving money in preparation for child birth, active HSC members creating hygiene awareness through school activities, including during world environment day and at home, latrine use (a rise in number of latrines from 25 in 2013 to 170 in 2017) and clean home compounds.</td>
<td>Home deliveries with TBAs, low vaccination, low ANC, low family planning, no birth planning, use of dirty water from lagga, few latrines and low usage, poor hygiene and sanitation in school, a lot of dysentery cases</td>
</tr>
<tr>
<td>Mata Arba dispensary and school</td>
<td>Provision of medical equipment benefiting 633 patients and facilitation of CHVs reaching 1.080 community members; Roof water Harvesting – 4 tanks 5000 l, construction of 1 center, fed babies early</td>
<td>Would travel to Merti about 20km to health center, fed babies early</td>
</tr>
<tr>
<td>Site</td>
<td>Interventions performed and impacts on community</td>
<td>Reason for relevance/previous situation</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
|                             | block dispensary latrines with 2 doors, 23.160 water pur in 193 HH, water connection and new tank, Training of school in hygiene and sanitation, formation of health school club with 30 children and activities such as drama competition and prize giving on hygiene messages as well as planting trees, provision of 2 sanitary kits for cleaning school (benefitting 260 pupils) and dispensary compound, family kits for 101 HHs, and repairs on main pipeline.  
**Outcomes/Impacts:** Medical care easily accessible from the equipped dispensary, closer access to water when it rains, behaviour change including exclusive breastfeeding, ANC, family planning especially use of injectable, PNC, latrine coverage of 40% (before 2013 there were none), more water treatment, tree planting by school pupils and hygiene messaging reaching many more people in school and outside enhancing better hygienic practices.                                                                 | with solid food – soon after birth, low practice of family planning, home deliveries with TBA, use of bush as toilet, ignorant of many health issues e.g signs of TB. School depended on dirty water from laggas, use of untreated water, outbreaks of diseases such as typhoid, teachers would skip classes looking for water. |
| Mulanda Noor school         | Provision of school water tank 10,000l and connection to the main pipe; water connected also the old storage tank, construction of latrines 2 blocks 2 doors each, benefiting 214 beneficiaries.  
**Outcomes/Impacts:** Availability of clean water for use in the school continuously throughout the year, clean school compound, better hygiene in the school.                                                                 | No water in school, using dirty water from laggas, use of bush as toilet                                                                                                                                                                                                                         |
| Muchuro dispensary          | Provision of medical equipment and facilitation of CHVs; Roof Water Harvesting, training water committee, borehole protection by constructing a wall around the borehole machine, connection of dispensary to main pipeline benefiting 1,248 catchment population, construction of dispensary latrines 2 blocks with 2 doors each.  
**Outcomes/Impact:** Easy access to health services from the equipped dispensary, more hospital deliveries, ANC services have improved, exclusive breastfeeding, latrines have risen from 25 in 2013 to 50 in 2017 as a result of community awareness. Community have adopted hygienic and healthy behaviours after being trained on by the CHV’s. More access to clean water, no more flooding and possible contamination at the borehole point as a result of protection, local community water management and maintenance as a result of training of water committee by LVLA. | Deliveries at home and low ANC, maternal deaths, myths and negative attitudes against use of latrines, rampant flooding at borehole machine area, poor hygiene in households, poor borehole maintenance.                                                                 |
| Malka Daka dispensary and school | Provision of medical equipment and facilitation of CHVs; Roof Water Harvesting, benefiting 2,250 community members; construction of 2 blocks of school latrines with 4 doors benefiting 312 pupils, Training of school in hygiene and sanitation, formation of health school club (HSC) and provision of 2 sanitary kits for cleaning school benefiting 312 pupils  
**Outcomes/Impacts:** Closer access to health care. More access to clean water from roof harvesting, behaviour change as a result of health education e.g more ANC attendance, hospital deliveries, more latrines in the community, more water treatment, more immunization uptake, school health club children participating in hygiene awareness activities for instance they had a drama on cholera demonstrating knowledge and skills on hygiene and disease transmission, more cleanliness in school. | Previously dispensary was inadequately equipped, low health seeking behaviour in community, low immunization coverage since no follow up with cases pregnant mothers and babies due for immunization at home, few latrines and low use, poor hygiene at home and at school, use of dirty untreated water. |
<table>
<thead>
<tr>
<th>Site</th>
<th>Interventions performed and impacts on community</th>
<th>Reason for relevance/previous situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duse dispensary</td>
<td>Provision of medical equipment with furniture, equipment, and shelves (planned), training and facilitation of 3 CHVs; Roof Water Harvesting, one water tank, and construction of 2 blocks 4 doors latrines benefitting 1.514 beneficiaries in the community, delivery of a sanitary kit to the dispensary distributed to 33 HHs, 16.320 water Pur in 136 HH. Outcomes/Impacts: Access to near and quality health services, more access to clean water from RWH, behaviour change as a result of health education e.g. defaulter tracing, proper sanitation in the dispensary, more latrines in the community, more water treatment, more immunization, uptake more hospital deliveries, ANCs services have improved, exclusive breastfeeding.</td>
<td>Dispensary was previously lacking equipment hence offering inadequate services to the community, no water in the dispensary, home deliveries using TBAs, community ignorance on health issues, early infant feeding with solid foods, use of dirty water, low latrine use, many cases of typhoid.</td>
</tr>
<tr>
<td>Kinna dispensary and Wako Wario primary school</td>
<td>Provision of medical equipment and facilitation of CHVs, delivery of a sanitary kit to the health centre. Family kits for 388 households. At Wako Wario primary school Training of school in hygiene and sanitation, latrine construction, formation of health school club (HSC) and provision of a sanitary kit for cleaning school compound. Outcomes/Impacts: Access to near and quality health services, more and better diagnosis of complex cases e.g. cervical cancer screening, behaviour change as a result of health education e.g. more ANC attendance, hospital deliveries, defaulter tracing proper sanitation in the dispensary, more latrines in the community, more water treatment, more immunization uptake, school health club children participating in hygiene awareness activities in school and community and clean school.</td>
<td>Poorly equipped health centre inadequate diagnosis, low defaulter tracing, collapsing toilets in Wako Wario school, poor hygiene in school and households</td>
</tr>
</tbody>
</table>

Note:

**Family kits**: comprised of 1 bar soap, 1 Omo soap, 1 body soap, sanitary pads and underwear, 10 sachets of oral rehydration salt. Merti got 652, Garba Tula 1.124 and Isiolo sub county 164 totalling 1.940. Among the beneficiaries were 324 lactating mothers. These kits were used in cleanliness at the household level.

**Sanitary Kit**: comprised of 1 wheel barrow, spade, rake, slasher, panga, bloom, watering can, bucket, water pur with 10 sachets, harpic detergent, jik, body soap and doom. These kits were used to enhance cleanliness at the institutions – schools and dispensaries.

Other notable interventions (though sites were not visited during this evaluation) included **boreholes protection** at Raap and Dhimado, sand dam rehabilitations at Mlma Chui and Longopito, intake secure at Bisan Biliqo, water connection to school and dispensary at Iresa Boru, water source rehabilitation at Nakupratt. These activities ensured access to adequate and safe water for people and their livestock.

From the key informant interviews and focus group discussions with various respondents as well as document review, the DAC evaluation criteria were scored on a scale of 1 to 5 where 1 is the lowest and 5 is the highest. The summary scores are as follows:
Figure 1: Ratings on DAC Criteria

Some reasons for the scoring awarded include;

Relevance: 5 – The project was highly relevant as it was anchored on National and County health and WASH plans, and provided solutions to problems existing at the design stage. The key water, health and sanitation gaps the project was to resolve included: Insufficient safe water mainly from few boreholes; insufficient water treatment at households; child mortality due to poor hygiene and diarrhoea; access to water – long distances travelled; inadequate access to toilets in HH and latrines in schools; high maternal mortality rate due to low ANC coverage; inadequate skilled delivery and emergency obstetric services due to lack of key equipment; understaffing in health facilities, poor health leadership, low finances, stock raptures, poor data management and poor access to health services, oral faecal contamination risks; flooding and related hygiene and morbidity and poor solid waste disposal at HH, schools and health facilities.

These gaps resonated well with the results envisioned in the project i.e improving access to safe, adequate and sustainable water supply through rehabilitation, restoration and protection of existing water sources and construction/rehabilitation of roof rain water harvesting scheme in schools/health facilities; improving access to safe and appropriate health and sanitation facilities through the construction of latrines in 15 targeted public school and 15 Health Centres/dispensaries and increasing awareness of hygiene/sanitation practices, especially amongst women with children under five, and populations living in areas prone to cholera, drought, floods; informing and educating women and pastoral communities in order to implement concrete actions to safeguard their own and household health and providing quality healthcare services for mothers and children in the targeted 15 Health Centres/dispensaries.

Effectiveness: 4 – The project has largely achieved its objectives with dispensaries equipped, communities educated on health and hygiene issues, water access improved, water treatment, sanitation kits distributed and used. The log frame targets were mostly reached and in some cases over achieved. This can be attributed to dedicated intervention planning and implementation associated with effective management and field staff right from start up, and both LVIA and CCM working as a team towards delivery of the stated outcomes/results as well as good monitoring systems for capturing data.

Efficiency: 4 – The project was largely efficient and most of the costs went towards project implementation rather than administration. Procurement procedures such as in selection of contractors was followed, synergies with other organizations such as WRMA, focus on repairs and rehabilitation of water infrastructure rather than risking drilling in uncertain sites to save costs;
undertaking software activities during periods of delayed funding to make use of time efficiently, cost sharing with other stakeholders and community on some aspects for instance food and use of affordable local personnel in project implementation.

**Impact: 4** - There is access to quality health care from equipping of dispensaries, mentoring of dispensary staff and community health workers, increased quantity and quality water through the borehole drilling, borehole protection, sand dam rehabilitation, river intake protection and roof water harvesting. Training of water committees has enabled local management and maintenance of water resources. As a result of the training at the community and dispensaries from the CHVs, there is evident behaviour change in latrine use, hand washing, exclusive breastfeeding, hospital referrals, deliveries, family planning. Community members are treating dirty water and thus avoiding water borne diseases through use of Pur. There is enhanced cleanliness in the schools, villages and dispensaries from the use of sanitary kits and family kits provided, reduced absenteeism of girls from school (information from KII with head Teachers) due to availability of sanitary pads for girls. People also view NGOs differently from the CCM/LVIA experience in terms of transparency, communication, information sharing, and commitment to duty and linkages.

**Sustainability: 3** – The project targeted the entire community developing the capacities of local personnel and structures. In WASH, water management committees were imparted with skills in legal framework and governance, financial management and O&M of constructed, rehabilitated and protected water sources (boreholes, pipelines extensions, shallow wells, sand dams and water pans) while schools were trained on operation and cleaning of installed RWHS and latrine use. WRUAs were supported in development of SCMPs to guide them in management of their respective sub-catchments while getting technical backstopping of WRMA. Students under the school health clubs have acquired knowledge and skills in good WASH practices which remain within the community. In Health sector, CHVs have been equipped with various health skills acquired during on-job training with full involvement of Ministry of Health. They are drawn from the local community where the facilities are located hence likely to remain within the villages to continue offering services to the community. CHVs have been imparting health and hygiene knowledge to students and community members through health facilities who in turn impart knowledge to the rest of the community members. The community has changed behaviours and is likely to continue with the beneficial health seeking and preventive health habits. However, the score was not as high due to the issue of dependency culture in the community, inadequate partner co-ordination in the County both for health and WASH components and poor support strategies from the local authorities. Some of the water management committees have not collected water tariffs for O & M despite being trained thereby risking halt in water provision in case the water source system fails.

Key recommendations include:

- There is need for local authorities to map the NGOs in the County and their sectors of operation, database of interventions with GIS locations and plan with them under the auspices of County steering groups at County and Sub-county level to ensure transparency and achieve more results;
- There is need to share credible data and information between government and NGOs to save costs collecting what already exists e.g geological surveys. Again this can be shared during coordination meetings;
- Government staff need to work in collaboration with NGOs to facilitate community development needs and should not be seen as working parallel. One way to ensure this is having their performance contracts to have a measure of collaboration and partnerships with non-state actors;
• More capacity building and mentoring of community management structures for sustainability of projects e.g. water committees, school management boards especially when they are replaced so that there is skills transfer and sustainability as concerns already existent projects. Alternatively, projects can produce simple manuals that can be left with the communities for institutional memory and in-house training;

• There is a need for a transition strategy for CHVs to the County or other service providers so that their services continue unhampered. Providing certificates and recommendation letters to those trained would be a good starting point for their career development;

• CSOs on the situation on the ground in Isiolo need to advocate County Government and other development partners and relief agencies to provide humanitarian assistance e.g. water tracking on short term when drought is too severe. There is also need for better co-ordination between CSOs and Government to ensure services initiated are not abruptly interrupted for instance sanitary pads for girls;

• Public participation needs to be actualized so that the community has their development priorities addressed through County Government funding. Local civil society groups need to represent their beneficiaries by attending County meetings for sensitization and demand more information and transparency from the Government since access to information is a safeguarded constitutional right that enhances effective citizen participation;

• There is a need for change in the public psyche as regards work done by NGOs and the dependency syndrome. This can be done by local leaders and religious leaders so that local communities learn to take charge of their own development and assist development partners to assist them through local contributions and the right attitudes. NGOs also need to develop similar policies on handling communities and Government staff on allowances such as peer to peer learning activities from other communities who have successfully took up and owned their projects;

• More water connection of tanks to main pipes need to be done in areas not benefitting so as to take care of lengthy drought periods without roof-harvested water. In addition, better planned water distribution is needed with water kiosks placed along water pipelines and awareness raised on need to pay a little money for water so that people along the pipelines do not destroy pipes to access the water;

• There is need to have a contingency plan to provide water to schools with RWHS during dry periods in order to promote continuity of learnt hygiene practices to school pupils. This can be taken into account in future similar interventions;
CHAPTER 1: INTRODUCTION

1.1 The Implementing Agencies and Sites

1.1.1. Lay Volunteers International Association (LVIA) is an International NGO working in Kenya since 1967, dealing with Health, Agriculture, Environment and WASH projects. The general vision of LVIA's development interventions is to empower people to develop more effective livelihood strategies, increasing the value of their assets and creating new opportunities for living a healthy and productive life. This will be achieved through the identification and wise use of local resources, supporting local initiatives and innovations and by promoting appropriate technologies to address poverty issues in a sustainable way.

LVIA has a long and extensive experience in the water sector, having worked on experimental water systems powered by alternative energy sources, such as solar pumps and wind pumps with the parallel development of the management components of the scheme itself. LVIA ranges from modern schemes to the rehabilitation and upgrading of traditional sources, together with components of hygiene education actions and educational activities for the management and maintenance of the water facilities.

1.1.2. Comitato Collaborazione Medica (CCM) is an NGO dealing with development in low-income countries. Since 1968 CCM promotes the right to the highest possible standard of health both in Italy and Africa, more specifically in Kenya, Somalia, Burundi, South Sudan, Ethiopia, and Uganda. The core of this right is an efficient and integrated health system taking into consideration not only health services but also the determinants of health, respecting national and local priorities and available to everybody. CCM promotes a holistic method, grounded on prevention, action on the determinants of health, active role of the community. CCM also worked to make essential health services economically accessible and respectful of cultural differences.

CCM sectors of intervention are International Cooperation, Education to world citizenship and medical training, Promotion of equality, Protection of immigrants’ and refugees’ health. Among others, CCM focuses on some thematic areas, such as Mothers’ and children’s health, Fight to great pandemics, Emergency medicine and surgery, vulnerable groups and Water and hygiene.

The project is implemented in Kenya, in Isiolo County, which lies to the north of Mount Kenya in a semi-arid landscape, it borders seven counties with Garissa to the east, Wajir to northeast, Meru to south-west, Samburu to the west, Marsabit to Northwest and Kitui and Tana River counties to the south-west and south-east respectively. Temperatures in Isiolo range from a minimum of 12°C to a maximum of 28°C. Rainfall ranges from 150mm to 650 mm per annum typical of ASALs in Kenya. Over 80% of the land in Isiolo County is non-arable. The main economic activities include pastoralism, subsistence agriculture, small-scale trade and limited harvesting of gum Arabic resin. Some Isiolo communities also derive their livelihood from entertaining tourists who visit seasonally to watch the Isiolo big five. The land is communally owned, held in trust by the County government. Natural resources include forests, wildlife, building sand, water, pasture, land, and potential for mining of; graphite, sapphire, feldspar, muscovite, kaoline, beryl, copper, corundum, garnet, bismuth, silica, iron ore, and pyrite. Geological surveys have also shown untapped deposits of blue sapphire Safer minerals in Duse, and ruby in Rapsu and Korbesa locations. The Uaso Ngiro River provides a rich farming or grazing riparian area and is the main water source for the community. The LAPSSSET corridor that seeks to link Lamu Port in Kenya to Ethiopia and South Sudan has Isiolo at the center. The construction of the Isiolo International Airport and Isiolo Resort City is also set to open up Isiolo County.
1.2 Background

1.1.1 Project Description

“Improve access to clean water, sanitation facilities and first health quality services in the County of Isiolo, Merti, Isiolo and Garbatulla Sub-Counties (MAPS)” is a 39-month-project funded by the Italian Ministry of Foreign Affairs starting from 2nd May 2014 ending on 31st July 2017 after a three-month no cost extension was approved on May 12th. The project is implemented in Kenya, in Isiolo County, which is classified as ASAL (Arid and Semi-Arid Lands). Isiolo County is drawing humanitarian attention due to heavy droughts affecting on regular basis the area and to socio-economic marginalization that characterizes the region due to political and cultural issues.

The project’s main objective is to improve living conditions for pastoral communities in Isiolo County, contributing to achieve the 7th Millennium Goal target focusing on halving the proportion of population without sustainable access to safe drinking water and basic sanitation, with a further impact on reducing water-borne diseases, especially diarrhea (MDG 6) and improving maternal and child health (MDG 4 and 5). The specific objective is to improve the continuous and sustainable access to clean water (for human and animal consumption), existing sanitary facilities and pastoral communities’ access to quality Primary Health Care services in the three Sub-Counties of Garbatulla, Merti, and Isiolo.

The project aims at reducing the vulnerability of pastoral communities in Isiolo County due to poor access to clean water and health services by:

**Expected Result:** 1) Improving access to the safe, adequate and sustainable water supply through rehabilitation, restoration, and protection of existing water sources and construction/rehabilitation of roof rain water harvesting scheme in schools/health facilities.

**Expected Result:** 2) Improving access to safe and appropriate health and sanitation facilities through the construction of latrines in 15 targeted public school and 15 Health Centers/dispensaries and increasing awareness of hygiene/sanitation practices, especially amongst women with children under five, and populations living in areas prone to cholera, drought, floods.

**Expected result:** 3) Informing and Educating Women and pastoral communities in order to implement concrete actions to safeguard their own and household health.

**Expected result:** 4) Providing Quality healthcare services for mothers and children in the targeted 15 Health Centers/dispensaries

*Table 2: Project Summary Table*

<table>
<thead>
<tr>
<th>SUMMARY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location(s) of the Action:</strong></td>
</tr>
<tr>
<td><strong>Duration:</strong></td>
</tr>
<tr>
<td><strong>Main Donor:</strong></td>
</tr>
<tr>
<td><strong>Leading Agency:</strong></td>
</tr>
<tr>
<td><strong>International Partners:</strong></td>
</tr>
</tbody>
</table>
1.1.2 Background information of the Consultancy

For a long time, Isiolo County has been affected by conflict and drought, hindering it from sharing the process of socio-economic development the rest of the Country is benefitting from. In 2013, rains (200% beyond average levels) caused serious damages to infrastructures (schools, health centres, water sources, latrines), with devastating consequences on pastoral communities and their livestock: because of limited access to water and pasture, as well as crop destruction, insecurity has risen.

![Figure 2: Animals ravaged by drought](image)

Limited access to water and its poor affordability, further to the climatic conditions, are related to the inadequate productivity of the existing water sources, especially in the most populated wet grazing area, where in fact most part of people is permanently settled. In the target area, the only reliable water sources available are deep boreholes. Some of them need rehabilitation in order to provide sufficient safe water to the communities, while other water developments such as new borehole drilling need to be planned.

According to the need assessments conducted at the beginning of the project there were 212 water points in the whole County *(Integrated Health and Nutrition Smart Survey of Isiolo District (GoK, IMC, UNICEF, May 2012)): families living next to a water source were 43.5%, among which, 18% were using drinking water. According to the Survey, the findings show very minimal treatment of drinking water at the household level, with 66% of community members not treating water before drinking, 23% using chemicals to treat their water while 10% boiling drinking water. 10.3% of mortality of children under 5 is due to diarrhoea, caused by poor hygiene behaviours. On average, a caregiver takes about 45 minutes to access the nearer source of water, which is located at a 5 km distance in average. 55.7% of the households have access to toilet facilities, but the majority of schools have no latrines in their compounds.*
In regard to the health system, there were 49 health facilities in the county; 75.5% were dispensaries and primary health care providers benefiting a population of 143,294 members. Mother-and-child health (MCH) indicators were therefore particularly serious, especially if compared to national data: Isiolo ranges among the 15 Counties with the highest maternal mortality rate (twenty times higher than the national average, UNFPA 2014), due to the poor access to and utilization of ANC services (47%) skilled assisted delivery (44% against 91% national average) and obstetric emergency services (6.2%)\(^4\). Most of the facilities are understaffed and most health Units benefit of NGO-trained staff.

Shortages and gaps had been assessed across all health system building blocks: (i) County and Sub-County health authorities do not have adequate means and capacities to exercise an effective sector leadership; (ii) financial resources to support the health system are limited; (iii) health facilities are understaffed and health workers would need capacity building; (iv) though not frequently, stock raptures in drugs, consumables, and essential medical supplies are experienced at both dispensary and primary health care level, (v) data collection is not always consistent and adherence to HMIS formats is hindered by both logistic and technical constraints, (vi) access to and utilization of health services is still low, especially among vulnerable groups (i.e. pastoral communities).

In the best case, health facilities got water from boreholes, which are located within the facility itself or more often within the community. As per LVIA-CCM need assessments, facilities boreholes need to be rehabilitated to ensure a continuous provision of pure water, while facilities lacking a borehole and relying on water from communal sources should be equipped with water supply systems to guarantee the uninterrupted availability of water for health care. The presence of water sources within the health facilities is, in fact, a minimal standard to promote the hygiene and cleanliness of the facility environments and the proper management of patients.

The Ewaso Nyiro river is the County’s lifeline, for both water fetching and to create pasture in the wet season. However, its flooding has also negative impacts on households’ hygiene conditions and increase the occurrence of diseases. The need to incorporate hygiene measure to treat the contaminated water that is fetched from the river at the onset of the rains is thus noted. At the same time, the need to improve health facilities capacity to ensure a quality health care to the community is perceived as a priority. Further to the water quality issue, the solid waste disposal at the household level, in schools and health centres is very poor in the area, and oral-faecal contamination risks need to be quickly addressed.

\(^3\)http://countryoffice.unfpa.org/kenya/2014/08/13/10331/accelerating_the_attainment_of_mdg_5_in_kenya_focus_on_the_15_counties_with_the_highest_burden_of_maternal_deaths/
\(^4\) Ibidem.
1.1.3 Project beneficiaries

The project targeted beneficiaries amount to 55,309 (40% of the local population). All of them will benefit from improved health services delivered at Health Centre/Dispensary level and sensitization activities on health and sanitation carried out by health-care promoters trained/updated under the framework of the project; in addition to this, they will access clean water for human consumption and animal watering, thanks to water point’s reconstruction/protection.

Expected beneficiaries comprise:

- 7,250 students (30% of whom female), who were meant to get Water and Hygiene services in schools, benefiting from rainwater harvesting systems and latrines, as well as from education activities on their correct use;
- 10,000 people (2,000 households) meant to benefit from the dissemination of health and sanitation material and Water Pur kits;
- 30,750 children (<5) meant to access primary health care services in Health Centres/ dispensaries involved in the project;
- 7,309 women meant to benefit from primary health care services during pregnancy and delivery and after delivery.

Indirect beneficiaries of the action include 114,560 people (80% of the population), who were meant to benefit from infrastructures building and sensitization activities organized in collaboration with communities.
CHAPTER 2: EVALUATION PURPOSE, OBJECTIVES, AND METHODOLOGY

2.1 Purpose and Objectives

The overall purpose of the assignment is to undertake a final outcome, process and impact evaluation of the project after 38 months since the beginning of the action and to provide recommendations to guide the implementing partners for further future similar initiatives. The Outcome Evaluation aims at measuring the degree to which the project is having an effect on the target population’s and beneficiaries’ behaviours. The Process Evaluation will determine whether project activities have been implemented as intended and resulted in certain outputs.

The FE will be a comprehensive analysis of the strategy applied by the intervention and of any synergy created by the project with other actions implemented at a local level, NGO working in the area and Local Government/Authority.

All the information and understanding gained from this FE will be used as a guideline for future projects implementation and made available to LVIA, CCM, WRMA and Isiolo County Department in charge of Health

The FE will be required to answer some questions related to the implementation strategy of the project such as:

- Which interventions have been carried out? Were they in line with the work plan?
- Were available resources used effectively and according to the plan?
- Which factors have hindered the project implementation? Which coping mechanisms have been developed? Were the mechanisms effective?
- Has the planned methodology been respected? If not, why?
- Do the targeted groups correspond to the expected ones?
- How is the partnership organized? Is the division of labor among partners effective and efficient? If not, why? What could be done to improve it?

For this consultancy, LVIA and CCM sought to procure the services of an independent, external consultant to design, plan and conduct a rigorous final evaluation in June 2017.

2.2 Methodology

The Final evaluation adopted a highly participatory and consultative process to ensure full participation and contributions by all interest parties that included individuals, groups, and institutions who contributed to the process and the subsequent results. Beneficiaries of the project activities included women, children, and pastoralists through public institutions (dispensaries, schools) and organized groups (Water Management Committees, health clubs, community health talk participants, members of Water Resources Users Association) and thus due attention was given to these categories. Various tools were developed to collect information from project managers, partners and beneficiaries at the community, health facility and school level. The evaluation utilized the following methodologies.

Document review:
Documents were reviewed including the log frame, mid-term evaluation, assessment reports, progress reports, training materials, action plans, county profiles, project monthly minutes, SCMPs, health
documents in the health centres CHV reports among others to identify key information necessary to enable a fair assessment of the project processes, worth and outcomes.

**Key Informant Interviews:**
23 Key informant interviews were held with the project management staff from LVIA and CCM, school head teachers, health and water officers at the county and sub-county levels (see Appendix 1).

**Focus Group Discussions:**
15 FGDs were held with community health volunteers, pupils who are members of school health clubs, community members who are beneficiaries of health and water interventions in the Manyattas (Appendix 2).

**Household Survey:**
A total of 92 household participated in the HH survey in the sub-counties. A total of 48 Households participated in the Health survey, while 44 participated in the WASH survey. Data was collected from households using questionnaires in Biliqo Marara, Malka Galla, Korbesa, Mata Arba, Muchuro, Malkadaka, Duse, Kinna, and Daaba. Focus Group discussions and Key informant interviews were also conducted targeting project management, water committees, community members, teachers, and pupils (See Annex 1).

The survey targeted households at the manyattas who benefited from the project. The average age of the household survey targeted respondents is 29 years all of who were women with young children and based at the homestead. Men were however also reached at the household in cases where they were at the homestead during the interview. Most (51%) of the 92 respondents interviewed had no education while slightly less than half (41.3%) had finished their primary education. Only a small fraction (7.6%) had cleared high school education. Their main source of income based on the survey showed that a large fraction (69.6%) were mainly pastoralists while business, charcoal, farming, and mining being practiced but minimally and not in all areas.

**Observations and photography:**
Observations on 14 sites were done that included the water infrastructure, health equipment and photography showing the current situation on the ground.

In terms of methodology, the techniques used included the following:
- Preliminary briefings, meetings, and consultations between LVIA/CCM and consulting team.
- Rapid desk review of all the relevant documents – progress reports, evaluation reports, minutes, plans, etc.
- Collaborative design of the evaluation exercise included:
  a. Development of data collection instruments to address goals and objectives of the Final Evaluation (Data collection tools are presented in Annex).
  b. Purposive sampling carried out in close liaison with the client to identify individuals, groups and institutions to provide the necessary data. The list of individuals and groups of respondents is contained in Annex 2. For whole groups, self-selected samples were used in focus group discussions.
  c. Preparation of field work, data collection itinerary, and appointments e.t.c

- Comprehensive fieldwork data collection – Qualitative data was collected from key informants using KII guide and Groups using Focus Group Discussion and from households through administered questionnaires (Health and WASH). Lists of respondents are in Annex 3. Table 1 summarizes how tools were applied to different target groups:
Table 3: Target Groups and tools Used

<table>
<thead>
<tr>
<th>Target Group</th>
<th>Tools Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) LVIA/CCM Project Staff</td>
<td>✓ Key Informant Interview</td>
</tr>
<tr>
<td>b) Target groups (local communities, individuals, community leaders)</td>
<td>✓ Focus Group Discussions ✓ Health and WASH Questionnaire</td>
</tr>
<tr>
<td>c) National/County Government Institutions (MOH, Water)</td>
<td>✓ Key informant interviews</td>
</tr>
<tr>
<td>d) Community Health Volunteers</td>
<td>✓ FGDs/KIIs</td>
</tr>
<tr>
<td>e) School health clubs</td>
<td>✓ Focus Group Discussions (Guiding questions)</td>
</tr>
</tbody>
</table>

- Data processing analysis and interpretation – Descriptive methods were used to analyse qualitative data while Excel and SPSS were used for the quantitative data. Reporting included; preparation of Draft Project Report, sharing the Draft Report and preparation of final Project Report and submission of the Reports and debriefing LVIA/CCM.
CHAPTER 3: LITERATURE REVIEW

Following is relevant literature from document reviews carried out prior to and during the evaluation. The literature indicates that design of the project was relevant, having been informed by National and County policy, legislations, strategies in both the water and health sectors as analysed below. This section links the various policies, strategies and reports and how the various suggestions have by design been incorporated in the MAPS project.

3.1 Water Sector

Conducive Water and Environment aspects are enshrined in Constitution of Kenya (CoK) 2010: Article 42 (every person has the right to clean and healthy environment) and Article 43 (b) (c) on access to reasonable standards of sanitation and to clean and safe water in adequate quantities, and Article 69(a) on ensuring sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure equitable sharing. The Social Pillar of Kenya's Vision 2030 seeks to engender just, cohesive and equitable social development in a clean and secure environment; it prioritizes aspects of the environment, water, and sanitation. However, water coverage in the country is quite low and in particular in rural areas where 2/3 of Kenyans live. Annual Water Sector Review 2013/2014 indicates national water coverage at 55.9% (65.4% in urban areas and rural coverage stood at 48.8%) while national sanitation coverage was 68.2% with rural coverage at 66%. Annual Water Sector Review 2014/15-2015/16 indicates that national water coverage increased from 55.9 to 58% of which urban coverage is 68.3% while rural coverage is 66.4%. National sanitation coverage decreased from 66.9% in FY 2014/15 to 66.4% in FY 2015/16 with urban coverage at 69.4% while rural coverage is 64.1%. Though the coverage parity signifies more focus currently given by development partners in urban areas, projected urban population by 2030 necessitates the provision of water services in urban areas. The water deficit versus demand is further captured in the National Water Master Plan (NWMP) 2030 which indicates that water demand (domestic, livestock, industry, irrigation, fisheries, wildlife) from the 6 catchment areas in the year 2030 is projected to be 21,468 mm/yr while deficit will be 14,959mcm/yr - an increment of deficit from 44 to 70%. More so, there is huge financing gap of Ksh 1.1172 Billion which hinders the water sector from achieving Vision 2030 goals (Annual Water Sector Review 2013/2014). This gap is distributed in every Financial Year (FY).

The Water Act 2002 establishes various institutions which have sectoral strategies and programs to handle mandates such as policy, water resources management, and water services management. The National Water Resources Management Strategy (2010-2016) fully recognizes the Integrated Water Resources Management and Water Efficiency (IWRM and WE Plan) 2009 as a national priority with obligations for participation and empowerment of stakeholders and decentralized management at the lowest appropriate level. The strategy also addresses mechanisms to achieve equal access to water, gender in water resources management, improving water resources assessment, catchment conservation, and management, rainwater harvesting amongst others. Ministry of Water, Environment and Natural Resources Strategic Plan 2013-2017 captures Water Resources Management, Water Harvesting, and Storage which includes the development of sub-catchment plans, rainwater harvesting strategy, and water storage investment plans. On Improved access to safe water and sanitation services, activities include expansion and management of infrastructure, national groundwater mapping and exploitation, Sanitation and pro-poor initiatives. The National Water Services Strategy (2007-2015) defines actions meant to provide an effective and efficient response to the challenges in water services sub-sector. The strategic actions were in line with 7th Millennium

5 National long-term development policy that aims to transform Kenya into a newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment
Development Goals (MDG) on water and hygienic facilities which the project has been addressing. Some of the objectives enshrined in Water Resources Management Authority (WRMA) Strategic Plan (2012-2017) is to uphold equity in water resources allocation which includes catchment conservation and management using SCMPs, and Partnership (institutional and NGOs). Isiolo County Government Annual Development Plans

The project objectives and activities were designed in line with provisions of the national and county strategies. The project staff carried out WASH Pre-Assessment (May-July 2014) to identify locations for further studies and the set interventions. The assessment embraced participation from various actors. This informed an external WASH Needs Assessments (September 2014) which gave guidance on local social and technical contexts, actual activities to be implemented in specific localities, appropriate technologies that could be used, and the target beneficiaries. The activities address strategies of Isiolo County ICDP 2013-2017 Isiolo County Government Annual Development Plans. It also informed modalities that could be used to accomplish the objectives. In order to deduce the performance of the project and inform better implementation strategies, the project assigned an independent consultant to conduct the Mid-term evaluation (March 2016). The evaluation identified areas of projects weaknesses and strengths and made actionable recommendations. Some of the recommendations revolved around building local capacities to community institutions such as water management committees, enhanced collaboration with county departments of water, more participation by the communities, strengthening of a working link between the newly established WRUAs and WSTF. The project could not, however, implement on water trucking as recommended from the mid-term evaluation in selected schools and health facilities since it had not been budgeted for, is an expensive and unsustainable affair and there was not contingency planning for it. Among the many activities, the project installed RWH systems which, if properly used and continuously serviced, provide a good source of clean water, can be sustained and is replicable. Various progress reports were actually monitoring tools that informed of constraints and how to improve on areas of implementation. The findings and recommendations of the projects assessment and evaluation and subsequent implementation blend well with findings of Water Point Mapping (2013) for Isiolo County conducted by Northern Water Services Board – Isiolo Sub-region Office and supported by Netherlands Development Organization (SNV). It provides spatial data that highlights issues of equity, inclusiveness, and targeting of interventions and as such will be instrumental in national and county level planning, Minutes of the Monthly Management Committee which has a representative from County Department of Health, WRMA representative, project progress reports (Health and Hygiene kits and PUR distribution reports, Infrastructure reports, Integrated Supportive Supervision, SCMPs, e.t.c) by the project staff gave continuous updates on activities and all related aspects to inform better planning and implementation. The initiative enabled the service providers to plan together with the Local Authorities (Health and Water), to share information and opinion, and to take action on the major issues and concerns. The Steering Committee was the political guide of the project instead, meeting quarterly and taking decisions beyond the technical aspects.

3.2 Health sector

The health interventions are aligned to the Constitution of Kenya 2010. Main Constitutional articles that have implications on health are i) right to life (Article 26), rights of special groups (articles 53-57), objectives of devolution in the 4th schedule (article 174) which guides on National health policy, County Health services, and county staffing. Article 43 Forms principles on rights of every person access to the highest attainable standard of health, reasonable standards of sanitation, clean and safe water in adequate quantities, emergency medical treatment and free from hunger and have adequate food of acceptable quality. The Social Pillar Kenya’s Vision 2030 involves investing in the people of
Kenya in order to improve the quality of life for all Kenyans by targeting a cross-section of human and social welfare projects and programs including health (medical services, public services, and sanitation) and the environment. **Kenya Health Sector Strategic & Investment Plan** is the 2nd Medium Term Plan for Health in Kenya which provides the Health Sector Medium Term focus, objectives and priorities to enable it to move towards the attainment of the Kenya Health Policy Directions, and therefore the sector obligations in the Constitution and Vision 2030.

Health services is a devolved function at County level. The project activities also in line with strategic priorities of Isiolo County Government. **ICDP, 2013-2017, and Annual Development Plans.** The public sector acknowledges that they cannot improve the health system without partnering with the private and FBO sector. In the Potential Strategic Policy Thrust, the ICDP seeks to establish new health facilities; Recruit and deploy more health personnel; Provide adequate drugs, Train CHVs; Sensitize communities on the importance of immunization; Carry more vaccination campaigns and Provide free maternal health among others. These strategies are replicas of needs in other counties in the country that require resources which is never adequate. This necessitated the establishment of The Kenyan Health Sector Services Fund (HSSF) which is an innovative health financing intervention. Government and development partners contribute to a central fund which is used to credit funds directly into approved health facilities’ bank accounts. However, availability of the funds is not consistent. There were, however, facilities some facilities such as Daaba that have not been gazetted and hence could not receive the funds. Others that were also improperly registered had issues with receiving the funds. The project has equipped the health facilities and gave incentives to CHVs to enhance access to health services.

The project staff carried out comprehensive **Health Facilities Assessment (June - July 2014)** focusing on Primary Health Care System in Isiolo County. The findings culminated into ten actionable recommendations which included coordinated with the County Health Management Team (CHMT), needs related to the lack of water and latrines, knowledge and skills of the Health Workers, implementation of a qualitative needs assessment of the health services, procurement of medical equipment for the selected facilities, accessibility and quality of the community health services organized around the Comprehensive Community Strategy. The project assigned an independent consultant to conduct **Mid-term evaluation in March 2016.** Amongst recommendations given by the evaluation are the promotion of FP as well as measles and TT2 vaccinations, jointly with the County Health Department facilitate the county medical engineer to assess, repair and demonstrate to nurses how various pieces of equipment should be operated and maintained. It emphasizes the need to include teachers and CHVs in school health talks and build the capacity of both teams in order to sustain the outcomes. The said concerns have been addressed through Quarterly Integrated Supportive Supervision (ISS) which regularly gives observation and recording of activities related to Primary Health Care (PHC) at county facility level as per the County Health Strategic Plan. Monitoring involves giving feedback about the status and the progress of the services to the care providers and beneficiaries and enables the gathered information to be used in making decisions to improve performances. It is a compliance promotion tool for service delivery standards and guidelines among health care providers, and hence improvements in the quality of health care provided health services. The project has kept the spirit of compliance which is expected to be sustained by the health staff.

**Minutes of the Monthly Management Committee** and **Project progress reports** (Health and Hygiene kits and PUR distribution reports, Infrastructure reports, Integrated Supportive Supervision, Monitoring Framework, Target analysis e.t.c) by the project staff gave continuous updates on activities and all related aspects to inform better planning and implementation. The management meetings participants include LVIA, CCM and County representatives from Department of Health and representative from WRMA for the WASH related activities.
CHAPTER 4: FINDINGS

This section presents the findings from the evaluation, integrating findings from document review, FGDs and interviews as well as a rapid household survey in the sites visited to gauge outcomes and behaviour change. The discussions are hinged on the evaluation criteria of relevance, effectiveness, efficiency, impact and sustainability. The final evaluation aimed at determining whether the project activities brought the change anticipated at the outset of the project. It also aimed at examining which factors are proving critical in making change happen.

4.1 Key highlights from Household Survey

4.1.1 HEALTH

Relevance: In summary, the health interventions were very relevant and had a huge impact on the community health needs. Previously, patients used to travel an average of 7.5km\(^6\) to the nearest HC/Dispensary to get basic health services, childbirth (pre/post-natal care) and emergencies before the dispensaries were set up and well equipped to cater for their health needs. It was interesting to note that out of the total respondents interviewed, a quarter (25\%) used to travel distances above 5km with some of the respondents traveling for distances of up to 42km away to the nearest HC/dispensary while another fraction (15\%) travelled for distances less than 5 km. Most of these respondents walked for the distances to access the health services while a few who could afford motorbike services hired them or occasionally through the use of public transport. This means that access to the health services could take as much as 8 hours for some of the patients. In the case of an emergency that required extra medical attention, this would be disastrous. Only a small fraction of the respondents (4\%) said that they did not go to the HC/Dispensary at all. This has however improved and access to basic healthcare services have been reduced to only a few minutes-walk to the well-equipped dispensary within their manyattas. Key beneficiaries include pregnant mothers who go for pre-natal clinics and babies for immunization and growth monitoring.

Quality and access to health care has also been enhanced by water provision. The various water provision interventions including water harvesting and water connections to main pipe for the HC/Dispensaries by LVIA have had a great impact on the dispensaries and health centers especially enhancing hospital delivery cases at Daaba, Biliqo Marara, Malka Galla, Korbesa, Mata Arba, Muchuro, Malka Daka, Duse, and Kinna. All benefitted from the tanks installation done by LVIA. Water that was collected during the rainy season can stay for up to six months and is sometimes used by the surrounding community. Some of the patients (18\%) who responded to the questionnaire said that they used the opportunity to visit the HC/Dispensary to fetch water for domestic use. It was however noted that at the time of the survey, most of the tanks were dry due to the prolonged drought that has hit the region.

Almost all the respondents (93.8\%) who were interviewed were beneficiaries of the health talks facilitated by CHVs at the community and also at the dispensary. Only a small fraction of these (6.25\%) were not recipients of the health talks as they did not participate in the weekly meetings organized by the CHV’s. They are however aware of the talks and the content probably because they have received this information indirectly from some of the health talks participants. Some of the topics discussed during this health talks were like family hygiene and sanitation (20.8\%), ANC and PNC (8.3\%), exclusive breastfeeding (20.8\%), child upbringing, lifestyle changes (family planning

\[^6\] HH survey findings
(10.4%), immunization (10.4%), and hospital assisted/modern delivery (8.3%). According to the FGDs with the CHVs, these meetings have been held once a week at the Health Centre/Dispensary and also at the Community. School going children who are members of the Health clubs were also beneficiaries of these talks at the schools. These talks were coordinated by the CHV’s who were trained by CCM on various topics and were expected to pass this information to the community.

The major reasons noted for visiting the local health centers/Dispensaries as represented by 81.3% of the respondents were for sickness, pregnancy check ups and also child birth where they were attended to by nurses (87.5%) and in some cases (10.4%) by community health volunteers who have received adequate support and training from CCM. It was also noted from the respondents that majority of the patients who visited the health centers and dispensary were mothers (43.8%) and children under 5 years (45.8%). All of the respondents interviewed frequented the facilities every 2 months (22.9%), monthly (66.7%) and the least fraction (6.3%) on a weekly basis. It was positive to note that all births at the facilities were successful based on the feedback from the interviewees meaning that the project has positively contributed to improved access to primary health care services (39%). Not only were they successfully delivered, but subsequent check ups, immunizations, for the new borns and advice was also given to the new mothers which KII respondents said has led to a reduction in maternal and child mortality rates.

Monitoring data collected by CCM indicates that new ANC rates improved by 15% and revisits by 18%. New PNC rates increased by 43% and revisits by 51%. Immunization rated also increased with BCG by 19% and PENTA 3 by 18%, although measles and TT2 reduced by -14% and -29% respectively. However, new Family Planning services reduced by -24% although revisits increased marginally by 6%, something that can be attributed to cultural believes. Monthly access to health services increased by 39% from 3193 to 4448 cases.

Family planning uptake is on the increase and this can be attributed to the health talks at the dispensaries and homesteads. This conclusion is based on the high percentage of surveyed respondents who were well aware of the different methods used and directly attributable to the health talks. There is an age gap between births, from the data on age of the last child under 5 which indicates a big number (72.9%) of the children being above 1.5 years. Some of the family planning methods that respondents mentioned they were aware of include, condoms/pills (35.4%), implant/pills (4.2%), injectables and Condoms (6.3%), injectables and implants (6.3%), Injectables and pills (35.4%). All had been asked to mention at least two they are aware of. Only a small fraction (8.3%) mentioned not aware about the family planning methods.

Respondents said improvements had been made in the health centers that impacted on their health services. Improvements at the health centers/ dispensaries and directly attributed to CCM’s interventions as mentioned by the majority (79.2%) respondents were services (25%), water tanks (4.2%), medicine (29.2%), infrastructure (6.3%) and equipment (10.4%). Water in the tanks was mostly used for facility cleaning (64.6%).

More evidence exist on improvement of health services. An evaluation conducted during the life of the project by the project staff to determine the impact of their interventions also yielded some interesting revelations that depict the impact of their work on the ground and necessary efforts to achieve further successes. This evaluation targeted the three sub-counties (Merti, Garba Tulla, and Isiolo) and managed to reach a total of 129 respondents who were direct beneficiaries at the local facilities. Waiting time at the dispensary/health center to access medical services was probed where slightly less than three quarters (67.44%) interviewed had no concerns about the time it took to access the medical services once at the hospital. The average waiting time as noted from the data is 8 minutes.
Adequate (91.47%) privacy was accorded to the patients when seeing the medical practitioner where a large percentage (88.37%) of the patients attended to feel that the health provider understood their health problem and concerns. Where challenges were experienced, the biggest reason (36.84%) was because they did not get the drugs they wanted rather than the attitude of the health provider. Other issues as mentioned were language barrier (3%), no examination (3%), no investigations/lab tests done (2%), referral to a higher level of care (1%) and a return date (2%). The patients to a larger extent (74.42%) received proper examination and also an explanation of the findings. Only a small percentage (17.05%) of these patients, could not understand the explanation they were given by the medical practitioner. The evaluation also revealed that the patients were generally happy (80.62%) with the therapy prescribed to them. Where not satisfied, some of the notable reasons given were lack of enough drugs at the facility (17.95%), wrong diagnosis (5.13%), unpreferred drugs (28.21%), no examination done (2.56%), a lack of water for handwashing (2.56%), prescription without testing (2.56%) and more tests from another facility (2.56%).

A low number of health practitioners were noted to wash their hands before examinations. More than half (57.36%) of the respondents said that the health practitioners who examined them did not wash their hands. This is an interesting observation considering that the practitioners have been trained on the importance of clean hands when examining patients. Future projects should seek to probe whether alternative hand cleansing practices are being used and if not to emphasize on its importance. It was however noted that to a slightly higher extent (51.16%) of the medical practitioners used gloves during examinations.

The project has trained and mentored health providers in the health centers. On matters of quality of service and the facilities/health center, 81.4% of the participants said that they receive all prescribed drugs for free and to a larger extent (93.02%) received a detailed explanation on how to take the medicine. Only slightly above half of the respondents (52.71%) were given a follow-up date to come back. Cleanliness was also well maintained at the facility with 87.6% of the participants vouching for this. Generally, there was a confidence in the service delivery quality as many (77.56%) felt satisfied with the service received and would definitely (81.40%) recommend the services to others. This can, therefore, reveal that CCM’s efforts in supporting service delivery by training the health service providers and the CHV’s as well as equipping have gone a long way in achieving this. This as mentioned include free drugs, good services and approach in dealing with patients issues, adequate privacy, improved maternity among others.

4.1.2 WASH

Access to water is a key issue among the mostly pastoralist community living in Isiolo County. The water is, however, scarce and where available some fees need to be paid to maintain the water source. 88.6% of the respondents were willing to pay an average amount of 600 KES per month to access clean and safe water. The respondents were also very keen to learn about new ways of making the readily accessible water from other sources, clean to drink because they believe that clean water leads to better health and also helps in preventing diseases. A question posed to the respondents on what is more important to them: clean water or a lot of water, the respondents unanimously (84%) responded on the importance and urgency of having cleaner water as opposed to more water. The average number of times water is collected at the household is 2 times a day, but some households depending on the proximity of the water source and the source itself might collect up to 4 to 5 times in a day. The main type of container used to collect this water is the 20 LTR water Jerrycan where one household will fetch up to an average of 4 jerrycans per day. From the evaluation, a household minimum consumption of water per day is 75 – 80 litres in a day. However, a large number (56.8%) of the respondents pointed out that the water is not as much as they would have wished to access.
Further probing showed that the households require as much as 80 Litres more for their household use per day.

It is also noteworthy that from the household feedback, 61.3% of them believed that the water they can access per day is not enough for their animals. At the time of evaluation, most of the herders claimed that their livestock has been on the move in search of water since their main water source at the river (Ewaso Nyiro) dried up.

During the evaluation period, above three-quarters (88%) of the households interviewed responded that they think their water is safe and clean for drinking. Further probing showed interesting answers from the households as only a small fraction (11.4%) responded that the water is safe for drinking because it is treated. A larger percentage of the households which formed close to half (38%) of the respondents believed that the water is clean. This was closely followed (27.3%) by other households that said that their water is safe for drinking as it is clear. Only 22.7% of the households felt that the water they fetch is dirty and not safe for drinking.

It was evident however from the respondents that all the sampled households have a clear understanding of how to handle dirty water as they all said that they are aware of the use of treatment using chemicals (PUR), filtering the water or boiling it, thanks to the project. This can be directly attributed to the project because it was mentioned that they are now aware of this from the project’s efforts in passing this information out to the community through the CHVs, health talk recipients and also to students at the health clubs in their school. The household’s respondents were all also aware that dirty water leads to diseases.

The average time used to go fetch water before was 2 – 3 hours but the respondents now have access to the water kiosks close to them at the manyatta. The situation is not whoever true for all the sites, for example, in Mata Arba and Malka Galla where the water has not been connected to the main water supply, their situation has not really changed much as the respondents said that the average time spent now is within the same range because they have to walk further to look for water near the dried up river Ewaso Nyiro. However, by the time of the evaluation an intervention is ongoing to connect school and dispensary to the main pipeline (that LVIA was also rehabilitating) in Mata Arba. In some specific households, however, the time has significantly reduced due to the close proximity to the
water kiosks and rainwater tanks. For instance, in Biliqo Marara as a result of borehole construction and connection to school and dispensary by LVIA, water is now easily accessible and it is clean.

’TThe first time I got transferred here, access to water was really a challenge. Once in a while, I would travel to go see my family but they never came to visit because of the water scarcity and access amongst other challenges. Water access is now no longer an issue as the water is piped all the way to our school and even to our local dispensary. My wife and daughter as we speak are here to visit for a few days’ Henry Kathurima – Teacher at KOM primary school at Biliqo Marara.

Open hand dug wells, water pans, lagga/river, and water bowser are considered not good for drinking as most responded that they are contaminated and dirty. This is also partly because the animals drink directly from the sources.

All respondents were knowledgeable on the aspect of maintaining hygiene by washing hands. From their responses, they are aware that dirty hands especially when handling food, before eating, after using the toilets and after work may lead to diseases at the household. This can be attributed directly to the training received from the CHVs who were supported by the project and the materials (sanitary kit) they received included soap, Omo, bar soap, rehydration salts and purs in order for them to practice cleanliness and hygiene measures from the health talks.

Some of the water-borne diseases mentioned were Typhoid, Cholera, Diarrhoea and Stomach aches. The use of water and soap was the most preferred method to wash hands but ash was also mentioned by one of the respondents as a means of cleaning their hands. The use of soap as described by the respondents removes dirt and germs and also contributed to personal hygiene. A majority (72%) were able to show availability of soap at the household even though it is not only used for hand washing but for other household chores like washing clothes, bathing, and domestic cleaning. The few (28%) who did not have soap said that they had no money to buy soap or it was just finished and were hoping to buy more.
Diarrheal cases are associated with lack of clean water and poor hygiene, especially among children. This is exacerbated by a large number of health facilities without access to clean running water. All respondents were aware of the disease and that it is caused by poor personal hygiene and consumption of dirty contaminated water. Drinking clean water, good personal hygiene and boiling unsafe water were some of the ways to prevent diarrhea that was mentioned.

The use of latrines at the household is quite high, based on the high number (75%) of respondents who said that they use latrines at the homestead. The decision to set up or dig a latrine is considered a role of the man at the homestead. It was however interesting to note from the interviewed households that more than half of the men (56.8%) do not help around the homestead on domestic work. It was, however, encouraging that some (22.7%) help in cleaning the compound while 18.2% help in gardening and 2.3% in weaving.

Many households (86%) practice covering the latrines and stated that this exercise prevents houseflies carrying the germs into the homestead and also avoiding the smell. Only a small number are still using the bush (10%) and Lagga (1%) to relieve themselves. The few who use the bush and Lagga preferred them because of the open area that has no flies. However, the rest were aware that this exercise spreads diseases and contaminates water sources.

The average age that a child goes to defecate by themselves is 5 years and for children under that age, 29.5% of the respondents said that they throw the faeces in the latrine and also the same percentage (29.5%) said they threw this at the compound. 23.8% of the respondents, throw the faeces in the bush.

40.9% of the children under 5 at the household has been affected by diarrhoea during the last one year at the time of the evaluation. No child died from the disease because they were treated at the health centre/dispensary. Some of the other diseases that affected the children apart from diarrhoea as mentioned by the respondents were common colds, measles, and malaria which affected more children. In the cases where their children did not sick, the respondents attributed that to immunization and preventive measures taken by their parents.
CHAPTER 5: EVALUATION RESULTS BASED ON DAC CRITERIA

In summary, the project was satisfactory as regards the assessment using DAC criteria of relevance, effectiveness, efficiency, impact, and sustainability. The following section represents the findings.

5.1 Relevance

The project was relevant in that it was aligned to national and local strategies/plans. Generally, the project design and implementation were anchored on the problem analysis which had identified critical issues anchored in national and county health and WASH strategies. The implementation strategy also answered to the local context in that interventions were informed through local research such as the Integrated Health and Nutrition Smart Survey of Isiolo District (GoK, IMC, UNICEF, May 2012) as well as LVIA-CCM need assessments. Local CHVs who understand the local contexts were trained and used in awareness creation in the local language with local groups such as school health clubs created and capacity build to spread awareness further in the community.

The methodology was relevant in that the selected methods responded to or were anchored within the existing water and health provision gaps and within the socio environmental contexts of the area. In all, a combination of services/equipment and infrastructure in health and school institutions, water infrastructure, capacity building of local community personnel, awareness creation on health and sanitation were relevant and all resulted in achievement of expected results, albeit with challenges highlighted later in this report. All stakeholders and actors appraised the project activities and approach since it addressed their pressing needs. On a scale of 5, the rating of relevance is 5/5 on average. The design, specific interventions and their relevance are discussed below.

WASH

Design and relevance to policy and environment

The project objectives were relevant in that they were in line with the Economic Recovery Strategy for Wealth and Employment Creation (ERSWEC) of 2003, Vision 2030, the Constitution of Kenya 2010, the Country Strategy Paper 2014-2018, Mid-Term Plan 2008-2012, the Kenya Rural Development Strategy (KRDS) 2001-2016, National Policy on Water Resources Management and Development articulated in Sessional Paper No.1 of 1999, and the Water Act (2002). The interventions are aligned to the Kenyan constitution promulgated in 2010 and Vision 2030. WASH interventions were very relevant given the fact that the area, Isiolo County, is drought prone.

Provision of water was a priority need in the Integrated Health and Nutrition Smart Survey of Isiolo District (GoK, IMC, UNICEF, May 2012) that indicated that families living next to a water source are 43.5%, among which, 18% are using drinking water. The 2012 survey findings indicated very minimal treatment of drinking water at the household level, with 66% of community members not treating water before drinking, 23% using chemicals to treat their water while 10% boiling drinking water. 10.3% of mortality of children under 5 is due to diarrhoea, caused by poor hygiene behaviours. On average, before the project, a caregiver took about 45 minutes to access the nearer source of water, which was located at a 5 km distance in average. The distances have reduced, after 21 water sources were provided through the project. Now, 55.7% of the households have access to toilet facilities, and all the schools have latrines in their compounds after 34 blocks of latrines (90 doors) were constructed in schools and dispensaries by the project. Thus the interventions were geared towards enhancing access to water especially for health and education institutions.

The area receives some rains 150mm to 650 mm per annum and settlements run parallel to the semi-permanent Ewaso Nyiro river and thus interventions were a combination of both complex water
solutions i.e construction, rehabilitation and protection of water sources (boreholes, pipelines extensions, shallow wells, sand dams) and installation of rain water harvesting systems (RWHS) which resulted in enhanced access to water among the vulnerable communities. The logical framework answered to the problems identified and the results levels were relevant to the project goals and objectives.

In terms of alignment to the local policies, the implementation strategy is aligned to the Isiolo CIDP (2013-2017) strategy for water of which immediate strategic objective is to reduce the average distance to water points from 3Km to 1Km by 2015. It cites roof water harvesting as one of the strategic policy thrust. In this light, this project supported among other activities, institutional (health facilities and schools) roof water harvesting which was well informed by WASH needs assessment conducted by the project in September 2014.

Other activities such as borehole drilling, water source protection and rehabilitation have been rolled out backed up with providing capacity training to the recipient's organized groups such as water committees to ensure sustainability of the same. Solar pumps have also been introduced, providing a stable solution in areas where sun is available throughout and as an alternative to the fuel pumping method which may require a continuous source of cash to operate. Although the capital outlay is higher at the beginning since many solar panels are used to pump water from deep wells, the maintenance after is much cheaper as it has little mechanical services required to run. Rehabilitating water infrastructures, providing water tanks and installing roof harvesting in institutions and connecting institutions to water sources all aimed at improving access to safe, adequate and sustainable water supply. Roof water harvesting on the other hand is a suitable intervention as the initial cost is low and the water can stay for as long as six months, meaning if rains do not fail, it provide a source of clean, safe (if the gutters and tanks are washed and well maintained) and sustainable/free water (as they don’t have to pay for it) for the institutions.

Provision of latrines was a felt need for people who were previously using mainly the bush for human waste disposal. By 2014, latrine use in Isiolo County was only 48%.\(^7\) In addition, education on use of latrine has enabled communities to adopt its use, with about 40%\(^8\) of the households having a latrine. Relevance of the education aspect becomes of significance given the cultural-religious myths rampant in the community such as ‘Satan hides in the toilet at night’ which have has prevented full uptake of latrine use. Education and consistent awareness creation is required to make communities change this attitude. CHVs are working with sheikhs to mitigate the religious myths and the project has already changed altitude of the pupils where the school health clubs have been established. There is 100% use of latrines at schools.

Another existing sanitation gap from LVIA assessment that made the project relevant was the use of dirty water from the Ewaso Nyiro, from pools and hand dug wells. Generally there was a water quality issue, the solid waste disposal at household level, in schools and health centres and risks of oral faecal contamination were rampant. Water treatment using PUR has worked magic and the community has welcomed the method, creating a demand although PUR supply was never meant to be a project activity but rather for demonstration and sensitization in water treatment. With supplies from LVIA out of stock, community members are flocking the local public health office to get the PUR to treat their water, showing the demand has been created and the expected behaviour change has occurred. LVIA has initiated good cooperation with Food for the Hungry (FH) on the possibility to cooperate in the field in the future for PURs availability. There is also the possibility to cooperate with local


\(^8\) Interview with CHVs at Mata Arba dispensary
shops in order to put them in contact with FH to get the PURS so that the community can access easily. Other adopted practices include hand washing after visiting toilet and boiling of drinking water in absence of PUR.

**Health Services**

Regarding relevance of the health interventions, these were aligned to the Constitution of Kenya 2010 and social Pillar of Kenya Vision 2030 which desires for social welfare projects and programs including health (medical services, public services, and sanitation) and the environment. Main constitutional articles that have implications on health are i) right to life (Article 26), rights of special groups (articles 53-57), objectives of devolution in the 4th schedule (article 174) which guides on National health policy, County Health services, and county staffing. Article 43 touches on rights of every person access to the highest attainable standard of health, emergency medical treatment and freedom from hunger and have adequate food of acceptable quality. Kenya Health Sector Strategic & Investment Plan is the 2nd Medium Term Plan for Health in Kenya which provides the Health Sector Medium Term focus, objectives and priorities to enable it to move towards the attainment of the Kenya Health Policy Directions, and therefore the sector obligations in the Constitution and Vision 2030. The project activities also in line with strategic priorities of Isiolo County ICDP 2013-2017 and County Government Annual Development Plans.

Another pointer to the relevance was the acknowledgement that public sector cannot improve the health system without partnering with the private and FBO sector (Isiolo ICDP, 2013-2017). More so, Kenya’s health sector faces enormous deficiencies in coverage and infrastructure.

*Rural health facilities lacked equipment hence the communities lacked access to health care. The project has well equipped the health facilities such that those not gazetted have reached a threshold of being gazetted, a process that is at advanced stages. I rate the relevance of the project 5/5*. (KII with PHO, Isiolo County).

The project is also relevant in contributing to gaps in health provision by providing the necessary equipment to health centres and dispensaries. Thus the project has provided synergies in supporting MOH and County health resourcing including the ungaetzted health facilities which do not receive Health Sector Services Fund leading to low or lack of health services being rendered to patients. Partners active in the County have been equipping some health facilities but the coverage is far below the needs on the ground thereby requiring more partners in the sector. The project supported 6 facilities which have reached threshold of being gazetted to level of providing health services. The County government is following up with the Ministry of Health at National level and informed the consultant that the process of gazetting is at advanced stages. However, until, then the facilities cannot be funded by the government hence will continue relying on support from Non state actors.

Methodologies adopted including health education and use of local volunteers in health education, materials distribution and referrals. Health education was relevant in that the literacy levels and ignorance regarding hygienic behaviour were quite high. Use of local personnel enables interaction in the local Borana and Turkana language which is critical for better understanding and uptake of desired behaviour change. Qualitative information from KIIs and FGDs with CHVs and community members visited by the consultant indicate previously lacking but now adopted practices include exclusive breastfeeding for 6 months, defaulter tracing, ANC and PNC uptake, hospital delivery, and family planning.

---

9 FGD with community members and KIIs with CHVs in sites visited
The methodologies adopted are relevant in achieving the four results areas. The project provided medical equipment in dispensaries and health centres including diagnostic sets, examination beds, autoclaves, weighing scales, delivery coaches, delivery kits, and water treatment kits including PUR and sanitary kits. These were relevant as they enhanced the quality of health care and shortened the distances the patients used to travel for health care services. Also, provision of water in dispensaries enhanced provision of services such as maternity which require adequate and clean water.

5.2 Effectiveness

Several changes have been produced in the health and hygiene-seeking behaviour of the population including more hand-washing, use of latrines and domestic water treatment. The targets for the specific objective of ‘To improve the continuous and sustainable access to clean water and existing hygiene facilities in the three Districts (sub-counties) of Garbatulla, Merti and Isiolo’ has been achieved; 55,242 (100% achievement) people have accessed water while 81,833 people have been sensitized on water and health best practices. Access to primary health care services by women and children was increased by 39%. The project has addressed four results of which implementation of activities have fully been accomplished, substantially accomplished and most less capital intensive ones surpassed. Notwithstanding various challenges the project faced, the evaluator finds the project successful and worth replication and scaling up hence the project achievement is rated 4/5.

5.2.1 WASH

Results 1 and 2 address WASH issues:

Result 1: Increased availability of clean water for human and animal consumption through rehabilitation/protection of water sources and rehabilitation/construction of Rain Water Harvesting Systems in schools and in Health Centers/dispensaries.

<table>
<thead>
<tr>
<th>Achieved target</th>
<th>Per cent achievement</th>
<th>Comments (supported by field observations)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1). 21 water sources (boreholes, pipelines extensions, shallow wells, sand dams and water pans) rehabilitated, protected and made operational</td>
<td>100%</td>
<td>Target achieved and sources are under use thus enhancing water availability</td>
</tr>
<tr>
<td>1.2). 24 RWHS built in Schools and Health Centres/dispensaries</td>
<td>100%</td>
<td>The original target was 28 RWHS but was reduced to 24 on approval by the donor. The need for this variant was due to a synergistic activity with KAME project, another LVIA initiative that also installed RWHS.</td>
</tr>
<tr>
<td>1.3). 7,126 students accessing water at school (50.2% girls)</td>
<td>98%</td>
<td>Enhanced water access improved cleanliness in schools, hygiene and hand washing</td>
</tr>
<tr>
<td>1.4). 5 WRUA formed and became fully operational</td>
<td>100%</td>
<td>Each WRUA developed SCMP which other development programs can contribute to</td>
</tr>
<tr>
<td>10 Water Management Committees trained</td>
<td>Done</td>
<td>Originally not in log-frame but was a recommendation in Mid-term evaluation.</td>
</tr>
</tbody>
</table>
1.5). 4,928 households received water PUR sachets and jerry cans | 246% | PUR usage enhanced clean water availability in the households

Result 2: Improved access to health and sanitation facilities through the construction of latrines in selected 15 schools and 15 Health Centres/dispensaries and through hygiene awareness promotion. The following targets of the result were achieved:

Table 5: Results 2 Target Achievement

<table>
<thead>
<tr>
<th>Achieved target</th>
<th>Per cent achievement</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1). 34 blocks of latrines (with 90 doors) built in the targeted schools and Health Centres/dispensaries</td>
<td>112.5%</td>
<td>34 blocks with 90 doors have been constructed; even though the number of blocks is lower than the target, the number of doors built is higher, hence the number of users is bigger</td>
</tr>
<tr>
<td>2.2). 75% of students and patients use the latrines</td>
<td>100%</td>
<td>All target students/pupils use latrines (survey findings)</td>
</tr>
<tr>
<td>2.3) 15 School Health Clubs formed and involved in monthly awareness meetings</td>
<td>100%</td>
<td>School health clubs enhanced hygiene among school students and in some cases planted trees</td>
</tr>
<tr>
<td>2.4). 30 sanitation kits distributed to the targeted schools and Health Centres/dispensaries</td>
<td>100%</td>
<td>Enhanced cleanliness in schools and health centers/dispensaries</td>
</tr>
</tbody>
</table>

NB: Actual needs for latrines was informed by assessments thereby leading to lesser blocks but more doors hence more users. All students/pupils use latrines and some have influenced families to put up latrines at home.

Achievements under each activity are detailed in Appendix (the Log frame).

Figure 8: Children at Biliqo Marara primary school enjoying water from LVIA donated tanks connected to a solar powered borehole

The project was effective and has had an impact in protection and management of water resources as follows:

WASH infrastructure

The WASH infrastructure have included rehabilitation/protection of 21 water sources (100% achievement) including boreholes, pipeline water extensions springs, 9 connections to
school/dispensary, 1 shallow well with solar pump, 1 well perforated and solar panel system installed, then connected to local school and dispensary, 1 river intake rehabilitated, 7 deep wells protected (on 4 of them a solar panel system was installed), 2 sand dams rehabilitated. A total of 24 Roof Water Harvesting (RWH) (100%) were installed in schools and health centres/dispensaries. These infrastructure has led to enhanced access to water in the settlements where they have been constructed. The effectiveness of the project in terms of access to water is enhanced by giving special considerations to the disadvantaged. For instance according to the Biliqo Marara water project chairman, the small fee of Ksh 100 may not be affordable to all for instance the elderly and disabled. The water project committee reviews those who fail to pay on a case by case basis, with the very needy also being exempted from paying to ensure they also access water. Where relatives are able they are also encouraged to pay for the needy cases so that there is money saved for maintenance and repairs in case of breakdown.

**Rain water harvesting**

Rain water harvesting has been a key intervention providing a source of clean water for schools and dispensaries at low set up costs. Rain water is captured through roof harvesting into tanks and can last some institutions up to the next rains, providing clean water for drinking and cooking. Some school health club member’s e.g Malka Galla have planted trees and are watering them from the water harvested, an intervention that can make the school environment more hospitable to the children and reduce the wind and dust. Surrounding communities for instance at Kinna also visit their school to fetch water from the tanks, and thus the resource dwindles quickly as a result of overuse. The only cost is installation, but the management of gutters through regular cleaning to prevent bird waste and dust from contaminating rain water is proving to be a headache to many institutions despite the trainings held by LVIA and the constant follow up by field officers. The project undertook 10 RWHS in Garbatulla Sub County, 7 in Merti Sub County and 7 in Isiolo Sub County. Despite the attractiveness of rain water harvesting, the persistent drought has hindered progress towards the desired outcomes as regards to water access raising queries regarding it’s effectiveness in such a dry environment, in an area badly hit by climate change. However, it is a source of fresh clean water if rains are consistent and system is well maintained in terms of hygiene. At the Malka Galla school for instance the project has installed gutters and 6 water tanks (all 10,000 lts except one with 5,000l) and are using the cook to maintain them. The harvested water can serve the school up to the next rainy season.

*When it rained we were able to collect water from the roof harvesting system, water which can serve us for one whole year as we await the next rains (Deputy Headmaster Malka Galla primary school)*

The effect is there to be felt. The water in Malka Galla was being used for cooking in the school, washing classrooms and latrines and for the pupils washing their hands before eating and when they visit the toilet. This according to the CHVs interviewed has reduced water borne diseases among the children. It was noted that at the time of the survey, most of the tanks were dry. Some pupils are absent from school either accompanying their mothers to look for water or taking care of the young ones at home as the mother looks for water, affecting their education.

**Boreholes**

A key contributor to adequate source of clean water have been the interventions focused on boreholes. Additionally, the project has trained water management committees. Results have been realised from the setting up and training of the committees in terms of legal framework and governance, financial management and operations and maintenance of the boreholes, ensuring steady supply of water. The project has provided/rehabilitated 6 water systems in Attan, Arimawoi, Eremet, Raap, Barambate, Biliqo Marara – with with solar photovoltaic panels to power the borehole submersible pumps. In Biliqo Marara, the committee is efficiently managing the water from the 6
panel-solar run borehole. Borehole installation is initially expensive but the use of solar energy to run it saves the community cash in terms of diesel, a single key important element in community water costs. This has adequately ensured supply of clean water at low costs to the 110 households in the community (through water kiosks), while the school and dispensary have been connected for free to the main pipeline. The borehole is a source of clean water for the community.

‘Previously, the community used to be supplied water from a hand dug well which was never enough, forcing people to manually fetch water from the Ewaso Nyiro River, 3 km away, water which was dirty and unhealthy to drink. Fetching water was the work of women and greatly burdened them due to the distances and efforts involved. LVIA has provided a 5000 its tank at the dispensary and did piping to the maternity and staff houses. The water is supplied to the community through water kiosks, and every household pays Ksh100, money which mainly goes for maintenance purposes’ (FGD with Water chairman Nuhura Abdi at Biliqo Marara, 2 July 2017).

‘The water we used to fetch from the river was dirty. We would use traditional herbs to make it clean. Now we drink fresh clean water and water related diseases have reduced’ (Nuhura Abdi 3rd July 2017).

The project installed a new submersible pump at Arimawoi borehole, rehabilitated the solar panel system and did the connection to the cattle troughs (with some reinforcement on the troughs). Community’s members acknowledged that the borehole is benefitting approximately 2,000 heads of cattle and shoats, 250 HHs (50 HH from outside the village). WMC at Arimwoi was also trained in management of the project for suitability purposes. Various community members appraised benefits of the project. Ms. Esther Ethurot is a WMC members and is very contented with the benefits: “I used to walk to Sumvi Yele which is 1 hour away to get a 20 lits jerican water. Though I had free access to water, I don’t have a donkey and have domestic chores to attend hence could only have fetch one jerican a day. Since LVIA rehabilitated this system, I can get 4 to 5 jericans a day within 500 meters. I don’t get tired and have energy and time to attend my other issues”.

**Water connections**

Water connections have enhanced cleanliness in schools and dispensaries and enabled more deliveries in the dispensaries. Access to water has been enhanced through 9 water connections to dispensaries, schools and water kiosks. Connections have been done in Bisan Biliqo, Daaba and Biliqo Marara settlements among others to ease access to water. This steady supply of water has enhanced hygiene especially hand washing in schools. In schools, children get more time to concentrate on their studies and teachers do not have to spend school time looking for water. The water has also enhanced access to some health services previously lacking for instance there are more cases of hospital deliveries as a result of water connection to the dispensary at Biliqo Marara enabling maternity services. In the
school, classrooms are cleaner and teachers spend more time with the children instead of looking for water as was previously.

**Sanitary pads for girls**

Another result from the project is enabling girls to stay in school. The project involved 205 girls from class 6 to 8. They were shown how to saw reusable pads using materials they can easily find, so to make them able to go on doing it and sensitized them. With this intervention, the girls could access the towels in their schools and no longer had to waste three days\(^{10}\) at home every month as was the practice previously. The sanitary towels are reusable three times with proper washing. Malka Galla primary school has 229 pupils of which 140 are girls and 89 are boys. Unlike other ASAL area with pastoralist populations such as Wajir, it is common to find more girls than boys in all the school, a fact the teachers attributed to the general gender population ratios in the area when there are more girls than boys. However, we were also told that many boys are out of school grazing animals in far areas such as Moyale where they have gone as a result of drought, a fact supported by the fact that in Kina, Garbatulla area where pastoral lifestyle is less practiced, there was more gender balance in school attendance. Whereas practices such as FGM have been blamed for drop out among girls in other pastoralist areas, FGM is still rampant among the Borana\(^{11}\), yet the girls are still in school.

**Water Pur**

Before the project, residents used to consume dirty water or use traditional methods to ‘purify’ dirty water from stagnant sources or the river. Use of Pur has ensured use of purified water for the community and created demand for the commodity. Over the project period, 508.908 water purs have been distributed to 4.928 HH including 1.853 buckets. The schools have also been provided with the sanitation kits for purifying water and shown how to use. The pur not only cleanses dirty turbid water but also kills germs, reducing exposure to diseases. The community has adopted water pur as a main water purification method and no longer use turbid water from water pans or the river before purifying it with pur. The community health officer in Merti said that community’s members have been approaching his office for pur when it gets over and that he cannot meet the demand, showing increased uptake of the behaviour.

**School health clubs**

School health clubs have enhanced hygiene knowledge and practice in the school populace and even at home. There were 15 Health School clubs established/empowered by the project with 458 students directly benefiting the sensitzation and 5,200 indirect beneficiaries. In Malka Galla the health club was established with a total of 32 pupils and a patron. Their main role is to train other pupils, for example, other girls on the use of the sanitary pads, train their fellow pupils and their parents at home on hygiene practices and use of PUR among other health education themes.

At Manyatta Zebra the school health club composed of 30 pupils (15 girls and 15 boys) of class 4 and 5. The club was formed and provided with sanitary kit for cleaning the school compound. The school was taught on hygiene and sanitation aspects such as handwashing and using latrines. It was reported that all pupils use latrines. The club has planted 200 trees in the compound though 27 had died by the time of the evaluation.

---

\(^{10}\) FGD with girls benefiting from sanitary towels at Malkagalla primary school. The three days of school absence every month are during the menstruation period

\(^{11}\) FGD with community members at Korbesa. 4\(^{th}\) July 2017
Latrines

Initially, school pupils and the community lacked latrines for proper human waste disposal and many were using the bush with consequences being a lot of water borne diseases when the waste contaminates drinking water. The project has witnessed reduction (KII with CHVs) in water borne diseases enhanced latrine construction and education of latrine use. The project has constructed 34 blocks of latrines with a total of 90 doors. This has happened in 6 Dispensaries (Duse, Muchuru, Malka Galla, Eskot, Mata Arba, Dadacha Basa) and 14 Schools (Iresa Boru, Malka Daka, Wako Wariu, Bisan Biliqo, Muslim Merti, Nagaa, Saleti, Parkishon, Raap, Dololo Dakye, Mulanda Noor, Manyatta Zebra, Adhe Warbesa, Badana - Merti). This is 84% of the target 40 blocks with a total of 80 doors. However, the 34 blocks have 90 doors hence the number of users was more. After health education, many households are also constructing and using latrines.

Sanitary kits

Cleanliness in the health and education institutions as well as households was a huge problem previously due to lack of not only hygiene knowledge but also cleaning materials A total of 30 sanitary kits were distributed to 15 schools and 15 dispensaries and members sensitized on how to keep the compounds clean. Pupils were taught on hygiene and sanitation aspects such as handwashing and using latrines. It was reported that all pupils use latrines and have influenced their families back at home to change attitude and adopt hygiene practices. Further, 1,940 HH (9,700 pp) received sanitary kits and were involved in activities on good hygienic practices.

Water management committees

Operations and maintenance of community infrastructure projects such as water is crucial to ensure continuous operations and service provision. The project has ensured this by training committee managing water projects in 10 sites on legal framework and governance, O&M, management of water projects at Attan, Daaba, Arimawoi, Eremet, Raap, Barambate, Muchuru, Dhimado, Bisan Biliqo and Biliqo Marara. The committees are maintaining the water resources although more community cooperation is still required and less donor dependency for community members to contribute towards water. At Muchuro for instance, the water management committee charges Ksh 2 per 20 litre jerrycan of water, and the money is hardly enough to maintain operations. Nevertheless, more transparency is required and the committees need to be well structured with bank accounts to deposit cash meant to run water rather than keeping it at home when they collect.
WRUAs

WRUAs ensure communities plan, mobilize resources and maintain their water systems and environment. The project was able to form 5 WRUAs in Oldo Ngiro (Isiolo SC), Kuro Bisan-Owo, Yamicha-Kom, Dhukes (Merti) and Omar Quri (Garbatulla). Being part of the water resources management, WRUAs are key in water sector planning and management (sub-catchment management) and are a good sustainability player for the water activities undertaken by the project, which can easily be taken over and managed through WRUAs. Each WRUA developed a SCMP to which other development programs/projects can contribute to since it is composed of activities devised to contribute towards sub-catchment management. Individual WRUAs are applying knowledge acquired during trainings to secure funding for activities in their SCMPs e.g Kuro Bisan-Owo WRUA submitted a proposal to WSTF and contract totalling Ksh 10 million has been signed.

5.2.2 Health Services

There are two results which have substantially been achieved. The targets have well been tracked using monitoring frameworks:

**Result 3:** Women and pastoral communities are informed and educated in order to implement concrete actions to safeguard their own and household health. The set targets have been fully achieved and some surpassed.

*Table 6: Results 3 Performance against Targets:*

<table>
<thead>
<tr>
<th>Achieved target</th>
<th>Per cent achievement</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1) 15 CHCs created (31.61% members are women)</td>
<td>100%</td>
<td>Enhanced grassroots health management practice</td>
</tr>
<tr>
<td>3.2) 45 health promoters trained (50% women)</td>
<td>300%</td>
<td>Enhanced health messaging in the community</td>
</tr>
<tr>
<td>3.3) 1,940 HH (9,700 pp) received sanitary kits</td>
<td>97%</td>
<td>Enhanced cleanliness and hygiene at household level</td>
</tr>
<tr>
<td>3.4) 205 students received sanitary reusable towels</td>
<td>additional achievement</td>
<td>Absenteeism among girls from classes reduced</td>
</tr>
<tr>
<td>3.5) 1,356 training sessions were conducted at health facility level (22,043 beneficiaries, 67% women) 1,521 training sessions conducted at community level (21,732 beneficiaries, 63% women)</td>
<td>387%</td>
<td>Enhanced health awareness and practices in the community</td>
</tr>
<tr>
<td>3.6) sensitization activities are organized on the occasion of 8 global awareness day (World Health/Hygiene Days)</td>
<td>400%</td>
<td>Enhanced health awareness and practices in the community</td>
</tr>
</tbody>
</table>

**Result 4:** Quality healthcare services for mothers and children provided in the targeted 15 Health Centres/dispensaries of which the following targets were achieved:
### Table 7: Result 4 Performance against Target

<table>
<thead>
<tr>
<th>Achieved target</th>
<th>Per cent achievement</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1). 15 Health Centres/dispensaries equipped with basic medical tools and drugs</td>
<td>100%</td>
<td>Better healthcare and increased consultations</td>
</tr>
<tr>
<td>4.2). 45 health workers of Health Centres trained on childcare protocols</td>
<td>300%</td>
<td>Better quality childcare in health centres</td>
</tr>
<tr>
<td>4.3). 50 health workers trained on prenatal and postnatal care and assistance during birth;</td>
<td>513%</td>
<td>More health worker assisted childbirth</td>
</tr>
<tr>
<td>4.4). 28,931 medical consultations provided to children (&lt;5, of whom at least 50% female) in Health Care centres/ dispensaries</td>
<td>94%</td>
<td>More access to health care services in the population</td>
</tr>
<tr>
<td>4.5). 2,861 pregnant mothers benefitted from ANC services at Health Centres/ dispensaries; at least 1,635 among them benefitted from assisted birth in Healthcare Centres/ dispensaries;</td>
<td>39%</td>
<td>Less mother and infant mortality at birth(^\text{12})</td>
</tr>
<tr>
<td>4.6) 4 monitoring activities organized with the HMDT in the three years</td>
<td>33%</td>
<td>4 monitoring activities conducted in 3 years rather than every year. The activities would result in better health planning and coordination in the county</td>
</tr>
</tbody>
</table>

NB: The low uptake of women seeking ANC services is due to the fact that it is an initiative since women from the community are used to have children at home and in absence of medical facilities. However, it is a good progress and has potential to increase; women who sought the services are excited.

*Factors affecting the implementation of quarterly supportive supervisions were, among others: absence of health staff at health facility level, unavailability of County and Sub county staff in the periods identified for the activity and high expectations in terms of per diems, rainy seasons affecting the accessibility to locations, periodic health staff’s strike, delay in transfer of funds by donors.*

### Health Facilities equipment

The project achieved good results and was effective in that it managed to equip 15 health centres/dispensaries with assorted medical equipment and drugs. The equipment has helped improve health service delivery in the health facilities for instance at Kinna health centre, the clinical officer said they are able to screen for cancer which they could not do before, saving lives of many patients as a result of early detection.

*Personally, I requested for equipment and cervical cancer screening ‘speculum’ which CCM provided. We conducted mass screening for cervical cancer and diagnosed some cases for early intervention’*(KII with Abdi Ibrahim Clinical Officer Kinna Health Centre, 7 July 2017).

Apart from accessing previously unavailable quality services, one key result from these intervention is reducing the distance travelled to a health facility for services. From the household survey, previously,

\(^{12}\) FGDs with CHVs and community members
patients travelled an average of 7.5km\textsuperscript{13} to the nearest HC/Dispensary to get basic health services, childbirth (pre/post-natal care) and emergencies. This has however improved and access to basic healthcare services have been reduced to only a few minutes’ walk within their manyattas.

The medical equipment were observed in several sites within the sub-counties of Isiolo, Merti, and Garba Tula.

The equipped dispensaries have provided 28,931 medical consultations (94% of target) to Under 5s leading to 1,459 children being fully immunized as mothers adopted exclusive breast feeding of under 6 month. Pursuant to reducing maternal and Under 5 mortality deaths, 50 health workers were trained on childcare protocols, ANC, PNC and SBA. Availability of health facilities and skills led to 2,861 pregnant mothers benefitting from ANC services of which 1,635 pregnant women got assisted birth, a 125% achievement against the target of 1,304.

As a sample, Biliqo Marara dispensary was built by CDF in 2013 but was left bare without equipment, save for two staff employed by the County Government. Before the dispensary was equipped with relevant materials and improved by CCM, community members used to track to Biliqo, 10km away. The very sick ones would be transported using donkey carts.

As one lady puts it: ‘it was bad those days and we would deliver at home which resulted in the death of two women during delivery as getting a vehicle to transport a patient to the hospital was a problem. Now with this dispensary, everything is okay’

Daaba dispensary in Ngare Mara ward was constructed in 2011 by World Vision. The project provided the dispensary with drugs, equipment and storage cupboards at the beginning of 2015.

**Health Education**

FGDs with community members, mainly women indicated high level of knowledge and practice on baby and maternal as well as hygiene issues. The project recruited 45 CHVs and trained them to undertake health education in the community and dispensaries for some stipend. They also facilitate referrals from the village and clinic attendance for mothers and babies. Of the 45, 51% are female.

In Daaba, one of the dispensaries visited, CCM trained 3 CHVs in PNC, ANC and SBA and were paid incentives until the end of the project. The consultant observed CHVs actions plans well displayed on wall of the dispensary and has been implemented showing accountability for their work and good practice learned from working with the project. If that practice of displaying work plans and results is adopted, it can greatly enhance even the work of CHEWs employed by the county.

\textsuperscript{13} HH survey data July 2017
Nurse in charge Mr. Ambrose Lowoton reported that CHVs act as mediators between the facility and community.

Figure 13: CHV Action Plan at Daaba Dispensary in Isiolo sub-county

CCM has also put the effort in building sustainable health capacities. CHVs in the community have spread awareness on ANC, immunization, nutrition, hygiene, latrines, hand washing, water treatment, etc. Mother to mother groups exist in the community (not formed by the project) and work hand in hand with community health volunteers in training community, meeting bi-weekly to pass health messages. The health education has borne fruits in that more mothers are delivering at the dispensary compared to the period pre-2015. Synergies have been observed in the project. Anglican Development Services organization has chipped in and motivates the TBAs by motivating them with an allowance of ksh500 for every delivery they refer. This makes the work of CHVs easy. Mothers have embraced immunization of their children; a total of 1,459 children are fully immunized at the supported health facilities.

Asked during the HH survey whether they had participated in the community health talks by CHVs and whether they had changed, 93% of the respondents replied in the affirmative. Some 87.5% had also participated at the health facility. Asked what they learnt, they mentioned the following:

Table 8: Community learning from Health Talks by CHVs

<table>
<thead>
<tr>
<th>Aspect learnt</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANC</td>
<td>4</td>
<td>8.3</td>
</tr>
<tr>
<td>Exclusive breastfeeding</td>
<td>10</td>
<td>20.8</td>
</tr>
<tr>
<td>Family planning</td>
<td>5</td>
<td>10.4</td>
</tr>
<tr>
<td>Hygiene and Sanitation</td>
<td>10</td>
<td>20.8</td>
</tr>
<tr>
<td>Immunization Program</td>
<td>5</td>
<td>10.4</td>
</tr>
<tr>
<td>Lifestyle change</td>
<td>3</td>
<td>6.3</td>
</tr>
<tr>
<td>Modern delivery</td>
<td>4</td>
<td>8.3</td>
</tr>
<tr>
<td>No response</td>
<td>7</td>
<td>14.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>48</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
However, with the project ending hence there are questions on incentives to the CHVs as they were being covered within the project timeframe.

In Korbesa, the community narrated how health education has benefited them. In a community focus group discussion, communities explained the health education they have got and how it is benefiting them.

“Now we know vaccination prevents diseases and ensure our children are vaccinated. We also follow up with growth monitoring”. Korbesa community FGD in a manyatta

By year 3, CHVs conducted 2,042 training sessions at health facility level with 33,816 beneficiaries with an average 70.6% women and 1874 sessions in the community reaching 36,879 community members (average 68% women) by the CHVs leading to enhanced knowledge and skills in the community as captured in the HH surveys and community FGDs.

However, despite the health education, some of hygiene impacts are affected by persistent habits such as dirty containers which take as many as six months to be washed yet people have a habit of rolling them on the ground instead of carrying after fetching water. Thus cases of diarrhoea are still rampant and form the majority of health complaints amongst children attending the dispensary. As Ibrahim, a CHV in the dispensary says; ‘I blame the dirty containers for diarrhoea’.

Training of health workers

The quality of health services in the dispensaries has been enhanced through on-the-job training of health workers in the health facilities. Basically “Training on the job” sessions were done in 15 health facilities benefiting a total amount of 50 health workers (42% women). There was a total of 433 OJTs conducted, among which 53 on IMNCI and 90 on safe motherhood. 43 other health staff were trained on ANC, PNC and SBA.

Training has enabled the health workers to have enhanced skills in maternal and child care. However, the two staff – sometimes one- are not enough and sometimes there is no staff for two days running. At the time of the evaluation, there was no staff and patients went unattended, again an outside factor affecting results of the project. With the strike going on, the CHVs in Korbesa refer the cases early to Merti for delivery

Quarterly monitoring missions together with the HMDT (Health Management District Team)

As part of efforts to enhance quality of health services in the whole county, the joint missions were organized to identify and correct potential gaps in rendered services, as well as to guarantee good quality services to patients. The missions sought to identify any issues in the health sector. A total of
4 monitoring sessions were conducted during the project period with recommendations being put into use.

5.3 Efficiency

The project allocated and utilized financial resources to implement the interventions as per the project agreement document. In general, the resources were efficiently used for the purposes they were intended for and the results are clear on the ground. In the health component, the project purchased medical equipment for dispensaries as per requirement, facilitated community health education and support supervision and provided sanitation kits. The medical staff and the local community is extremely satisfied with the work of CCM in that regard. LVIA has also used resources to provide and rehabilitate water sources, provide water tanks and roof harvesting, construct latrines for schools and dispensaries and provide sanitation materials to schools, dispensaries and households. As a result of lessons learnt from borehole drilling projects by other stakeholders, LVIA avoided drilling new boreholes in new sites, to avoid risks of borehole failure and associated loss of money which can be used to obtain with results in other investments such as RWH where one is sure of results.

Other development partners including the County Government have also collaborated in providing resources (drugs, staff, other equipment) in the dispensaries providing synergies for efficient operations. The project saved resources by ensuring value for money, providing no allowances for government staff (since the project is contributing to their work which government pays for), use of solar systems to save the community from diesel expenditure, sometimes rehabilitating equipment e.g. painting water tanks to preserve them from heat and increase longevity rather than buying new, using low-cost community resources such as CHVs in health awareness creation rather than employing them as full time staff. The time frame envisaged for the project was three years but the project suffered for some delays in funding release during the first year. Thus, the project had to be extended by three months to accomplish its deliverables.

The field officer used a motorbike in his field activities and this lowered operational costs compared to use of a vehicle. To maintain the longevity of the tanks, basements, and shades were constructed for each tank. However, the evaluator noted some poor workmanship, especially on the water infrastructure although the project was following up on the issue. LVIA retains 10% of payments to contractors for several months to test workmanship in projects. Although some of the damage to the water harvesting gutters and tank shades could be blamed on the excessive wind. Another issue that needs to be followed up was the quality of materials some contractors used. School personnel informed us that some materials such as the iron sheets used on the tank shades were of low gauge and were torn or blown off by the wind and some tank taps were leaking, leading to loss of collected water.

![Figure 15: Damaged infrastructural works at Malka Galla primary school](image-url)
5.4 Impact

The project has resulted in considerable impacts in the community as far as health – preventive health and health-seeking behaviour are concerned and appropriate water and sanitation practices which from the initial project assessments were generally poor before the project. The activities have contributed towards better health of citizens while changing some of their negative attitude and practices that hinder their well-being and improved on their health and sanitation knowledge. Some achievements will be replicated and/or scale-up at individual, community or County/Sub-County levels. However, inadequate resources from government and other stakeholders and inadequate/lack of ownership of the facilities may hinder accrued benefits to the community. From the perception of the beneficiaries and actors, the impacts of the project can, therefore, be rated 4 out of 5. Key impacts resulting from project interventions are discussed.

WASH

Behaviour change as regards sanitation
The community members have adopted water treatment using pur, something they were not doing before. According to the Merti public Health officer, this has resulted in a reduction of water-borne diseases. Demand for PUR where the community members visit the public health officer’s office to request for it is a clear indicator of this change.

More community members have adopted latrine use, something that was rare before. In Duse community, for instance, there were 8 latrines in 2014 which have increased to 42 in 2017, over 400% increase - serving 165 households. In some cases where community surrounding schools lack latrines, they come to school or dispensary to use the project constructed ones. The Members of school health clubs have also been instrumental in educating their parents back home on importance of latrines in addition to other practices such as handwashing and water treatment which many parents during FGDs informed the research team they have adopted.

Impacts of increased access to water on community
Water availability in the dispensaries has enabled and encouraged more hospital deliveries unlike before when there was no water in the dispensaries. In Biliqo Marara where there is a solar powered borehole for instance, water availability has enabled hospital deliveries to increase from zero to 6 deliveries per month\(^\text{14}\). The price of water is also low with the community members paying only Ksh 100 per month to access constant supply of water. Water is expensive going for Ksh20 or more per Jerry can in places such as Korbesa\(^\text{15}\) where there is none. At Duse which also has a borehole but no solar, water is still affordable, the officials charge Ksh 2 for a 20-litre jerrycan of water and a family consumes 5 jerrycans in a day.

Rehabilitated Eeremet borehole is benefitting 52 HHs and 548 pupils. The borehole was not functional by the time the intervention reached the village. Community members used to scoop water from Isiolo lagga but quantity has been disappearing due unsustainable of sand harvesting and prolonged dry seasons as result of climate change. Alternative sources were Kiwanja which is 5 kms away and water costs Ksh 20 per 20 lts jericans, and Natanga spring which is 7 kms away where one queue for 2 hours. During failure of the borehole in 2015, there were 105 diarrhoea cases, 10 cases of trachoma and 47 cases of scabies. During this time, school feeding programme had stopped as a mitigation measure against diseases. A total of 137 pupils had dropped out of school to help their

\(^14\) KII with CHV at Korbesa dispensary
\(^15\) Interview with Korbesa deputy head teacher
parents in fetching water. WMC and the school management reported that the steady supply of water has mitigated the aforementioned problems.

Rehabilitated borehole at Attan primary school has become a saviour to the community. The school has a population of 240 pupils who are fed in school. Government provide cereals but the school management has to get water for cooking. Small children from the village also come to school for lunch since many households also do not have enough food. During the breakdown, 80 pupils dropped out of school since there was no cooking since there was no water even in the village. The school has vegetable and fruit garden that provide supplementary diet to the pupils. After rehabilitating the village borehole with the installation of solar, LVIA formed a School Health Club at the school, distributing a sanitary kit. The consultant observed the kit and a hygienically kept compound. There are 2 teachers in charge of the club Mr. Kinoti and Ms Makena who have continued to keep up the spirit of the acquired knowledge by pupils.

Water treatment is more evident in the community and as communities are drinking clean water purified using PUR or boiled water.

**Health Services**

**Improved access to health care**

There was an improvement in access to health services in the population. Availability of equipment from CCM and on-job trainings to health workers have enhanced quality health service delivery in the 15 dispensaries and health centres, with a better diagnosis of health conditions, sterilization of equipment, curative care and data records among other achievements. Patients do not travel anymore for health services unless it is a referral case. Mr. Ambrose Lowoton is the nurse in charge of Daaba dispensary, which serves approximately 480 people (300 adults and 180 children):

*‘Patients from our Ngare Mara ward used to walk to Archers post 15 km away or Ngare mara Catholic Dispensary 15km away for medical treatment. In case a patient couldn’t walk, we would have to part with ksh 7,000, if we are lucky, to get a car for hire. Lives have been lost during that struggle’*

Results from the household survey indicate that in all the cases the respondents said that they received treatment along with their medicine and got well as a result. All respondents interviewed said that the HC/dispensary is good for the community. Before the project interventions, patients used to travel an average of 7.5km to the nearest HC/Dispensary to get basic health services, childbirth (pre/post-natal) and emergencies. It was interesting to note that out of the total respondents interviewed, a quarter (25%) used to travel distances above 5km with distances up to 42km away to the nearest HC/dispensary while only 15% travelled for distances less than 5 km. Most of these respondents walked for the distances to access the health services while a few who could afford motorbike services hired them or occasionally through the use of public transport. This means that access to the health services could take as much as 8 hours for some of the patients to access. In the case of an emergency that required extra medical attention, this would be disastrous. Only a small fraction of the respondents (4%) said that they did not go to the HC/Dispensary at all. Currently, there are dispensaries within 10 to 20 minutes as they are located in the Manyattas. Most were done by Constituency Development Fund (CDF) or county government but were equipped and provided with water source by CCM/LVIA.

Similarly, from the FGDs with mothers, before the project many mothers would start feeding the baby almost immediately with solid foods. The household survey indicates this has changed, with an overwhelming 83.8% of the mothers saying they don’t feed the baby with anything other the breastmilk in the first six months after birth, 89.6% saying they were advised by the CHVs and nurses on the importance of exclusive breastfeeding.
The chart below indicates that OPD under 5 increased by 19% from baseline figure while OPD adults increased by 71%. This indicates an increase in health seeking behaviour by both adults and more hospital visits for under 5’s who are also seen during PNC visits and revisits.

![OPD data baseline vs 2017](image)

**Figure 16: OPD data comparing baseline and end of project**

**Hospital deliveries**
The community has learned that delivering at home alone or through TBAs is not appropriate health wise especially due to infections such as HIV and STDs and lack of health care in case of complications. CCM and its partners have ensured the community is capacity build to appreciate hospital deliveries. Partners such as ADS have also been providing motivation to both new mothers and the TBAs who refer them to the dispensary to encourage the behaviour. Water availability in the dispensaries has also contributed to increased hospital deliveries. In Korbesa, for instance, the target of 6 per month has been reached yet before there were no hospital deliveries and all were TBA assisted. From the qualitative information obtained in FGDs, cases of maternal deaths have reduced in the communities.

**Enhanced ANC and PNC**
Pregnant mothers are attended to at the HC/Dispensary and can access services such as check-ups for both the mother and baby, PMTCT services for patients who are HIV positive and also the mothers can get advice on how to take care of their babies. This for most of the respondents happens on a monthly or 2 months basis. According to findings from community FGDs, there is enhanced care for under 5-year-olds, with the adoption of ANC and PNC, exclusive breastfeeding and immunization of children, there is better growth and development for children under five years. Cases of diarrhoea and typhoid are lesser than before. Data indicates that new ANC rates improved by 15%\(^{16}\) and revisits by 18%. New PNC rates increased by 43% and revisits by 51%.

\(^{16}\) CCM data for Target analysis 2017
Immunization rates also increased with BCG by 19\% and PENTA 3 by 18\%, although measles and TT2 reduced by -14\% and -29\% respectively probably since the parents do not realize the value. as opposed to the BCG and PENTA. From the survey, 89.6\% of the respondents said they revisit the health centres either monthly or every two months during the first year after birth. Availability of cold storage for vaccines in the health centres has been instrumental in access to the service.

Asked to mention one vaccination their child had received, most of the respondents (66.7\%) would only remember BCG, followed by Measles (8.3\%) and Polio (6.3\%) in that order.

Before the Health centres were established close to the community, the pregnant women were mostly attended to by TBA’s or midwives. During their pregnancy period, pregnancy care was limited and pregnant mothers would seek divine intervention and wait for a safe delivery at the end. Further probing indicates that this led to a lot of infant mortality and death to the mothers in some cases due
to over bleeding. Before the interventions, a large percentage of mothers (63%) would travel more than 5km to a health centre with the furthest described distances up to 50km. The rest (26%) would travel for distances less than 5km. This in most cases was a tall order as most of them responded that they walked to access pregnancy care with some walking up to 4 hours. Other means that were used are motorbikes and hired vehicles.

![Figure 19: Elizabeth, an officer from CCM showing some of the maternity equipment donated at Malka Daka Dispensary](image)

**Health seeking behaviour**
Health seeking behaviour has improved with fewer defaulters such as immunization. CHVs have also traced and referred defaulters with other public health conditions such as TB. At Duse for instance, two TB cases in the manyatta were followed up by CHVs until they got cured. On vaccination, some CHVs have taken it upon themselves to have a record of all cases at the household level, with dates due for follow up. At Muchuro dispensary in Garba Tulla Sub-County for example, the CHVs check the records of patient attending check-ups, vaccinations and compare with their due date records and physically trace defaulters on the same day to ensure they get the service

**Family planning**
According to qualitative information from CHVs and community FGDs in the sites visited, attitudes towards family planning are changing as a result of health education. From the FGDs with community members, child spacing is now more widely practised unlike before. Mothers in the FGDs told the research team that most had adopted exclusive breastfeeding (also a method for family planning) which has reduced health problems among infants such as stomach upsets and diarrhoea which are caused by the use of solid foods in early infant feeding. However, new Family Planning services reduced by -24% although revisits increased marginally by 6%. Reduced new FP uptake is attributable to cultural believes. As one woman said during KII, “Us pastoralists believe family planning is for Merus17 not for us”. However, FGDs discussions indicate that these believes are slowly changing and this may explain the marginal increase in revisits.

5.5 **Sustainability**
Sustainability of the project is hinged on several factors. One is a smooth transition to the county government. Water and health services are devolved county government functions. The two sectors, therefore, need adequate financing by the Isiolo county government, based on priorities. Secondly, lot of capacity building has been done to the local community volunteers and this knowledge and

---

17 Meru people who neighbour Isiolo County are farmers living on the slopes of Mt Kenya.
skills will be left in the community. If the trained local personnel continue imparting the skills, the results will be sustained. Other training was for school health clubs facility and community level training about the use of latrines and RWHS. The equipment and infrastructure are already operational and committees such as water committees and health committees are in charge of the operations. Meetings have been held between the implementing partners and government agencies at the county level to plan implementation and handover.

However, there has been inadequate collaboration/partnerships between the NGOs and with county government, mainly due to a negative attitude and lack of commitment leading to for instance failure to attend meetings on the part of some government officials especially, affecting joint planning and collaboration. The project closely worked with County Public Officer but Sub-county public health officers were not adequately involved. As a result, issues such as takeover and support of CHVs and other community support initiatives has not been finalized. Inadequate support of WASH and Health facilities from government and other actors may lead to stalling/slowdown of services. Most of the interviewees sought continuous support indicating reservations government and community capacity to maintain a good level of services. They rated the sustainability at 2-3 out of 5.

**WASH**

To ensure continuity in water services, the project has formed and trained water project management committees on legal framework and governance, financial management and operation and management for each water scheme protected/rehabilitated/constructed to ensure sustainability. They have developed by-laws to ensure proper water governance. The committee has been charging some cash for operations and maintenance. For instance, at Biliqo Matara, the community members pay Ksh 100 each. At Duse, the officials charge Ksh 2 for a 20-litre jerrycan of water and a family consumes 5 jerrycans in a day. Five jerrycans would thus cost Ksh10 per family per day. There are 200 HH at Duse. Given that the generator is diesel run, the cash collected is not enough to buy diesel, pay the Kiosk operators, repair burst pipes, and other maintenance costs.
Any efforts to raise the cost of water from Ksh 2 is met with a lot of resistance from the local community. The current water committee at Muchuro has not been trained, but the previous one was trained on capacity building. Although the previous water committee leaders had been trained by LVIA, there was no skills transfer to the newly elected ones. Communities are sometimes forced to go without water as they can’t afford diesel to run generators for boreholes. They asked for more use of solar rather than generators for boreholes, which are expensive to run in terms of diesel costs. There is apparent community dependency with little efforts being made in simple activities such as repair of damaged gutters or even cleaning gutters of bird waste and dust. The project installed a solar powered pump at Arimavoi borehole and repaired water supply system and trained management committee as well as other project locations. However, all households have declined to contribute towards a kitty that could be used to cater for a breakdown of the system despite the fact that one would walk to Sumvi Yele, which is 1-hour walk (5 km away) to get jerry cans of water. This can affect the sustainability of the project unless local institutional structures take up the mantle.

At Eremet village where LVIA installed a solar water pump, each household is supposed to contribute Ksh 50 per month, which is saved in a bank account to cater for eventual breakdown of the borehole system, which serves a school of 548 pupils and 52 HHS plus their livestock. So far, 40 households have contributed but not consistently.

As part of sustainability plan, the project formed and capacity build 5 Water Resources Users Associations (WRUA) within the context of WRUA Development Cycle (WDC). The project is a collaboration with WRMA supported each WRUAs to develop Sub-Catchment Management Plan (SCMP) which has is composed of sets of projects. Water Services Trust Fund (WSTF), a national pro-poor financial kitty has so far supported part of the projects in the SCMPs and in particular Roof Water Harvesting (RWH). WSTF has funded 20 institutional RWHS under 3 WRUAs; 8 under Merti, 8 under Gafarsa and 4 under Sericho WRUA. Two water springs (Gotu and Kura Mawe) have been protected while 2 sand-dams at Sericho and Gallan Gofo have been constructed.

A negative factor was that Local water county officials especially at the sub-county level were seen as reluctant to collaborate and are rarely on the ground in Merti or Garbatulla. However, the project has worked well with officials at the county level, WRUA and held several meetings to discuss hand over of the health and water interventions for a smooth transition and sustainability.
Health Services

A lot of equipment has been provided to the health institutions and staff given the necessary skills to use them. To ensure the continuity of services after CCM/LVIA exits, capacity building activities were undertaken for nurses and locally recruited CHVs, who were provided extensive training on ten modules with topics such as disease prevention, vaccination, immunization, ANC, PNC, breastfeeding, water and sanitation, water treatment methods and skills such as improvised latrine construction. From the discussions held with the CHVs, they are quite skilled and have adequate content on mother-child health care as well as water and sanitation.

![Figure 22: A baby weighing scale donated by CCM](image)

CHVs have been provided certificates, which are essential for their career growth and recognition by other health partners, or County Government where their services are needed. This is necessary for sustainability. The CHVs will remain in the villages after the development partner exits and continue to pass the knowledge and skills. To some extent, the CHVs have also facilitated formation and build the capacity of local community members such as Mother to Mother groups and School Health clubs. The project has also trained community members on proper hygiene and the importance of referring maternity cases to the hospital rather than delivering at home. The project has also been networking with other development partners such as UNICEF, ADS, World Vision, Red Cross and County Government and these organizations especially the County Government will take over some of the services being offered, given that Health and Water are devolved functions under the Constitution of Kenya 2010.
CHAPTER 6: LESSONS, CHALLENGES, CONCLUSIONS AND RECOMMENDATIONS

6.1 Implementation lessons learned

Beneficiary identification: the project deliberately targeted key population groups to be reached by the project including young mothers who benefitted from skills and knowledge on health and hygiene, ANC, PNC, family planning and hospital deliveries. The focus on key beneficiaries and aligning strategies helped the project achieve its results beyond expectations.

The project also targeted pupils in primary schools who also benefitted from skills and knowledge on health and sanitation including, hygiene, water treatment, hand washing, access to latrines, sanitary pads for girls, water from roof harvesting. A good practice noticed was to form and support of school health clubs where pupils learn and practice hygiene matters and transfer skills at home. For instance, Ms. Paulina Nakasi praised the hygiene skills her class 8 daughter has instilled to her parents and siblings at home:

“I am glad my daughter has taught us the importance of handwashing after visiting the toilet, before handling meals, after handling a soiled baby so as to avoid diseases. Every member of the family is doing it. She has also taught on home compound clean of which she does together with her siblings. We understood the need of adding another window on the opposite wall of the existing window for better aeration of the house. There is lesser smoke in the house. It is a good practice. My neighbour has adopted the same practices at her home.”

The interventions were beneficial to pastoralists who are marginalized from mainstream populations. They have access to water for their domestic use and for their livestock. They also benefited from information on hygiene, hand washing, access to quality hospital services, skills for water treatment and PUR, access to family planning services and latrine use. Of special mention are the defaulters including TB defaulters or vaccination defaulters who were individually traced by the CHVs in their homes and referred to health facilities for services.

“We had three cases of TB here in Kina and we followed them up until two completed their doses and got healed. The third case was adamant and refused to take his medication. He passed on recently.’ (KII with CHV at Duse 7 July 2017)

CSO collaboration: there were enhanced CSO collaboration/synergies between CSOs, for instance, some CSOs would have materials such as drugs and family planning materials but had no means of transport and CCM personnel would assist with transport to distribute them to the health facilities and communities.

Addressing inequalities in water access: inequalities in access to WASH services were addressed, for instance, special groups such as people with disabilities and the very old persons at Duse they were provided with water free of charge. This was the same treatment at Biliqo Marara.

Key actor co-ordination: a key lesson is that coordination amongst actors can bring about synergies for better benefits of the interventions and highly avoid duplication of interventions. E.g LVIA has implemented WASH services and CCM implemented Health services at health facilities thereby bringing about needy complementary benefits to the community. Coordination by government and assessment of activities needed by various target groups pre-empted overlaps and duplication in most cases although there were few cases of double equipping of health facilities by various actors. LVIA
connected health facilities to water and constructed latrines whereas CCM equipped the facilities and conducted all health trainings. LVIA installed RWHS to provide safe water access to pupils, constructed latrines to ensure disposal of human waste and formed school health clubs and provided them with sanitary kits for cleaning of school compounds. CCM facilitated the trained CHVs to conduct trainings to the health clubs. ADS has been instrumental in providing ambulances for referrals cases from the health facilities equipped by CCM amongst others.

Use of local personnel: there was the use of local personnel and impact from the on-job training of CHVs, an approach that instils real skills and keeps facilities active. Communities have also been involved in governance of the water and health facilities enhancing sustainability. This happened to all the 15 health facilities.

Involving and building children confidence: the school health and WASH outreach program through the CHVs and project staff were also a powerful tool in imparting new knowledge and achieving sustainability through the School health clubs. The uptake of most of the content the members of the club learned is high as they are motivated and eager to learn. Case in point is the confidence built by the girls at Malka Galla Primary school was refreshing where they exhibited a lot of confidence in talking about sanitary towels and how they have benefited from the project. Most of the other school girls are very shy and do not engage directly on the topic. They pointed out that before they were trained, they had reservation about asking for new sanitary pads from their teachers. They are now very open to that subject and no longer fear to talk about it. Students also talked about sharing health and WASH related information at home where some like practices like handwashing and digging of compost pits were adopted. During the survey, some activities like tree planting were seen for example in Mata Arba and Manyatta Zebra Primary schools despite the shortage of water in the school. The students were motivated to keep the trees alive irrespective of these challenges.

Synergies with other projects/donors: it is important to note some synergies from other Italian projects /donors that contributed to the project results, with catalytic effect on investments, energies and skills. Climate and Development Foundation (CDF) is an Italian foundation that strives to implement cooperation projects for the deployment of affordable and appropriate renewable energy technologies. Through the Foundation funds, LVIA co-funded a part of the MFA project, in particular some water infrastructure rehabilitations (6 wells) equipped with solar schemes. Another notable activity was the support to LVIA from the Polytechnic of Milan which sent 2 students, supervised by their Professors, to support LVIA in the identification of appropriate technologies and sites to be equipped with solar schemes (the above mentioned wells). The CEI (Italian Episcopal
Conference) also completed some minor needs identified by CCM and LVIA and not included in the main project, in particular: the final workshop, additional technical staff and equipment to better support the health facilities and a contribution to the WESCOORD meetings (for a stronger coordination among the development actors in the area). Again, Toscana Region, through minor funds, helped LVIA in supporting WRMA on the planning of water interventions in Isiolo County.

Adapting to emerging needs: the project adapted to emerging needs in the community e.g in February 2017, the project conducted an assessment to inform repair of solar panels to provide lighting and running of health facilities. The donor has approved the estimated budget for the repair of solar panels in Merti (for Malka Galla, Korbesa, Biliqo Marara) and in Garbatulla (for Badana, Muchuro, and Malka Daka). The water pipeline from Merti to Korbesa is also being repaired to enhance water access, ensuring the connection of Saleti, Rigga and Mata Arba villages/schools/ dispensaries.

6.2 Some challenges and constraints

The project targeted vast geographical areas means spreading thin and lesser impact at the community level. There is need to target narrower geographical area for enhanced coverage and impact. There were delays in the flow of project funds from May to December 2015 and October 2016 to March 2017 consequently delayed implementation of capital intensive activities. Apart from the fact that some unregistered facilities are not eligible to receive government funds, there is also delay in funding of registered health facilities especially the HSSF funds by the government which is supposed to run operations including water payment.

“Sometimes the water is cut because we haven’t received HSSF funds to pay the bills” (KII with clinical officer Kinna Health Centre).

Sometimes there was double equipping of health facilities by various actors due to lack of assessment by some partners and poor coordination by County Government - for instance only 3 health sector stakeholder forums have been conducted since 2014. It is expensive to facilitate such a forum due to the expectation of incentives for government officials and community representatives.

Dependency syndrome by government officials and community members resulting in low or lack of proper collaboration and pro-activeness on matters related to the implementation of the project activities. Different policies from different NGOs regarding allowances for government staff, resulting in resentment and non-cooperation for some who do not provide allowances as expected. However, it is expected that since NGOs are assisting government to do its work, government staff would provide support without demanding pay which is not the case on the ground.

There was inadequate collaboration and sharing of data by NGOs and other actors, for instance training of CHVs has been undertaken by several NGOs but the database is not shared. Early warning information e.g information collected by Government and development partners such as WFP is not shared with communities to help them prepare for droughts and famine and water shortage. Lack of/inadequate sharing of data is a consistent challenge since all Government departments lack data bases. Development actors share available data they collect during their assessments but government departments do not collate and store it for retrieval and sharing with needy actors. Sometimes though data were not existing because there is no proper activity to keep or require data by the MoW from the NGOs/private sector who drill boreholes. There is at times no analysis on the quality of water and no hydrological survey done before interventions by some of the actors involved.
It was clear there were rampant donor dependence and little effort among the communities and institutions to contribute to the success of projects or help themselves even where they can. They wait for the donor to rescue them even for minor works such as repairing water tank taps, tank shades or gutters. There was little community participation and locals had to be paid to work on trenches for pipes to connect water to them.

Understaffing of health facilities by County Government constrained the potential of the full use of equipment and skills provided by the project. Also, the national wide nurse strike has paralyzed health services in all the 15 supported facilities for several months (from December 2016 to March 2017 and again from June 2017 to now) thereby impeding the communities the much-needed services to the capacity of the facilities. In this case, some of the CHV’s trained and supported by the project were present to attend to minor cases. In the case of an emergency CHV’s do organize for an ambulance to transport patients. Excessive drought-related movement of pastoralist populations is also likely to reduce vaccination coverage of children and access to essential health services, including maternal and new-born care.

In the community, the intermittent occurrence of insecurity arising from cattle rustling and tribal armed violence delay implementation of activities in some areas. Remoteness (sand and rocky terrains) and vastness of the project area leading to costly and complex logistics. During rainy seasons, roads are not motorable thereby causing to delays in implementation of activities.

Persistent drought leads to lack of water in the facilities in case of Roof water harvesting e.g. Mata Arba and Korbesa primary schools and dispensaries. In some cases, children miss school due to lack of water.

‘two days ago, a child who missed school told me be failed to come due to lack of water to wash school uniform’ Mohamed Duba. KII with Deputy Headteacher Mata Arba Primary school, 5 July 2017

In Mata Arba, even teachers lack water and skip classes to look for water in the river or Merti. However, there is ongoing intervention to rehabilitate the pipeline serving Korbesa, Saleti, Riga, Mata Arba villages and to connect their schools and dispensaries to the pipeline itself.

Hand washing facilities constructed outside latrines are not being used due to lack of water in the facilities. Only the metal stand remains on the ground. Hard rock formation in most parts of the county makes latrine construction difficult. In some cases, there were abandoned pits after the ground became too hard after only two feet deep – as observed in one site Garbatulla. This affects community willingness to dig pit latrines. Thus, latrine coverage is only around 40% although community members said they share the available latrines in the manyattas.

Retrogressive cultural beliefs e.g there is difficulty in acceptance of family planning practices by the community members as they believe in having many children as safety number of those who may die due to disease and during the armed violence. Also, some believe FP services are for other communities and not them. There was also a religious hindrance in latrine use among some people despite health and hygiene education as reported in three sites regarding ‘Satan hiding in the latrine at night’ thus people using the bush although they have a toilet. Others don’t see the need for a latrine asking ‘why to build a house for faeces!’ FGM is still rampant in the area and this impacts on female reproductive health.

Some poor workmanship from some contractors resulting in rampant dysfunctional yet relatively new items such as water tank taps, lid covers. In some cases the workmanship is poor with the gum
connecting gutters that has come out. The situation has been compounded by the strong winds in the area, that have blown off roof gutters and tank shades roofs.

There was a lack of continuation from stakeholder in providing materials such as water treatment PUR or sanitary pads for girls, destroying gains made earlier in health education and service delivery. Also the lack of refresher training for committees, for instance, the water management committee in Muchuro has not been trained since it assumed office. The earlier committee that was trained did not pass on the skills to the current members. The inadequate motivation for the CHVs for instance some claiming they were not awarded certificates or recommendation letters after the training and the work they do, despite CCM confirming certificates were distributed.

Staff in the Counties felt there was inadequate networking and collaboration by CCM with Government staff especially at the sub-county level, being seen as not ‘cooperative’ or ‘caring’ affecting project ownership and sustainability. For instance lack of incentives from CCM/LVIA for government staff, unlike other NGOs who give them may have resulted to this discontent.

Some information is not uniformly understood, for instance some CHVs think just treating water with PUR makes it safe for drinking while some say one has to boil even after treating with PUR.

Inadequate staffing in the health centres. Most dispensaries have two – and some have one – nurse. An example is Duse dispensary which is unregistered and has one nurse and when the nurse closes, the dispensary closes. Delay in registration of some dispensaries making them ineligible to get assistance from the County Government.

The periodic project reports indicate that the project staff made all efforts to hold quarterly meetings to plan together with the Local Authorities (Health and Water), to share information and opinions, to take action on the major issues and concerns. The Steering Committee was meant to take decisions beyond the technical aspects. The project met three times a year. The Management Committees met almost every month but meetings were often defected by government officials mainly because they probably expected allowances which would be huge and had not been foreseen in the project budget.

6.3 Mitigation measures for the constraints

During fund delays: the project team has been implementing activities that need little or funds such as assessment for next set of activities.

Duplication of activities: project team has attended County Health/WASH Sector Stakeholder Forums to understand synergic partnership. The project has conducted need assessment and equipped health/school facilities accordingly.

Partnerships with religious leaders to educate the community on religious myths that prevent them from using latrines. One way is to say a prayer or ‘dua’ to ward off the evil spirits or use lighting as the evil spirits ‘thrive in darkness’

In some cases, school leadership is working to manage infrastructure including gutter management to ensure. However, it was clear there were rampant donor dependence and little effort among the communities and institutions to help themselves… they wait for the donor to rescue them even for minor works such as repairing water tank taps, tank shades or gutters. There was little community participation and locals had to be paid to work on trenches for pipes to connect water to them.
It is important to provide the same information to the CHVs to ensure they pass uniform content to the patients.

6.4 Conclusions

The summarized conclusions, lessons learned and recommendations for the combined for the end of the project evaluation of the MAPS project are as follows:

LVIA and CCM have a lot to show from the implemented project in the three sub-counties of Isiolo, Merti, and Garbatulla as planned. However, vagaries of weather and some cultural issues have negatively affected the impact of implemented activities. Health education, for instance, has worked wonders and has provided an arena for communities to learn health and hygiene messages from local personnel who understand the contexts. There have been impacts in health care including better diagnosis and health care at the health facilities, more hospital deliveries, more immunization/vaccination, more uptake of antenatal and postnatal care, exclusive breastfeeding, and defaulter tracing. However, uptake of FP and some types of vaccinations (Measles and TT2) is still a challenge. In WASH identified changes include enhanced water treatment practices, more handwashing, and other hygienic practices such as use of latrines, use of compost pits at the Manyattas and also use of soap for general hygiene. There have been synergies between implementing agencies although there is a need for more coordination of efforts and sharing of information. The Ministry of water needs to be more supportive of NGO/partner activities as they complement government efforts.

6.5 Recommendations

- Future projects should target fewer areas and focus more activities more a larger impact, rather than spreading thin especially with water interventions
- More community sensitization is still required especially on necessity of Family planning and the need to provide all types of vaccines to babies for protection.
- There is need for continuous capacity building of community management structures since they have yearly life spans for sustainability of projects e.g water committees, school management boards e.t.c
- A clear transition strategy for CHVs to the County, other service providers should be formulated and implemented. The project should also provide certificates and recommendation letters to all CHVs to facilitate them get other opportunities to serve.
- Advocacy is necessary by CSOs on the ground for networking and closer collaboration and coordination among stakeholders including government and private sector so that crucial services such as sanitary pads for girls and PUR are not stopped at any time.
- Closer collaboration between NGOs providing services in the county and also the relevant county departments so as to reduce duplication of services including training of local community volunteers.
- Public participation need to be actualized so that the community has their development priorities addressed through county government funding.
- More water connections of tanks to main pipes to take care of lengthy drought periods. LVIA is already working on the main pipeline from Merti to Korbesa (including the villages of Mata Arba, Saleti and Rigga).
- There is need to have a contingency plan to provide water to schools with RWHS during dry periods in order to promote continuity of taught hygiene practices to school pupils. This can be taken into account in future similar interventions.
• Comprehensive Impact Assessment Survey several years after closure of the project is important to deduce impacts which can well inform future programming in terms of scaling up and/or replication.
REFERENCES


Health Facilities Assessment (June - July 2014). Primary Health Care System in Isiolo County

Isiolo County Government Annual Development Plans

Mid-term evaluation (March 2016). An external evaluation.

Minutes of the Monthly Management Committee

Project proposal

Project Progress reports e.g Health and Hygiene kits and PUR distribution reports, Infrastructure reports, Integrated Supportive Supervision (ISS), SCMPs, Monitoring Framework, Target analysis,


The Republic of Kenya. Kenya Health Sector Strategic & Investment Plan

WASH Pre-Assessment (May-July 2014) by Project staff

**APPENDICES**

**Appendix i: List of individuals interviewed**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of the individual</th>
<th>Designation</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Maurizia Sandrini</td>
<td>Previous Project Coordinator</td>
<td>LVIA</td>
</tr>
<tr>
<td>2</td>
<td>Heinrich Gorfer</td>
<td>Current Project Coordinator</td>
<td>LVIA</td>
</tr>
<tr>
<td>3</td>
<td>David Kamau</td>
<td>WASH Field Officer</td>
<td>LVIA</td>
</tr>
<tr>
<td>4</td>
<td>Elizabeth Ncabira</td>
<td>Primary Health Care Supervisor for Garbatula and Isiolo</td>
<td>CCM</td>
</tr>
<tr>
<td>5</td>
<td>Emma Antonacci</td>
<td>Intern</td>
<td>LVIA</td>
</tr>
<tr>
<td>6</td>
<td>‘Tamara Littame’</td>
<td>Health Coordinator</td>
<td>CCM</td>
</tr>
<tr>
<td>7</td>
<td>Ephraim Shamba</td>
<td>Primary Health Care Supervisor for Merti SC</td>
<td>CCM</td>
</tr>
<tr>
<td>8</td>
<td>Michael Mugo</td>
<td>County Public Health Officer</td>
<td>Isiolo County</td>
</tr>
<tr>
<td>9</td>
<td>M. K. Mbogori</td>
<td>Ag. Asst. Technical Catchment Manager</td>
<td>WRMA, Ewaso Ngiro North Catchment</td>
</tr>
<tr>
<td>10</td>
<td>Abraham Gitonga</td>
<td>Field Monitoring Officer</td>
<td>WRMA, Ewaso Ngiro North Catchment</td>
</tr>
<tr>
<td>11</td>
<td>Nicholas Munene</td>
<td>Project Officer for Merti</td>
<td>Anglican Development Services (ADS)</td>
</tr>
<tr>
<td>12</td>
<td>Moses Ngaca</td>
<td>Intern</td>
<td>Anglican Development Services (ADS)</td>
</tr>
<tr>
<td>13</td>
<td>Sora Gonjobo</td>
<td>Sub County Public Health Nurse for Merti</td>
<td>Isiolo County</td>
</tr>
<tr>
<td>14</td>
<td>Ibrahim</td>
<td>CHV Biliço Marara</td>
<td>Merti sub-county</td>
</tr>
<tr>
<td>15</td>
<td>Jack Kalla</td>
<td>Deputy head teacher Malkagalla Primary school</td>
<td>Meri sub-county</td>
</tr>
<tr>
<td>17</td>
<td>Wako Dadacha</td>
<td>Deputy head teacher Korbesa Primary school</td>
<td>Merti sub-county</td>
</tr>
<tr>
<td>18</td>
<td>Mohamed Duba</td>
<td>Deputy head teacher Mata arba Primary school</td>
<td>Merti sub-county</td>
</tr>
<tr>
<td>19</td>
<td>Abduba Dida</td>
<td>Sub-county public health officer Merti</td>
<td>Merti sub county</td>
</tr>
<tr>
<td>20</td>
<td>Amina Ibrahim</td>
<td>CHV Muchuro</td>
<td>Garba Tula sub county</td>
</tr>
<tr>
<td>21</td>
<td>Abdullahi Ali</td>
<td>Teacher Malkadaka primary school</td>
<td>Garba Tula sub county</td>
</tr>
<tr>
<td>22</td>
<td>Jumale Chachu</td>
<td>Duse Dispensary CHV</td>
<td>Garba tula</td>
</tr>
<tr>
<td>23</td>
<td>Adbullahi Ibrahim</td>
<td>Clinical officer Kina health center</td>
<td>Garba tula</td>
</tr>
</tbody>
</table>
Appendix ii: List of Focus Group Discussions

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of the Group</th>
<th>Gender composition</th>
<th>Contact Person</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Daaba Dispensary Management Committee and Community</td>
<td>4M:6F</td>
<td>Mr. Ambrose Lowoton</td>
<td>Nurse in charge</td>
</tr>
<tr>
<td>2</td>
<td>Attan Primary school Health Club Management</td>
<td>2M:2F</td>
<td>Ms. Jeniffer Makero</td>
<td>Head Teacher</td>
</tr>
<tr>
<td>3</td>
<td>ArimaWoi Water Management Committee and community</td>
<td>5M:6F</td>
<td>Ms. Esther Ethurot</td>
<td>Member</td>
</tr>
<tr>
<td>4</td>
<td>Manyatta Zebra Primary school Health Club</td>
<td>8M:12F</td>
<td>Mr. Gitoro Wambua</td>
<td>Deputy Head teacher</td>
</tr>
<tr>
<td>5</td>
<td>Eremet Primary School Water Management Committee</td>
<td>2M:3F</td>
<td>Mr. Stanley Mugambi</td>
<td>Deputy Head teacher</td>
</tr>
<tr>
<td>6</td>
<td>Biliqo Marara water management committee</td>
<td>2M:1F</td>
<td>Nuhura Abdi</td>
<td>Chairman</td>
</tr>
<tr>
<td>7</td>
<td>Malkagalla dispensary CHVs</td>
<td>1M:2F</td>
<td>Boru Wako</td>
<td>CHV</td>
</tr>
<tr>
<td>8</td>
<td>Malkagalla School Health club</td>
<td>2F</td>
<td>Faldosa Abdi</td>
<td>Member SHC</td>
</tr>
<tr>
<td>9</td>
<td>Korbesa community</td>
<td>1M: 2W</td>
<td>Abdullahi Tadicha</td>
<td>Community member</td>
</tr>
<tr>
<td>10</td>
<td>Mata arba dispensary CHVs</td>
<td>1M: 1F</td>
<td>Hussein Diba</td>
<td>CHV</td>
</tr>
<tr>
<td>11</td>
<td>Mata arba community</td>
<td>6F</td>
<td>Rukia Abdi</td>
<td>Community member</td>
</tr>
<tr>
<td>12</td>
<td>Mataarba school health club</td>
<td>3M: 2F</td>
<td>Fatuma Salad</td>
<td>SHC member</td>
</tr>
<tr>
<td>13</td>
<td>Muchuro water committee Garba Tula</td>
<td>2M:2F</td>
<td>Ephraim Abduba</td>
<td>Chairman</td>
</tr>
<tr>
<td>14</td>
<td>Malkadaka dispensary CHVs Garba Tula</td>
<td>2M:2F</td>
<td>Jarso Ali</td>
<td>CHV</td>
</tr>
<tr>
<td>15</td>
<td>School Health club Malkadaka primary school</td>
<td>3M:2G</td>
<td></td>
<td>Pupils</td>
</tr>
</tbody>
</table>
Appendix iii: KII Tool for Project Managers/key implementers and partners

Name: 
Date: 
Title: 
Location: 

1. What key interventions were undertaken by the project to improve access to safe, adequate and sustainable water and clean water, sanitation facilities and first health quality services
2. How relevant were these interventions were conceived? Rate the relevance on a scale of 1 to 5. Explain your score.
   a. What were the achievements against targets? Fill Table below for que 1 to 5
   b. Would you say the project achieved its objectives? Were available resources used effectively and according to the plan? Rate the effectiveness from a scale of 1 to 5.
3. Has the planned implementation methodology been followed as planned? Explain. If not, why?
4. Were resources used efficiently in terms of value for money? Explain or give examples where this was achieved. Rate the efficiency on a scale of 1 to 5.
   a. What has changed (impact) in terms of water access, sanitation and quality health among the beneficiary communities?
5. b. How would you rate the impact on a scale of 1 to 5. Explain your score
6. a. What factors have hindered the project implementation?
7. b. Which coping mechanisms have been developed?
8. c. Were the coping mechanisms effective?
9. How did you select the targeted groups/beneficiaries i.e what criteria was used? Were these the expected ones?
10. Describe the partnerships in the project and their roles. Has the partnership worked well? Is the division of labour among partners effective and efficient? If not, why? What could be done to improve it?
11. In your opinion, are the interventions sustainable? Explain or give examples where sustainability will be achieved. Rate the sustainability on a scale of 1 to 5.
12. What worked well in the project and why?
13. What did not work well and why?
14. Were there other interventions outside of the project (e.g other government projects, other organizations working on the same) that contributed to these outcome results?
15. If other projects were present, what percentage of the observable results/outcomes can be attributed to this project alone?

For question 1 to 3, use the table below

<table>
<thead>
<tr>
<th>Activities</th>
<th>Target (How many planned?)</th>
<th>Outputs (actual numbers reached)</th>
<th>Outcomes (changes in behaviour, practices in the community (give specific examples))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rehabilitation, restoration and protection of existing water sources</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For question 1 to 3, use the table below
<table>
<thead>
<tr>
<th>Construction/rehabilitation of roof rain water harvesting scheme in schools/health facilities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of latrines in 15 targeted public school and 15 Health Centers/dispensaries</td>
</tr>
<tr>
<td>Increasing awareness of hygiene/sanitation practices, especially amongst women with children under five, and populations living in areas prone to cholera, drought, floods</td>
</tr>
<tr>
<td>Informing and Educating Women and pastoral communities in order to implement concrete actions to safeguard their own and household health.</td>
</tr>
<tr>
<td>Providing Quality healthcare services for mothers and children in the targeted 15 Health Centers/dispensaries</td>
</tr>
</tbody>
</table>

**Appendix iv: KIIIs and FGDs with community members**

**Names:**

**Date:**

**Location:**

1) *What key interventions were undertaken by the MAPS project to Improve:*
2) *access to safe, adequate and sustainable water and clean water*
3) *sanitation facilities and*
4) *health quality services*
5) *What has changed among the beneficiary communities compared with the situation before the project in terms of water access, sanitation and quality health (Give specific examples)? Probe in terms of the main benefits*
and relate to gender, time availability for other chores rather than fetching water, child labour, child mortality, disease burden, school performance etc

6) What has not worked and why? Any challenges still faced despite the intervention?

7) Were other interventions from other stakeholders e.g. other government projects, other organizations working on the same) that contributed to these outcome results?
### Appendix v
*Household WASH survey Isiolo (Interview with Household head)*

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Answer Options</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td><strong>What are your names</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>What level of schooling did you complete?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td><strong>What is your age?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td><strong>What is your families main source of income?</strong></td>
<td><strong>Pastoralist</strong> <strong>Business</strong> <strong>Farmer</strong> <strong>Farmer/pastoralist</strong> <strong>Charcoal</strong> <strong>Fishing</strong> <strong>Weaving</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Others please specify</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>How many people are in your own immediate family? (number only)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Where do you get your drinking water from in wet season? (Tick against answer)</strong></td>
<td><strong>Lagga with hand dug well</strong> <strong>Handpump</strong> <strong>Borehole</strong> <strong>Tank/Tap</strong> <strong>Surface water</strong> <strong>Water Pan</strong> <strong>Open Well-Culvert</strong> <strong>Pond/Lake</strong> <strong>Dam</strong> <strong>Other</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>And during the dry season? (Tick against answer)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>How many times, and with which containers do you collect water each day? (must make estimate of the volume of containers used per day)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Times a day</td>
<td>Container type</td>
<td>number and volume</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>----------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Is this water being used now ok for drinking? <em>(tick)</em></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4a</td>
<td>If yes, why? If no, why not? <em>(Tick on the answer)</em></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>It is clear</td>
<td>It has no diseases</td>
<td>It is clean</td>
</tr>
<tr>
<td></td>
<td>Believe it is safe</td>
<td>It's treated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Others, specify</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>If there is only bad water to drink, is there anything you can do to make it safer? <em>(Tick)</em></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>5a</td>
<td>If yes, what can you do? <em>(Tick appropriately)</em></td>
<td>use treatments chemicals</td>
<td>Filter it</td>
</tr>
<tr>
<td></td>
<td>5c</td>
<td>If no, why not?</td>
<td>No time</td>
</tr>
<tr>
<td>6</td>
<td>How much time do you take to walk to the water source and return back to your house when collecting water? <em>Put time in hours and minutes in the provided box</em></td>
<td>Before</td>
<td>Now</td>
</tr>
<tr>
<td>7</td>
<td>Which source of water do you prefer to drink from? <em>(Tick on the source box)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Lagga with hand dug well</strong></td>
<td><strong>Handpump</strong></td>
<td><strong>Borehole</strong></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------</td>
<td>---------------</td>
<td>--------------</td>
</tr>
<tr>
<td><strong>7a</strong></td>
<td>Why?</td>
<td><strong>Tick in box</strong></td>
<td><strong>Safe/Clean</strong></td>
</tr>
<tr>
<td><strong>8</strong></td>
<td>What does bad drinking water mean to you?</td>
<td><em>Put answer below</em></td>
<td></td>
</tr>
<tr>
<td><strong>8b</strong></td>
<td>Which sources not good for drinking?</td>
<td><em>Tick against answer</em></td>
<td>Lagga/river</td>
</tr>
<tr>
<td><strong>8c</strong></td>
<td>Why is it bad?</td>
<td>Contaminated/cause diseases</td>
<td>Dirty</td>
</tr>
<tr>
<td><strong>9</strong></td>
<td>Do you have enough water for all your family needs, not including animals?</td>
<td><strong>Tick in the box</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>9a</strong></td>
<td>If no, how many more 20 litre jerry cans of water do you need per day?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>10</strong></td>
<td>What is the most important use for water?</td>
<td><em>Tick against answer</em></td>
<td>Drinking</td>
</tr>
<tr>
<td><strong>11</strong></td>
<td>Do you have enough water for all your animal’s needs?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>11a</strong></td>
<td>If no, how many more 20 litres jerrycans of water do you need per day?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>12</td>
<td>Is it important to have clean hands? <strong>Tick against answer</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>12a</td>
<td>If Yes, why? <strong>Tick against answer</strong></td>
<td>Prevent Disease</td>
<td>Food hygiene</td>
</tr>
<tr>
<td>12b</td>
<td>In No, why not?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>How and what do you use to keep your hands clean?</td>
<td><strong>Water Only</strong></td>
<td><strong>Water and Soap</strong></td>
</tr>
<tr>
<td></td>
<td>Others, specify</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13a</td>
<td>When or at what times do you wash your hands? <strong>Tick against answer</strong></td>
<td>Whenever needed</td>
<td>After eating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Never</td>
<td>After waking</td>
</tr>
<tr>
<td>14</td>
<td>Do you think that water can cause sickness in people? <strong>Tick against answer</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>14a</td>
<td>If yes, what kinds of sickness? <strong>Tick against answer</strong></td>
<td>Diarrhoea</td>
<td>Flu/Coughs</td>
</tr>
<tr>
<td></td>
<td>Others, specify</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Do you have soap at this moment? - <strong>ask to see the pieces and confirm</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>15a</td>
<td>If yes, what do you use it for? <strong>Tick against answer</strong></td>
<td>Washing clothes</td>
<td>Bathing</td>
</tr>
<tr>
<td>15b</td>
<td>If no, why not? <strong>Tick against answer</strong></td>
<td>No Money</td>
<td>It's finished</td>
</tr>
<tr>
<td>16</td>
<td>Can using soap help to prevent sickness in people?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>----</td>
<td>--------------------------------------------------</td>
<td>-----</td>
<td>----</td>
</tr>
<tr>
<td>16a</td>
<td>If yes, how? <strong>Tick against answer</strong></td>
<td>Removes dirt</td>
<td>Good domestic hygiene</td>
</tr>
<tr>
<td>17</td>
<td>What causes diarrhoea? <strong>Tick against answer</strong></td>
<td>Don't know</td>
<td>Wind</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Devil</td>
<td>Uncooked food</td>
</tr>
<tr>
<td>18</td>
<td>Do you think it's possible to prevent diarrhoea?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>18a</td>
<td>If Yes how? <strong>God decides</strong></td>
<td>Hospital/drugs</td>
<td>Drink clean water</td>
</tr>
<tr>
<td>If No why not?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Where do you go to defecate? <strong>Tick against answer</strong></td>
<td>latrine</td>
<td>logga</td>
</tr>
<tr>
<td>19a</td>
<td>Is it within 50m of your source of drinking water?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>20</td>
<td>Is this a good place to defecate?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>20a</td>
<td>If yes why? <strong>Yes</strong></td>
<td>Place used by many others</td>
<td>Likes open area</td>
</tr>
<tr>
<td>Question</td>
<td>Yes</td>
<td>No</td>
<td>Don't know</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-----</td>
<td>----</td>
<td>------------</td>
</tr>
<tr>
<td>Is it important to have a latrine?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If Yes why? tick against answer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If No why not? tick against answer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At what age does a child go to defecate by themselves? - give age in years</td>
<td></td>
<td></td>
<td>yrs</td>
</tr>
<tr>
<td>For children under this age what happens to their faeces? tick against answer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you think human faeces near your home could be a problem for the family?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If yes, what problem? If no, why not? tick against answer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who in the family would make the decision to build a latrine? tick against answer</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tick against answer**

- **No**: Inconvenient, No privacy, Spreads disease, Contaminates water source, Others:
- **Yes**: Stops water getting contaminated, Convenience, Hygienic/Good health, Privacy, Prevents disease, Stops flies getting to faeces
- **No**: Not necessary, Create more flies, They are dirty, Others, specify
- **yrs**: yrs
- **YES**: Diseases, Brings flies, Smell, Rain bring faces back to home, Other (specify)
- **NO**: Faeces is not harmful, Other (specify)
- **Wife, Husband, Mother, Father**
### 24a. Do you cover your latrine

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

#### 24b. If Yes, why? **tick against answer**
- Avoid smell
- Avoid houseflies
- Don’t know
- Others, specify

#### 24c. If No, why not? **tick against answer**
- Don’t know
- Others

### 25a. When does a child’s faeces become unhygienic?
**tick against answer**

<table>
<thead>
<tr>
<th>Any age/ From Birth</th>
<th>When eating solid food</th>
<th>When having diarrhoea</th>
<th>Other</th>
</tr>
</thead>
</table>

#### 25b. At what age does a child’s faeces become unhygienic?
**tick against answer**

- 1 year
- 2 years
- 3 years
- 4 years
- 5 years

### 26. How many children under five do you have? - **number**

### 27. During the last 1 year how many of your children **under 5yrs** have had diarrhoea? - **number**

#### 27a. Is there any under 5 who child dead due to diarrhoea? If so, how many?

### 28. During the last 1 year how many of your family **over 5 yrs** have had diarrhoea? - **number**

### 29. When your child/children have diarrhoea what do you do for them?
**Tick against answer**

<table>
<thead>
<tr>
<th>ORS</th>
<th>Give fluids</th>
<th>Buy medicine</th>
<th>Take to hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massage stomach/using oil</td>
<td>Give traditional/local medicine</td>
<td>Others, specify</td>
<td></td>
</tr>
</tbody>
</table>

#### 29a. If nothing, why? If something why?
**Tick against answer**

<table>
<thead>
<tr>
<th>Nothing</th>
<th>No money</th>
<th>Too far</th>
<th>No time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nothing</td>
<td>To be treated</td>
<td>To stop diarrhoea</td>
<td></td>
</tr>
</tbody>
</table>

#### 29b. Besides diarrhoea, has your under 5 child fallen sick in the past 1 year?
- Yes
- No.
29c  | If **Yes**, what was the disease(s)?
---|---
29d  | If **No**, why do you think the child did not get sick?
| Immunization | prayer | Don't know
---|---|---|---
29e  | If the under 5 child got sick, was the disease preventable?
| Yes | No
---|---|---
29f  | If yes, why?
---|---
29g  | If No, why so?
---|---
30   | What domestic work do men do around the home?
| Tick against answer | Nothing | Gardening | Cleaning compound | Weaving
---|---|---|---|---
| Others, specify: |---|
31   | Would you be willing to pay for clean drinking water? Tick against answer
| Yes | No
---|---|---
32   | If you had to pay, how much would you pay for safe drinking water per month
| Ksh
---|---
33   | Would you be interested in learning ways of making water safer to drink?
| Yes | No
---|---|---
34   | How many members of your family have been treated for suspected malaria in the last 1 year? — number
---|---|---|---|---|---
35   | What is the cause of malaria? Tick against answer
| Don't know | Mosquitoes | Dirty water | Bad food | Wind | Bad weather| cold |
| Dirty utensils | Natural causes | Hunger | Devil | Others: |
---|---|---|---|---|---|---|---
36   | How can you protect the family against malaria?
| Don't know | Mosquito nets | Washing bands | Washing utensils | Heating left over food before eating |
---|---|---|---|---|---
### Appendix vi. Household Health Services Survey Isiolo (Interview with Household Head) - Someone who benefited

**NB: Tick on/or fill in the answer**

<table>
<thead>
<tr>
<th>A</th>
<th>What is your name</th>
<th>Tick for gender</th>
<th>M</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>What level of schooling did you complete? Tick one</td>
<td>None primary Secondary College</td>
<td>What is your age? yrs</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>What is your family’s main source of income? Others please specify</td>
<td>Pastoralist Business Farmer Farmer/pastoralist Charcoal Fishing Weaving</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. How many people are in your own immediate family? (number only)
<table>
<thead>
<tr>
<th>3</th>
<th>Why did you visit health center/dispensary last time?</th>
<th>Sickness</th>
<th>Pregnancy</th>
<th>Giving birth</th>
<th>Family planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Who did you find in health center/dispensary when went there?</td>
<td>Nurse</td>
<td>CHV</td>
<td>Midwife</td>
<td>Patients</td>
</tr>
<tr>
<td>3</td>
<td>If no one was there, what was the problem?</td>
<td>Conflicts in the area</td>
<td>Drought</td>
<td>No money from government</td>
<td>Don’t know</td>
</tr>
<tr>
<td>3a</td>
<td>For Sickness, who in the household was sick?</td>
<td>Father</td>
<td>Mother</td>
<td>Under 5 Child</td>
<td>Child 5 yrs and above</td>
</tr>
<tr>
<td>3b</td>
<td>If you/ mother/child was Sick, were you treated?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3c</td>
<td>If Yes, how were you treated?</td>
<td>Given medicine</td>
<td>Bandaged</td>
<td>Operation</td>
<td>Other, specify</td>
</tr>
<tr>
<td>3d</td>
<td>If treated, did you get well?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3e</td>
<td>If yes, do you think health center is good for the community?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3f</td>
<td>If not treated, why not?</td>
<td>Nurse absent</td>
<td>No medicine</td>
<td>No consumables</td>
<td>Nurse refused to treat me</td>
</tr>
<tr>
<td>3g</td>
<td>How far were you going for treatment before this health center/dispensary started operations?</td>
<td>Walk for ______ hrs</td>
<td>By motorbike for _____ hrs</td>
<td>By public vehicle for _____ hrs</td>
<td>By donkey for ______ hrs</td>
</tr>
<tr>
<td>3h</td>
<td>With which means were you going there?</td>
<td>Nearest facility ______ km away</td>
<td>Could not go at all</td>
<td>Other, specify</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>If you went to health center/dispensary because of Pregnancy, what was done to you?</td>
<td>Given medicine</td>
<td>Given advise</td>
<td>Body checked</td>
<td>Nothing</td>
</tr>
<tr>
<td>4a</td>
<td>How often did you visit the clinic?</td>
<td>Weekly</td>
<td>Biweekly</td>
<td>Monthly</td>
<td>Every 2 months</td>
</tr>
<tr>
<td>4b</td>
<td>After visiting clinic, what changed or what was good about it?</td>
<td>My baby felt safe</td>
<td>Minded about my diet</td>
<td>Avoided heavy work</td>
<td>Took supplements</td>
</tr>
<tr>
<td>4c</td>
<td>If you did not visit clinic, why was it so?</td>
<td>Didn’t need</td>
<td>Didn’t get time</td>
<td>Didn’t know need</td>
<td>Other, specify</td>
</tr>
<tr>
<td>4d</td>
<td>What were you doing when pregnant before the dispensary started operations?</td>
<td>Just wait to give birth</td>
<td>Pray</td>
<td>Attended by midwife</td>
<td>Take local medicine</td>
</tr>
<tr>
<td>4e</td>
<td>How far were you going for pregnancy clinic before this health center/dispensary started operations?</td>
<td>Nearest facility ____ km away</td>
<td>Could not go at all</td>
<td>Others. Specify</td>
<td></td>
</tr>
<tr>
<td>4f</td>
<td>How were you getting there?</td>
<td>Walk for ____ hrs</td>
<td>By motorbike for ____ hrs</td>
<td>By public vehicle for ____ hrs</td>
<td>By donkey for ____ hrs?</td>
</tr>
<tr>
<td>5</td>
<td>Who attended to you at the Health center/dispensary when you giving birth?</td>
<td>Nurse</td>
<td>CHV</td>
<td>Midwife</td>
<td>Patients</td>
</tr>
<tr>
<td>5a</td>
<td>Did you deliver well at the facility</td>
<td>Yes</td>
<td>No. - was Referred to hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5b</td>
<td>How far would you go for delivery if this health center/dispensary was NOT operational?</td>
<td>Nearest facility ____ km away</td>
<td>Could not go at all</td>
<td>Others. Specify</td>
<td></td>
</tr>
<tr>
<td>5c</td>
<td>How would you get there?</td>
<td>Walk for ____ hrs</td>
<td>By motorbike for ____ hrs</td>
<td>By public vehicle for ____ hrs</td>
<td>By donkey for ____ hrs?</td>
</tr>
<tr>
<td>5d</td>
<td>If you delivered well at the facility, what service was given to you?</td>
<td>Given medicine</td>
<td>Given advise</td>
<td>body checked</td>
<td>Others. Specify</td>
</tr>
<tr>
<td>5e</td>
<td>What was done to the baby upon birth?</td>
<td>body checked</td>
<td>immunization</td>
<td>cleaning</td>
<td>Others. Specify</td>
</tr>
<tr>
<td>5f</td>
<td>How often did you go back to the center/dispensary for check up</td>
<td>weekly</td>
<td>Bi-weekly</td>
<td>Monthly</td>
<td>Every 2 months</td>
</tr>
<tr>
<td>5g</td>
<td>Can you mention one pregnancy related risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 h</td>
<td>Can you mention at least 2 methods of family planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 i</td>
<td>How often did you take the newborn baby to the center/dispensary for checkup in the first year?</td>
<td>weekly</td>
<td>Bi-weekly</td>
<td>Monthly</td>
<td>Every 2 months</td>
</tr>
<tr>
<td>5j</td>
<td>How often did you take the newborn baby to the center/dispensary for checkup after being 1 year old?</td>
<td>After ____ Months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5k</td>
<td>What is the age of your last under 5 child ____ yrs/months. How many immunizations has your got so far from this center/dispensary?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5l</td>
<td>Can you mention one at least 1 immunization your newborn received.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5m</td>
<td>Besides breast feeding, what else should you feed the child within the first six months?</td>
<td>Cow/goat/sheep/camel milk</td>
<td>porridge</td>
<td>water</td>
<td>juice</td>
</tr>
<tr>
<td>5n</td>
<td>Why do you do what you have said?</td>
<td>Advise by nurse/CHV</td>
<td>Our culture</td>
<td>My thinking</td>
<td>Other. Specify.</td>
</tr>
<tr>
<td>5o</td>
<td>Has your under 5 child got sick in the past 1 year?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5p</td>
<td>If yes What was the disease?</td>
<td>diarrhoea</td>
<td>measles</td>
<td>cough</td>
<td>fever</td>
</tr>
<tr>
<td>5q</td>
<td>What was done to him at the center/dispensary</td>
<td>-- Checked and treated</td>
<td>Nothing – no services</td>
<td>Didn’t take him/her</td>
<td></td>
</tr>
<tr>
<td>5r</td>
<td>What improvement have you seen in the health facility during your visit in the last 2 years?</td>
<td>Equipment:</td>
<td>Medicine:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Infrastructure:</td>
<td>Services:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>How have you benefited from water in the health center/dispensary?</td>
<td>Cleaned myself during visit</td>
<td>Drunk water during visit</td>
<td>There is no water</td>
<td>Facility is cleaned</td>
</tr>
<tr>
<td>6a</td>
<td>For how long has the water been available in the health center/dispensary?</td>
<td>Put number in years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6b</td>
<td>What could happen if there is no water in the health center/dispensary?</td>
<td>diseases</td>
<td>dirt</td>
<td>nothing</td>
<td>Other. specify</td>
</tr>
<tr>
<td>6c</td>
<td>Did you participate in health education sessions at the community level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6d</td>
<td>What did you learn and how have you changed from what you learnt?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6e</td>
<td>Did you participate in health education sessions at the dispensary/health center</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6f</td>
<td>What did you learn and how have you changed from what you learnt?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix vi: ToR for Evaluation

AID 010191/LVIA/KENYA

TERMS of REFERENCE
for a FINAL EVALUATION
to be held under the framework of the project

“Improve access to clean water, sanitation facilities and first health quality services in the County of Isiolo, Merti, Isiolo and Garbatulla Sub-Counties (MAPS)”

(AID number 010191/LVIA/KENYA)

Project implemented by: LVIA and CCM

In partnership with:

WRMA and Isiolo County Department Responsible for Health

Funded by: Italian Ministry of Foreign Affairs (MAE)

May 2017
1. Organization Background

Lay Volunteers International Association (LVIA) is an International NGO working in Kenya since 1967, dealing with Health, Agriculture, Environment and WASH projects. The vision of LVIA’s development interventions is to empower people to develop more effective livelihood strategies, increasing the value of their assets and creating new opportunities for living a healthy and productive life. This will be achieved through the identification and wise use of local resources, supporting local initiatives and innovations and by promoting appropriate technologies to address poverty issues in a sustainable way. LVIA has a long and extensive experience in the water sector, having worked on experimental water systems powered by alternative energy sources, such as solar pumps and wind pumps with the parallel development of the management components of the scheme itself. LVIA ranges from modern schemes to the rehabilitation and upgrading of traditional sources, together with components of hygiene education actions and educational activities for the management and maintenance of the water facilities.

Comitato Collaborazione Medica (CCM) is an NGO dealing with development in low-income countries. Since 1968 CCM promotes the right to the highest possible standard of health both in Italy and Africa, more specifically in Kenya, Somalia, Burundi, South Sudan, Ethiopia and Uganda. The core of this right is an efficient and integrated health system taking into consideration not only health services but also the determinants of health, respecting national and local priorities and available to everybody. CCM promotes a holistic method, grounded on prevention, action on the determinants of health, active role of the community. CCM also worked to make essential health services economically accessible and respectful of cultural differences.

CCM sectors of intervention are International cooperation, Education to world citizenship and medical training, Promotion of equality, Protection of immigrants’ and refugees’ health. Among others, CCM focuses on some thematic areas, such as Mothers’ and children’s health, Fight to great pandemics, Emergency medicine and surgery, vulnerable groups and Water and hygiene.

2. Project background information

“Improve access to clean water, sanitation facilities and first health quality services in the County of Isiolo, Merti, Isiolo and Garbatulla Sub-Counties (MAPS)” is a 36-month-project funded by the Italian Ministry of Foreign Affairs starting from 2nd May 2014 ending on 31st July 2017 after a three-year no cost extension was approved on May 12th. The project is implemented in Kenya, in Isiolo County, which is classified as ASAL (Arid and Semi-Arid Lands). Isiolo County is drawing humanitarian attention due to heavy droughts affecting on regular basis the area and to socio-economic marginalization that characterizes the region due to political and cultural issues.

The project’s main objective is to improve living conditions for pastoral communities in Isiolo County, contributing to achieve the 7th Millennium Goal target focusing on halving the proportion of population without sustainable access to safe drinking water and basic sanitation, with a further impact on reducing water borne diseases, especially diarrhoea (MDG 6) and improving maternal and child health (MDG 4 and 5). The specific objective is to improve the continuous and sustainable access to clean water (for human and animal consumption), existing sanitary facilities and pastoral communities’ access to quality Primary Health Care services in the three Sub-Counties of Garbatulla, Merti and Isiolo.

The project aims at reducing the vulnerability of pastoral communities in Isiolo County due to poor access to clean water and health services by:
Expected Result: 1) Improving access to safe, adequate and sustainable water supply through rehabilitation, restoration and protection of existing water sources and construction/rehabilitation of roof rain water harvesting scheme in schools/health facilities.

Expected Result: 2) Improving access to safe and appropriate health and sanitation facilities through the construction of latrines in 15 targeted public school and 15 Health Centers/dispensaries and increasing awareness of hygiene/sanitation practices, especially amongst women with children under five, and populations living in areas prone to cholera, drought, floods.

Expected result: 3) Informing and Educating Women and pastoral communities in order to implement concrete actions to safeguard their own and household health.

Expected result: 4) Providing Quality healthcare services for mothers and children in the targeted 15 Health Centers/dispensaries

| SUMMARY |
|-----------------|-----------------|
| **Location(s) of the Action:** | Isiolo County  
Isiolo, Merti and Garbatulla Sub Counties |
| **Duration:** | 39 months; from 02/05/2014 to 31/07/2017 |
| **Main Donor:** | Italian Ministry of Foreign Affairs |
| **Leading Agency:** | LVIA |
| **International Partners:** | CCM |
| **Local Partners:** | Isiolo County Public Health Department, Water Resources Management Authority |

3. Background information on the consultancy

For a long time, Isiolo County has been affected by conflict and drought, hindering it from sharing the process of socio-economic development the rest of the Country is benefitting from. In 2013, rains (200% beyond average levels) caused serious damages to infrastructures (schools, health centres, water sources, latrines), with devastating consequences on pastoral communities and their livestock: because of limited access to water and pasture, as well as crop destruction, insecurity has risen.

Limited access to water and its poor affordability, further to the climatic conditions, are related to inadequate productivity of the existing water sources, especially in the most populated wet grazing area, where in fact most part of people is permanently settled. In the target area, the only reliable water sources available are deep boreholes. Some of them need rehabilitation in order to provide sufficient safe water to the communities, while other water developments such as new borehole drilling need to be planned. There are 212 water points in the whole County (Integrated Health and Nutrition Smart Survey of Isiolo District (GoK, IMC, UNICEF, May 2012): families living next to a water source are 43,5%, among which, 18% are using drinking water. According to the Survey, the findings show very minimal treatment of drinking water at the household level, with 66% of community members not treating water before drinking, 23% using chemicals to treat their water while 10% boiling drinking water. 10.3% of mortality of children under 5 is due to diarrhoea, caused by poor hygiene behaviours. On average, a caregiver takes about 45 minutes to access the nearer source of water, which is located at a...
5 km distance in average. 55.7% of the households have access to toilet facilities, but majority of schools have no latrines in their compounds.

In regard to the health system, there are 49 health facilities in the county; 75.5% are dispensaries and primary health care providers benefiting a population of 143,294 members. Mother-and-child health (MCH) indicators are therefore particularly serious, especially if compared to national data: Isiolo ranges among the 15 counties with the highest maternal mortality rate (twenty times higher than the national average, UNFPA 2014\textsuperscript{18}), due to the poor access to and utilization of ANC services (47%) skilled assisted delivery (44% against 91% national average) and obstetric emergency services (6.2%)\textsuperscript{19}. Most of facilities are understaffed and most health Units benefit of NGO-trained staff.

Shortages and gaps have been assessed across all health system building blocks: (i) county and sub-county health authorities do not have adequate means and capacities to exercise an effective sector leadership; (ii) financial resources to support the health system are limited; (iii) health facilities are understaffed and health workers would need capacity building; (iv) though not frequently, stock raptures in drugs, consumables and essential medical supplies are experienced at both dispensary and primary health care center level, (v) data collection is not always consistent and adherence to HMIS formats is hindered by both logistic and technical constraints, (vi) access to and utilization of health services is still low, especially among vulnerable groups (i.e. pastoral communities).

In the best case, Health facilities get water from boreholes, which are located within the facility itself or more often within the community. As per LVIA-CCM need assessments, facilities boreholes need to be rehabilitated to ensure a continuous provision of pure water, while facilities lacking a borehole and relying on water from communal sources should be equipped with water supply systems to guarantee the uninterrupted availability of water for health care. The presence of water sources within the health facilities is in fact a minimal standard to promote the hygiene and cleanliness of the facility environments and the proper management of patients.

The Ewaso Nyro river is the County’s lifeline, for both water fetching and to create pasture in the wet season. However, its flooding have also negative impacts on households’ hygiene conditions and increase occurrence of diseases. The need to incorporate hygiene measure to treat the contaminated water that is fetched from the river at the onset of the rains is thus noted. At the same time, the need to improve health facilities capacity to ensure a quality health care to the community is perceived as a priority. Further to the water quality issue, the solid waste disposal at household level, in schools and health centres is very poor in the area, and oral-faecal contamination risks need to be quickly addressed.

The project targeted beneficiaries amount to 55,309 (40% of the local population). All of them will benefit from improved health services delivered at Health Centre/Dispensary level and sensitization activities on health and sanitation carried out by Health-care promoters trained/updated under the framework of the project; in addition to this, they will access clean water for human consumption and animal watering, thanks to water point’s reconstruction/protection.

Expected beneficiaries comprise:

\textsuperscript{18} \url{http://countryoffice.unfpa.org/kenya/2014/08/13/10331/accelerating_the_attainment_of_mdg_5_in_kenya_focus_on_the_15_counties_with_the_highest_burden_of_maternal_deaths/}

\textsuperscript{19} Ibidem.
7,250 students (20% of whom female), who were meant to get Water and Hygiene services in schools, benefiting from rainwater harvesting systems and latrines, as well as from education activities on their correct use;
10,000 people (2,000 households) meant to benefit from the dissemination of health and sanitation material and Water Pur kits;
30,750 children (<5) meant to access primary health care services in Health Centres/dispensaries involved in the project;
7,309 women meant to benefit from primary health care services during pregnancy and delivery and after delivery.

Indirect beneficiaries of the action include 114,560 people (80% of the population), who were meant to benefit from infrastructures building and sensitization activities organized in collaboration with communities.

4. Purpose and objectives of the Final Evaluation (FE)

The overall purpose for the assignment is to undertake a final outcome, process and impact evaluation of the project after 38 months since the beginning of the action and to provide recommendations to guide the implementing partners for further future similar initiatives. The Outcome Evaluation aims at measuring the degree to which the project is having an effect on the target population’s and beneficiaries’ behaviours. The Process Evaluation will determine whether project activities have been implemented as intended and resulted in certain outputs.

The FE will be a comprehensive analysis of the strategy applied by the intervention and of any synergy created by the project with other actions implemented at a local level, NGO working in the area and Local Government/Authority.

All the information and understanding gained from this FE will be used as a guideline for future projects implementation, and made available to LVIA, CCM, WRMA and Isiolo County Department Responsible for Health.

The FE will be required to answer some questions related to the implementation strategy of the project such as:

- Which interventions have been carried out? Were they in line with the work plan?
- Were available resources used effectively and according to the plan?
- Which factors have hindered the project implementation? Which copying mechanisms have been developed? Where they effective?
- Has the planned methodology been respected? If not, why?
- Do the targeted groups correspond to the expected ones?
- How is the partnership organized? Is the division of labor among partners effective and efficient? If not, why? What could be done to improve it?

For this consultancy, LVIA and CCM seek to procure the services of an independent, external consultant to design, plan and conduct a rigorous final evaluation expected to begin by June 2017.
5. Evaluation Criteria

The final evaluation aims to determine whether the project activities brought the change anticipated at the outset of the project. It also aims to examine which factors are proving critical in making change happen.

To this end, the final evaluation should be conducted based on the following criteria:

**RELEVANCE**
The evaluation shall verify:

- the project design and implementation are aligned to national and local strategies/plans;
- the implementation strategy is adequate to the local context;
- the logical framework is relevant to project goals/objectives;
- the methodologies adopted are relevant to achieve the expected objectives/results.

**EFFECTIVENESS**
The evaluation shall verify:

- if and which changes in the health and hygiene-seeking behavior of target populations have been produced by the project;
- if and which impact the project has produced on the protection and management of water resources;
- if the project has produced non expected results (and, if so, which is their effect in relation to the project objectives);
- how the project could adapt/react to external factors;

**EFFICIENCY**
The evaluation shall verify:

- how efficiently have financial resources been allocated and utilized;
- how efficient is the contribution by each partner to the project;
- how adequate were the human resources employed?
- how efficient was the time frame adopted?

**SUSTAINABILITY**
The evaluation shall verify:

- If and to what extent project Partners and beneficiaries have assimilated health and hygiene-seeking behavior messages and tools;
• if and how local authorities are committed to foster the project results; which changes have been produced across target groups and/or partners, increasing the sustainability of the intervention;

• which human, technical and financial resources are required to ensure the project sustainability, upon its completion;

IMPLEMENTATION
The evaluation shall verify:

• which population is impacted by the project (wider or narrower than expected? similar or different from the expected one in terms of composition?)

• if non expected impacts have occurred (if so, which ones?)

• if inequalities in access to WASH services are being tackled;

IMPACT
The evaluation shall verify

• whether there is any impact produced since the beginning of the project

• To what extent is it likely that the desired practice change will lead to improvement in the County?

Where applicable, the evaluation should clearly define lessons learnt, best practices and recommendations to readdress LVIA/CCM’s intervention in the wash and health sectors, in order for LVIA and CCM to address future interventions in the target area.

The Consultant(s) is free to identify additional questions for the completion of the assignment.

The consultant(s) will be also required to design, plan and carry out the project’s evaluation process, using a mixture of quantitative and qualitative data that should be collected from at least the following sources:

• 15 Health facilities’ available documents, registers and files;

• 450 HSC members and 30 school teachers involved by the project who benefitted by sensitization activities and raising awareness campaigns;

• 133 Members of 10 Water Committees empowered/created (2 are going to be trained shortly), Water Users Associations, 5 Water Resources Users Associations (WRUA);

• The monitoring available data, reports and minutes of the project meetings (Steering, Management and Sub County);
● Direct beneficiaries from the construction of 24 Rain Water Harvesting Systems -9 in dispensaries and 15 in schools- 34 blocks of latrines (14 blocks under construction)-11 blocks in dispensaries and 23 in schools- users of the 21 water sources rehabilitated/protected (4 are under construction), 4,928 families benefitting from water purs distribution, 1,940 families benefitting from the family kit distribution;

● 15 Village Health Committees members;

● 36 Health staff from the health facilities;

● The County/Sub County Records Officers;

● County/Sub County Health and Water Officers;

● NGOs and main actors (Local/International) active in the County;

● WRMA, Ministry of Water, Irrigation and Environment.

The Consultant(s) is free to identify more sources useful for the completion of the assignment.

6. Methodologies and Tools

The Consultant(s) will present a FE proposal which will:

1) Define and specify the methodology and participative qualitative and quantitative data collection tools to be adopted in the FE for gathering information from beneficiaries at community, health facility and school level, from Governmental Institutions/Ngo-s (to be reviewed with LVIA Project Coordinator and CCM’s Health Activities Coordinator).

2) Specify which primary and secondary sources the Consultant(s) is going to analyze;

3) Detail a plan for the FE implementation, scheduling meetings/interviews/focus group discussions with stakeholders and field/visits and related logistic needed;

4) Specify data and information analysis tools/software;

5) Specify literacy review sources

LVIA and CCM would also like the Consultant(s) to suggest any particularly innovative or interesting methodology they may employ.

7. Deliverables and Time frame

The FE is expected to be conducted during the month of June 2017.

The proposal is expected to specify the number of working days needed to comply with the following outputs:

Output 1: A final evaluation report based on the activities as per the log-frame indicators, including suggestions and recommendations. Thus, LVIA-CCM expects from the Consultant(s) to assess how well the program has been working, the extent to which the program is being implemented as
designed, whether the program is accessible and acceptable to its target population. In addition to that the Consultant(s) is supposed to assess the degree to which the program is having an effect on the target population behaviours.

8. Location and logistics

The FE will be organized and carried out in Isiolo, Merti and Garbatulla Sub-Counties. LVIA will supervise the process, together with its Partner CCM. Specifically, the Consultant will report to LVIA Project Coordinator and CCM Health Activities Coordinator. LVIA and CCM will facilitate and coordinate the FE process, pay the professional fee inclusive of all FE-related costs (food, accommodation, data collection), incur all costs related to the transport to the field and review the methodology and other outputs of the FE.

The consultant should use his/her computer. LVIA/CCM’s office spaces in Isiolo will be availed to him/her as well as relevant project documents/data.

9. Desired Qualifications of the Consultant(s)

The Consultant(s) is required the following qualifications:

- At least bachelor degree in social studies/health sciences;
- At least five years of work experience in the field of social research, including consulting in M&E with experience in Wash and Primary Health Care projects’ evaluation;
- Previous working experience with INGOs;
- Previous experience in implementation, monitoring and/or evaluation of Health and WASH projects, added advantage in Mother and Child Health projects;
- Familiarity with ASAL Region and rural communities added value;
- Fluency in English

10. Reporting

A comprehensive inception report is to be presented in soft copy by 25th May 2017. Preliminary findings are expected to be presented in soft copy and illustrated during a presentation/workshop to discuss progress and conclusions with project staff and management.

The final outcome/conclusions of the work carried out is required in both soft copy and hard copy by July 2017.

The report should include:

- executive summary
- introduction
- background (project description)
- evaluation purpose and objective
- evaluation methodology
- literacy review
- major findings
- lessons learnt (from both positive and negative experiences)
- constraints that impacted project delivery
- recommendations and conclusions;
- relevant annexes (i.e. evaluation tools).

11. Terms and Conditions

● Though the interested Consultant(s) are expected to provide a budget for the assignment, LVIA/CCM will consider proposals that are within the approved rates as per its policy on professional fees and award the assignment based on technical and financial feasibility;

A contract will be signed by the Consultant(s) upon commencement of the FE, which will detail additional terms and conditions of service, aspects of inputs and deliverables.

12. Application process

One expert is required. All expressions of interest should include:

● Technical Proposal (presentation of the Consultant, with particular emphasis on previous experience in Mid Term and Final Evaluations; profile of the Consultant(s) to be involved in undertaking the FE; proposed tools and methodology to be used, FE design to be described, understanding of ToR, the task to be accomplished and draft FE framework and plan)

● Financial Proposal (cost estimates of daily Consultancy fees, data collection, accommodation and food, flights/visa/insurance, etc) while transport costs will be provided by LVIA/CCM

Applicants should apply to the following e-mail addresses: lviakenya@yahoo.it and hac.isiolokenya@ccm-italia.org