

Republic of Kenya
Mother to Mother SHIONOGI Project
(Ilaramatak, Narok County)

YEAR 5 Completion Report

November 30, 2021

(Reporting period: October 2019 - July 2021)

World Vision Japan

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1. Summary of the Project

Project Name	Mother to Mother SHIONOGI Project (the “Project”)
Project Site	Osupuko Division of Narok South Sub-County (Elangata-Enterit sub locations), Narok County, Republic of Kenya
Project Period	October 2019 - July 2021 (YEAR 5 : 22 months)
Direct Beneficiaries	741 households (3,545 residents)
Total Budget	JPY 26,536,441, inclusive of prior year carry forward
Objective	To contribute to improvement of maternal and child health through multi-sectoral approach, and to evaluate the impact of the community intervention

2. Brief Project Background and Purpose

The Project site is located in Osupuko Division in Narok South Sub-County, and it is one of the most impoverished areas in Kenya. Situated close to the Masai Mara National Park near the Kenya-Tanzania border, the area is abound with the majestic African nature and wildlife, but lacks social infrastructure such as electricity and water supplies which makes people’s living conditions harder. The number of schools and health facilities are not enough, and some children have to travel 10 kilometers to get to school, and patients have to walk long distances to a health facility to receive a simple medical treatment. More than 90% of the population in this area is nomadic Maasai, and their lifestyle is strongly influenced by its traditional customs.

In most indicators of maternal and child health, Osupuko Division in Narok South Sub-County shows lower than the national average. This is a consequence of several factors such as limited number of health facilities, inadequate quantity and quality of services provided, lack of coordination between Community Health Volunteers (CHVs) and health facilities, lack of capacity of CHVs and health facility staff, insufficient knowledge on health and nutrition amongst local residents. Gender inequality is another factor that contributes to the health problem: often it is men, not women, who decide whether to use health services. The Mother to Mother Project, which started in October 2015, aims to save the lives of mothers and children by improving the quality of maternal and child health services, through capacity building of healthcare workers, and engaging in advocacy activities to policymakers.

● Activity Objectives

The Project team is dedicated to improving the health and development of children under 5 years of age and maternal health through raising awareness and promoting behavioral change of the target population. It will deploy a multi-sectoral approach focusing on Water, Sanitation and Hygiene (WASH). In parallel, the Project conducts a scientific research to assess the impact and effectiveness of the Project intervention, by measuring indicators on nutritional status and prevalence of diarrhoeal diseases amongst the target population.

3. Project Progress

In addition to the original project period of year5 (October 2019- July 2020), the project period has been extended by 12 months until July 2021 (total of 22 months) due to the effects of COVID-19.

At the Project site, the measures such as lockdowns, travel restrictions, and curfews were taken by the Government of Uganda to prevent the spread of the COVID-19 particularly during the period from April to December 2020. Due to such measures, implementation of workshops and training sessions which involved project staff visiting the communities had to be suspended for some period. Moreover, many staff were required to work from home. As there was a travel restriction across counties, project site visit was not possible during this period.

The project continued its work in 2021, with measures against COVID-19 such as wearing masks and keeping social distance of participants in training and workshops. In the community the project continued mobile outreach services, CHVs and M2M Group activities. By visiting households and reaching out to pregnant and lactating women within their own communities, the CHVs disseminated knowledge about maternal and child health and hygiene in order to bring about their behavioral change. In April 2021, the project was able to conduct an endline survey at the end of the project in cooperation with Nagasaki University. This project was completed at the end of July 2021. Nagasaki University collected all necessary samples onsite by the end of July, followed by the analysis of the results and preparing for presentations at academic conferences.

Activities conducted between 1st October 2019 and 31st July 2021

Activities	Annual Plan	Achievements
1. Facilitate construction of new water supply facilities	Development of water supply facilities • Construction of water tank • Construction of water kiosks and cattle troughs, pipeline extension	Construction of water tank (50m ³), water kiosks, and cattle troughs are completed. The water management committees were maintaining the facilities.
2. Promote construction of sanitation facility	1) 1 training session for CHVs 2) regular monitoring	Community-Led Total Sanitation (CLTS) training was provided to 30 CHVs. The project regularly advocated to the communities on hygiene issues and construction of sanitation facilities (latrines). 28 households constructed their own sanitation facilities during the project period, however, the initial target of 86 households was not met.
3. Train Community Health Volunteers on Water, Sanitation and Hygiene (WASH)	• 1 training session • 5 Awareness-raising activities	1 training session for CHVs and 5 Awareness-raising activities were conducted. Participants were educated on methods of purification and sterilization of water using water purifiers. The project provided water purifier sachets to 741 households.
4. Train school health clubs on WASH with handwashing facilities	3 schools	348 students were trained on WASH at 3 schools (Elangata-Enterit primary school, Elangata-Enterit secondary school, and Isinon primary school).
5. Sensitize the community on proper WASH practices	Continued	CHVs and mother-to-mother support groups (M2M group) were trained on water purification methods in addition to activity 3.

Activities	Annual Plan	Achievements
6. Train CHVs, male champions, and Traditional Birth Attendant (TBA) as key influencers on Maternal Newborn and Child Health (MNCH)	CHVs: monthly educational activities TBA: 1 time	CHVs conducted educational activities in a monthly basis; 2 sessions were conducted for faith leaders and 1 session was conducted for TBAs.
7. Train CHVs on early childhood development	2 times	30 mothers attending M2M groups received a training on early childhood development including importance of play and communication, safe and stimulating environment for young children to boost their cognitive development.
8. Facilitate training of CHVs and Mother to Mother Support Group (M2M group) on village saving and loan activity	2 times (Once to each Saving Group)	The project supported to 2 saving groups for CHVs and TBAs to operate. They received 2-refresh training during the project period.
9. Conduct monthly mobile outreaches	12 times (once a month)	Mobile outreach services including antenatal care and vaccination were conducted monthly for people living far from health services.
10. Carry out periodic review meetings with the Ministry of Health (MoH) and partners	3 times	Due to COVID-19, one formal review meeting was held in November 2020, however, informal coordination meetings were held with MoH and health services regularly.
11. Strengthen the system for providing guidance to health facilities	2 times	This activity was interrupted temporarily due to COVID-19 but the guidance was given 2 times; one time in 2019 and once in April 2021.

Activities	Annual Plan	Achievements
12. Strengthening health service management capacity	1 time	Due to COVID-19, this activity was implemented in November 2020.
13. Conduct nutrition program	2 training sessions 3 Nutrition education sessions	Training sessions were conducted to mothers in M2M groups on topics of sanitation, exclusive breastfeeding, nutritious food and child nutrition. 3 growth monitoring sessions were held and malnourished children received therapeutic treatment.
14. Coordination meeting with the local government	3 times	1 meeting was held and a handover ceremony with MoH was held on June 24, 2021.
15. Endline survey	1 time	Endline survey was conducted in March-April 2021 in coordination with Nagasaki University.

● Activity Details

1. Facilitate construction of new water supply facilities

Drilling of a borehole had been completed by Year 4 (end of September 2019), and construction activities, which had been delayed by COVID-19, were completed in Year 5. Water pipes to Elangata-Enterit Primary School and Elangata Enterit dispensary have also been completed to provide access to water onsite. Construction of water stations and cattle trough for livestock was also completed. The Elangata-Enterit Water Management Committee maintains the facilities, and the water kiosks and cattle troughs.

2. Promote construction of sanitation facility

The Ministry of Health staff and CHVs worked together to conduct community-led-total-sanitation (CLTS) training to encourage residents to construct sanitation facilities (latrines) in 4 target villages, and to monitor efforts to build sanitation facilities. In addition, in order to encourage each household to voluntarily set-up simple handwashing facility and to promote handwashing habits, the project provided plastic bottles for storing water.

Of the 86 households identified at the start of the project, 6 (7%) had sanitation facilities at

baseline and 28 (30%) constructed new sanitation facilities during the project. However, the remaining 54 households (67%) did not build sanitation facilities despite the advocacy efforts of CHVs. Therefore, the target of achieving open defecation free for all households was not met.

There are various factors that inhibit the construction of sanitation facilities; the following factors have been identified at the project site:

- Some people are not fully aware of the problem of open defecation, even with CLTS and triggering (knowledge and understanding problems)
- There are many farmers who graze while moving in search of pasture in accordance with the season, and there are households that have low motivation to install toilets because they do not settle in the same place (livelihood and lifestyle factor).
- Even if a latrine is constructed on the household premises, the head of the household and his family (wife and children) do not share the same sanitation facilities. Therefore, for all family members to use latrines, multiple toilets need to be constructed; which hindered the construction (cultural factor).
- Land is owned by the community as a whole rather than by individuals. Some households may not want to build sanitation facilities on land that could be taken by residential rezoning (land policy and housing issues).

On the other hand, there were some opinions explaining that the cost of purchasing materials for constructing latrines did not hinder the construction. Achieving open defecation free is a goal of the Ministry of Health of Kenya. The Narok County Ministry of Health and CHVs who received training through this project will continue to work in line with the government's policies to encourage people to change their attitudes and behavior while involving role models such as community leaders and teachers.

3. Train Community Health Volunteers (CHVs) on Water, Sanitation and Hygiene (WASH)

Since training for CHVs in February 2020, CHVs and mothers in the M2M group have continued educational activities to disseminate knowledge to other households in their communities. A demonstration of the water purification method using a simple water purifier made by P & G was given to households. The efforts were made to reduce infectious diseases through water such as diarrhea. A total of 85,600 packets of water purifiers were provided to 741 households. The water purifier is also available at small local stores and sells for 3 bags of 20 Kenyan shillings (about 20 yen). One packet can purify 10 liters of water, which is equivalent to the daily amount of drinking water for 5 people (estimated amount: 2L of drinking water per person per day).

World Vision Kenya was able to obtain funding to purchase new water purifiers through another project after the completion of the project, providing the community with ongoing support for a period of time. On the other hand, people are beginning to understand the importance of water purification, and it is expected that beneficiaries will be able to purchase it themselves.

4. Train school health clubs on WASH with handwashing facilities

From March to December 2020, there was no health club activity implemented due to school closure as a COVID-19 prevention measure. Since the reopening of schools in January 2021, health club activities have resumed and children continue to participate. According to school teachers, children who have received WASH training voluntarily wash their hands with soap. As a result, the number of children complaining of diarrhea has decreased, and the knowledge learned in health clubs has spread to other students, and activities are continuing. In addition, the endline survey revealed an increase in hand-washing practices throughout the community, suggesting that what children learned at school is being disseminated to their homes and communities.

5. Sensitize the community on proper WASH practices

This activity was conducted alongside the activity #3. Due to the influence of COVID-19, the activities could not be carried out in the form of training. However, CHVs and M2M groups demonstrated water purification methods at the communities and promoted the use of safe water in households.

6. Train CHVs, male champions, and Traditional Birth Attendant (TBA) as key influencers on Maternal Newborn and Child Health (MNCH)

Due to the influence of COVID-19, there were times when it was not possible to conduct monthly awareness activities, but CHVs continued to conduct home visits to inform mothers of the significance of antenatal care, vaccinations, and breastfeeding. Through these activities, community mothers were encouraged to improve their knowledge of maternal and child health, including exclusive breastfeeding up to the age of six months, more than four antenatal checkups, and immunizations.

During the reporting period (22 months) between 2019 and 2021, a total of 8,315 people utilised the Elangata-Enterit dispensary and 174 deliveries took place. There was a time when the Ministry of Health urged people not to visit clinics because of COVID-19, but now people in the community are using health facilities as before. The Elangata-Enterit health facility built

under this project continues to contribute to improving people's lives through the provision of medical services, including maternal and child health, to the community. The M2M groups formed through this project has strong relationships among its members, and through savings groups (See #8 below.) it will be able to maintain these relationships and continue its activities voluntarily.

7. Train CHVs on early childhood development

In this activity, mothers participating in the M2M group were taught about play and communication, and an environment that stimulates safety and growth, for preschool age children. Due to school closure as COVID-19 prevention measures, the number of training sessions were reduced. However, 4 playgrounds were set up in project sites where children can play safely. These playgrounds are being well utilised by children in the community.

8. Facilitate training of CHVs and Mother to Mother Support Group (M2M group) on village saving and loan activity Savings and loan group activities in the Elangata-Enterit district by CHVs and traditional birth attendants received refresher training and are now able to take the initiative in their activities. Each group saves between 100,000 yen and 200,000 yen, and members can lend money if they wish. For CHVs and traditional birth attendants who work on a voluntary basis, the economic benefits of using savings to start small businesses and receive small loans motivate them to continue their activities.

In the Project area, the rate of institutional delivery showed an increase this year. In addition to the advocating efforts that have been made to TBAs, the Project team observes that the financial safety net provided through the Saving Group scheme also played a part. It has empowered the TBAs by seeking ways of generating income through other businesses instead of relying on a small income they earn by assisting births, and as a result, the TBAs are less hesitant of promoting safe deliveries at health institutions.

9. Conduct monthly mobile outreaches

While various activities were suspended due to COVID-19, monthly mobile outreaches were carried out in cooperation with the Ministry of Health and health staff. In addition to basic medical examinations, medical services such as antenatal checkups, vaccinations, vitamin A supplements, and de-worming tablets were provided by the mobile outreach services. With many mothers and children receiving these services every month, it shows that mobile outreach is a very effective approach for mothers who had to give up antenatal checkups and vaccinations because of the distance to the health facilities. (See below for maternal and child health services through mobile outreach services)

To support these activities, the project has provided vehicles to help the Ministry of Health and health staff travel to the site. Even after the end of the project period, health staff continue to visit the two remote areas by motorcycle. Beginning in October 2021, WV will allocate a small amount of funds from the Ilaramatak Area Programme to support the continuation of this activity.

10. Carry out periodic review meetings with the Ministry of Health (MoH) and partners

Due to the influence of COVID-19, the project was unable to arrange meetings with the Ministry of Health and other partner NGOs after the first meeting in November 2020. Due to prevention of COVID-19, the Ministry of Health indefinitely postponed the workshop between government officials and WV Kenyan staff in 2021 (Other training and workshops involving community members were conducted with infection control measures). At the project site, however, WV staff visited the Ministry of Health and communicated with relevant parties, and constantly exchanged information with each other regarding the project progress and the hand over of facilities. In particular, WV continued discussions with the government officials on capacity building of health staff and on upgrading Elangata-Enterit dispensary (currently level 2 of the public health system) to Health Center (Level 3).

11. Strengthen the system for providing guidance to health facilities

This activity was conducted only once in April 2021 due to COVID-19. Ministry of Health officials, local public health officials and WV Kenya staff visited the local health facility and monitored activities. During this visit, the use of sanitation facilities and use of water purifiers by communities were monitored.

12. Strengthening health service management capacity

Due to COVID-19, this activity was conducted once in November 2020. 9 members of Elangata-Enterit Health Facility Management Committee (HFMC) in charge of maintenance and management of health facility received training on resource mobility and management and planning necessary for maintenance and management of the facility. After the completion of the project, the Ministry of Health of Narok Sub-County will be responsible for managing the health facilities and the necessary equipment and personnel, and the necessary budget will be allocated from the budget of the County government.

13. Conduct nutrition program

In this activity, the trained mothers in the M2M group were trained on child nutrition, and then

they communicated their knowledge to other mothers in the community. Since the beginning of 2021, the nutrition promotion activities in the community, including cooking demonstrations, were planned. However, the people of the community did not support the idea about the implementation of these activities as means of nutrition improvement, and it has not been implemented as planned.

On the other hand, growth monitoring for children aged 6 months and -59 months was conducted in cooperation with the Ministry of Health. The height and weight of children under the age of five were measured and their nutritional status was evaluated at five locations, with a brief interruption due to COVID-19. As a result, children who were diagnosed as stunted, wasted, or underweight were supported with therapeutic diet to supplement their nutrition and their nutritional status was followed-up continually.

14. Coordination meeting with the local government

The meeting was held in November 2019. However, the project staff regularly visited the governor's office and the Ministry of Health to coordinate the formal handover of health facilities. On June 24, 2021, with the participation of the Governor of Narok County and other concerned parties, a handover ceremony for Elangata-Enterit health facility was officially conducted.

Throughout the project period, the project had continuous discussions with the Ministry of Health regarding the upgrading and maintenance of the facilities. During the handover ceremony, the Governor of Narok County stated that the facilities would be upgraded. Two criteria for upgrading to a health center must be met by end of July 2021, when the project is completed: (1) personnel structure (one additional nurse is required), and (2) population of the area covered by the health facility (population of 5,000). With regard to target population, the total population exceeds 5,000 when population outside the Elangata-Enterit sub-location is included, as they are covered by the health facility. Therefore, while requesting the additional assignment of nurses, WV will continue to work with the Ministry of Health to upgrade the health facility as soon as possible.

15. Endline survey

From March to April 2021, the endline survey was conducted in cooperation with the research team of Nagasaki University. Nagasaki University collected stool samples at its Elangata-Enterit dispensary and Magi Moto dispensary (control site), and is planning to analyze and present them at academic conferences and as articles even after July 2021.

Story of Beneficiaries

The project has helped mothers and children in Elangata-Enterit access health services. CHVs played a vital role in connecting the clinic to the community. Joshua is one of them.

"I was trained through this project to learn about various diseases, how to follow up with children who have been vaccinated, the importance of institutional delivery, and I disseminated the message to mothers. I also told them how to wash hands and the importance of facility delivery.



Joshua teaching how to wash hands
(Third from left)

Before the Elangata-Enterit health facility was built, many children had to travel 25 kilometers to a health center and were not immunized. As a resident of the Elangata-Enterit district, I would like to thank Shionogi & Co., Ltd. for supporting the construction and activities of this facility through the project.

The Mother to Mother group of mothers is another major factor in the success of this project. The M2M Group played a major role in disseminating important health and hygiene information and messages to the wider community. Nabor, a member of the group, says:

"When the clinic was first built, I didn't know much about using health facilities. Now, not just me, but many mothers have acquired knowledge about maternal and child health, including health facilities, birth registration, and immunization."

M2M also acts as a savings group, and some people have been able to use their savings to pay for their children's tuition and start small businesses.



Mr. Nabor Oloybolmon.
(Woman standing in the middle)

4. Endline Survey

From March to April 2021, endline survey was carried out to assess the impact of the project in the Elangata-Enterit sub-location, where the project was implemented, and in the Maji Moto sub-location as a control site (project was not implemented). The summary of the evaluation is as follows.

➤ Approach

The endline survey collected quantitative and qualitative data in both Elangata-Enterit and Maji Moto sub-locations. Quantitative data were collected using a household questionnaire and anthropometric tools, and 490 households with children under 5 years of age were randomly selected from both sub-locations. Qualitative data was provided by Focus Group Discussion (FGD) and Key Informant Interviews (KII). The survey was conducted by consultants and household surveys were conducted by enumerators.

➤ Tools and Training

The household questionnaire, FGD, and KII were completed using smartphones, and 40 enumerators and 4 FGD facilitators received 3 days of training. After a deeper understanding of the content of the questions, the survey was conducted after pre-testing to ensure that the questions and tools were relevant.

➤ Data collection

A total of 978 households were surveyed and 1,028 children aged 6 to 59 months were measured. Anthropometric measures included weight, height, upper arm circumference (MUAC), and the checking of presence or absence of edema in both feet. The FGDs for 18 groups of people with various attributes were also conducted. The group attributes include men, women, CHVs, traditional birth attendants, water committee members, advocacy groups, and the members of M2M. In addition, through KII, a total of 19 people, including 2 public health officers, 1 nutrition officer, and a community health assistant (CHA, 1 person) in the sub-county, were interviewed as key participants in the project, and data on health service utilization was also collected. In addition, data were collected on the practices of Elangata-Enterit health facility and Maji Moto health facility; questionnaires were conducted in five schools on topics of WASH and health clubs; and photographs and videos were taken.

➤ Secondary study

The second study (literature review) including a review of WV Kenya's Ilaramatak Area Development Program Plan, overall office strategy, annual area development program reports, the project proposal, and the baseline report were also done. The national strategy document of the Kenyan government, the development plan of Narok County,

and the health information system of the county were also reviewed.

➤ Ethical considerations

The endline survey was approved by the Maseno University Ethics Review Committee. The enumerators were trained in ethical considerations by Professor Colin of Maseno University. The household survey was conducted only when the respondents agreed and gave informed consent prior to the survey.

➤ Limitations of this study

After submitting the draft report to WV Kenya, a meeting was held with government officials, Nagasaki University, Maseno University and others to review the content and finalize the report. The endline survey was carried out differently from usual survey methods so as to adhere to government guidelines for infection control measures against COVID-19. For example, the surveys for community members were conducted outdoors. There were some indicators that could not be compared to the baseline data, as some of them were not collected properly due to limited road infrastructure and communication. Because some schools were closed, only principals or teachers of five schools out of eight elementary and high schools were interviewed.

< Comparison of Survey Results with Baseline >

The purpose of this project was to improve the health conditions of pregnant women and children under five years of age. There are various indicators to measure the health status of pregnant women and children under 5 years of age. However, the survey measured stunting in children under 5 years and changes in the prevalence of diarrhea in children.

The stunting rate was 31.4% at endline, an improvement of 6.3 points from baseline. The percentage of children with diarrhea experienced within 2 weeks before the survey was 5.9% at endline which is 14.5 point improvement from baseline. The major improvements in these 2 indicators, which the project has been aiming for since 2018, can be attributed to the following factors: the project contributed to the increased utilisation of community health services by providing training and awareness raising on maternal and child health to newly established M2M groups and to CHVs who were not actively engaged in activities before the project; the project also contributed to the improvement of child nutrition by reducing the incidence of diarrhea through the provision of safe water through the establishment of water supply facilities.

	Baseline	Endline
Implementation period	February 2018	March 2021
No. of stunted children	37.7% (115/305)	31.4% (162/516)
Incidence of diarrhea in the past 2 weeks	20.4% (88/431)	5.9% (37/624)

*Stunting is calculated based on the number of children aged 5 to 59 months who

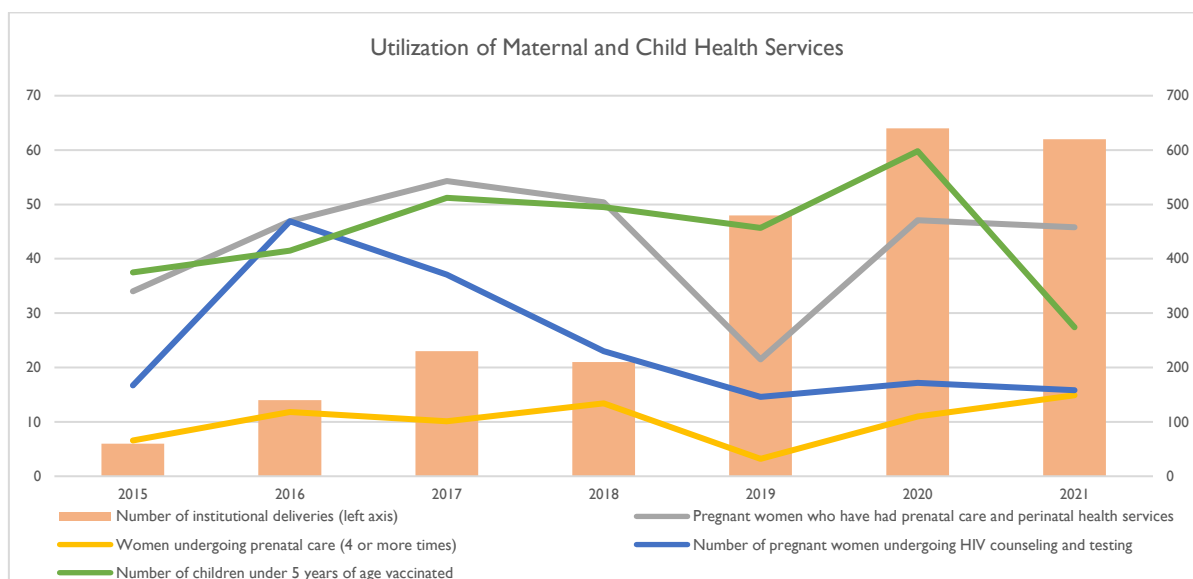
were measured by anthropometry. Diarrhea prevalence was calculated based on the number of children from all the surveyed households. The baseline and endline surveys were implemented as indicated.

By implementing a number of support, the project aimed at enabling the provision of maternal and child health services in medical facilities and communities.

The project has supported the following as hard components from the first year: construction of a dispensary (clinical laboratory, pharmacy, outpatient rooms (2 beds), maternal and child health rooms (2 beds); waiting room; construction of toilets; installation of gate and fence; maternity building (8 beds); kitchen; staff house (for 3 people); 1 water storage tank (50 m³); equipment procurement; general ward (18 beds)). In addition, the following activities were implemented to improve maternal and child health services to people living in remote communities: maternal and child health training and awareness raising activities (advocacy to faith leaders, community leaders and pregnant women by CHVs, and advocacy to traditional birth attendants to promote institutional delivery) and mobile outreach services (provision of round visits, medical examinations, vaccinations, etc. at four locations in Elangata-Enterit sub-location).

As a result of the support, the use of maternal and child health services in the project site increased significantly. Institutional deliveries increased significantly from 6 cases before the start of the program to 62 cases in 10 months of fiscal 2021 (October 2020 to July 2021). It is believed that efforts by CHVs and members of the M2M Group to promote the use of medical services have also contributed to other services.

	2015	2016	2017	2018	2019	2020	2021
Number of patients	2505	3996	6359	4273	4459	5138	3177
Number of institutional deliveries (left axis)	6	14	23	21	48	64	62
Number of women receiving antenatal care and perinatal health services	340	469	543	504	215	471	458
Pregnant women receiving antenatal care (4 or more times)	66	118	101	134	32	110	149
Number of pregnant women counselled and tested for HIV	167	469	371	230	146	172	158
Number of under children fully immunized	375	415	512	495	457	598	274



At the end of the evaluation, the results of the Maternal and Child Health Questionnaire showed a significant increase in key maternal and child health services in the community, including antenatal care, institutional delivery, postnatal care, and immunization, compared to baseline. The spread of maternal and child health services is helping to improve the nutrition and health of mothers and children.

	Baseline survey	Endline survey
Percentage of pregnant women received 4 or more antenatal care	48.3% (208/431)	63.5% (296/516)
Proportion of births attended by skilled birth attendants/ delivered at health facilities	4.4% (16/431)	47.4% (296/624)
Percentage of mothers who received postnatal care within 24 h of delivery	25.5% (63/248)	41.3% (119/288)
Percentage of children fully vaccinated	38.9% (167/429)	66.2% (100/151)

This project implemented multi-sector interventions focusing on improving the water sanitation environment, with the aim of “improving the health status of children and pregnant women in the target areas through public awareness raising and behaviour change”. Many of the indicators related to maternal and child health that have significantly improved by the end of the project were directly linked to the project's activities, such as health facility construction, facility deliveries which were promoted by CHVs, and vaccinations provided by mobile outreach services. It can be concluded that this project has contributed significantly to the improvement of maternal and child health in this county.

5. Project Implementation Schedule and progress

Activity	2019			2020												2021						
	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7
Project activity																						
1.Facilitate construction of new water supply facilities	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
2. Promote construction of sanitation facility			✓		✓							✓	✓	✓	✓							
3.Train Community Health Volunteers on Water, Sanitation and Hygiene (WASH)					✓							✓	✓	✓	✓		✓					
4.Train school health clubs on WASH with handwashing facilities			✓		✓											✓					✓	
5.Sensitize the community on proper WASH practices					✓																	
6.Train CHVs, male champions, and Traditional Birth Attendant (TBA) as key influencers on Maternal Newborn and Child Health (MNCH)	✓		✓		✓							✓	✓	✓	✓	✓					✓	
7.Train CHVs on early childhood development			✓															✓				
8.Facilitate training of CHVs and Mother to Mother Support Group (M2M group) on village saving and loan activity					✓							✓										
9.Conduct monthly mobile outreaches	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10. Carry out periodic review meetings with the Ministry of Health (MoH) and partners	✓													✓				✓				
11.Strengthen the system for providing guidance to health facilities			✓																✓			
12. Strengthening health service management capacity														✓								
13.Conduct nutrition program	✓	✓												✓				✓		✓		
14.Coordination meeting with the local government	✓				✓													✓				
15.Endline survey																				✓		
Research activity																						
Planning of endline evaluation					✓	✓	✓								✓			✓				
Collection of samples				✓	✓	✓													✓			
Field interviews																			✓			
Analysis of samples						✓														✓	✓	
Publication of the evaluation report																						
Steering Committee																						

Originally planned in July 2019

Plan amended in August 2020

Plan amended in February 2021

✓ = Activity done

6. Project Outcomes

The Project targeted 3 areas, namely, Elangata-Enterit, Enkutoto and Mosiro for 3 years from 2016 to 2018. From 2019 onwards, the Project focuses only in Elangata-Enterit, the site of the research. The project year corresponds to the following period:

2016 : October 2015 - September 2016 (YEAR 1)

2017 : October 2016 - September 2017 (YEAR 2)

2018 : October 2017 - September 2018 (YEAR 3)

2019 : October 2018 - September 2019 (YEAR 4)

2020 : October 2019 - September 2020 (Original YEAR 5)

2021 : October 2020 - July 2021 (7 months ; Extended-YEAR 5)

The data collected on number of clients at Elangata-Enterit health facility in 2021 was only 10 months, so the data cannot be simply be compared with the previous year. However, the number of clients has decreased slightly even when taking into account of shorter period. On the other hand, the number of institutional deliveries was almost the same as the previous year (62) at the end of 10 months, indicating an increasing trend. Moreover, it can be seen that many people received antenatal care and HIV counseling from the mobile outreach services. Although the number of children who are fully vaccinated is slightly lower than the past, it was found that 99% of the children surveyed had been vaccinated, suggesting that vaccination rate has reached to a certain level.

Table 1. Number of clients attended Elangata-Enterit health facility in each year

	2015 Before intervention	2016	2017	2018	2019	2020	2020 (Extended) 3 months
# of patients	2,505	3,996	6,359	4,273	4,459	5,138	3,177
# of institutional delivery	6	14	23	21	48	64	62

Table 2. Number of clients in mobile outreaches in maternal and child health services

* : 3 areas ** : 1 area (4 sites)	2015 before inter- vention	2016*	2017*	2018*	2019* *	2020 **	2020** 10 months
Pregnant women aged 15 - 49 years							
# of women receiving antenatal care from a skilled provider	340	469	543	504	215	471	472
# of women at least 4+ ANC for the last live	66	118	101	134	32	110	79

birth							
# of women delivered by skilled birth attendant /at health facility	2	29	27	46	48	64	62
# of women counselled and tested for HIV and received their result during ANC visit	167	469	371	230	146	172	203
Children 0 – 59 months							
# of children fully immunized	375	415	512	495	457	598	388
# of children immunization defaulters	167	47	227	247	54	31	8
# of children reported to be stunted	10	0	59	72	18	31	2
# of children reported to be wasted	5	3	85	78	64	20	16
# of children reported to be underweight	14	0	109	203	101	71	28

7. Future Plan

This project completed all the activities at the end of July 2021. For the reporting period of 22 months in Year 5, there were times when operations were not always conducted smoothly due to the spread of COVID-19. As of October 19, 2021, the Ministry of Health recorded 125 new daily cases, indicating that the fourth wave of infections is decreasing. President Kenyatta announced on October 20 that the curfew would be lifted and the restrictions on maximum number of people at gatherings can be eased. COVID-19 vaccination coverage remains low at 4.6% of the adult population (percentage who have completed 2 doses as of October 19, according to Ministry of Health, Kenya), however, the systems for vaccination coverage is also being developed in county hospitals. It is expected that social and economic activities will be normalized in the near future while basic infection control measures such as masks and hand washing will be maintained.

As shown in Chapter 4. Endline Survey, many indicators of maternal and child health showed improvement in the evaluation at the end of the study. In this project, CHVs provided training on maternal and child health and nutrition, and were able to create savings groups. Although CHVs are volunteers, they are a formal part of the official community health system in Kenya, and their role is clearly stated in the policies of the Ministry of Health. WV will continue to encourage people in the community to use health services and disseminate knowledge about health and hygiene that can be practiced in their daily lives. The mothers of the M2M Group who have received training in this project will lead the community and support the activities of CHVs by participating actively. Both CHVs and M2M members live in the community and will remain there even after the project period. Even without significant external funding, the knowledge, experience and network built up through this project will remain in the project site. World Vision will continue to implement projects to solve problems in the county until

2027, and continue to follow up on the following specific areas.

- Upgrading Elangata-Enterit Health facility

The project constructed a new Elangata Enterit health facility consisting of a general ward (12 beds), a maternity ward (8 beds), a laboratory, and staff accommodation in the Elangata-Enterit sub-location, where there used to be only a small dispensary, and provided the necessary equipment. In June 2021, the dispensary was officially handed over to the Narok county government at the ceremony.

Since the beginning of the project, the dispensary has been aiming to improve its facilities and personnel structure during the project period and to be upgraded from a level 2 dispensary to a level 3 health center. At the handover ceremony, the county governor stated that the dispensary would be upgraded. (Note: As of the end of July 2021, it had not been upgraded.). There are several requirements for upgrading, but the current facility meets all the requirements for infrastructure. The two other criteria that have not been met are the target population of the facility and staffing. The population of the targeted area is thought to be limited to the Elangata-Enterit sub-location in terms of administrative division. However, since residents of nearby Isinon and Moshiro sub-location, where there are no dispensaries, are also using the facilities, it is clear that the number of target population exceeds the standard of 5,000. The Ministry of Health has been informed of the current situation and World Vision is continuing to communicate on this issue.

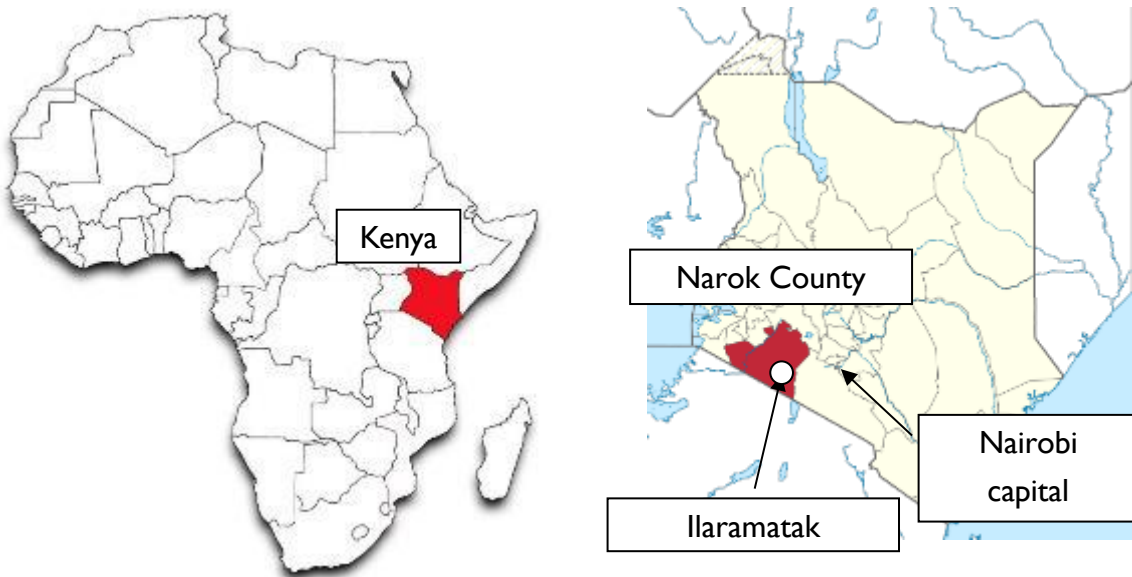
In terms of staffing, a health center requires one assistant doctor, two nurses, one laboratory technician, one public health officer, and one social worker. All staff except nurses are currently on staff. After the completion of the project, World Vision will continue to communicate with the Narok Ministry of Health to appoint the additional nurse and to upgrade the health facility as a health center as soon as possible.

- Mobile outreach services

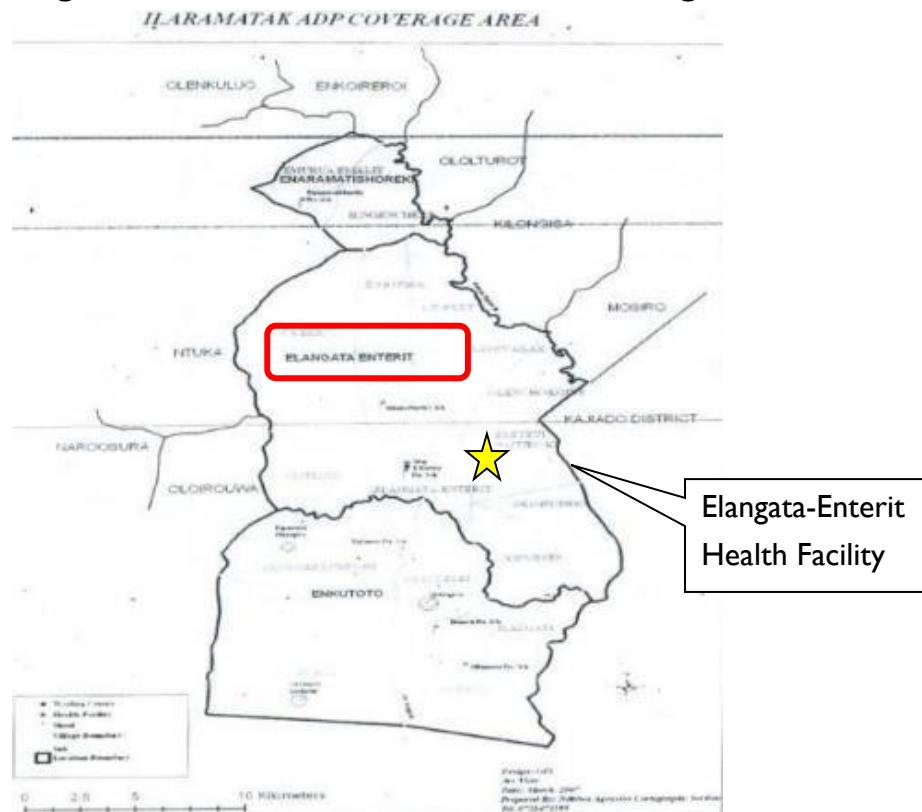
In this project, the mobile outreach services were conducted at four remote villages far from the dispensary. The mobile outreach service has enabled hundreds of mothers and children to receive health services and vaccinations every year. It was one of the activities that directly contributed to the improvement of maternal and child health in this area. Since August 2021, World Vision continues to support travel expenses for health staff so that they can use their motorbikes to travel to 2 most remote villages for mobile outreach. World Vision will continue to support the provision of mobile outreach in a way that does not incur significant costs, while encouraging the government to take over such activities and to budget for transportation costs for health staff.

[Annex]

① Map of target areas



Elangata-Enterit District in the Iraramatak Region



② Pictures



Water kiosks in the community



Cattle trough



Health club at Elangata-Enterit primary school



Health club at Elangata-Enterit secondary school



MNCH training for CHVs



Training for mothers on
early childhood development



Playground made as part of
early childhood development activity



Management training to
Health facility committee members



Mobile outreaches



A latrine constructed by a household



The Narok Governor giving speech
at handover ceremony



Community members at handover ceremony



Endline survey: training for data collectors



Endline survey: household interview



Endline survey: group interview



Endline survey: Child growth monitoring