Towards Malaria Elimination in Indonesia

Executive Board Meeting, ACT MALARIA

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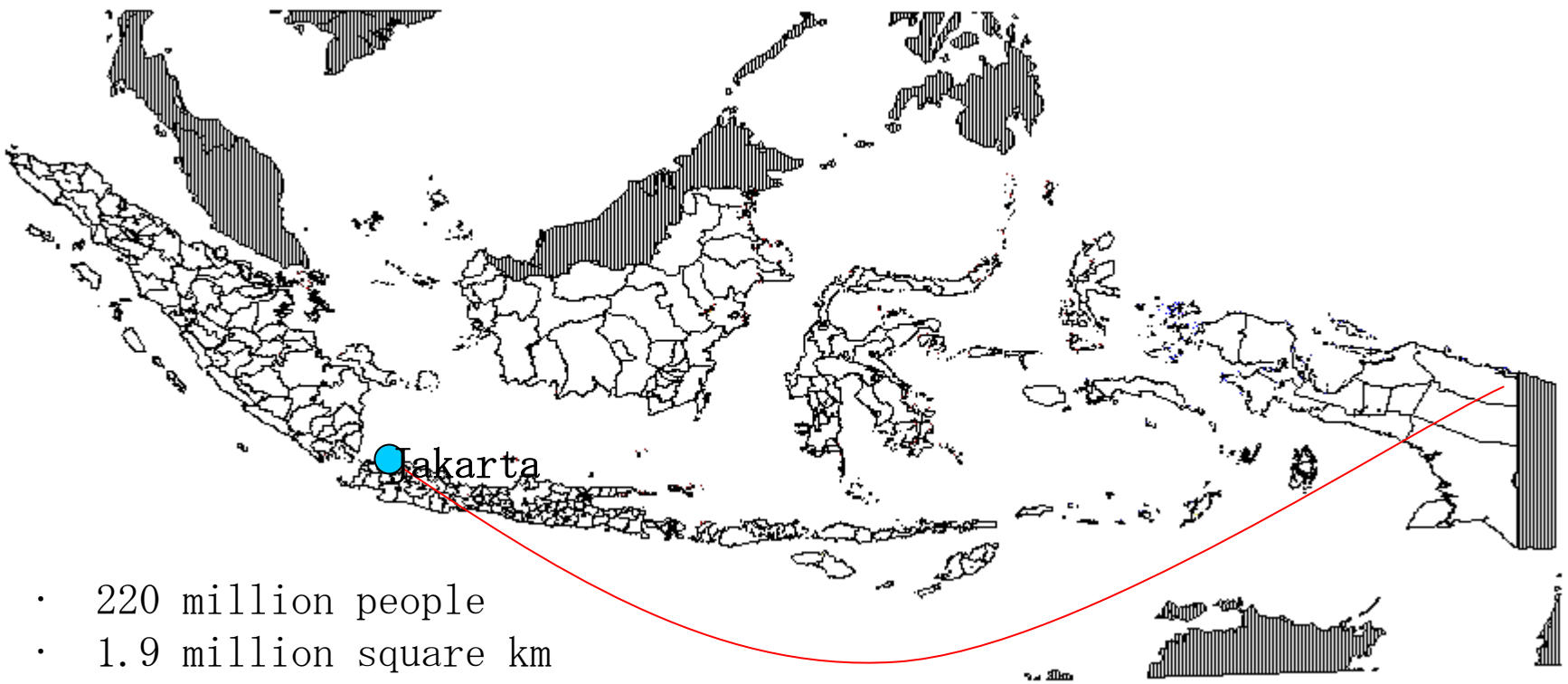
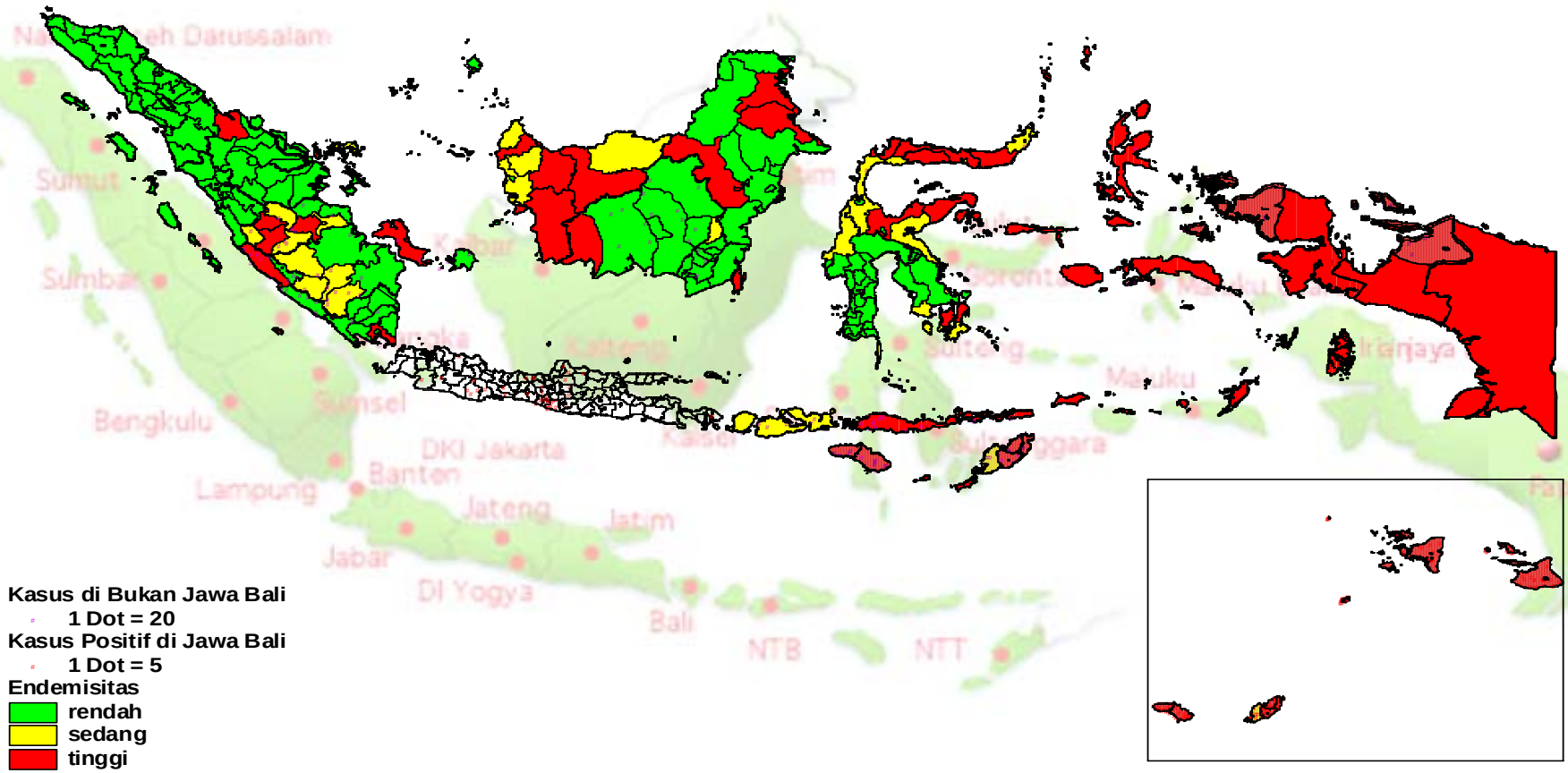
VIENTIENE, 16 – 18th March 2009

Indonesia : COUNTRY IN BRIEF

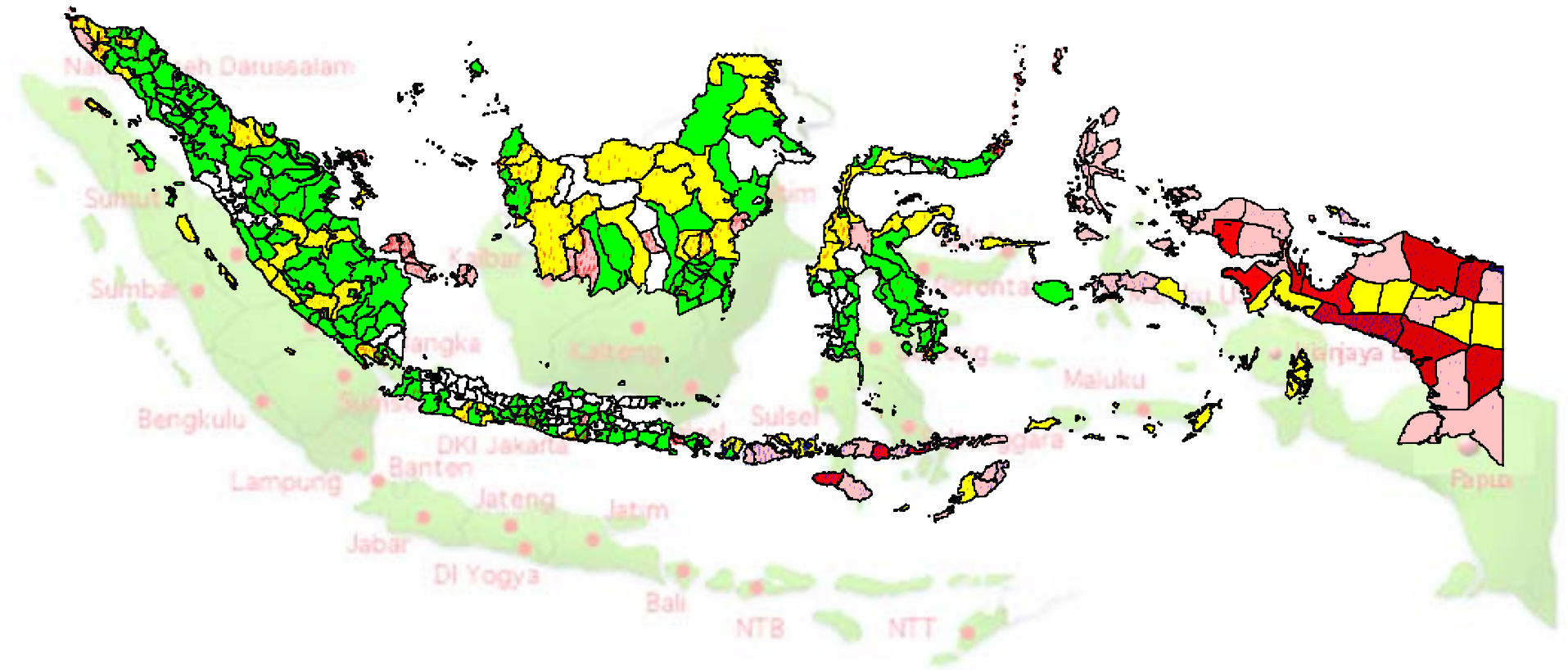


- 220 million people
- 1.9 million square km
- 33 provinces
- 471 districts
- 17,000 islands (transportation includes flight, road, boat)
- cultural diversity
- since 2003 shifting to decentralized system

MALARIA INCIDENCE IN INDONESIA
2005



PETA ENDEMIS MALARIA DI INDONESIA
TAHUN 2007



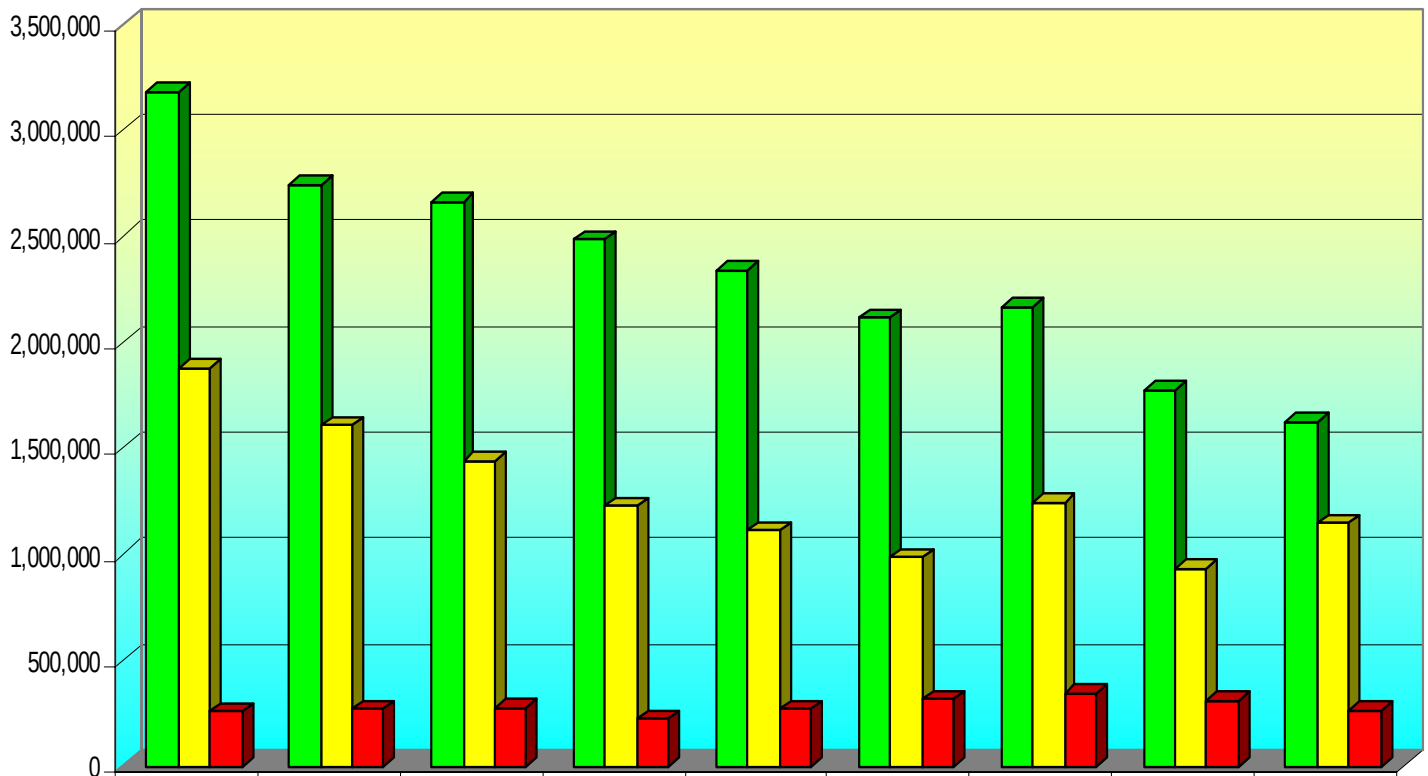
API o/oo

0	0-1	1-5	5-49	50-100	> 100
Free	Low	Moderate		High	

1 dot = 50 Kasus

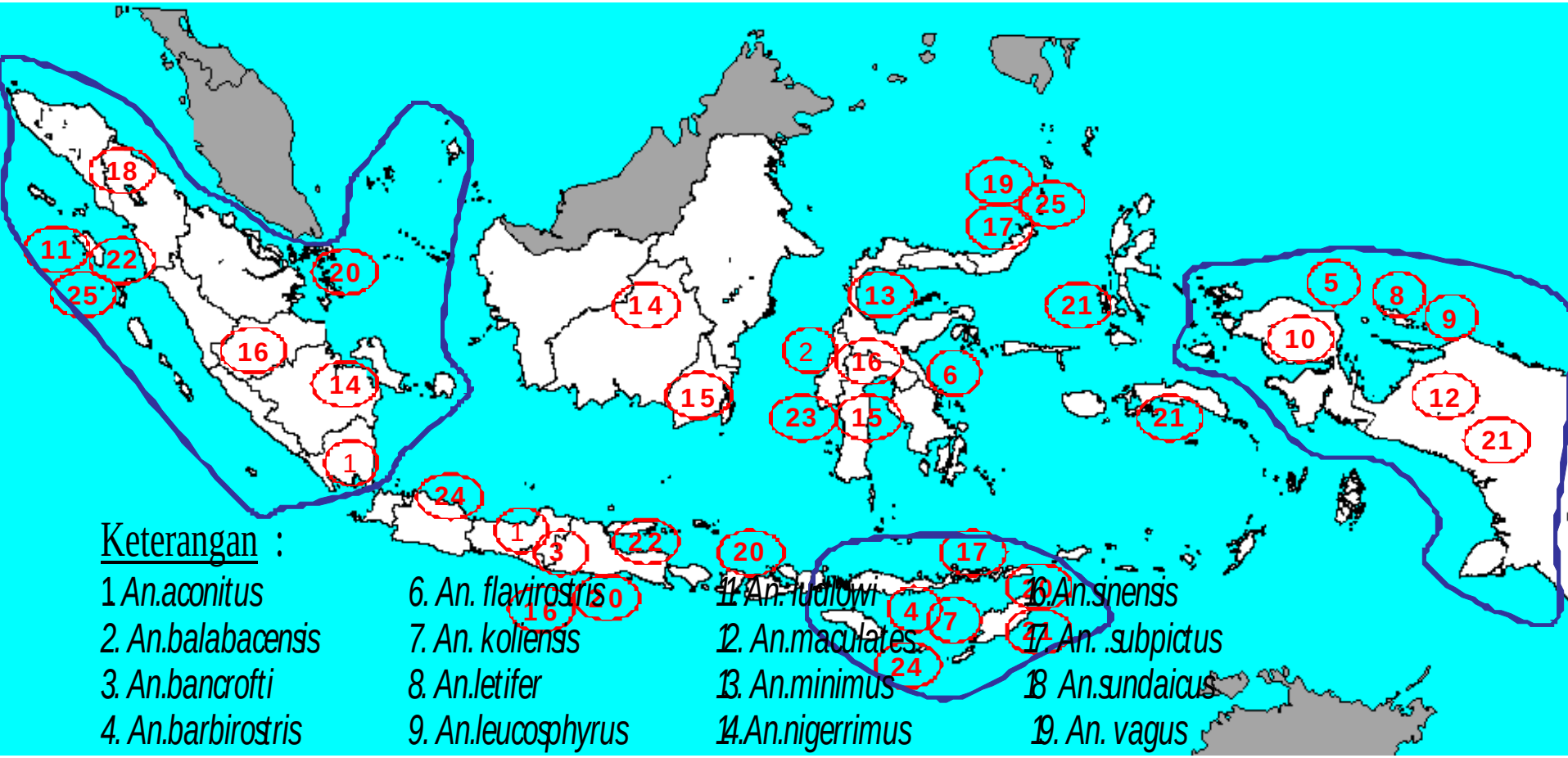
1 dot = 250 kasus

Malaria Cases in Indonesia 2000-2008



	2000	2001	2002	2003	2004	2005	2006	2007	2008
Malaria Klinis	3,178,212	2,737,927	2,660,674	2,482,906	2,335,585	2,113,265	2,167,028	1,774,845	1,624,930
Spesimen Darah Diperiksa	1,880,418	1,604,573	1,440,302	1,224,232	1,109,801	982,828	1,246,324	930,029	1,145,087
Kasus Positif	256993	267,592	273,793	223,074	268,852	315,394	347,597	311,789	266,277

VECTOR MALARIA IN INDONESIA



Keterangan :

1 *An.aconitus*
2. *An.balabacensis*
3. *An.bancrofti*
4. *An.barbirostris*
5. *An.farauti*
6. *An. flavirostris*
7. *An. koliensis*
8. *An.letifer*
9. *An.leucosphyrus*
10. *An.karwari*
11 *An.ludlowi*
12. *An.maculates*
13. *An.minimus*
14 *An.nigerrimus*
15. *An.punctulatus*
16 *An.sinensis*
17. *An. subpictus*
18 *An.sundaicus*
19. *An. vagus*
20. *An. umbrosus*
21 *An.tessellatus*
22. *An.parangensis*
23 *An. kochi*
24 *An.ludlowi*
25 *An.annullaris*

OBJECTIVES : Indonesia

1. By the year 2010 be able **to decrease** all HCI areas (villages with malaria positive ≥ 5 per 1000 pop) **by 50 %**

2. In year 2010 all districts and cities able to conduct **confirmation** of malaria suspected cases and 100% treat with **ACT**
3. In year 2010 all Indonesia's endemic areas conduct intensification and integration in malaria control.
4. By the year 2010 begin elimination of malaria in stepwise by Islands

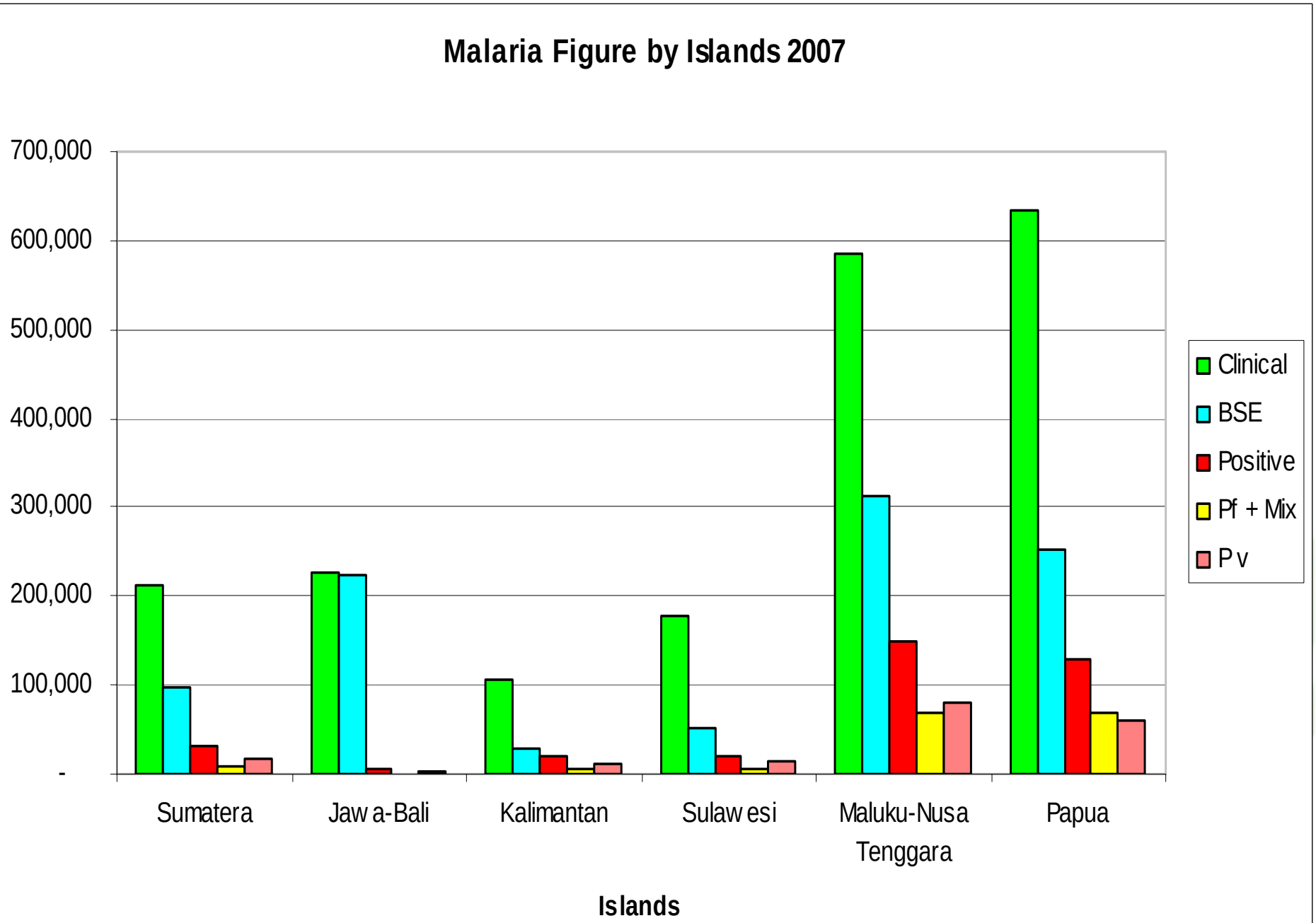
OBJECTIVES :ELIMINATION

1. Elimination in DKI, Bali, Batam: 2010

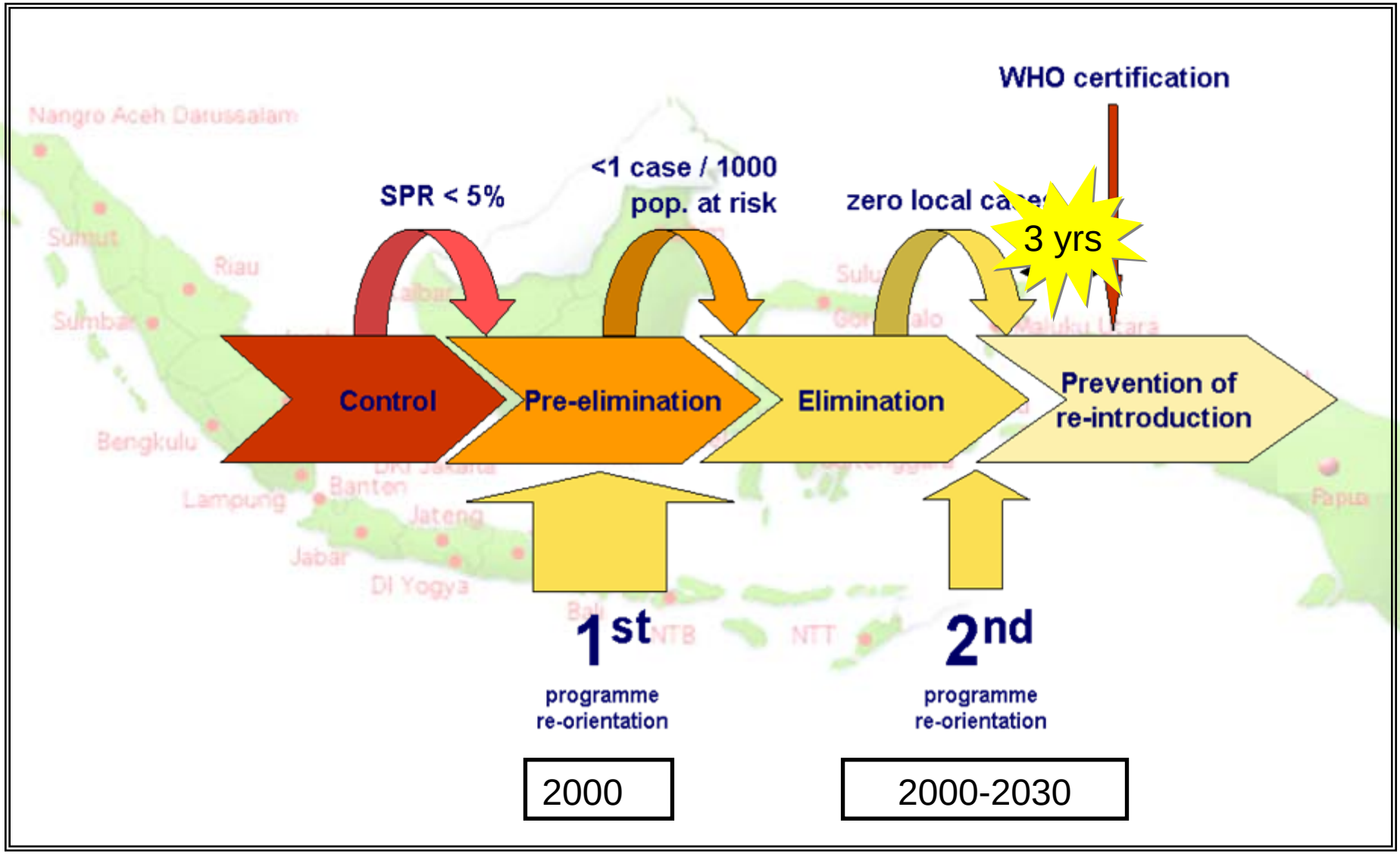
2. Elimination in Jawa and Aceh : 2015

3. Elimination in Sumatra, NTB, Kalimantan, Sulawesi: 2020

4.Elimination in Papua, WestPapua, Maluku,, NTT, North Maluku : 2030


Malaria Figure by Islands 2007
700,000
600,000
500,000
400,000
300,000
200,000
100,000
-
Sumatera
Jaw a-Bali
Kalimantan
Sulaw esi
Maluku-Nusa Tenggara
Papua
Islands
Clinical
BSE
Positive
Pf + Mix
P v

Indonesia : Steps towards elimination



Indonesia : Elimination

CONTROL PHASE :

-No or limited confirmation activities, limited microscopist.

- Diagnosis :Clinical Malaria

-Predominantly Plasmodium falciparum

-Weak in surveillance , outbreak often occur and late in control it -→ prevalence still high, SPR > 5 %

-PRE ELIMINATION

- Good confirmation activities

-Good surveillance activities, towards the zero transmission (indigenous)

-API < 1 / 1000 population at village level

Intervention towards Elimination

- Confirmation of all malaria cases by quality malaria microscopy
- Full coverage by effective antimalarial drugs given free of charge
- Total coverage by IRS the main prevention measure in active foci (coverage >85%)
- Use LLN as prevention and vector control
- Strong malaria information system covering all health facilities including community surveillance
- Surveillance system to classify all cases and all foci with their present functional status (in real time)
- Active case detection
- Geographical reconnaissance

ACTIVITIES

- Trainings
- Active case detection (MBS. MFS).
- Case management: diagnosis and treatment.
- Vector control/IVM (IRS and LLIN).
- Village Malaria Posts with Village Mal Cadres.
- Procurement of laboratory facilities (Microscope and RDT) laboratory supplies , LLIN and ACT.
- Advocacy : RBM forum , partnership NGO's , Private, expert organization

Indonesia: SCALLING UP

Integration and Intensification of Malaria Control Activities.

- Mass Blood Survey
- Malaria treatment and bednet distribution to pregnant women.
- Malaria treatment and Bednet distribution during immunization program.
- Bednet distribution during Mass Drug Administration for Fillariasis control program and conduct mass campaign.
- Establishment of Village Malaria Posts

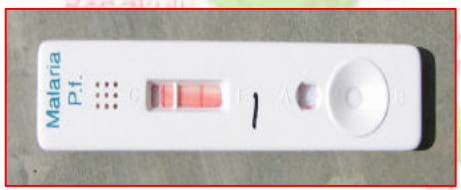


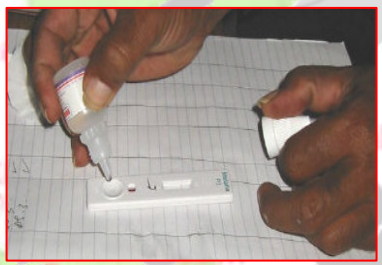

MALARIA DRUG RESISTENT IN INDONESIA,

1978 - 2005

POLICIES

I. Diagnosis must be confirm by microscope or Rapid Diagnostic Test





STOP CLINICAL MALARIA

POLICIES

II. TREATMENT

Artemisinin-based Combination Therapy (ACT)

STOP MONOTHERAPY

POLICIES

III. PREVENTION : use LLIN ,IRS , repellent etc.

Policies

IV. Intersectoral collaboaration in RBM forum.

Policies

V. Community participation through strengthening the Village Malaria Post and Village Malaria Cadre/volunteers.

PKK Kabupaten Banjarnegara Peserta Paduan Suara Lagu "Gebrak Malaria"

Indonesia : ACHIEVEMENT IN PILOT DISTRICT

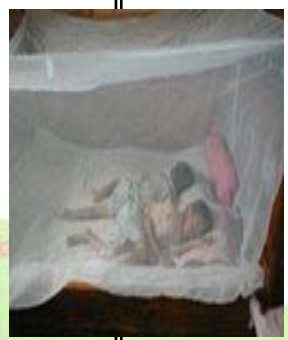
- 897 midwives out of 1034 has been trained and equiped in 2007. (86.7%)
- 38,688 new pregnant women out of 49,371 received LLIN when visiting ANC in 2007. (78.8%)
- 16,736 new pregnant women out of 32,786 screened for malaria (51%)

Indonesia: Success Story 1: Integrated Bed Nets Campaign (MOH –UNICEF)

Intervention : distribution of Long Lasting Insecticide Bed Nets Campaign in Sumatra







Integration with measles, Polio, and Vit A (24 Districts in Sumatra), with Vit A (6 Districts in Sumatra), with Vit A and Sprinkles (Sikka), with filariasis (Keerom and Merauke), purely bednet campaign in NAD.

Indonesia : Success story : Continued

-In total 3,8 million nets were distributed

-Achievement in Sumatra (rapid assessment 1 month after campaign) :

- -% HH who has 1 or more ITNs, increased from 2.2% (2/91) before the campaign to 94.5% (86/91) after the campaign.
- -But the % ITNs that was used/hanged = 44.8% (64/143)
- -% children under five years of age who slept using ITN increased from 1.9% (2/106) to 51% (54/106) after the campaign

-Figures from other districts were more or less similar

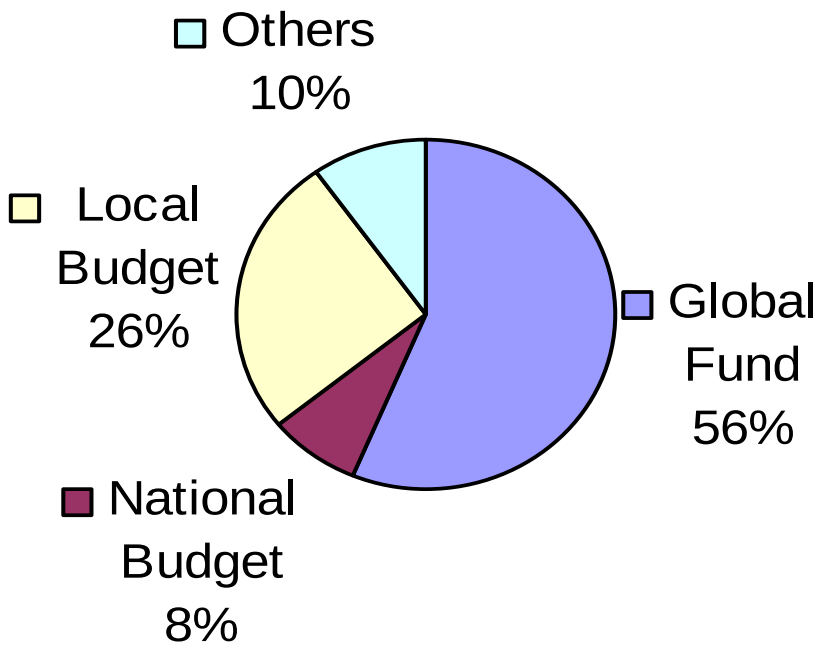
-Benefit for other program was noted and appreciated (high coverage of EPI, nutrition, and mass drug administration of filariasis)

Success story 2 : Vector control program through community mobilization

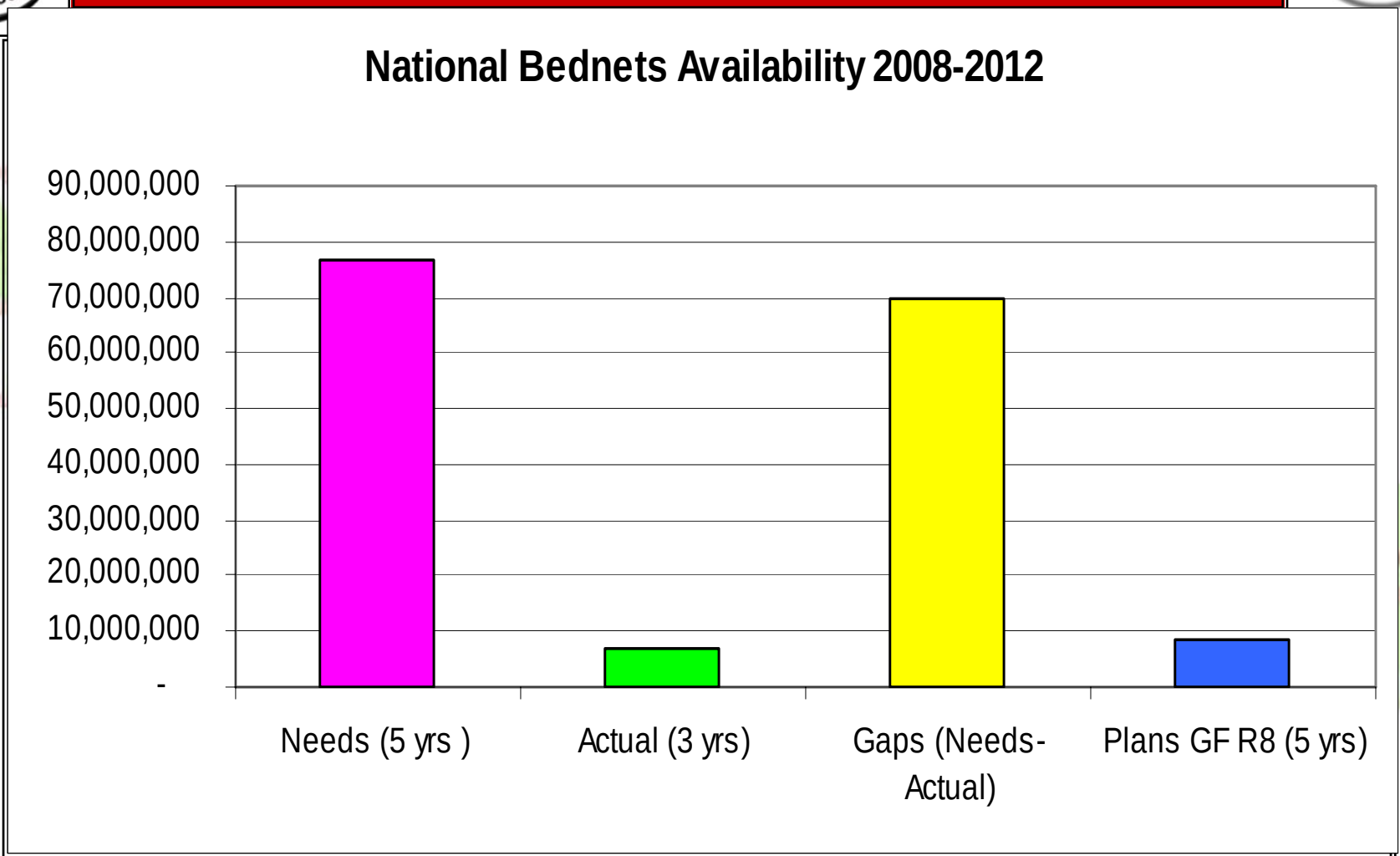
Intervention : Community based vector control, using PLA (Participatory Learning and Action) approach/Mr. Bangkit (workshop management of vector control programs, Cambodia, August 2008).

Achievement : together with Sub Dit Vector/Mr. Winarno, WHO, PHO, and DHO develop training and activities in the villages in South Halmahera

Indonesia : FUNDING



Indonesia : F U N D I N G needed



Indonesia : Challenges

- Lack of access to health facilities in very remote areas and hard to reach islands.
- Inequality of health development (Java VS Outer Java).
- Limitation of adequate Malaria Human Resources mostly microscopist & entomologist (Ms. Hasni & Ms. Melvinawati, both are participants from strengthening training in Malaria microscopy & quality assurance in Philippines, Sept 2008)
- Environmental changes relates to increasing of mosquito breeding places
- Limited Operational research

Indonesia : Challenges

1. Quality of midwives performing RDT needs to be closely evaluated and improved

2. Poor distribution of health workers (midwives) in remote places (in this setting, IPT needed?)

Indonesia : Challenges & opportunities

1. Expansion to 101 district for malaria in pregnancy and 70 district for integration of routine EPI is huge and will need strong technical capacity and strong collaboration to have good quality program.

2. Expansion will need to be continued beyond GF funding.

3. Campaign is effective to reduce malaria in most endemic area, though, expensive.

4. Most malaria endemic area are remote and difficult to reach, logistic and coverage is a challenge


`THANK YOU
Terima kasih