



# MALARIA PREVENTION INITIATIVE SUMBA TIMUR 2023 REPORT

KECAMATAN MAHU, KABUPATEN SUMBA TIMUR, NTT

## #ZEROMALARIA SUMBA TIMUR







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# EXECUTIVE SUMMARY

August 30,  
2023

Malaria presents a significant public health challenge and is endemic in nearly all regions outside of Java and Bali. Its seriousness lies in its potential to inflict health issues, diminish work productivity, and, in severe cases, lead to fatalities.

Despite being an age-old ailment, malaria is a major health concern in numerous tropical nations, including Indonesia. The disease has established a presence across the archipelago, exhibiting varying levels of endemicity on different islands.

In 2023, the Malaria Prevention Initiative in East Sumba embarked on a mission to confront the formidable challenge of malaria, enhance healthcare accessibility, and expand educational opportunities for the Mahu District, East Sumba Regency community.

The Kawan Baik Indonesia Foundation, Fair Future Foundation, and Sumba Volunteers, along with our dedicated partners and supporters, achieved a remarkable feat by successfully implementing a comprehensive array of promotional, preventive, and curative measures in the villages of Lulundilu, Haray, and La Hiru, all situated within the Mahu District of East Sumba.

The preparatory phase, which involved local governmental stakeholders, partners, and volunteers, extended over a month. Our operational activities spanned three villages and employed a meticulous Door-to-Door approach, encompassing households, educational institutions, and community gathering points, all carried out tirelessly for five days.



This endeavor enlisted at least 60 dedicated volunteers from diverse backgrounds. Furthermore, it entailed an exploration of previously unmapped terrain, covering a sprawling 140 square kilometers located within a malaria red zone area. Our collective endeavors have yielded tangible and positive transformations within East Sumba Regency. Our healthcare initiatives encompass:

### **Promotional Measures**

The dissemination of knowledge among the public through comprehensive educational programs offering precise insights into malaria symptoms, modes of transmission, and preventive strategies.

### **Preventive Measures**

1. The meticulous implementation of Indoor Residual Spraying (IRS) to curtail the population of malaria-transmitting mosquitoes.
2. The distribution of insecticide-treated mosquito nets (ITNs).
3. The provision of mosquito bite prevention products, including anti-mosquito soap and lotion.
4. The early detection of malaria infections represents a pivotal facet of our preventive efforts, facilitated through the deployment of Rapid Malaria Diagnostic Tests (malaria RDT) and Microscopic examination.
5. The enhancement of healthcare access via the installation of well pumps and the activation of clean water networks within the Mahu Community Health Centre area.

### **Curative Measure**

We ensure a prompt, tailored treatment for each malaria parasite, prioritizing swift, comprehensive recovery driven by our commitment to well-being and effective care.

Each activity unit has been meticulously documented within a digital platform, readily adaptable to the specific needs inherent to our ongoing endeavors to control malaria cases within Mahu District. The impact of our labor is both palpable and brimming with promise. We invite you to delve into our comprehensive report, offering a profound insight into the depths of our journey and the myriad achievements it has engendered.



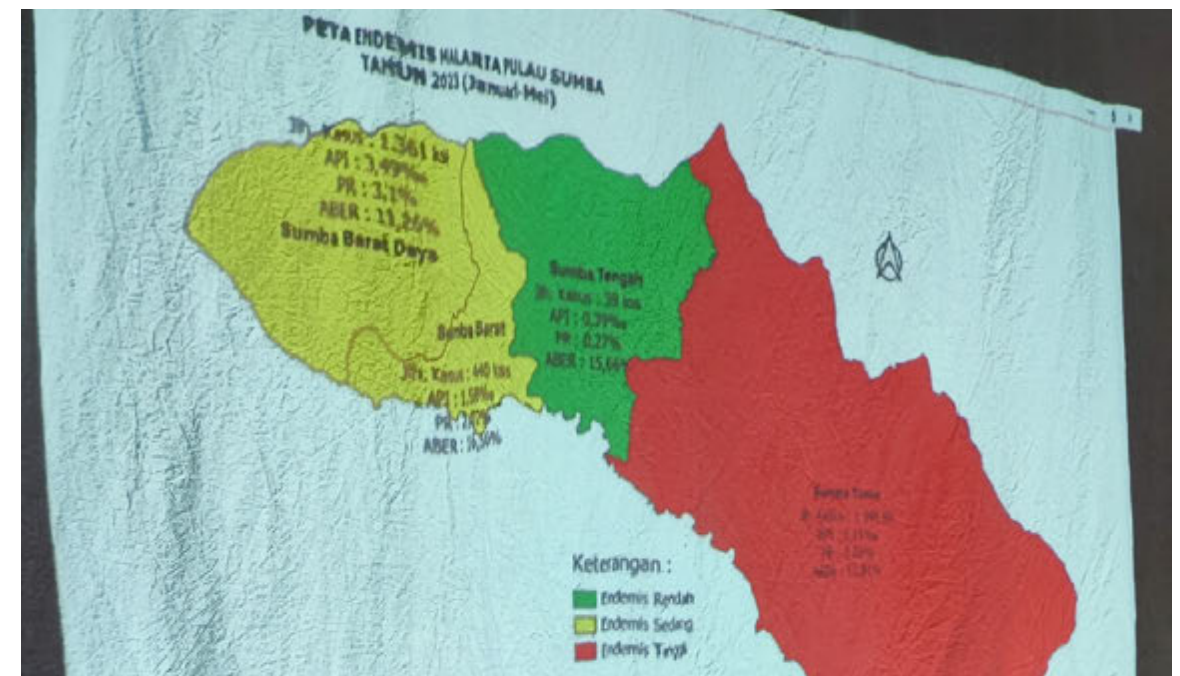
# INTRODUCTION

East Sumba faces significant challenges in addressing malaria within the region. High infection rates are crucial, indicating obstacles in preventing, treating, and controlling the disease.

Moreover, enhancing local knowledge about malaria in East Sumba is vital. By improving understanding of symptoms, transmission, and preventive measures, we aim to empower people to take effective precautions and reduce malaria risks.

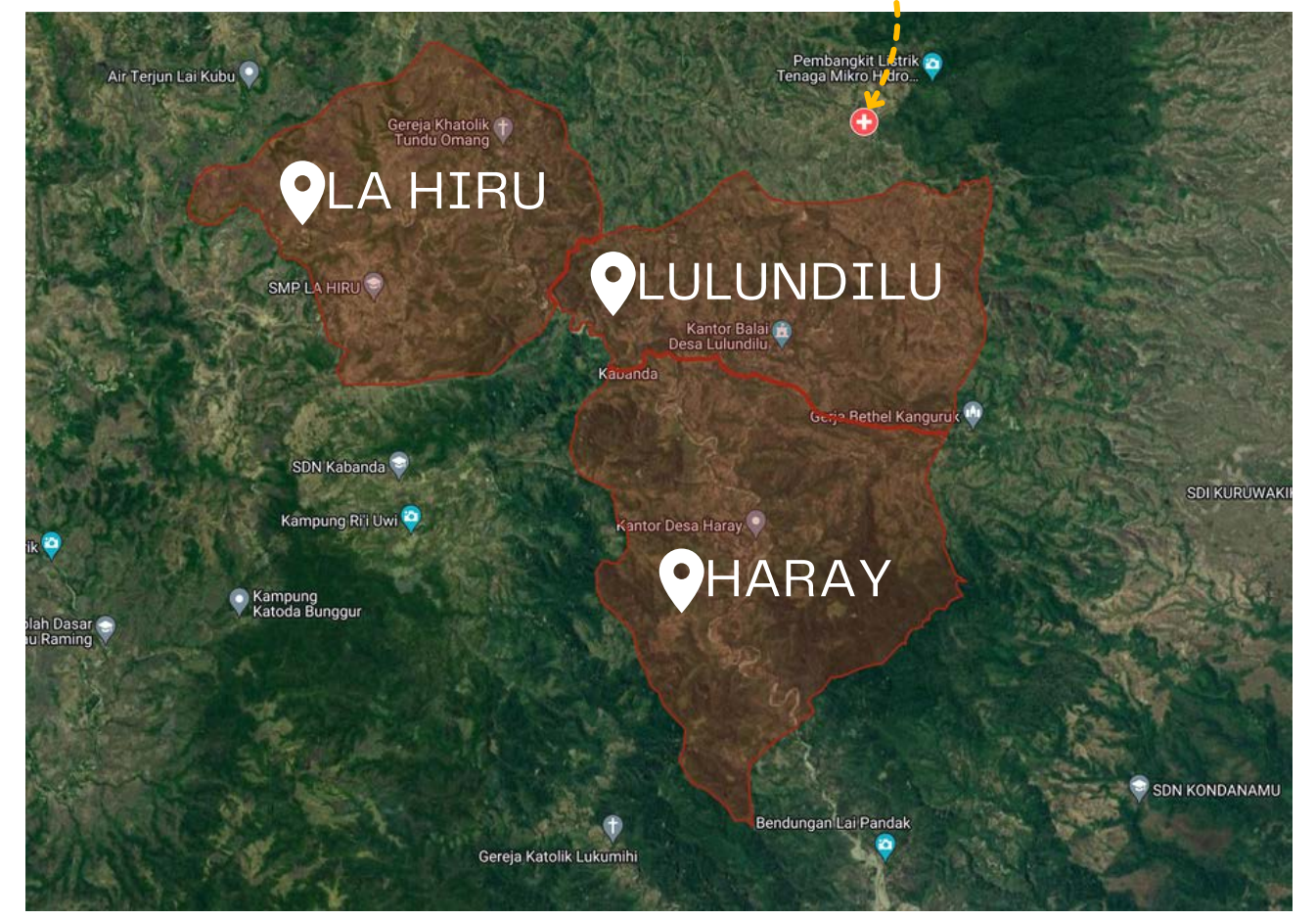
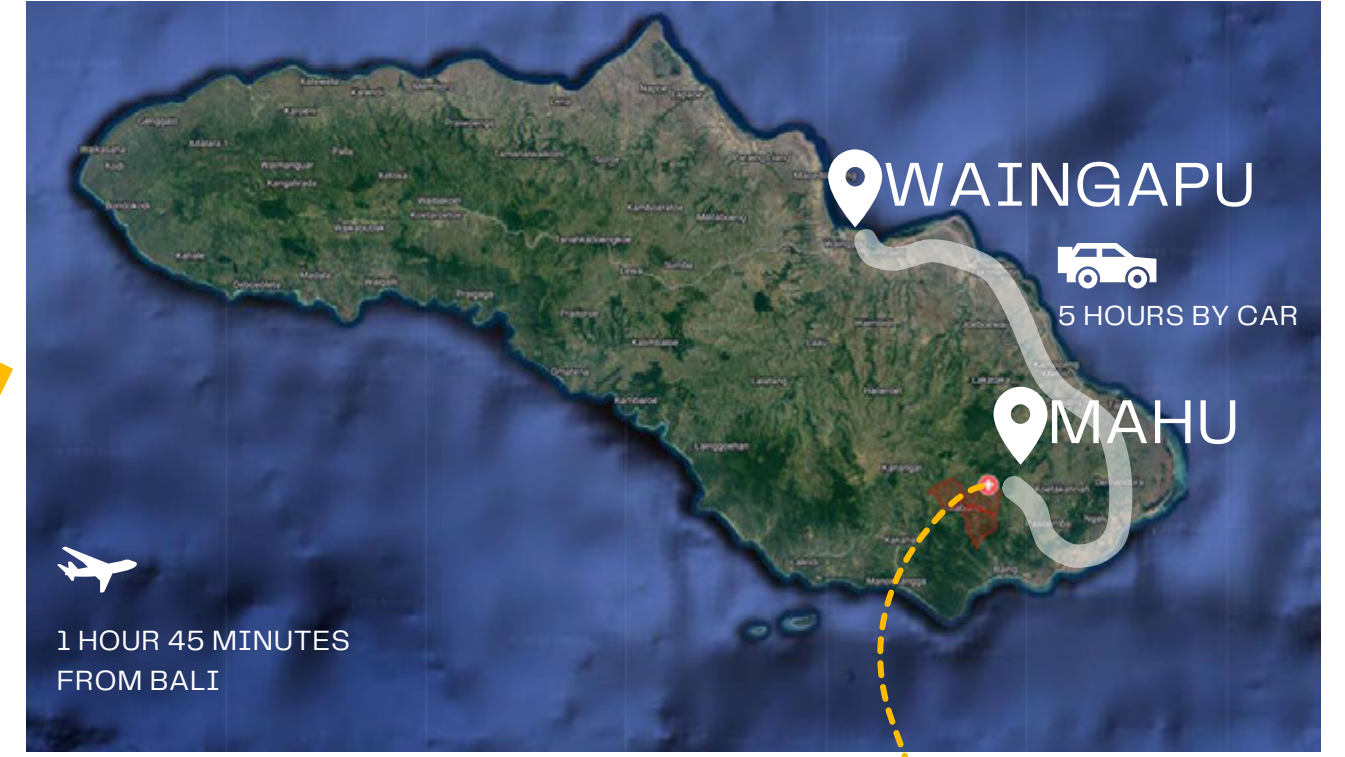
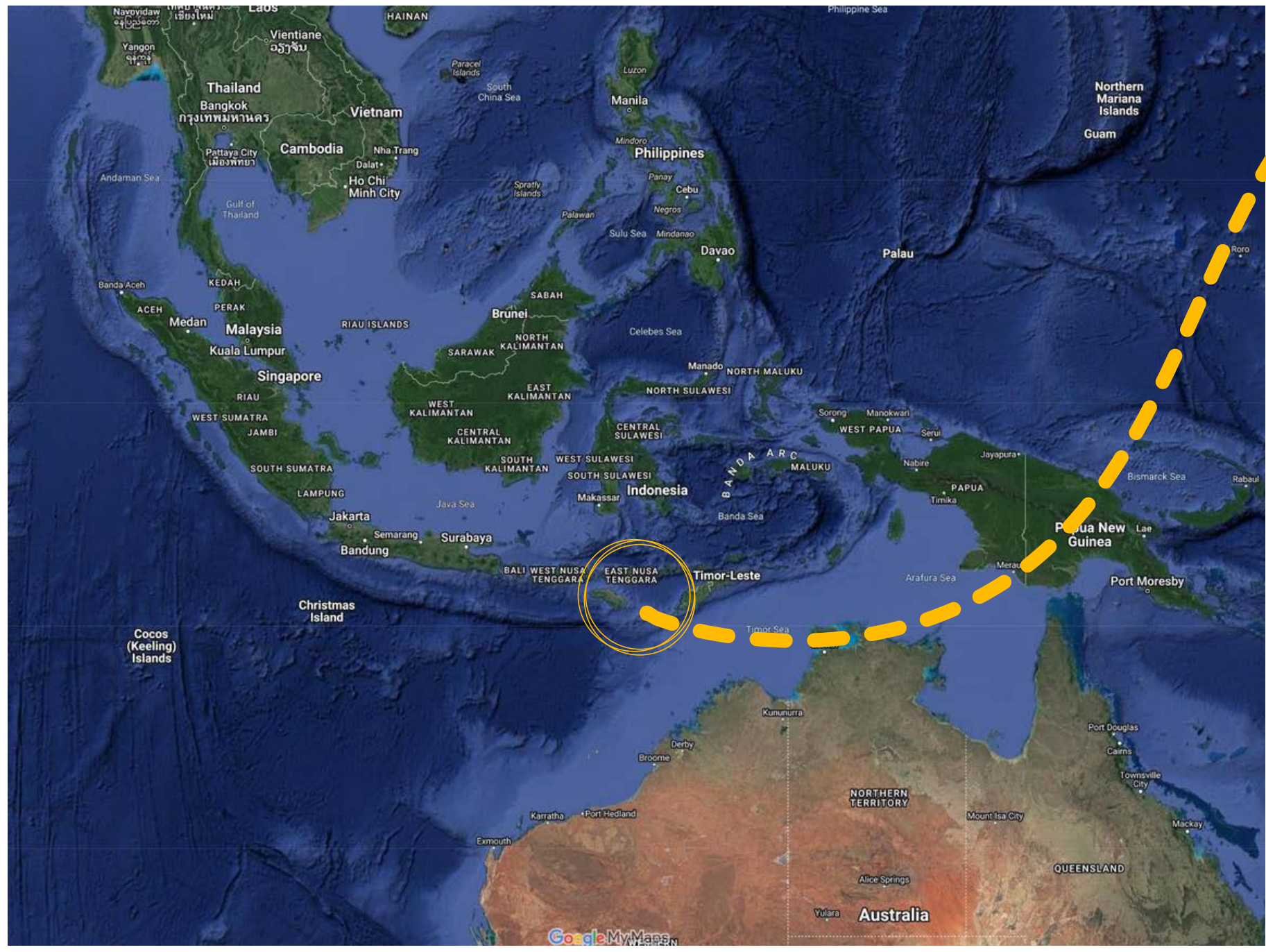
Additionally, early detection is crucial. Tools like malaria Rapid Diagnostic Tests (RDTs) and Microscopic examination identify malaria cases promptly, enabling swift treatment, medication, and prevention of further spread. We're also developing a user-friendly digital platform for instant reporting during door-to-door tests, with volunteers receiving training in Rumah Kampera before deployment in the Mahu district.

This comprehensive approach, encompassing case-control, education, and early detection, aims to alleviate the malaria burden in East Sumba District and enhance the community's quality of life.





# Where is Mahu Sub-district?





# THE MALARIA PREVENTION INITIATIVE ACHIEVEMENTS



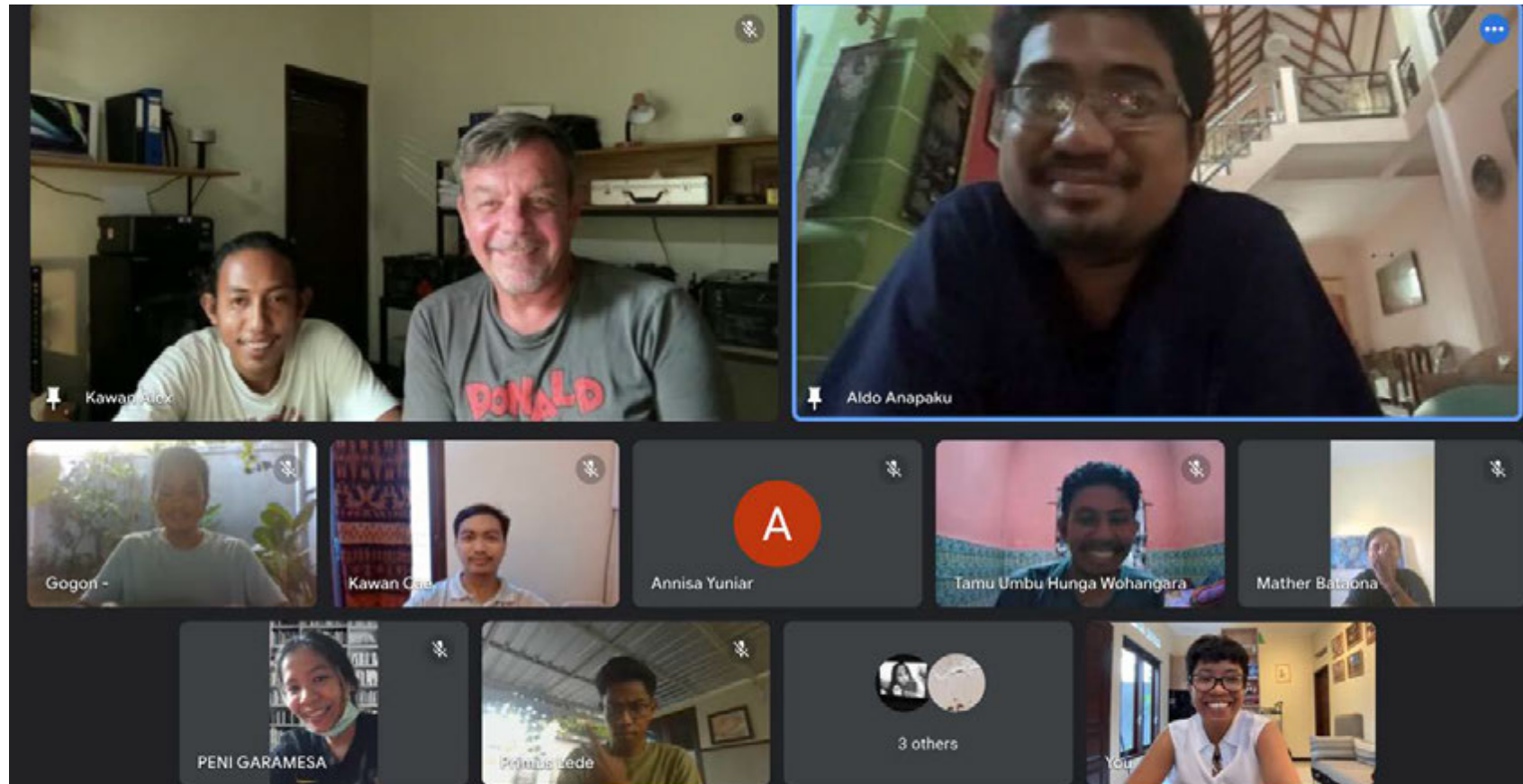
- A** Coordination
- B** Survey
- C** Preparation
- D** Impacts



# A. Coordination

Intensive coordination was conducted at every stage, from preparation to implementation, involving a wide range of stakeholders, including district-level authorities, village-level representatives, and various supporting partners who endorse the 2023 Malaria Prevention Initiative in East Sumba. Here are the coordination stages we've mentioned:

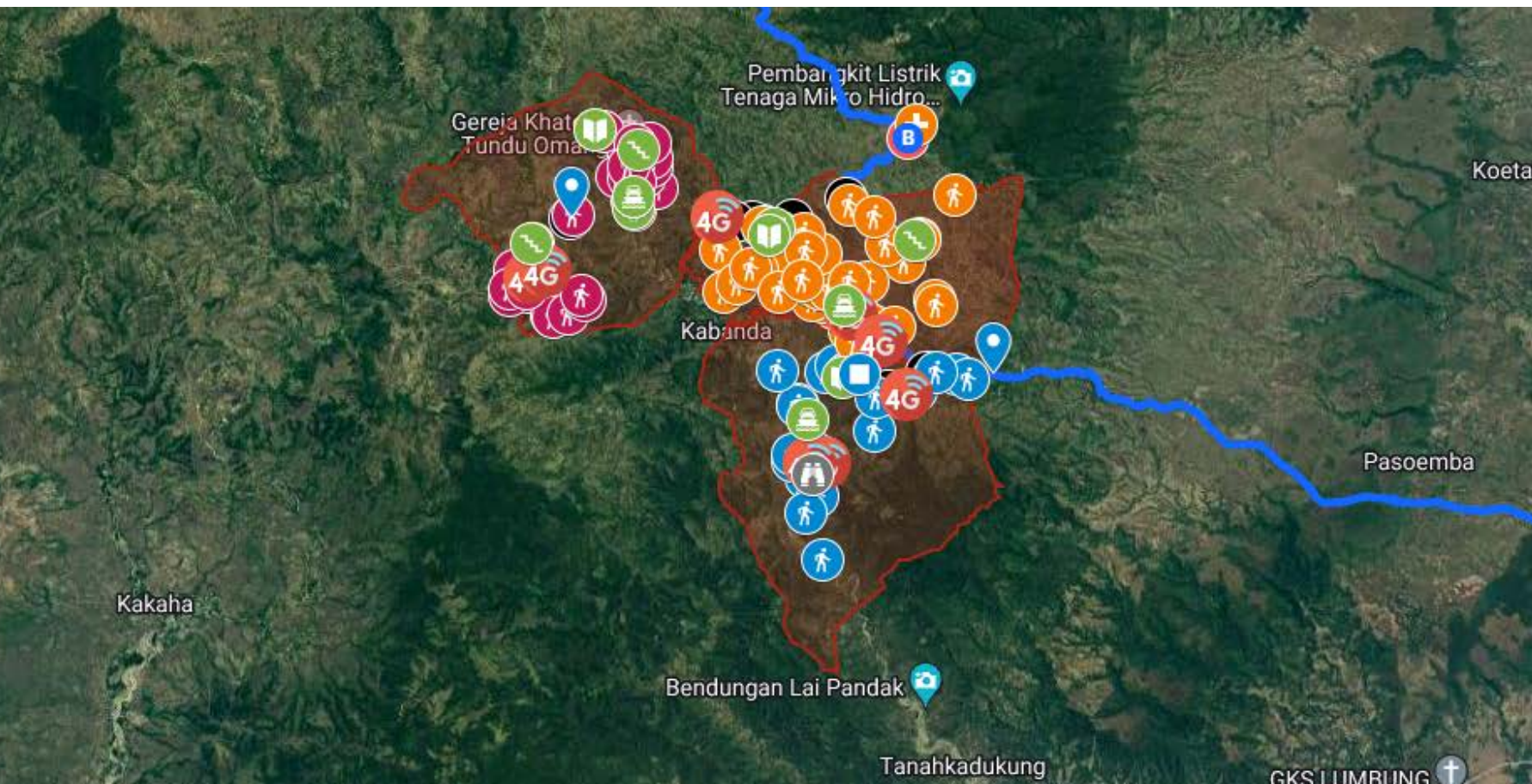
1. Collaborated with the Head of Mahu Community Health Centre to access malaria data and cases in the Mahu sub-district.
2. Discussed with the Mahu sub-district government and the heads of Lulundilu, Harai, and La Hiru villages to submit activity plans and ensure their readiness for participative collaboration.
3. Coordinated with the partners, supporters, volunteers, Mahu Community Health Centre, Malaria Cadres, East Sumba District Health Department, East Sumba Government, and the village governments of Lulundilu, Harai, and La Hiru to outline agendas and provide technical descriptions of activities.





# #ZEROMALARIA SUMBA TIMUR

The location surveys conducted by coordinators in each village serve several crucial purposes. This is undertaken to identify key distribution points within residential areas, identify suitable gathering points for activities, pinpoint areas with reliable signal coverage, assess challenging terrains that may be impassable, and identify supporting data and facilities necessary for the seamless execution of activities. The primary goal of these surveys is to furnish a comprehensive description of the prevailing location conditions.



## B. Survey



They serve to gain a profound understanding of the challenges that may arise during activities and ascertain the preparations needed to address them effectively.

Mapping is meticulously executed using Google My Maps. This platform lets us pinpoint precise location coordinates and provide comprehensive data at each point. It facilitates the inclusion of detailed information, including photographic documentation and a thorough assessment of existing challenges at each designated location.

SCAN TO SEE THE MAP :











The Zero Malaria program engages medical professionals and other general volunteers, strategically assigned based on their expertise and departmental requirements. The volunteer job descriptions vary depending on the needs. There are at least eight positions: Medical analysis, Blood sample collecting, Data collection, Public Health Surveillance, Mobility, Cook, Photographer and videographer, and Mechanic.

## C. Preparation

### 1. VOLUNTEERS RECRUITMENT

Kawan Baik Indonesia oversees the volunteer recruitment process by the Sumba Volunteer, which unfolds through distinct phases:

1. Registration: 8 June – 9 July 2023
2. Screening and talent assessment: 12 – 15 July 2023
3. Announcement: 18 July 2023

### JOB DESCRIPTION OF VOLUNTEERS

Here are example job descriptions for two different volunteer roles, one for medical professionals and another for general volunteers:

1. As Medical Professional Volunteers, they play a vital role in our malaria prevention initiative by providing medical expertise in analyzing and collecting blood samples.
2. As General Volunteers, they contribute to our malaria prevention initiative by raising community awareness, distributing educational materials, and supporting outreach efforts.





## 2. TRAINING

Kawan Baik Indonesia, Fair Future Foundation, and Sumba Volunteer held two days of training for East Sumba #ZeroMalaria volunteers. This training aims to prepare volunteers for implementing the malaria prevention project in Mahu District. There were 60 participants, consisting of volunteers and all supporters, at Rumah Kambera on 20 and 21 July 2023.

In this training, the Health Service provided the latest information regarding spreading malaria cases in East Sumba Regency. The agency also provides experts who provide special training to the IRS (Indoor Residual Spraying) spraying team. We also provide training on strategies, understanding locations, and using data collection applications to make implementing this activity easier.





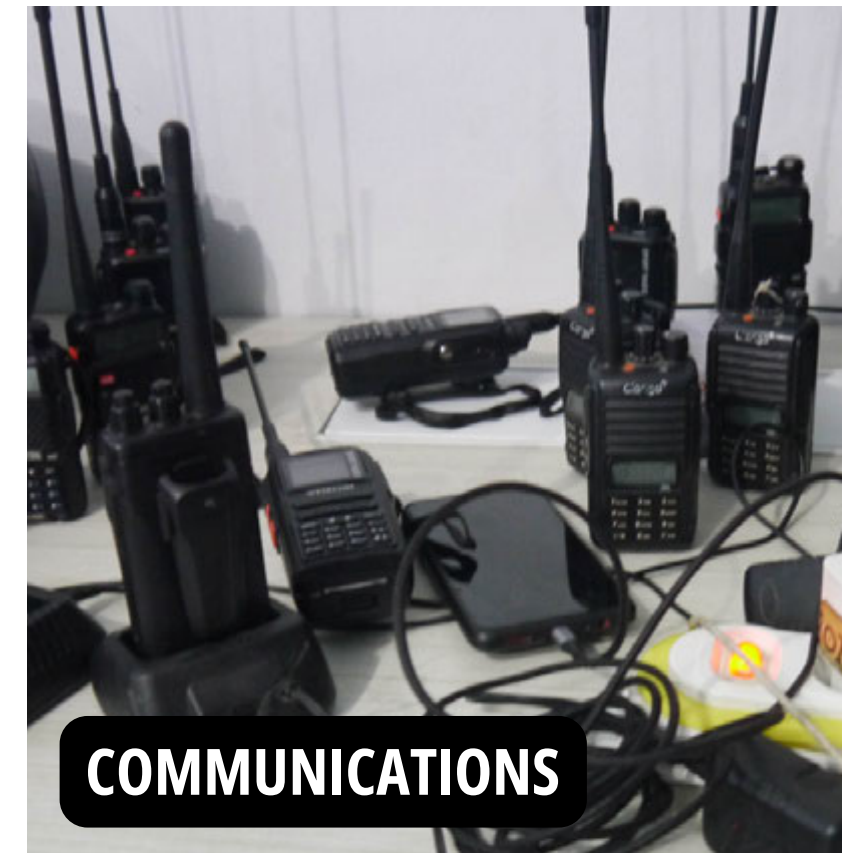
### 3. LOGISTICS AND TECHNICAL PREPARATION

Managing the risk of malaria transmission involves a synergy of community awareness, environmental control, and enhanced healthcare accessibility. This program relies on a range of logistical requirements, both medical and non-medical. Technical equipment, education, and prevention tools were provided to ensure we were pivotal in achieving our goals.

It encompasses logistical preparations, operational equipment installation, and verifying the availability of supplies before moving to the location. Volunteers selected for this role are individuals with skills in building, responsiveness, and attention to detail.









# D. Impacts

1. Centralization patients data

2. Malaria Case Detections

a. Microscopic

b. Rapid Diagnostic Test (RDT)

c. Diagnosis test in the three villages – La Hiru, Lulundilu and Haray

3. Malaria Prevention

a. Environmental management and larviciding for vector control

b. Indoor Residual Spraying of houses

c. Distributions of Insecticide-Treated Nets (ITNs)

d. Distributions of anti-mosquito lotion and soap

e. Equipped with clean water access in the community health facilities

4. Health awareness campaign





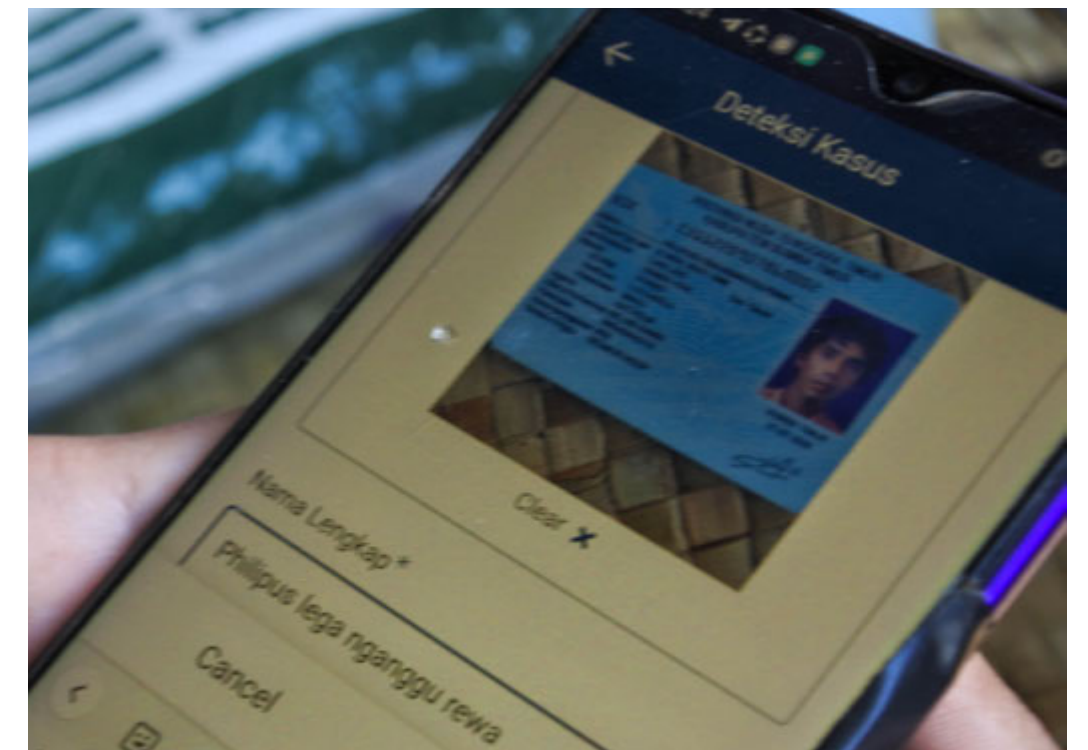
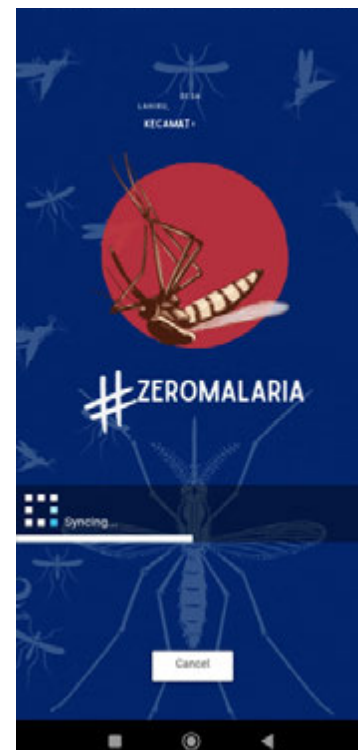
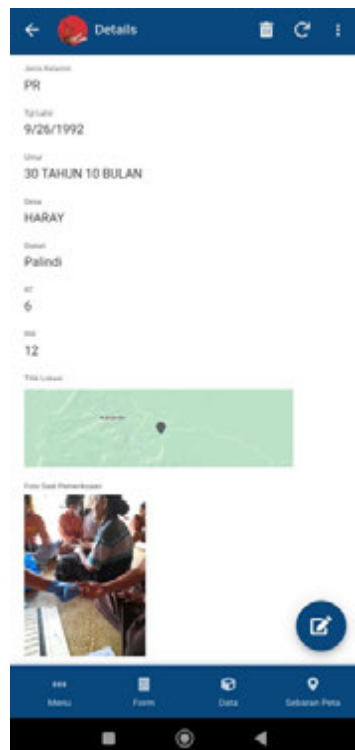
# 1. CENTRALIZATION PATIENTS DATA

## USING OUR ZERO MALARIA APPLICATION

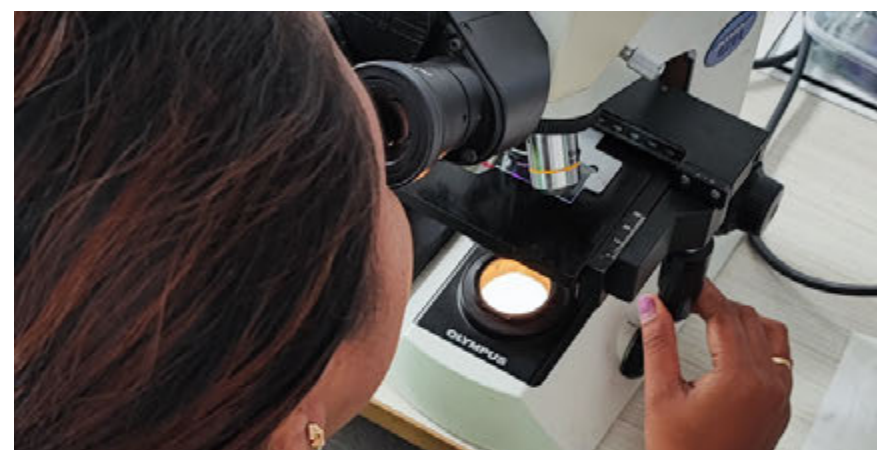
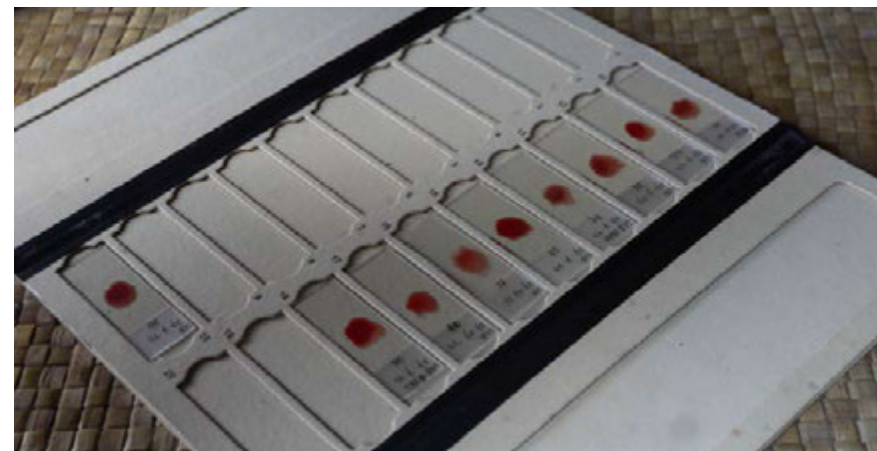
Patients must register before being tested through either Rapid Diagnostic Testing (RDT) or microscopic methods. Our dedicated volunteers undergo thorough training sessions to maximize the efficient use of our digital tool. These sessions, conducted at Rumah Kambara, arm our volunteers with the necessary skills and understanding to adeptly operate the platform. Empowered with this technology, our teams are primed to carry out testing and reporting duties within the Mahu district, enhancing our malaria control strategies. The collected fundamental data is then inputted into a digital platform, provided by the Foundations and installed on the volunteers' mobile phones, following the Ministry of Health's Malaria Elimination Program implementation.



Mobile screenshots of #zeromalaria App







## 2. MALARIA CASE DETECTIONS

This operation uses two methods to identify malaria parasites in patients (parasite-based tests): the Rapid Diagnostic Test (RDT) and the Microscopic diagnosis method utilizing glass slide media. Volunteers assigned to this field are medical professionals specializing in medical analysis and blood sample collection drawn from the Community Health Center in East Sumba.

### A. MICROSCOPIC

Before commencing field operations, the team utilized survey data and the distribution of cases from the past six months to determine the utilization of the Microscopic method. This approach aims to ensure accurate results, enabling prompt treatment for patients testing positive for malaria parasites during treatment.

A total of 4 microscope units operated alternately by 9 ATLM teams succeeded in reading the sample slides. The results obtained from this method are obtained within five full days.

### B. RAPID DIAGNOSTIC TEST (RDT)

The most important malaria diagnostic method used at the community level is the rapid diagnostic test (RDT) for malaria. RDTs provide a quick way to tell whether a person with malaria-like symptoms has malaria, as the test takes only 15–20 minutes. We tested all patients during the 3-day operation using the RDT method.



C. DIAGNOSIS TEST IN THE THREE VILLAGES – LA HIRU, LULUNDILU AND HARAY

The malaria morbidity rate is typically assessed using the Annual Parasite Incidence (API). In the case of the East Sumba region, particularly in Mahu District, the API is alarmingly high.

Our approach prioritizes using the microscopy method while supporting the Rapid Diagnostic Test (RDT) for swift case detection. Any positive results obtained through RDT are subsequently retested utilizing a microscope.

We focus on two villages, namely Lulundilu and Haray, which exhibited exceptionally high API numbers over the last six months. In these villages, nearly 90% of the samples underwent microscopic examination.

Village Name	RDT	Microscopy	Combo RDT & Microscopy	Total
La Hiru	590	112	15	717
Lulundilu	72	768	9	849
Haray	85	430	3	518
Others	0	2	0	2

2086

BLOOD SAMPLE TESTED

747

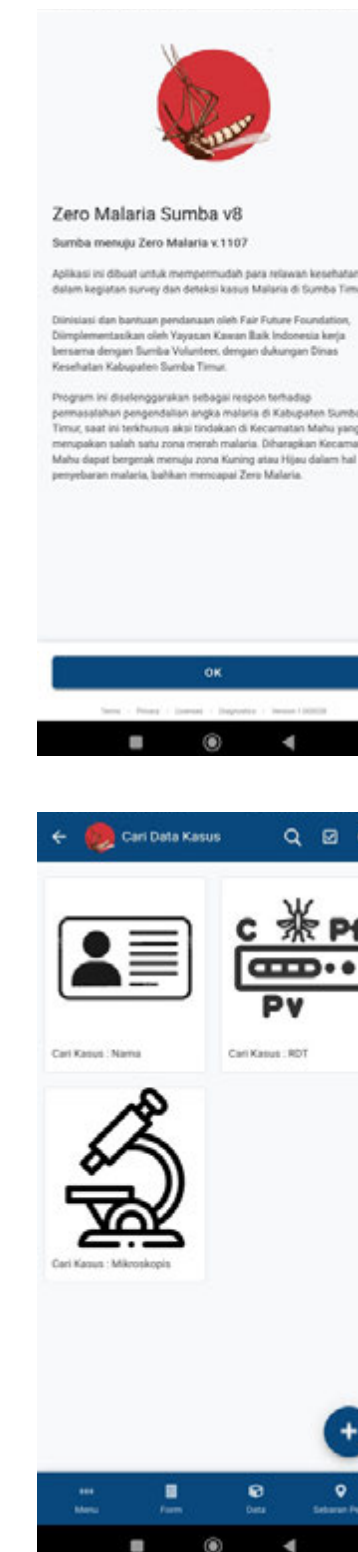
RDT

1312

MICROSCOPY

27

RDT + MICROSCOPY



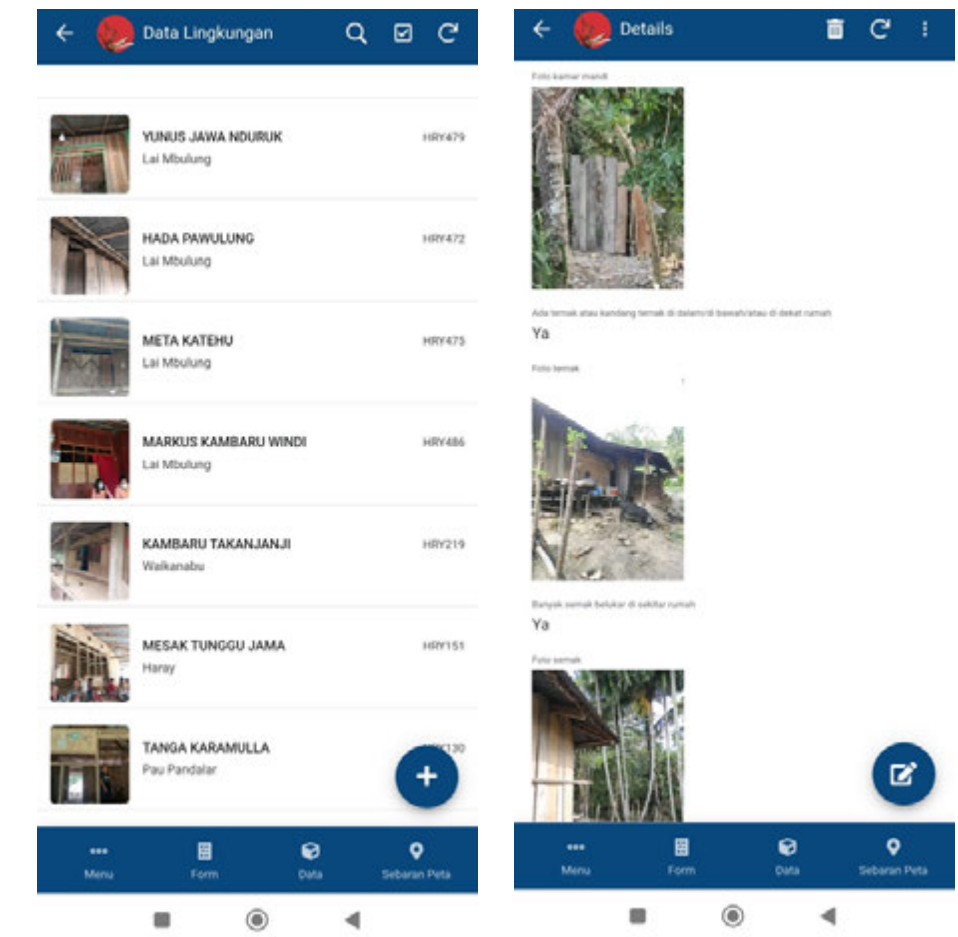
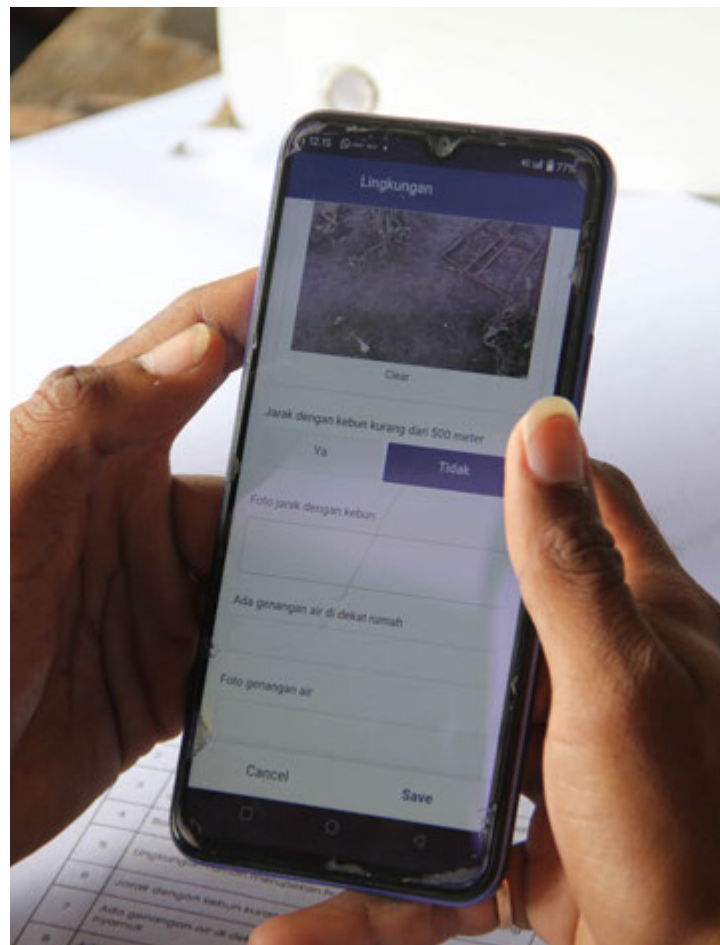
Mobile screenshotted #zeromalaria App



# 3. MALARIA PREVENTIONS

## A. ENVIRONMENTAL AND LARVICIDING OR IGR (INSECT GROWTH REGULATOR) FOR VECTOR CONTROL

Environmental conditions are important in malaria transmission; regulating these conditions can help reduce the disease burden. Larval control is a crucial community-level malaria prevention measure, encompassing methods to prevent vector breeding and eliminate mosquitoes in their larval stage. Environmental cleaning and modification hinder the mosquito's life cycle, reducing malaria transmission risk. We employed ALTOSID® 1.3 GR, which contains S-Methoprene as a larvicide. This IGR (Insect Growth Regulator) works by inhibiting larvae exposed to methoprene from releasing Cysteine, preventing them from maturing into adults.



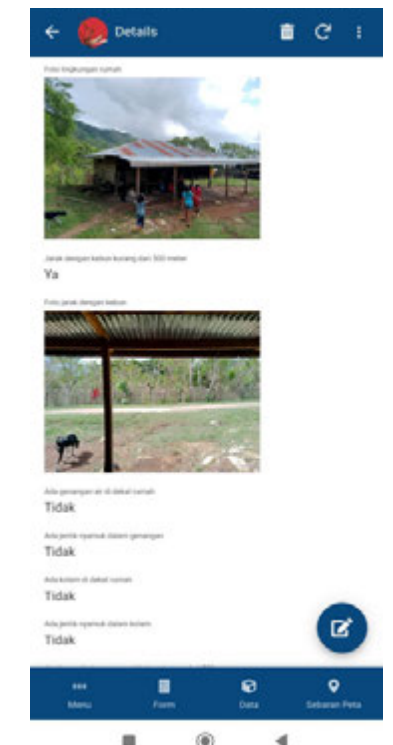
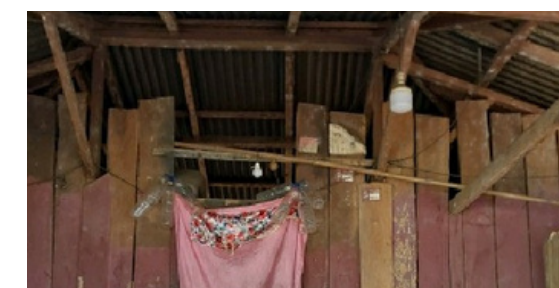
Mobile screenshots #zeromalaria App



### 1. Improper house ventilation

The Public Health Surveillance team's data indicated that out of 288 houses, 272 had exposed air vents, mostly of varying sizes and predominantly large. These houses feature wooden walls with structures reinforced by ties, complemented by reed roofs. Comparing malaria rates between 'modern' and 'traditional' houses demonstrates a reduced likelihood of malaria infection and clinical cases in modern housing.

Well-designed ventilation systems lower indoor humidity and temperature, making homes less hospitable for malaria-carrying Anopheles mosquitoes. Ventilation also discourages these mosquitoes from entering homes and enhances the efficacy of residual insecticides. While not a standalone solution, better ventilation is a vital but often overlooked component that should be integrated into comprehensive anti-malaria programs. This investment can significantly reduce disease prevalence and enhance the quality of life in vulnerable communities.

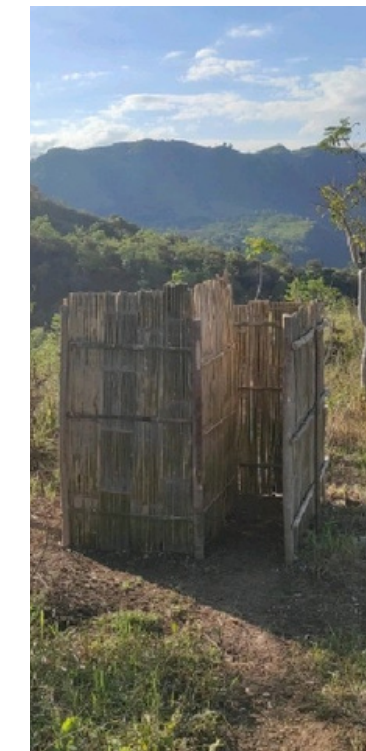
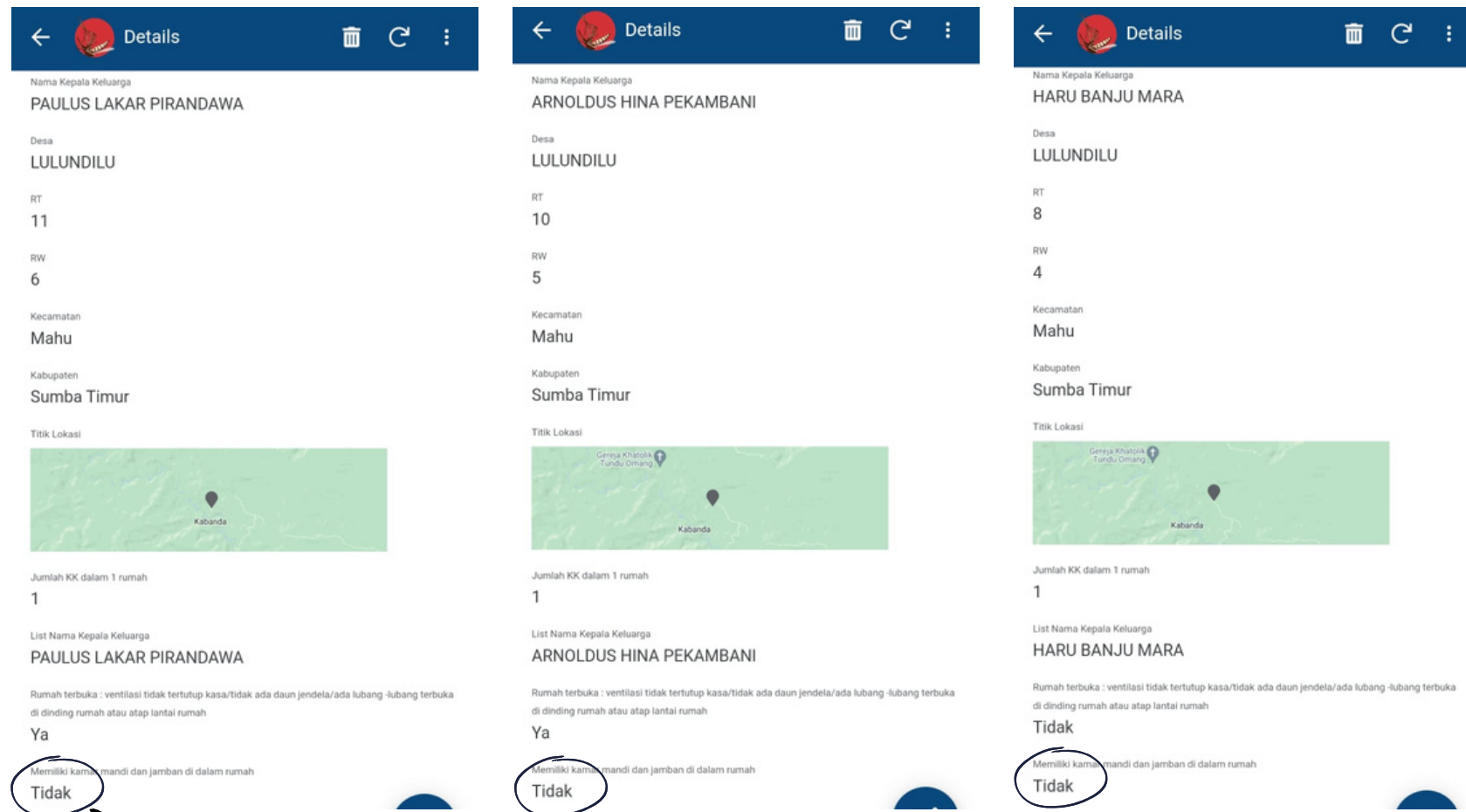




## 2. Sanitation facilities

Among the 288 houses identified by the Public Health Surveillance team in three villages, **none** have a sanitation facility inside the house. We found 128 outside sanitation facilities, while the remaining places lacked sanitation facilities. Conclusion: a night out, washing, bathing, defecation, and the presence of gardens were statistically significant risk factors for malaria incidence. Mosquitoes breed quickly without proper sanitation and water facilities, making residents more susceptible to malaria and hindering prevention efforts. Addressing these infrastructure gaps is vital in fighting malaria.

Mobile screenshotted #zeromalaria App

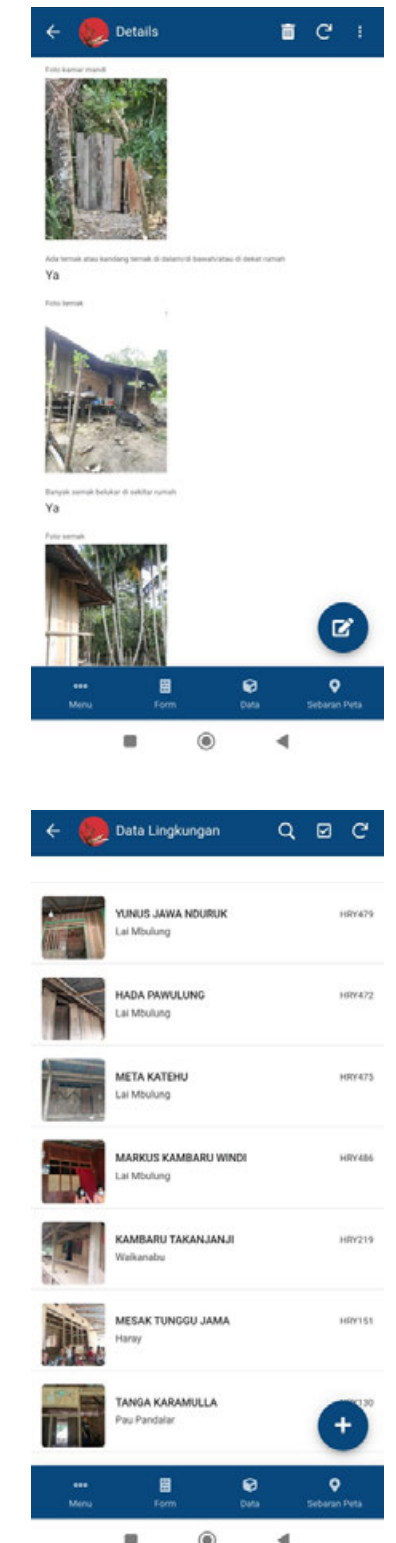


Q: "Does it have a bathroom and toilet inside the house?"  
A: "No"



### 3. Livestock pens, thickets, and gardens around the household

The livestock pens, thickets, and ponds near homes are also inspected. These conditions are highly conducive to the breeding and resting of Anopheles mosquitoes. This area is characterized by its natural surroundings, including forests, rice fields, cultivated lands, and gardens, intersected by several rivers that provide essential resources for the community's daily needs. The average temperature ranges from 22.5 degrees to 31.7 degrees Celsius, with the highest rainfall typically occurring in December.





## B. INDOOR RESIDUAL SPRAYING

The insecticides used in IRS are long-lasting and kill the vector when it enters houses to bite people



Indoor Residual Spraying (IRS) involves applying the WHO-approved malaria insecticide, FICAM® 80 WP. FICAM® 80 WP is a powder insecticide containing 80% BENDIOCARB as its active ingredient. It is suspended in white for residual spraying, targeting Anopheles mosquitoes with a droplet size of 200 microns. IRS uses a suspended solution, leaving a layer on the wall as a thin white powder, killing mosquitoes if they land on the wall surface.

In Haray village, three volunteers from the local community underwent training to become IRS operators. During the training, they received instruction from the Disease Prevention and Control Team (P2P) of the East Sumba District Health Service and the Foundation's team on safely handling insecticides. To execute IRS effectively in Haray village, comprehensive training was provided, covering spray techniques, operator training, pump maintenance, and other practical skills.

Factors like dosage size, spraying method, equipment type, and material choice influence the effectiveness of the IRS. For example, Ficam 83g, when dissolved in 8.5 liters of clean water, can cover approximately 212 square meters of wall surface, equivalent to one medium-sized traditional Sumba house (8x6 meters, 2.5 meters high). One operator can spray up to 8 houses daily, including lunch breaks and mixing liquids. So far, we've concentrated on spraying a single village in Haray. Over three days of operations, we've successfully sprayed 50 houses using two sprayers.





**EXPLAINING**



**MOVING**



**WATER**



**MIXING**



**SPRAYING**



**WAITING**





### C. DISTRIBUTIONS OF INSECTICIDE TREATED NETS

We've distributed hundreds of insecticide-treated nets (ITNs) as part of our malaria prevention efforts in the three villages. Our role includes ensuring high coverage by providing ITNs to those in need and educating households on their proper use and maintenance. This knowledge will help you maximize the benefits of ITNs in the Mahu community, as they are essential for malaria prevention and saving lives.









## D. DISTRIBUTIONS OF ANTI-MOSQUITO LOTION AND SOAP

To prevent malaria among the residents of Mahu, we implement several preventive measures, including the distribution of soap and anti-mosquito lotion.

### **Soap for Personal Protection:**

Soap serves a dual purpose—it helps maintain personal hygiene by ensuring cleanliness and reducing the risk of mosquito bites. Lemongrass, sandalwood, and natural scent emit an aroma that acts as a natural mosquito repellent, making it an effective choice for personal hygiene to avoid these insects.

### **Anti-Mosquito Lotion and Spray:**

Besides lemongrass soap, we distribute anti-mosquito lotion and spray containing ingredients like DEET or natural repellents. We provide clear instructions on applying these products to the skin, particularly in areas prone to mosquito bites. This helps enhance protection against mosquitoes and reduces the risk of malaria transmission





## E. EQUIPPED A CLEAN WATER ACCESS IN THE COMMUNITY HEALTH FACILITIES

Three Years of Dedication Amidst Limited Access to Clean Water

For the past three years, the Community Health Centre of Mahu Sub-district has faced the challenge of limited access to clean water due to a broken water pump.

This has compelled them to fetch water from rivers or springs, often covering distances of 700 meters to 1 kilometer by motorbike or on foot. Furthermore, the taps in the Puskesmas building need to be fixed as they should.

Our mission is to bring about improvements that will facilitate access to clean water for health services, addressing the community's three-year-long inconvenience.



**WATER CONNECTIONS**





The enhancement of healthcare access via the installation of well pumps and the activation of clean water networks within the Mahu Community Health Centre are as follows:

In our efforts to improve water accessibility and distribution, we have undertaken a comprehensive plan:

- Conducted surveys and mapping for water improvement
- Designed distribution routes and additional facilities to enhance clean water access
- Installed a 0.5 HP submersible water pump
- Implemented automatic pump control and automatic valve installations
- Added 1100-liter fiber tanks to facilitate water distribution to employee mess houses and backup the elevation system for other storage tanks
- Activated three water distribution control lines leading to three large storage tanks
- Installed HDPE pipes throughout the Mahu Community Health Centre area to ensure water reaches employee mess houses, patient waiting houses, and the main Mahu Community Health Centre building for community health services
- Conducted repairs and replacements of pipes and faucets at each water facility
- Planned an evaluation process
- Added alum media to purify drilled well water

These steps aim to significantly improve access to clean water for the community and enhance the quality of healthcare services provided at the Mahu Community Health Centre facility.



## Water Connection Design

We applied the design based on data collected during surveys conducted by the Foundation's team. Interviews with health workers in the Mahu Community Health Centre's official residence provided insights into the need for and access to clean water over the past three years. This data helped us determine usage patterns and prioritize the Community Health Center's capacity needs.

Our primary focus was ensuring that all healthcare buildings immediately access clean water. Additionally, we addressed the clean water needs of healthcare staff living within the Mahu Community Health Centre area and extended water supply to other buildings, including patient waiting houses and outdoor water taps for handwashing and plant watering.

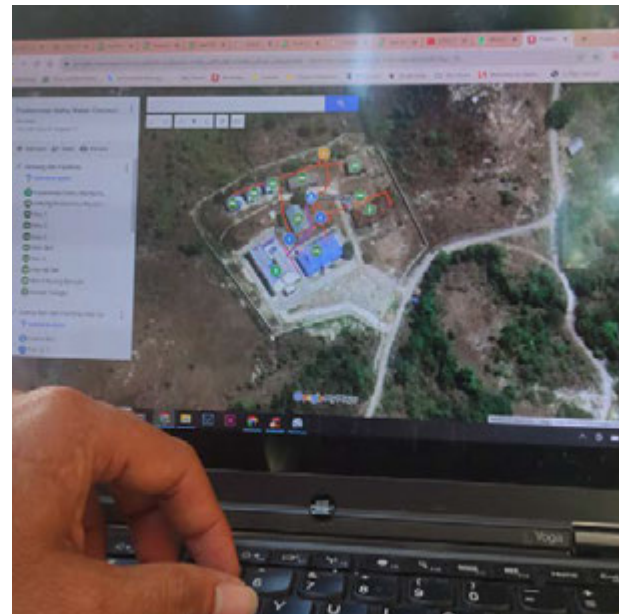
As the sole central medical facility in Mahu District, our clean water program is the foundation for all healthcare initiatives and community health promotion efforts.



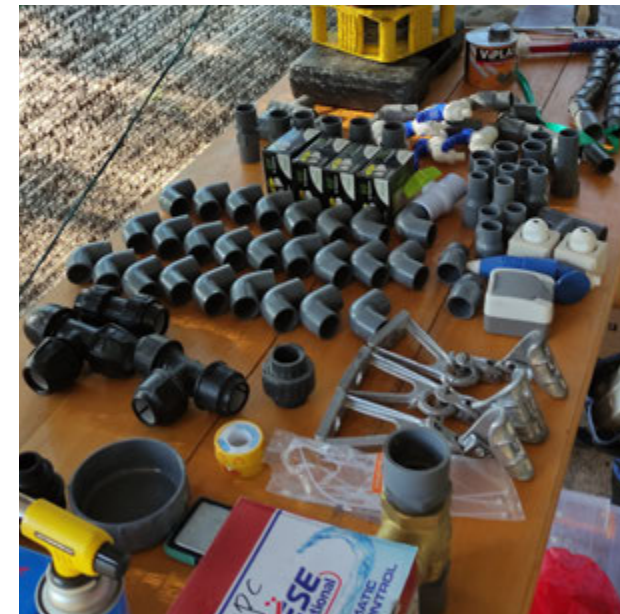




Survey



Water Connection design and plan



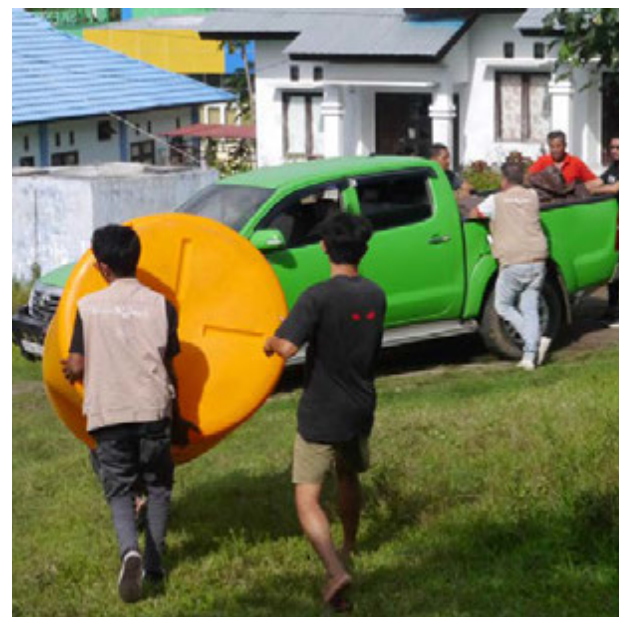
Material purchase



Submersible pump installation



Pipelines installation



Fiber tank installation



Sharing knowledges and learn how to maintaining with medical workers



Water-well purification





Sharing knowledges and learn how to maintaining with medical workers in the Mahu Community Health Centre

1. Sharing Expertise: We encourage sharing knowledge on the intricacies of repairing and replacing pipes and installing water pumps. This includes identifying the root causes of issues like cloudy water or a dry well and providing practical solutions.
2. Self-Sufficiency: We empower individuals to handle equipment and water facility problems independently. However, if the task appears challenging or beyond one's capabilities, we encourage them to seek consultation and assistance to ensure the best solution.



# HEALTH AWARENESS CAMPAIGN

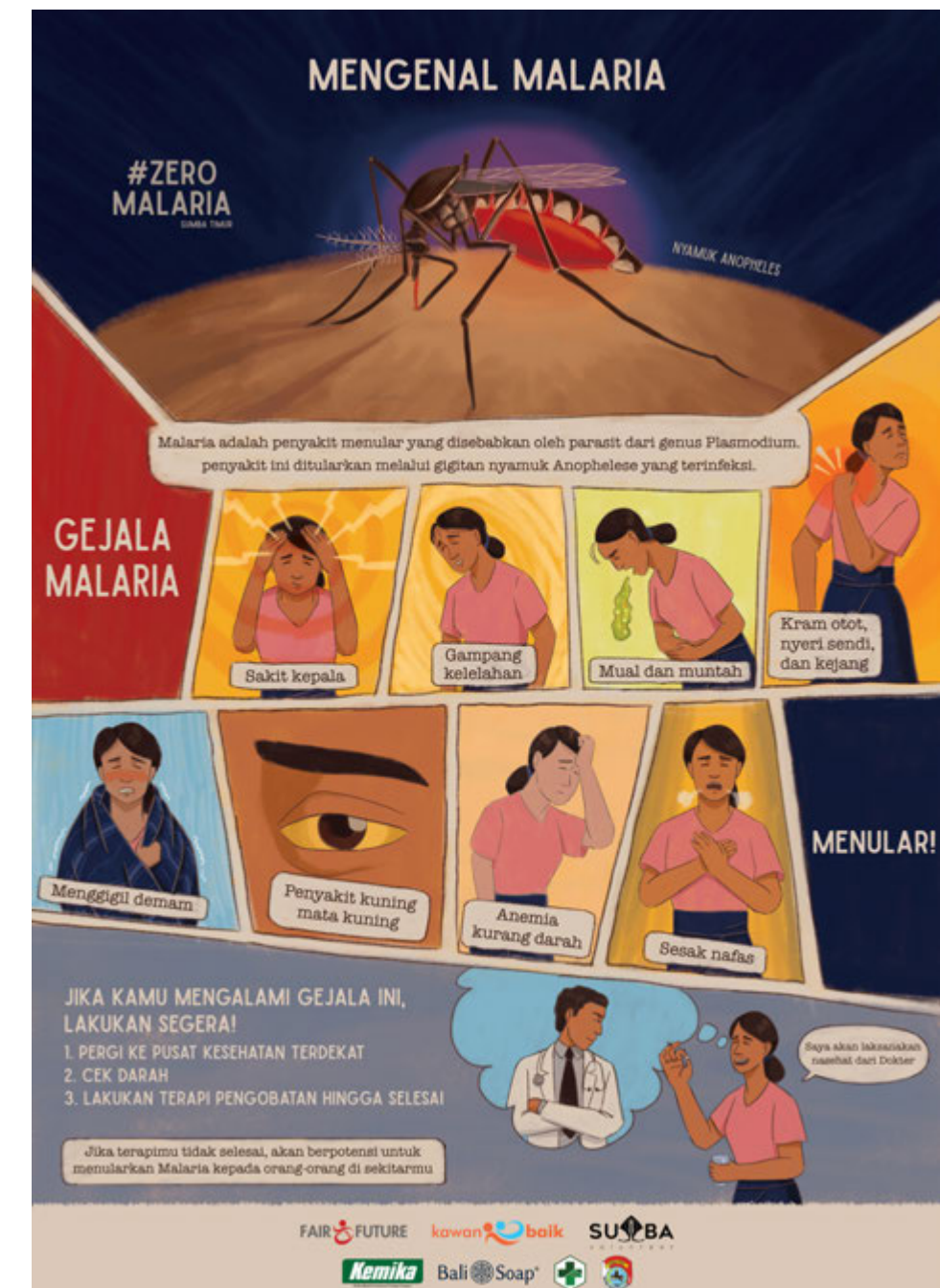
Raising awareness about malaria infection within the East Sumba community is fundamental to our program

Through comprehensive educational initiatives, our goal is to provide the public with pertinent information about malaria symptoms, transmission methods, and preventive measures. This knowledge empowers individuals to take proactive steps in preventing malaria and identifying cases early with a solid understanding.

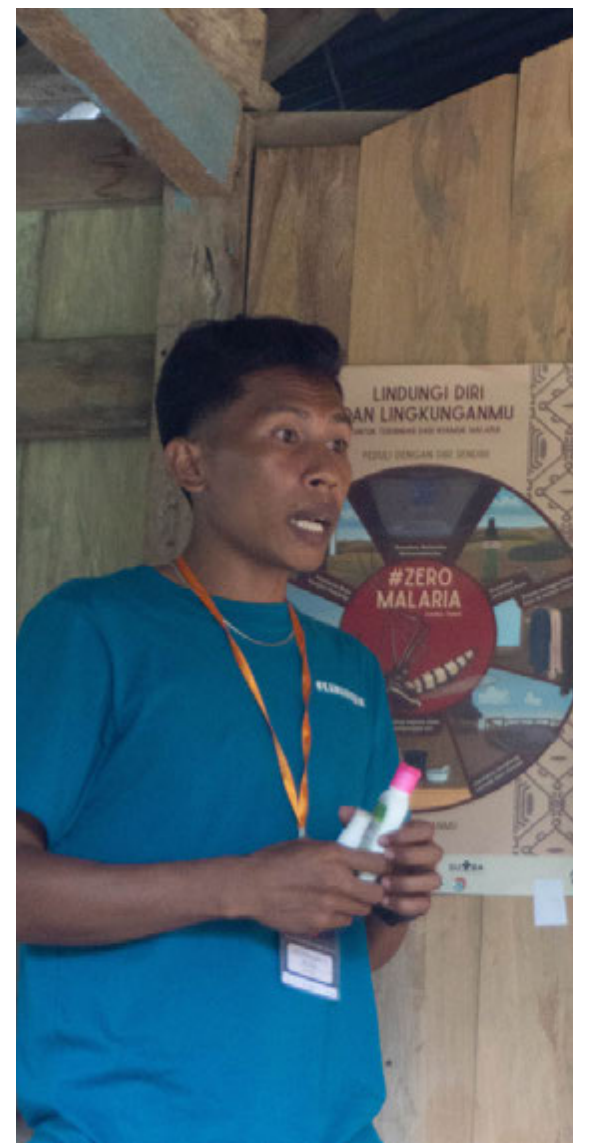
We employ various educational mediums to disseminate this information. We utilize radio broadcasts in remote areas with limited internet or television coverage. Additionally, in the Mahu sub-district, we equip health education volunteers with posters as a door-to-door outreach tool, ensuring wide-reaching awareness efforts.

## Malaria Prevention Radio's Public Health Awareness Campaign

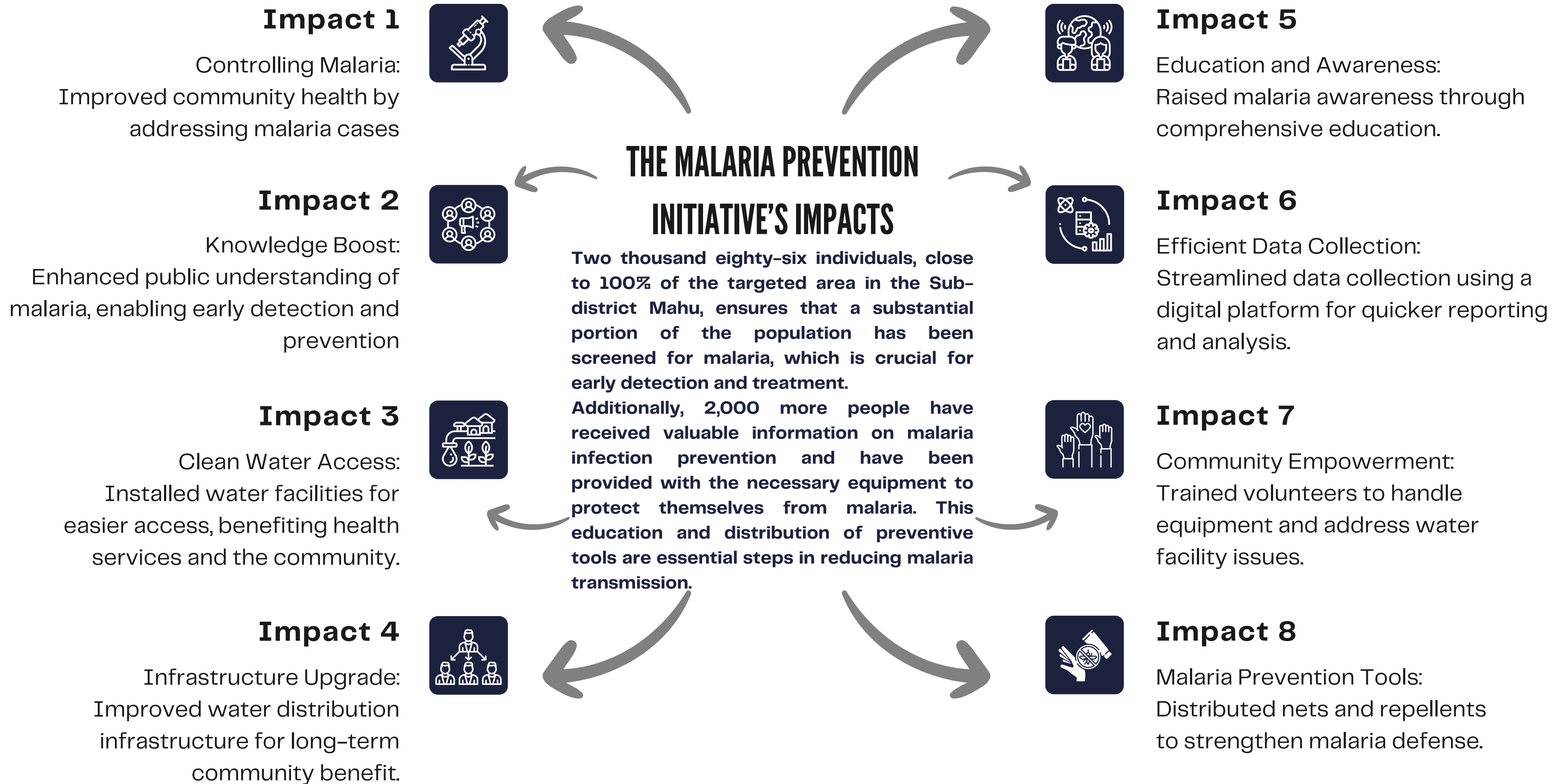
by Kawan Baik Indonesia













# THE CHALLENGES

## Challenges Faced During Fieldwork:

- Weather: Volunteers encounter weather challenges while working in the field.
- Terrain: Limited road access makes Some houses challenging to reach. We optimize the use of motorized vehicles and walking to overcome this.
- Distance: The distribution of houses is spread out over a considerable distance, which extends the time required for door-to-door visits and detection.
- Communication: Despite anticipating signal points during the survey, communication difficulties arise due to the distance between locations. This can hinder effective coordination.
- Uncomfortable living conditions: These factors can negatively impact their performance and overall well-being during their mission.





# ACKNOWLEDGEMENTS

The Kawan Baik Indonesia Foundation would like to express our gratitude to the project's partners and supporters; our donors, especially Fair Future Foundation, have fully supported implementing this project.

Thank you for your trust and cooperation that has allowed us to successfully carry out this project together with the community of East Sumba.

The Fair Future Foundation also initiated this project from the planning stage.

It was implemented with support from Sumba Volunteers, Mahu Community Health Centre, the East Sumba District Health Department, the East Sumba Government and the Regent, and the village governments of Lulundilu, Harai, and La Hiru, Kemika and Bali Soap Indonesia.

The primary donor for this project:



Supported by:





# NEXT STEPS

## Why Continuity is Essential?

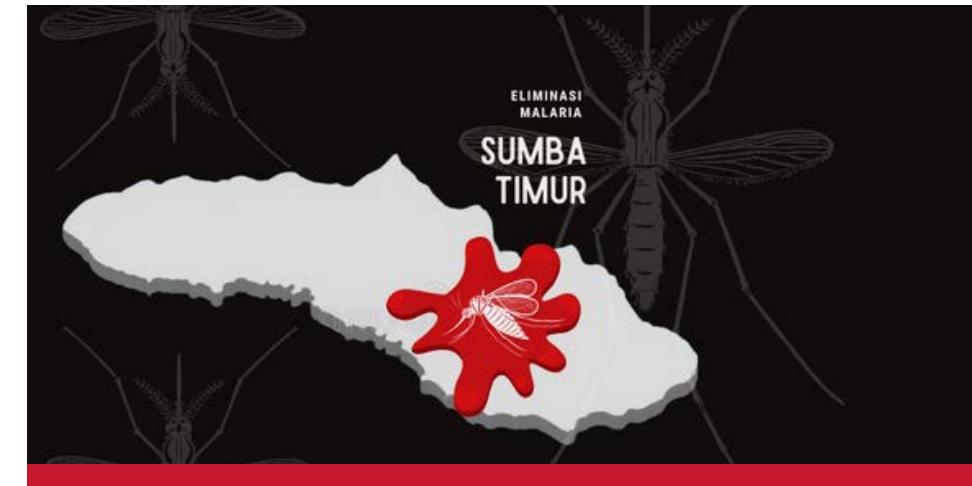
The fight against malaria is an undeniable challenge, particularly in the ultra-rural regions of Southeast Asia and specifically in Eastern Indonesia, where the toll of this disease is devastating. The Fair Future Foundation, in collaboration with Kawan Baik and Sumba Volunteer, has implemented the #ZeroMalaria program with notable success. Yet it's crucial to understand that this is only the initial step in a long journey.

### Education and Training

**01** A cornerstone of sustainability is educating families on the importance of prevention. This goes beyond merely distributing insecticide-treated nets. It involves changing behaviors, a task that requires time and ongoing commitment.

### Strengthening Local Capacities

**02** Educating local authorities and healthcare professionals is crucial. They are the pillars that will perpetuate these initiatives in the long term.



### Continuous Screening

**03** Ongoing surveillance and screening in ultra-rural regions are necessary to understand the epidemiological dynamics of malaria, including early detection of outbreaks and adapting treatment strategies.

### Direct Medical Care

**04** Through our initiatives, mortality rates, especially among infants, have significantly decreased. Halting this process would risk compromising the gains achieved so far.

### Partnerships and Collaboration

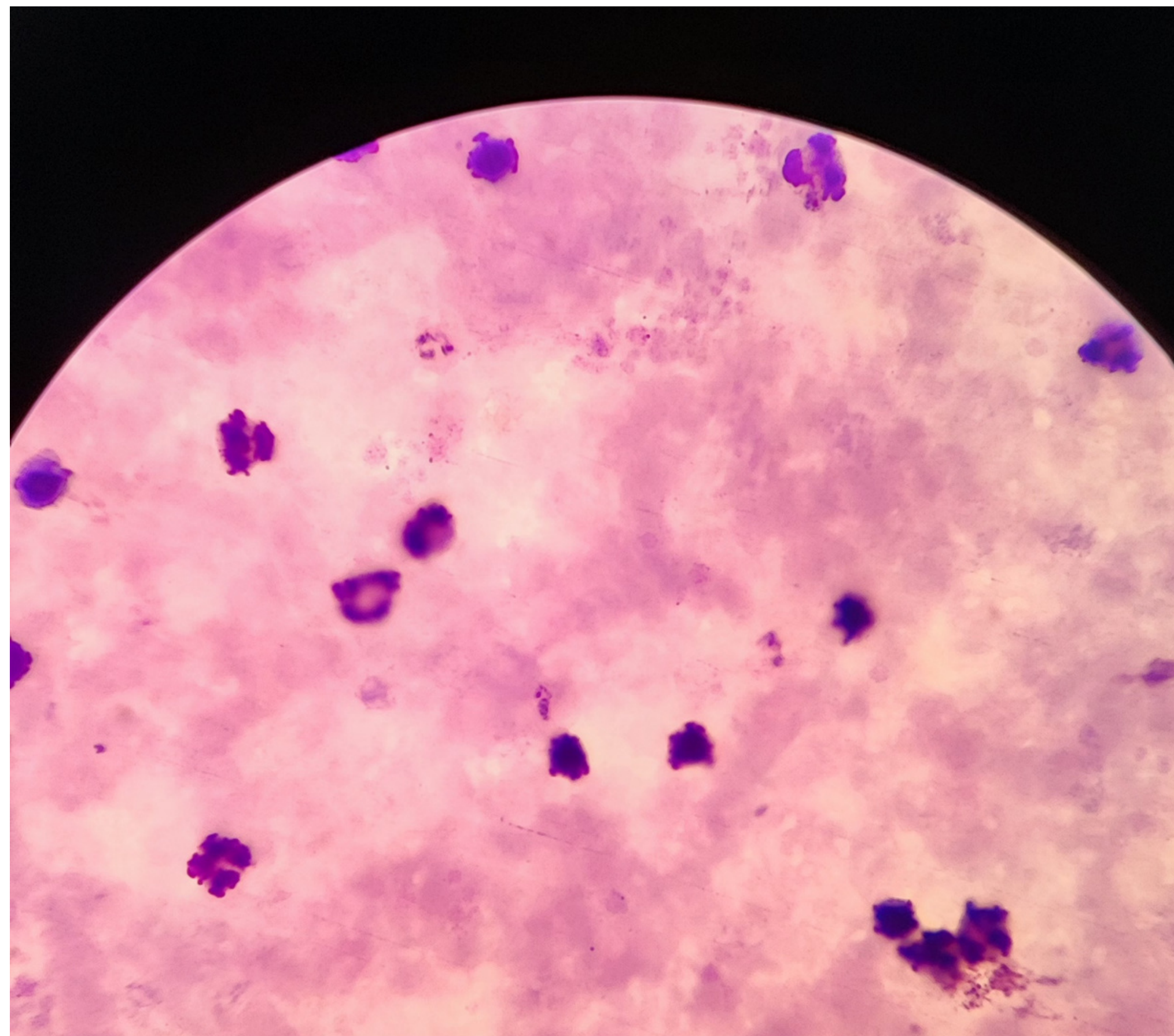
**05** The synergy between Fair Future, Kawan Baik, and local authorities creates a unified force more effective than each entity acting in isolation.



# CONCLUSION

In conclusion, this project has significantly favorable changes in the targeted areas

By controlling malaria, increasing knowledge, providing clean water access, upgrading infrastructure, promoting education, streamlining data collection, empowering the community, and distributing malaria prevention tools, we have collectively improved public health, living conditions, and the overall quality of life in these communities. These achievements demonstrate the power of collaborative efforts and the potential for positive impact when addressing critical issues like malaria and clean water access. We remain committed to furthering these improvements and ensuring the well-being and prosperity of the communities we serve.





# GLOSSARY

## **Ahli Teknologi Laboratorium Medik – ATLM**

Medical Laboratory Technologist

## **ALTOSID® 1.3 GR**

It is an IGR (Insect Growth Regulator) class larvicide to control the malaria vector mosquito Anopheles sp larvae.

## **Annual Parasite Incidence – API**

Is the number of positive malaria cases per thousand population in one year.

## **BENDIOCARB**

s an acutely toxic carbamate insecticide used in public health and agriculture and is effective against a wide range of nuisance and disease vector insects.

## **Cysteine**

It is a non-essential amino acid for making protein and other metabolic functions.

## **DEET**

Diethyltoluamide is the oldest, most effective, and most common active ingredient in commercial insect repellents.

## **Pencegahan dan Pengendalian Penyakit – P2P**

The Directorate General of Disease Prevention and Control (P2P) is a branch of the Indonesian Ministry of Health that manages programs and activities related to preventing and controlling diseases in Indonesia.

## **FICAM® 80 WP**

Contact and gastric poison insecticide in powder with the active ingredient BENDIOCARB 80% can be suspended in white to control Anopheles sp mosquitoes and Musca domestica flies by residual spraying.

## **Giemsa stain**

A classic blood film stain for peripheral blood smears and bone marrow specimens

## **High-Density Polyethylene – HDPE**

It is a thermoplastic polymer produced from the monomer ethylene.

## **Indoor Residual Spraying – IRS**

The process of spraying the inside of dwellings with an insecticide to kill mosquitoes that spread malaria.

## **Insect Growth Regulator – IGR**

An insect growth regulator is a substance that inhibits the life cycle of an insect.

## **Insecticide-Treated mosquito Nets – ITNs**

Form of personal protection that has been shown to reduce malaria illness, severe disease, and death due to malaria in endemic regions.

## **Komando Distrik Militer – KODIM**

Military District Command is a territorial army office covering a City or Regency level.

## **Larviciding**

Process of controlling mosquitoes when they are in the larval or pupal form

## **Methoprene**

Methoprene is an insect growth regulator.

## **Pusat Kesehatan Masyarakat – Puskesmas**

Community Health Centres are government-mandated community health clinics located across Indonesia.

## **Rapid Malaria Diagnostic Tests – RDT**

Group of diagnostics categorized by performance characteristics rather than the specific analyte or test platform.



# SUSTAINABLE DEVELOPMENT GOALS



THE GLOBAL GOALS



## GOOD HEALTH AND WELL-BEING

The project contributes to improving community health by controlling malaria, increasing awareness of health-related issues, and providing access to clean water, which is fundamental to well-being.



## QUALITY EDUCATION

The educational initiatives undertaken by the project contribute to raising awareness about malaria and its prevention, aligning with the goal of providing quality education.



## GENDER EQUALITY

Achieving gender equality and empowering all women, in this project everyone can take a role



## CLEAN WATER AND SANITATION

By installing water facilities and improving infrastructure, the project addresses the need for clean water access, which is a critical component of SDG 6.



## PARTNERSHIPS FOR THE GOALS

The collaborative efforts between various organizations, including Kawan Baik Indonesia and the Fair Future Foundation, demonstrate the importance of partnerships in achieving sustainable development.



# Thank You

Big thanks for your incredible support in uplifting the health and well-being of the East Sumba communities!

**Presented By : KAWAN BAIK INDONESIA FOUNDATION**

