

World Vision



Republic of Kenya

**Rima Ra Pera Dispensary improvement project
through Electric Power Supply**

Interim Report

May 11, 2023

World Vision Japan
URL: <http://www.worldvision.jp>

I. Summary of the Project

Project Name	Rima Ra Pera Dispensary improvement project through Electric Power Supply
Project Site	Rima Ra Pera Sub Location, Bamba Ward, Ganze Subcounty, Kilifi County, Republic of Kenya
Project Period	February 1, 2022 – May 31, 2022 (4 months)
Project Goal	Improve the medical environment in the Rima Ra Pera area
Outcome / Output	I. Improved access to medical services at the Rima Ra Pera dispensary I.1 Electric power is provided to ensure proper medical services at Rima Ra Pera dispensary, including night-time medical care.
Activities	I.1.1 Building construction for installation of Power Supply Station (PSS) I.1.2 Installation of PSS I.1.3 Installation of distribution wiring and lights
Target Population/ Beneficiaries	Direct beneficiaries Dispensary user: 3,929 people (female-2,026, male-1,903) Indirect beneficiaries Residents of the Bamba area: 61,394 people (male-28,431, female-32,963) Including 34,849 children (17,538 boys and 17,311 girls)
Reporting Period	August 2022 – March 2023 (8 months)

II. Social and Geographical background information of the Project Site

Republic of Kenya ("Kenya") is located in East Africa and has approximately 53.7 million people (World Bank, 2020) living in about 42 tribes on a land area roughly 1.5 times the size of Japan. Kenya is the largest economy in East Africa, maintaining an annual economic growth rate of around 5% until 2020, with a gross GDP exceeding US\$100 billion in 2020 (World Bank, 2020). On the other hand, the disparity between the rich and the poor is widening, and it is said that 0.1% of the population owns more wealth than the total of remaining 99.9% of the population.

Kilifi County, the site of this project, faces the Indian Ocean and is located about 520 km from Nairobi, the capital city, and 56 km northeast of Mombasa, the second largest city. Kilifi County is divided into seven sub-counties, and this project is implemented in Bamba area, among the 4 areas in Ganze Subcounty. The area is classified as arid and semi-arid. Residents mainly make a living by agriculture (maize, which is the staple food, coconut, cashew nuts, cassava, etc.) and livestock farming, but the area is prone to periodic droughts, and crop failures and water shortages are serious issues. In addition, Bamba area has poor accessibility from the central area and is a left-behind community that lacks access to government services and development. Poverty rates are also high, with the average income of the local community estimated to be less than \$1 per day.

III. Background of Support Project

Kilifi County has one of the highest maternal mortality rates in Kenya. The dispensaries lack sufficient facilities for deliveries, and the provision of medical supplies and other items was unstable, leaving the environment inadequate to provide proper delivery care. In response to this situation, SHIONOGI Mother-to-Mother Bamba Project started to improve 3 health facilities in Ganze Subcounty, Kilifi County, in April 2020. At the Rima Ra Pera dispensary in this

project site, a new maternity ward has been constructed and the necessary equipment and supplies have been installed. In addition, the maternity ward was expanded and a maternal and child health care building was constructed.

While these supports are helping to improve the sanitation and safety of the facilities, the Rima Ra Pera dispensary also faces the challenge of electricity. The lack of access to power due to the unavailability of a nearby grid connection limits the medical services that can be delivered. For example, it could not provide night-time medical care, nor could it adequately store vaccines. In addition, basic medical equipment such as respirators were not yet utilized. By installing the PSS and delivering electricity through this project as well as improving the facility, we aimed to create a synergistic effect to enhance the medical environment at the Rima Ra Pera dispensary.

IV. Project Programs

Through this project, 1 unit of power supply station was installed at the dispensary and wiring was done to the existing facility, the newly constructed maternal and child health care building, the staff house, and the outdoor electric lights. The construction work and the solar panels and PSS installed are shown in the photos below.



Solar panels on the roof of the maternity ward, with building construction for the PSS in front.



Solar panels installed on the roof of delivery room



The PSS building



Commemorative plaque installed on the building



Inside of PSS building with battery and panels installed.



Local staff explaining the PSS system (October, 2022)



Refrigerator for vaccines to be used with electricity



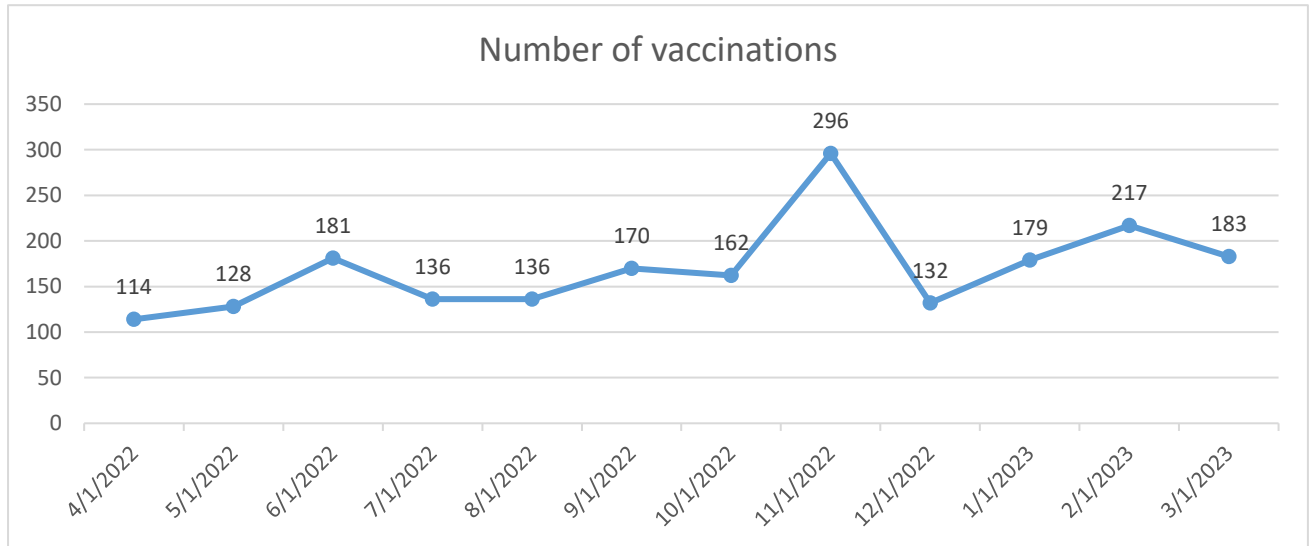
Oxygen inhaler and nebulizer purchased under the Shionogi project

V. Project outcomes

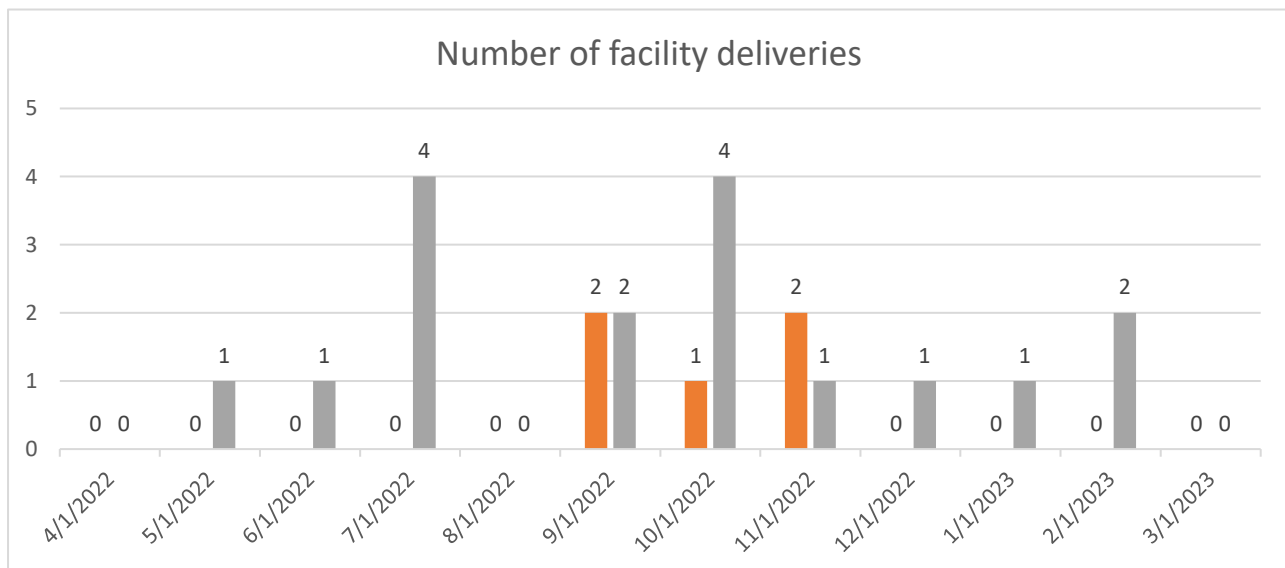
The project was completed in May 2022 and use of the PSS system has since begun on-site. Stable power is now available at the dispensary, which previously did not have electricity. This has enabled evening and night-time medical care and treatment using medical equipment with electricity. For example, vaccines that used to be stored in gas refrigerators are now stored using electricity. Also, medical equipment provided to dispensaries through the SHIONOGI Mother-to-Mother Bamba Project, such as microscopes, oxygen inhalers, and nebulizers that are powered by electricity, can be used with the power from the PSS.

The following chart shows the number of vaccinations given at the Rima Ra Pera dispensary and the number of facility deliveries (daytime and night-time) since April 2022. The PSS has been officially in operation since May 2022,

and electricity is now available in the dispensary. The number of persons vaccinated temporarily increased in November 2022, during the period of a campaign on maternal and child health care led by the Kenyan government. The campaign promoted the importance of vaccinations, thus many mothers and children were vaccinated. As a result, the number of vaccinations decreased in the following December. The overall trend is that the number of vaccinations is gradually increasing.



The number of facility deliveries also fluctuates by month, but since May 2022, a total of 22 births have been attended at the Rima Ra Pera dispensary. Among these, 17 were delivered at night, using the dispensary's lighting system to ensure a safe birth. In daytime deliveries, sterilized medical equipment was used, and lights in the facility were used for the mothers to rest after delivery.



VI. Voice of Beneficiaries (stakeholders)

(1) Mr. Kazungu, nurse at the Rima Ra Pera dispensary

The quality of delivery-related medical services has improved with the installation of solar panels and the availability of electricity. For example, we can now have electric lights in the maternity ward and for examinations, as well as using the incubators for infants. The availability of power throughout the dispensary has also improved safety and made it possible to respond to emergencies during the night. The power has also been delivered to the staff quarters built within the dispensary site, ensuring a more comfortable living environment.

And thanks to the power supply, a refrigerator provided by the Kenyan Ministry of Health's Expanded Immunization Program has been installed in the maternity ward, in which vaccines are stored. In addition to storing all vaccines that should be taken at various ages from infants to children, the novel coronavirus and cervical cancer vaccines are also stored.

The laboratory, constructed through the Shionogi M2M Bamba project, now has equipment to examine urine and malaria, test for HVI, and perform microscopic examinations. Kazungu, nurse at the Rima Ra Pera dispensary, expressed his appreciation, "Words cannot express how grateful we are to Panasonic Corporation for their support. Please visit this hospital again".



Mr. Kazungu, a nurse.



Infant incubator (left) and refrigerator (right)
utilized at the dispensary



Mr. Kazungu examining
a mother and her child

(2) Mother and child in the community

Maria (23 years old) and her son, John (14 months old), live in the Rima Ra Pera area. She told that when John was born, the maternity ward at the Rima Ra Pera dispensary had not yet been constructed, but since when electricity was supplied to the dispensary, vaccines could be kept refrigerated at all times, and John was able to receive all the vaccinations he needed up to his current age. Maria also mentioned one night when John was feeling suddenly ill, “I rushed to the dispensary with John during the night, but the power was on and my son could receive medical care from nurses.” And added, “another great benefit for pregnant and lactating mothers is that they can now have their prenatal checkups and other tests done at this dispensary.”(*)

Maria expresses her gratitude by saying, “the solar system has enabled people in the village to access medical services even at night. I hope that other mothers and pregnant women will make the most of the Rima Ra Pera dispensary.”

(*) In the past, there were no testing equipment or laboratories (built with the support of Shionogi) using electricity, so they had to visit distant dispensaries and hospitals for examinations.



Maria and John

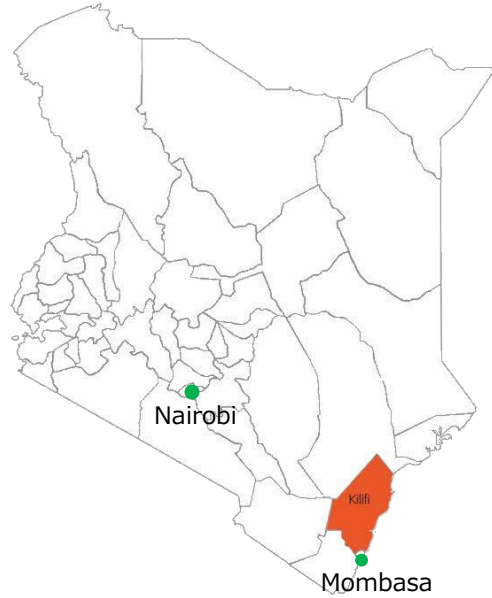
[Appendix]

I. Map of the Project Site

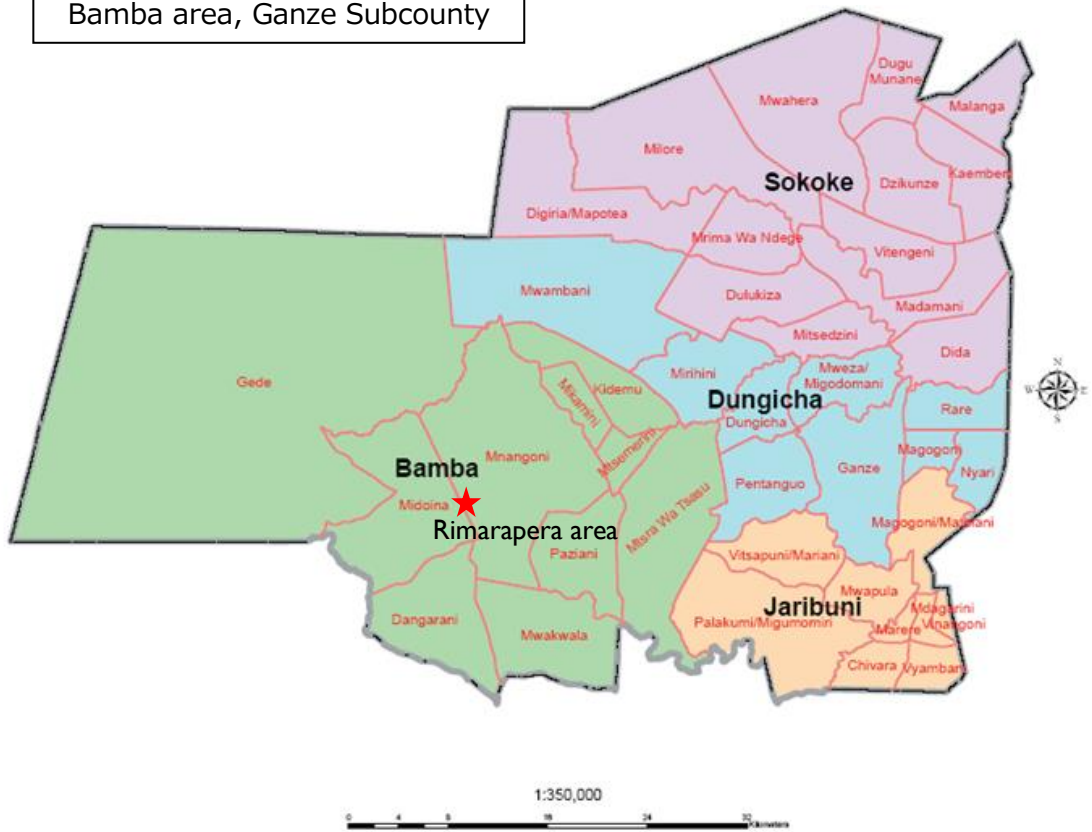
Kenya



Kilifi County



Bamba area, Ganze Subcounty



2. Rima Ra Pera dispensary before the project started.



Entrance to Rimarapera dispensary



Rimarapera dispensary



There used to be no electric light



Former roof under renovation