

# Rotarians Against Malaria (RAM) Australia

## Findings from Visit to West Timor February 2020

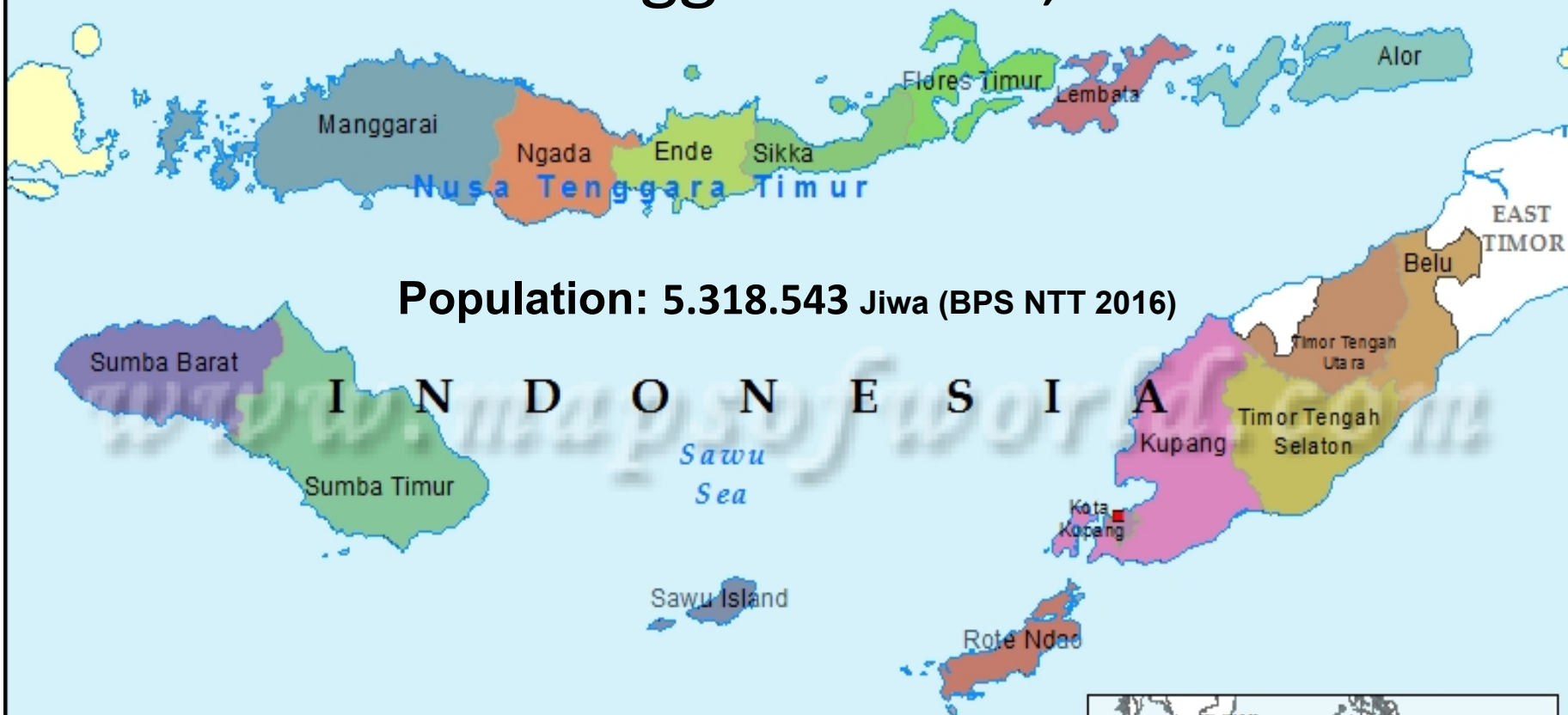




Flores  
Sea

# Nusa Tenggara Timur, Indonesia

Population: 5.318.543 Jiwa (BPS NTT 2016)



## Legend

- Coastline
- Provinsi Boundary
- Provinsi Capital

0 0.4 0.8 1.2 1.6 Meters

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# Meeting with West Timor, Provincial Health Office, NTT province, Indonesia



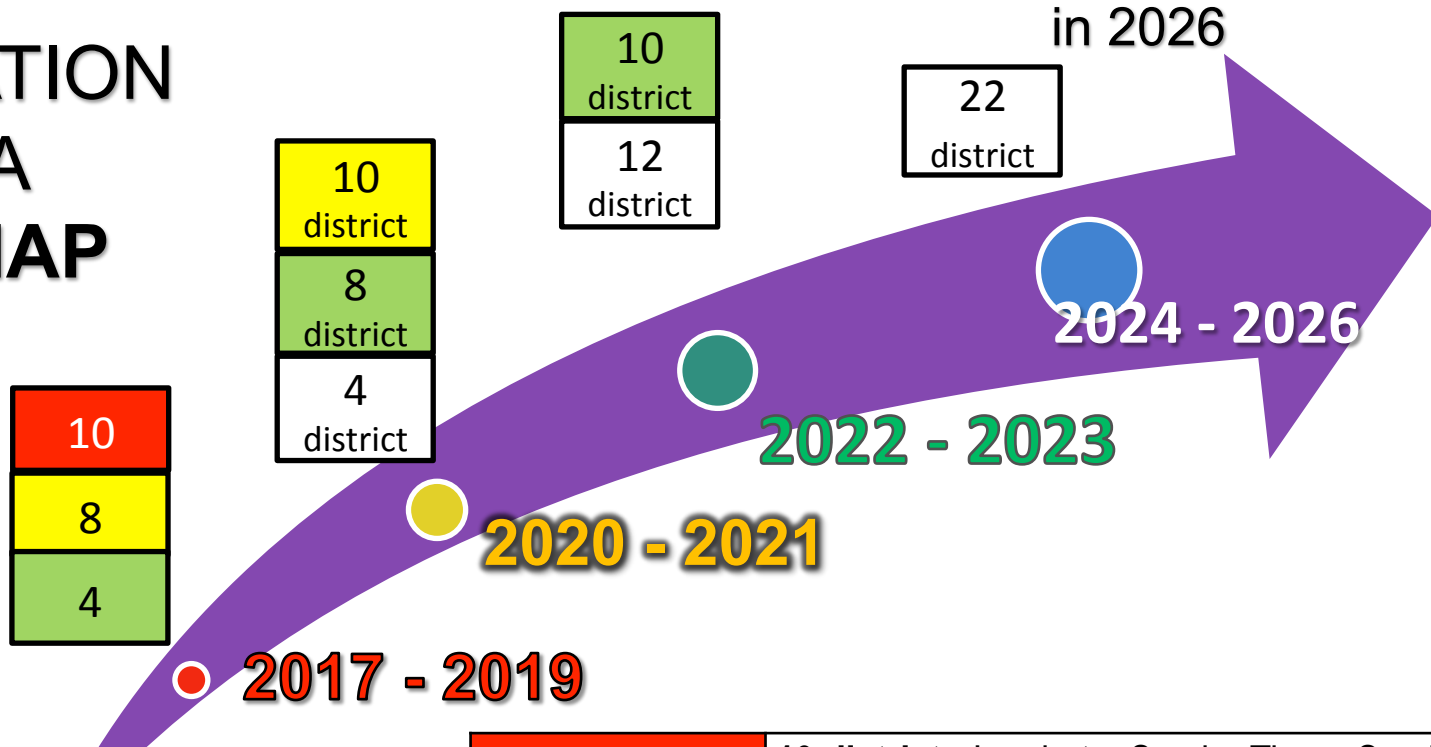
# Malaria in NTT Province

annual parasite incidence (API) per 1,000 at risks population

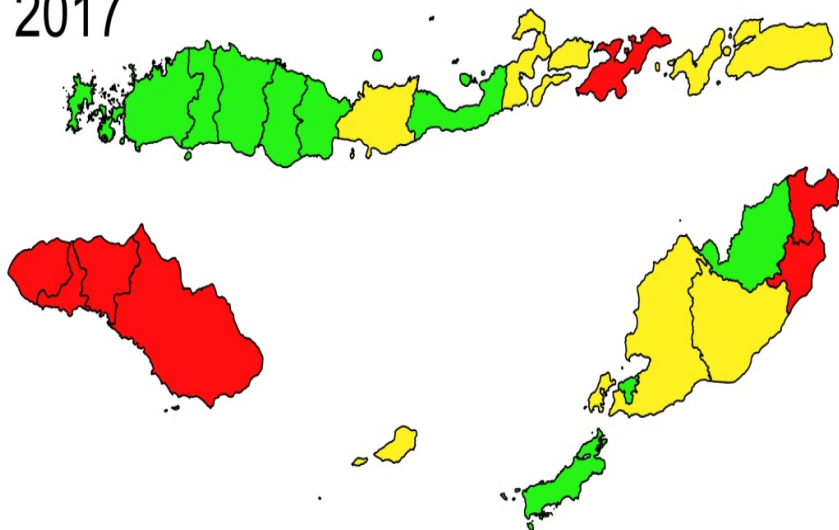
ISLAND	NO. DISTRICT	POPULATION	CASE	% OF TOTAL	API
Sumba	4	831,006	13,809	76	16.62
Alor	1	189,866	907	5.02	4.78
Timor	6	1,422,295	1,703	9.43	1.20
Sabu	1	82,867	146	0.81	1.76
Flores	8	2,486,401	841	4.66	0.34
Rote	1	136,106	62	0.34	0.46
Lembata	1	129,854	585	3.24	4.51
Total	22	5,278,395	18,053	100	3.42

# NTT ELIMINATION MALARIA ROAD MAP

WHO malaria certification  
in 2026



2017



**Acceleration  
stage**

**10 district :** Lembata, Sumba Timur, Sumba Barat Daya, Sumba Tengah, Sumba Barat, **Belu**, Alor ,Ende, Sabu Raijua dan **Malaka**

**Intensification  
Stage**

**8 district :** Timor Tengah Selatan, Flores Timur, Manggarai Barat, Kab. Kupang, Nagekeo, Sikka, Rote Ndao, dan Ngada

**Elimination Stage**

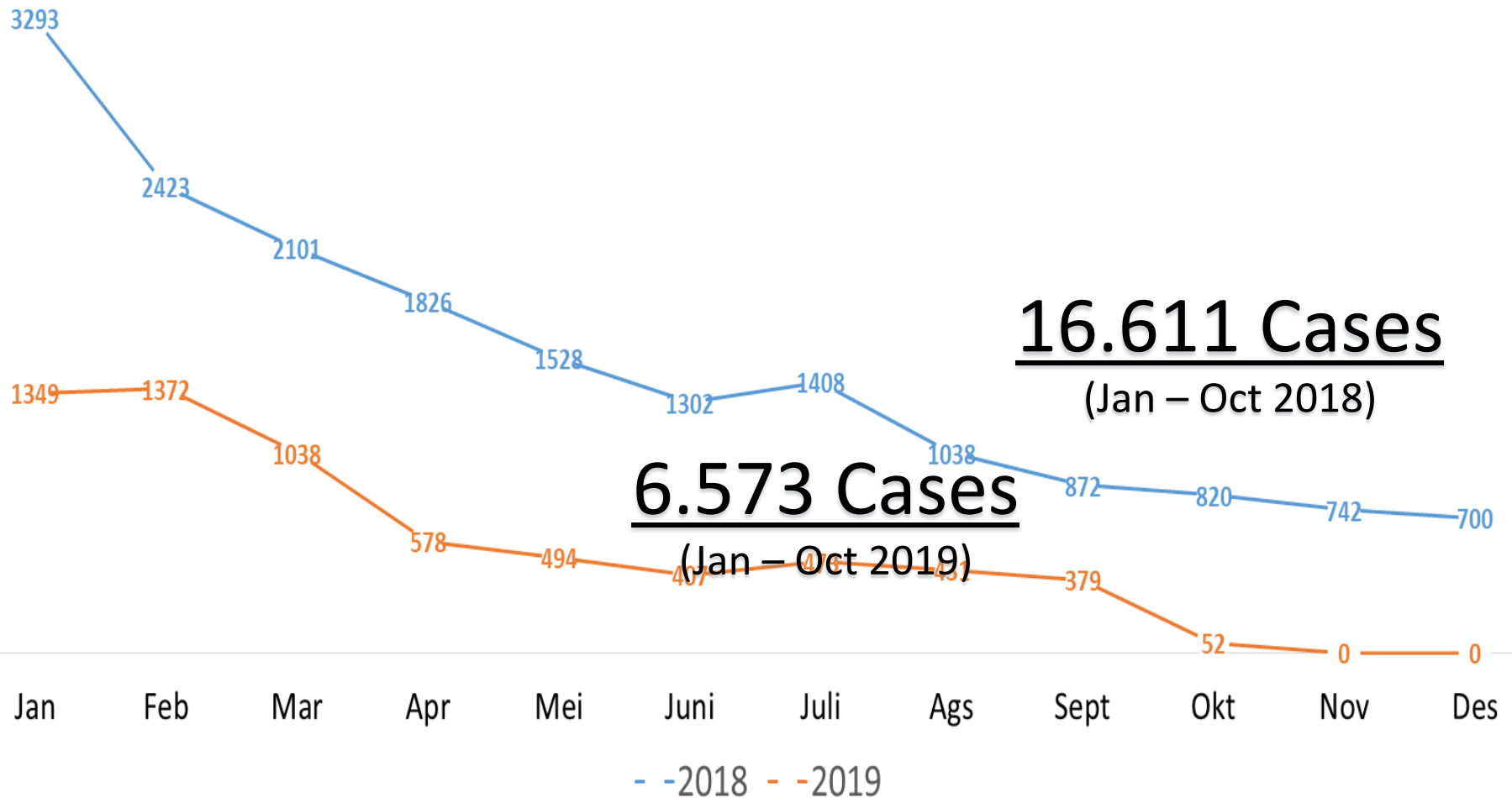
**4 district :** Kota Kupang, Manggarai, Manggarai Timur & **Timur Tengah Utara**,

**Maintenance  
Stage**

All Districts



# Decrease in Malaria cases 2018 and 2019



# Malaria Cases in West Timor, 2019

- Pop 2 Million
- 5 Districts and 1 capital city
- 93 imported cases (mostly Papua)

Positive cases	Annual Parasite incidence	Indigenous	Imported
1,600	0.8 per 1,000	1,507	93

# Locations of Community Assessments

## Districts Malaka & Belu

Two villages per District



West Timor has 2 Million population



# Community Assessment

- A pre-requisite for a Rotary Global Grant Application
- Goal: to eliminate malaria at border districts in West Timor, to protect West and East Timor.
- Purpose of visit: to identify the communities' needs for participation in malaria elimination at the border districts.
- **Two districts** (Malaka and Belu) in West Timor
- Dates: 6 and 13 February 2020.
- RAM team: 5 Rotarians (4 Australians & 1 local)
- Workshops in each District post data collection.
- Results and recommendations presented to the Provincial Health Office on Monday 17 February 2020.

# Acknowledgements of Funding

- Rotary D9830 Grant & RC North Hobart
- Self-funded international travel and hotel in capital cities in Indonesia
- Partnering with RAM allowed sharing of costs – 50% were from RAM

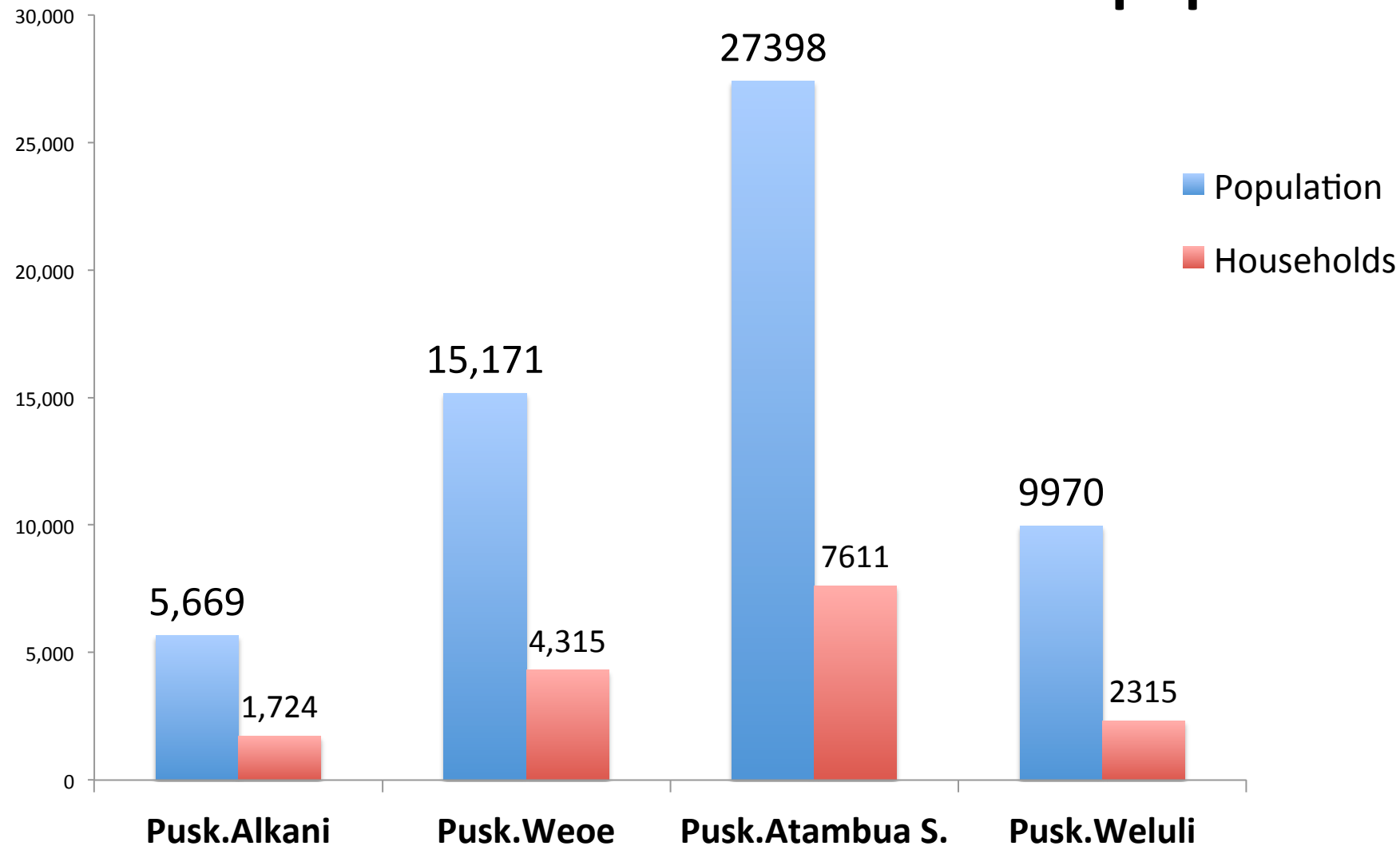
FUNDING SOURCES	AMOUNT
1. District Grant	2,000
2. Rotary Club of North Hobart	1,000
3. Rotarians Against Malaria	3,763
<b>Total Project Income</b>	<b>\$6,763</b>

# West Timor February 2020

## Community Assessment



# 2019 - Puskesmas catchment populations

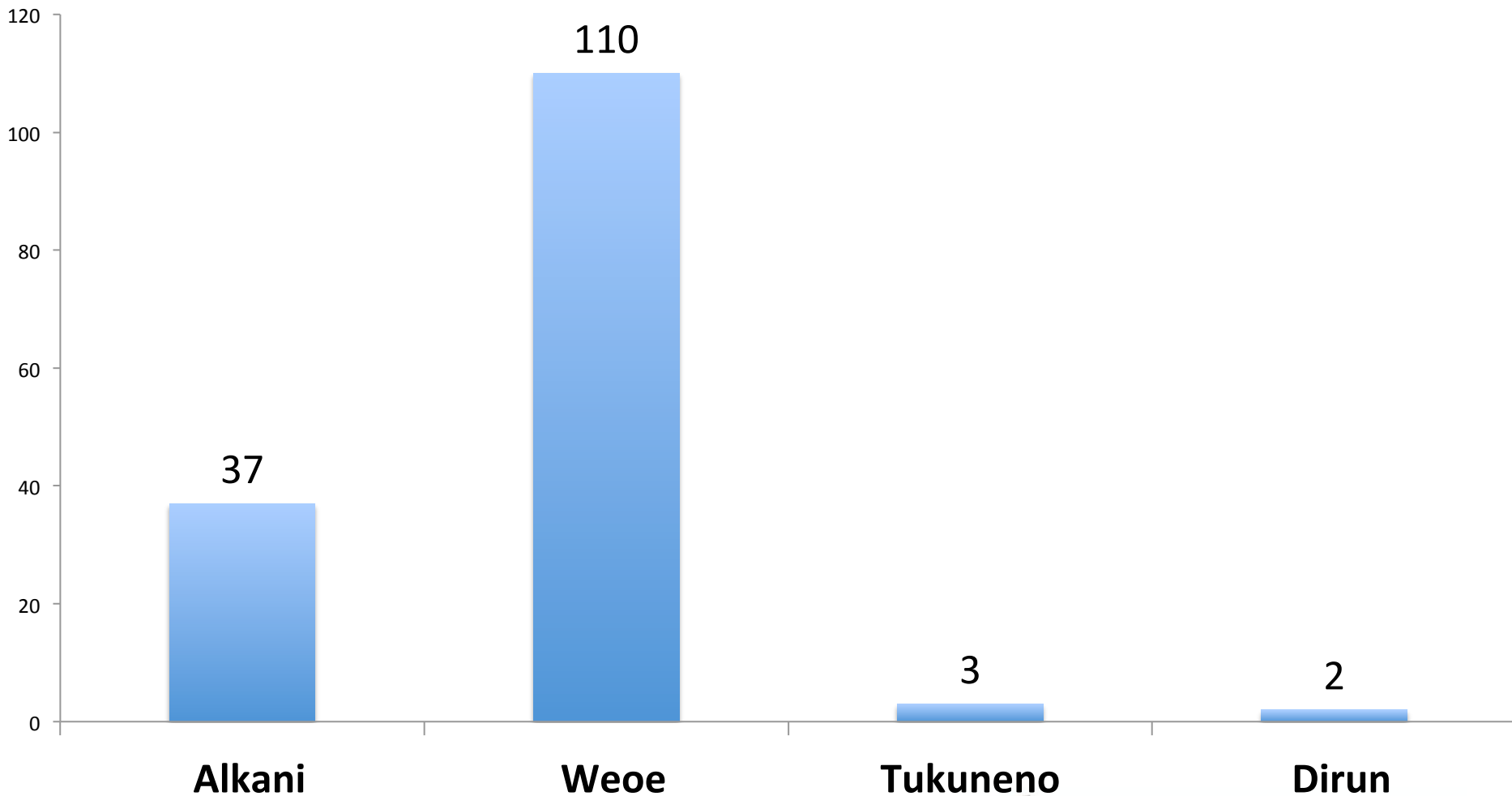


# Number of Participants interviewed = 120

Village	Environment - Heads of Households	Community Leaders & Members	Puskesmas Staff
Alkani	5	21	9
Weoe	4	9	9
Tukuneno	5	16	5
Dirun	5	26	6
<b>Total</b>	<b>19</b>	<b>72</b>	<b>29</b>



# 2019 - Malaria Cases in Villages Malaka & Belu





# Findings: Malaria Prevention

- All consultations confirmed the same activities for malaria prevention:
  - Long Lasting Insecticidal Nets (LLINs)
  - Indoor Residual Spraying (IRS)
  - Mosquito breeding sites
  - Information

# Findings: Many health issues in the Built Environment

No. of Village	Type of House	Water Supply	Bath / Toilet	Garbage	Inhouse water storage
4 Villages visited	Majority semi-permanent	Bores, Dug wells, & springs	Majority outside	Household wastes disposed in Backyard - burned. Animal wastes create water swamping	60% covered (n=20 houses)





Stagnant water  
Desa Weoe, Malaka





Outside kitchen – exposure to malaria mosquitoes at night





Many houses  
are of sticks  
and straw

# Findings: Malaria Prevention in Houses – many nets need replacing

Village	Houses seen	Sleeping under LLINs	LLINs Access	LLINs Condition	IRS
Alkani	5	72% (n = 21)	Mass	17% damaged (n=12)	All houses
Weoe	5	65% (n=24)	Mass	3% (n=35) damaged	No houses Fogging outside after confirmed case
Tukuneno	5	100% (n=29)	Mass	None (n=14) damaged	All houses
Dirun	5	81% (n=22)	Mass	29% (n=14) damaged	1 of 5 houses





# Demonstrating use of bed net





# Conclusions:

## Community Identified Needs

- Sanitation – proper toilets for each house
- Water supply
- Cleaner and safer environment
- Information and education
- LLINs (Long lasting insecticidal nets)
- Early diagnosis for all fever cases
- Follow-up after treatment (Desa Weoe)
- More Malaria Cadre in villages

# Conclusions from Community Visits

- The enthusiasm and local knowledge of the people could be used to help with malaria elimination in the villages.
- The Built Environment puts communities at high risk for malaria.
- Accurate planning and procurement are needed at all service levels.
- Missed opportunities for prevention, early diagnosis and treatment.
- Staff changes lead to lack of experience in malaria program; staff gaps.
- Intersectoral and cross border collaboration are opportunities to accelerate malaria elimination.

# District Workshop Recommendations:

## “Prevent, Diagnose, Treat & Track”

- Pilot Malaria Post run by Village Health Volunteers (Cadres) (focus on breeding sites)
- Training of Cadres in community engagement (Malaka)
- Capacity building for malaria staff (medical, environmental health, community engagement)
- Procure print and video media

# District Workshop Recommendations:

## Equipment requirements

1. Nets for houses at the Timor Leste border
2. Larvicides
3. Indoor Residual Sprayers and personal protection equipment
4. RDTs for the Harbour health services
5. Microscopes (Malaka only)
6. In Malaka District
  - Fix bore in Desa Weoe – an immediate need
  - Government to improve water supply & sanitation



# Post Community Assessment

- 26 June 2020 – A Rotary Global Grant Application was submitted for USD125,350
- Project for training, 10,000 nets, 15,000 RDTs
- Funding sources:
  - International Partner: RC Hillary's D9455
  - Host Partner: RC Kupang Central D3420
  - RAM donated: AUD70,000
  - District Designated Funds (DDF): 3420, D9455, 9465, 9830, 9710.
  - Rotary clubs Queanbeyan, 19 clubs from D9420

Next step:  
Rotary Global Grant Planning for 2022  
Universal access to nets Project  
“one net one sleeping place”

Bed net is a proven method to protect  
individuals and decrease community-wide  
malaria transmission



# Thank you

