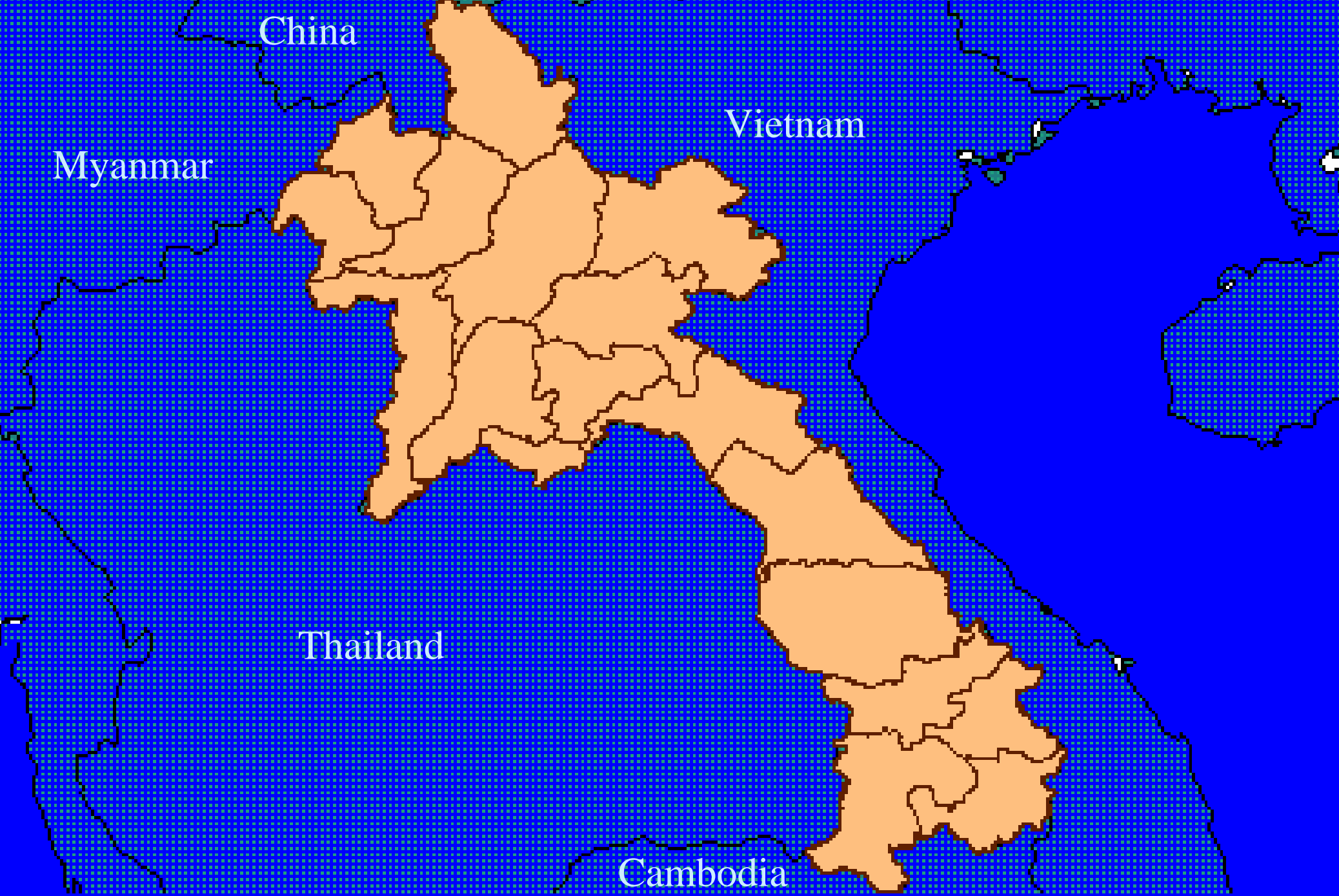




Malaria Control in LAO PDR

By Dr Bouasy Hongvanthong and Dr Rattanaxay Phetsouvanh
Centre of Malariology, Parasitology and
Entomology



China

Myanmar

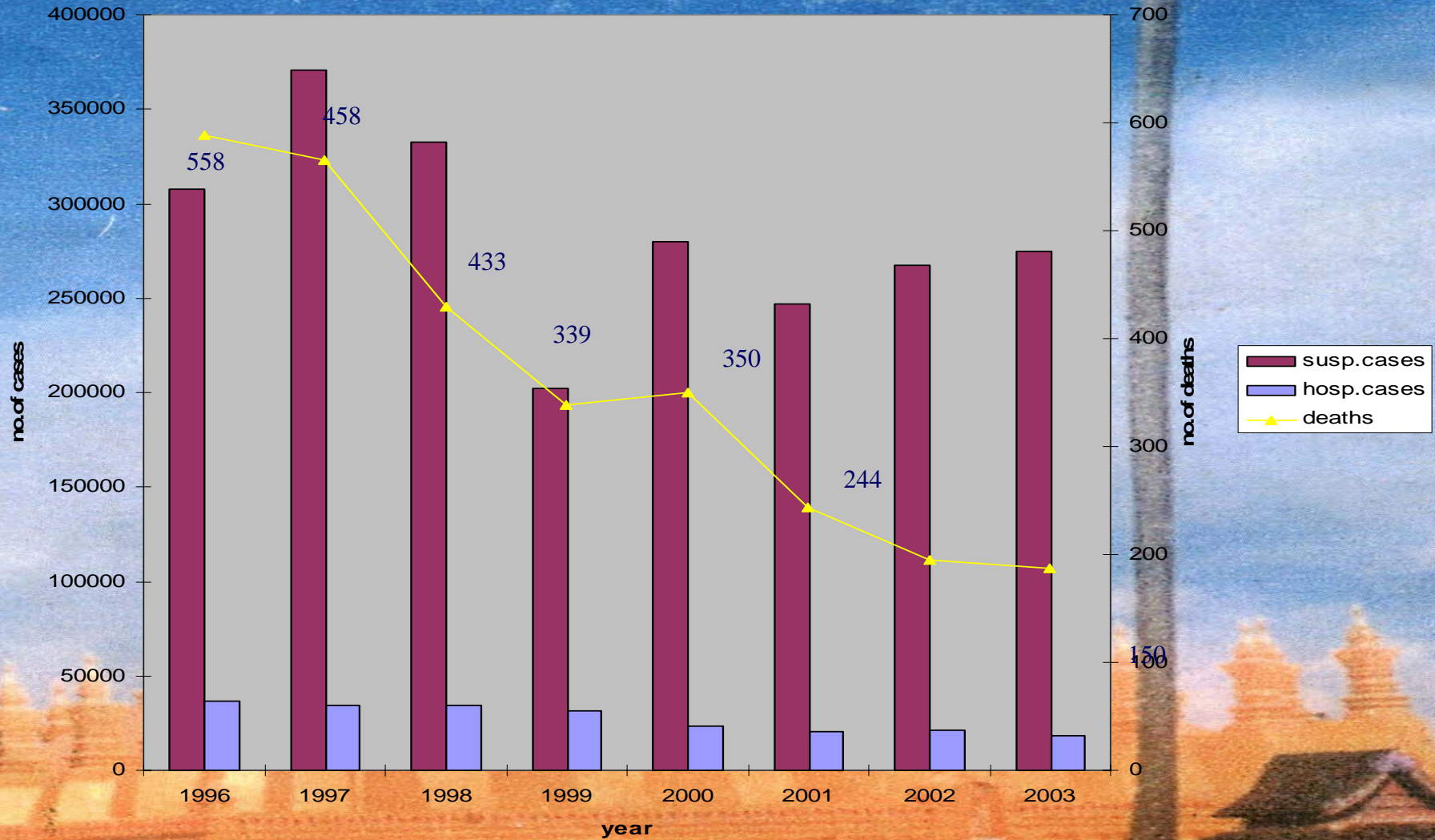
Thailand

Vietnam

Cambodia

Overall malaria situation

Trend of malaria situation in Laos from 1996-2003



Malaria transmission

The background of the slide is a photograph of a large, ornate golden pagoda, likely the Shwedagon Pagoda in Yangon, Myanmar. The pagoda is illuminated with warm, golden light, and its intricate details are visible against a clear blue sky. A tall, thin palm tree trunk is visible on the right side of the image, extending from the bottom to the top.

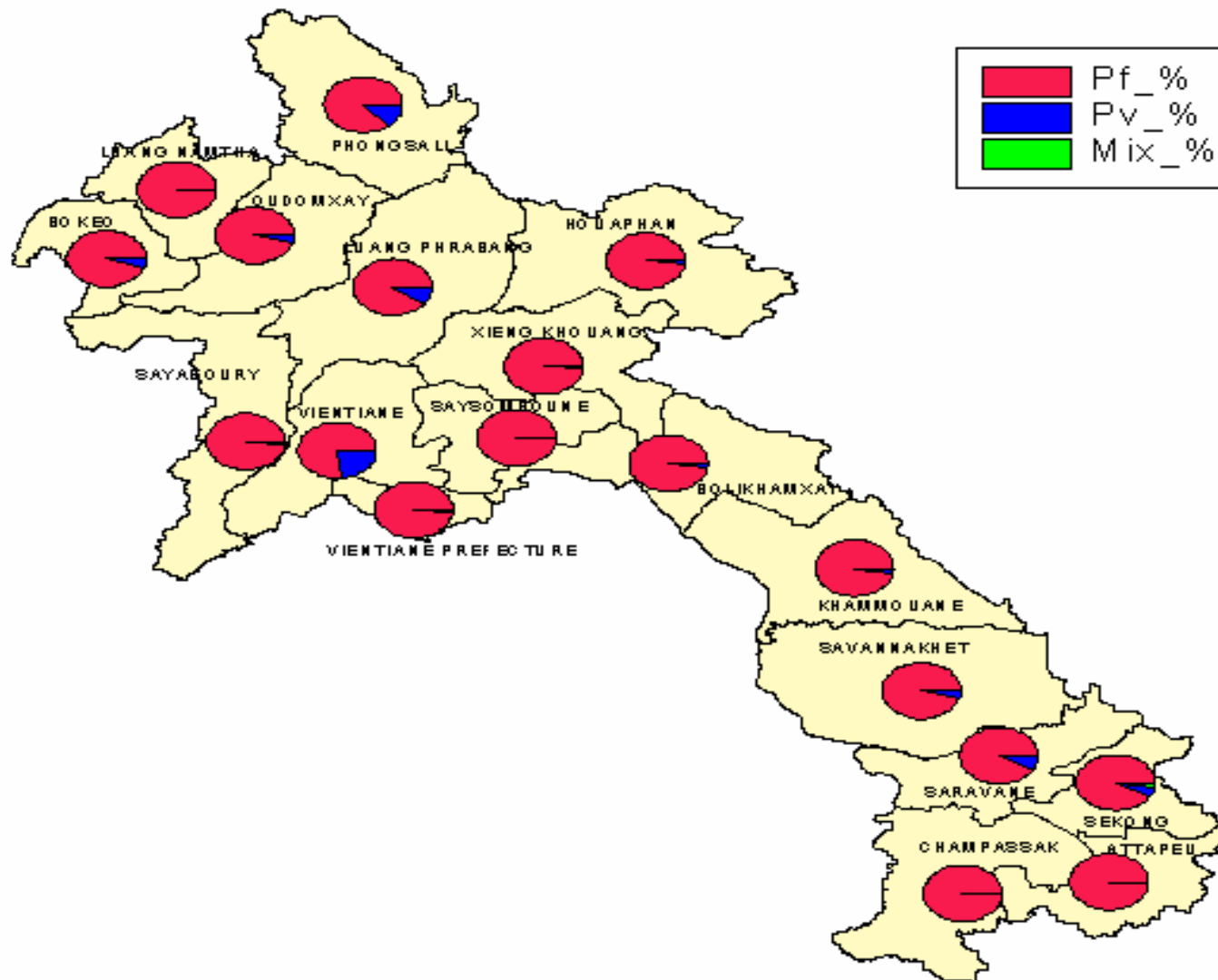
■ Malaria species:

- *P.falciparum*:95%
- *P.vivax*:4%
- *P.malariae*:0.8%
- *P.ovale*:0.2%

■ Malaria vectors:

- *An.dirus*
- *An.minimus*
- *An.maculatus*
- *An.jeyporiensis*

Distribution of Malaria parasites species in Laos



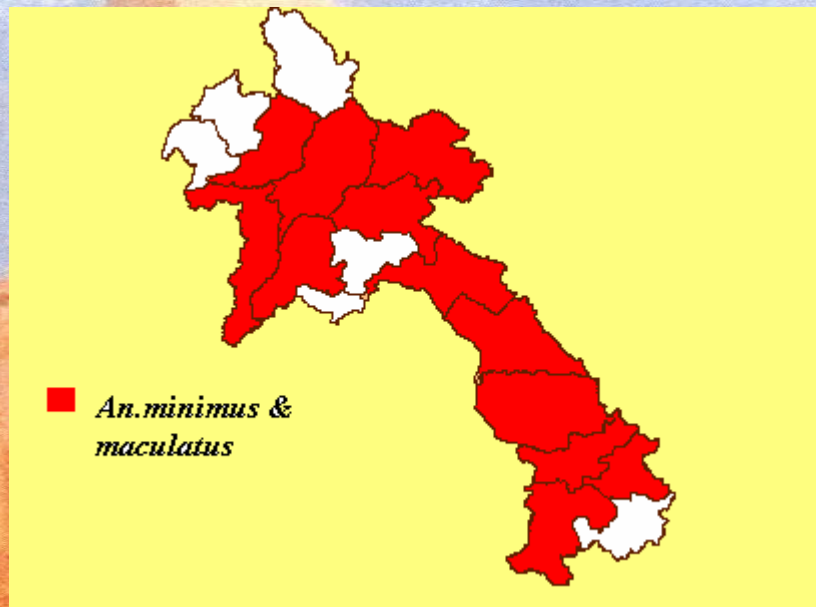
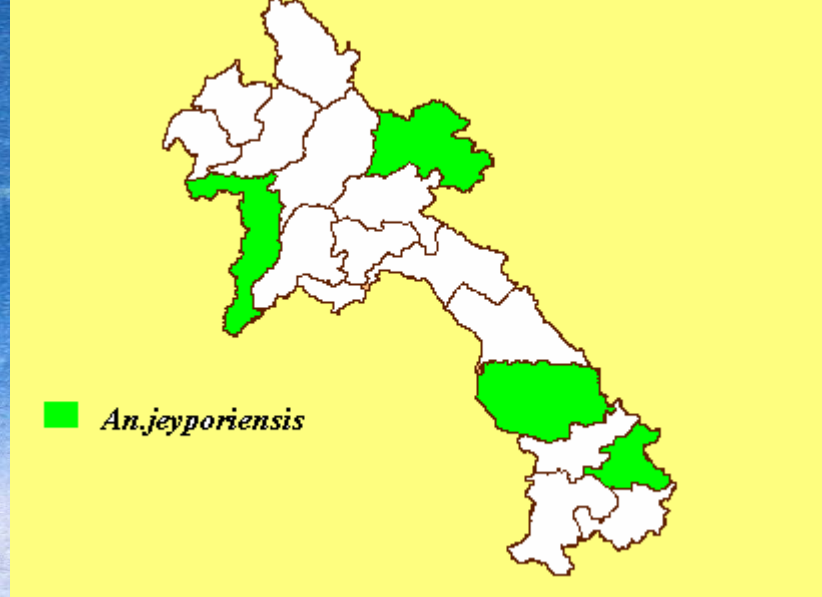
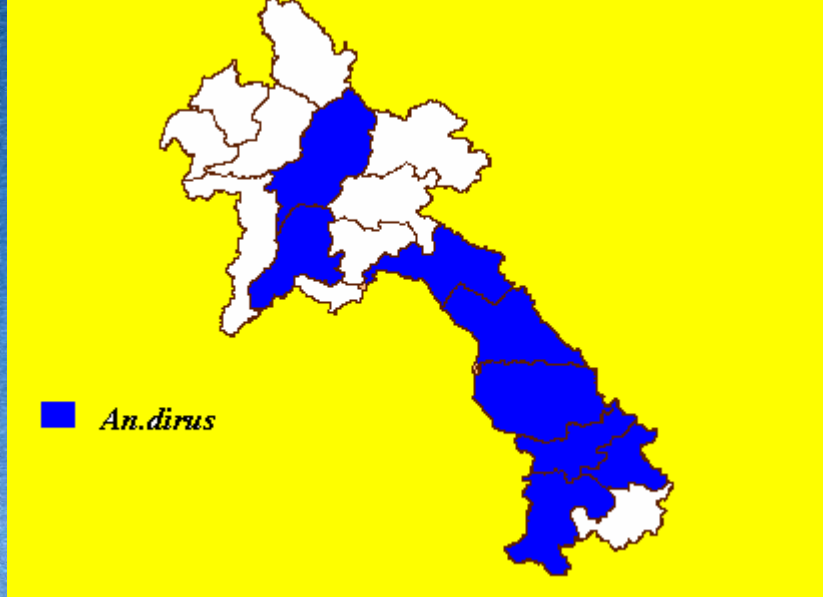
Current drug resistance situation

■ 1998-2001:

- 32-53% of failure to CQ (42/14 days) in VP, SK, ATP, SVK, LN
- 15-18% of failure to SP (14/42 days) in ATP, SVK
- 17-23% of failure to CQ+SP (14 days) in ATP
- 100% efficacy to mefloquine (14 days) in ATP

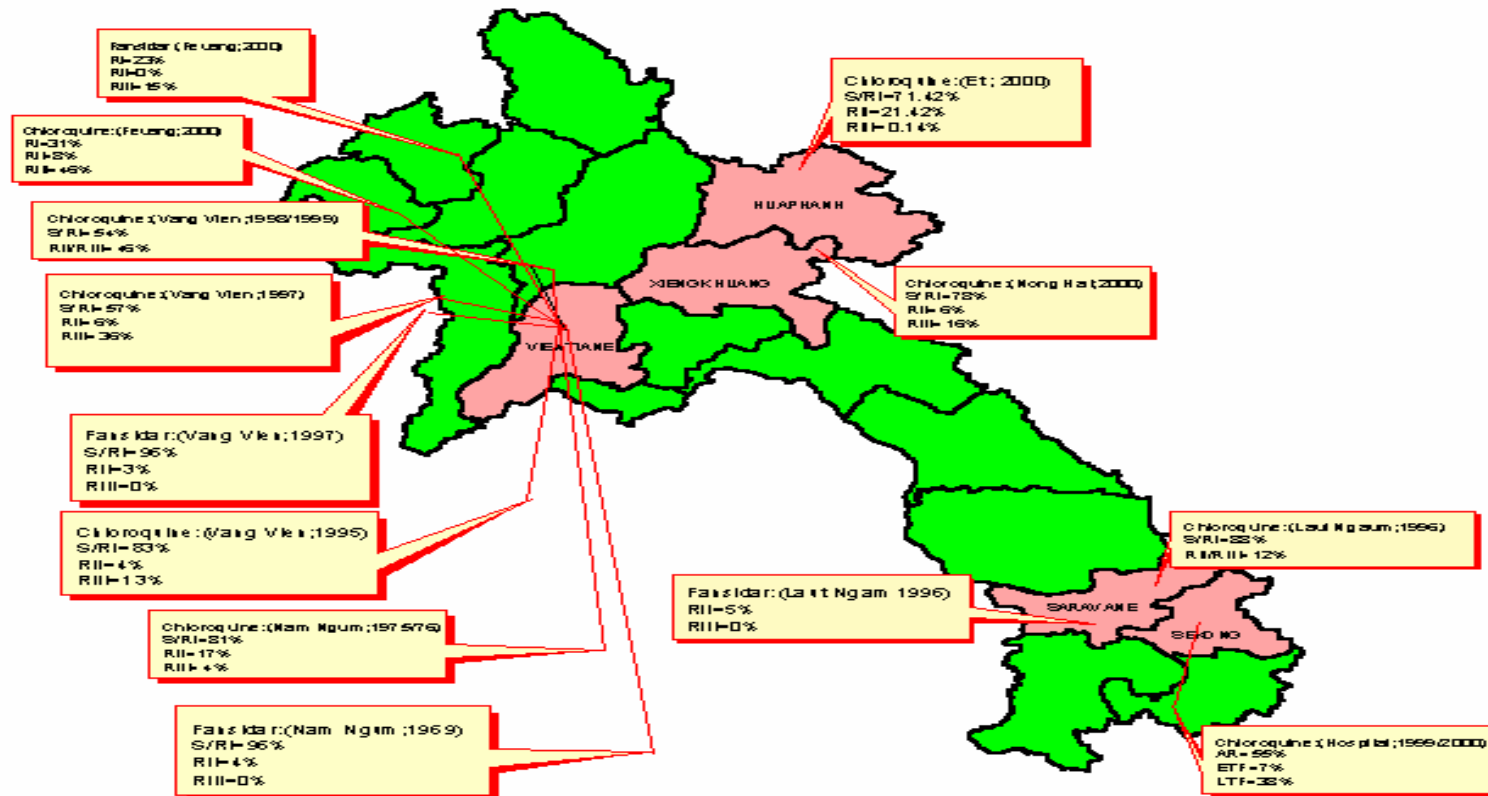
■ 2002-2003:

- 55% of failure to CQ (14 days) in CPS
- 11.1% of failure to SP (14 days) in CPS
- 8% of failure to CQ+SP (42 days) in SVK
- 97% efficacy for Coartem[®] (42 days) in SVK
- 100% efficacy for A+M (42 days) in SVK

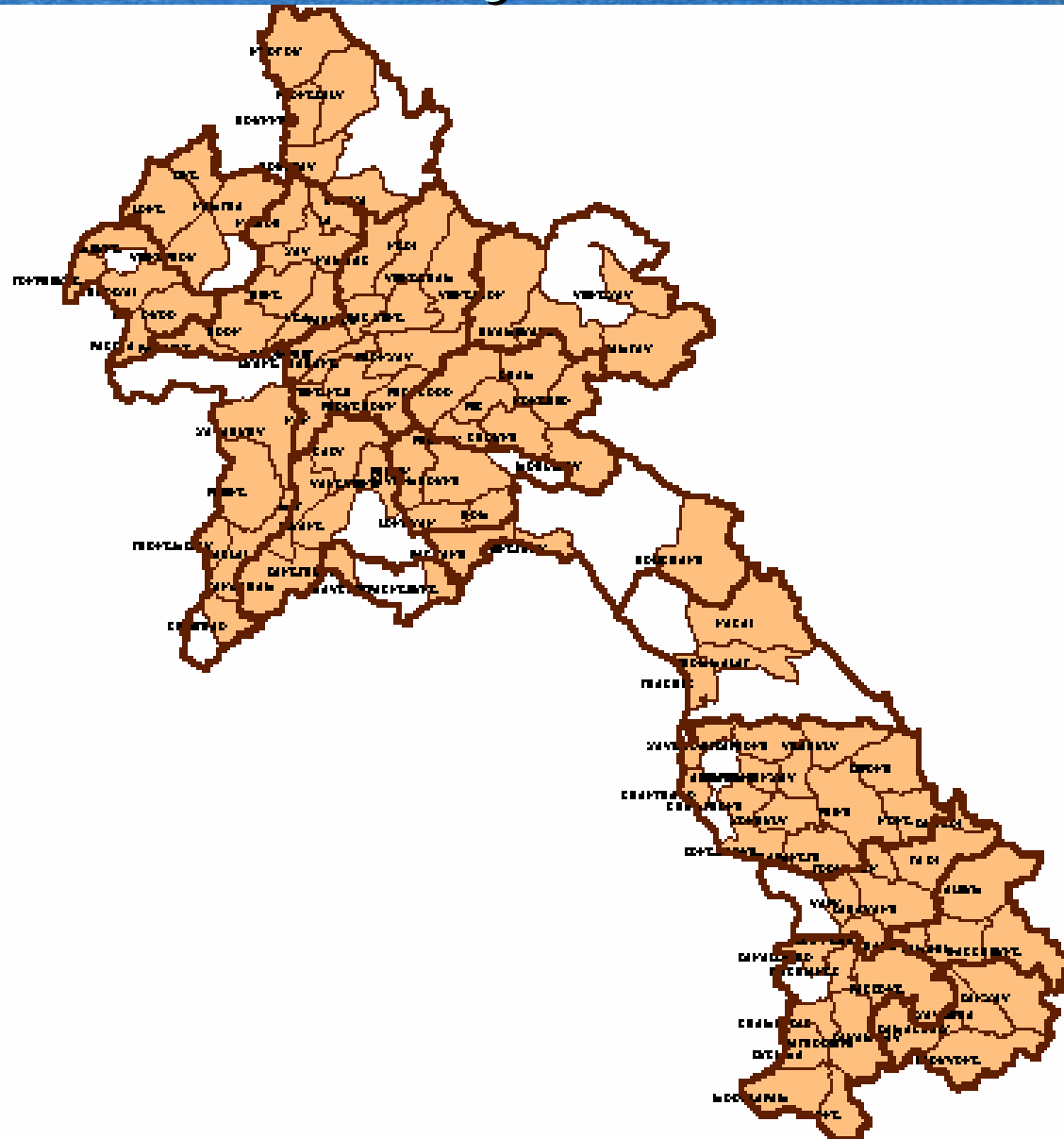


Distribution of malaria main vectors in Lao PDR.

Results of studies on drug resistance in selected areas of Laos



Districts covered by IBN in Laos in 2002



Coverage of impregnated bed net from 1999-2001

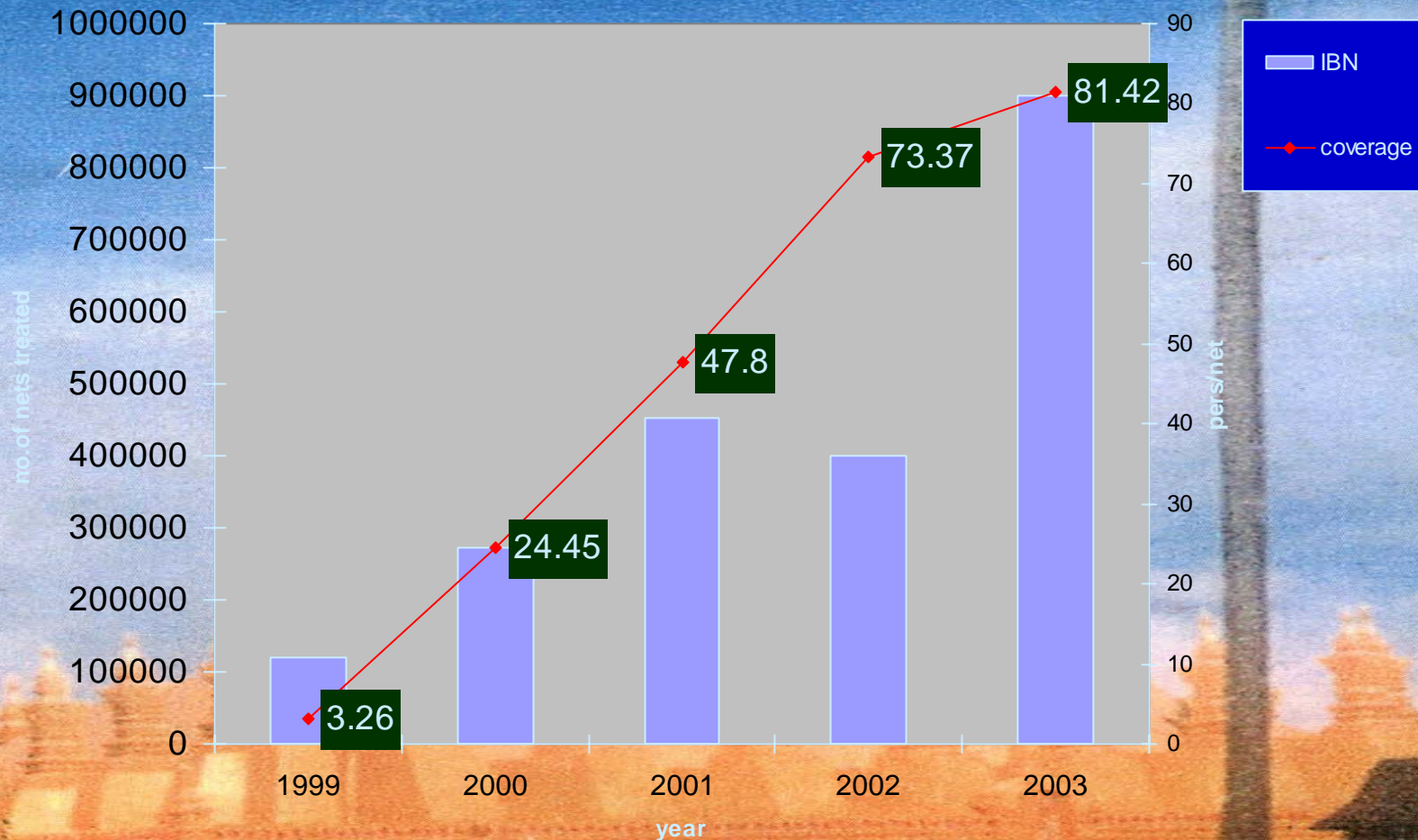


Table. 1 INDICATORS (Malaria Control Programme in Lao PDR) 2000 -2020.

Indicators	2000	2001	2002	2003	2004	2005	2010	2015	2020
N. of dipped nets	354,097	836,303	902,226	1,010,000	1,110,000	1,250,000	œ	œ	œ
N. of pop. protected by IBN	1,249,452	1,252,776	2,255,565	2,700,000	3,300,000	3,850,000	œ	œ	œ
N. of Malaria hospitalized cases	20,530	18,000	15,000	13,000	11,000	9,000	6,500	4,500	2,500
Slide Positive Rate (%) SPR	16.5	16.00	15.5	14.8	14.00	13.5	12.0	10.5	7.50
Morbidity Rate (/ 1,000)	27.0	25.00	22.5	15.00	13.60	12.84	5.73	3.00	2.31
Mortality Rate (/ 100,000)	6.7	5.60	5.00	4.00	3.00	3.4	2.4	2.0	1.6

Remark : Pop.Growth Rate= 2.5% / year, Pop. at risk = 75% .

MALARIA VECTOR CONTROL IBN COVERAGE (end of 2003)

(Insecticide: Deltamethrin 1% SC)

- **PROVINCES :** 17 + 01 (Special zone)
- **DISTRICTS :** 129
- **VILLAGES :** 6,853
- **POPULATION :** 2,353,797
- **TOTAL DIPPED NETS:** 899,480
- **COVERAGE RATE (Target villages):** 68.48 %
- **COVERAGE RATE (Target population):** 81.42 %
- **COVERAGE RATE (Population at risk):** 47.8 %?

Future trend of NMCP in Lao PDR

- GFATM starts from May 2003 first at small scale then expand nationwide
- Funds collected from IBN would be used to continue the IBN activities until new assistance arrive.



Thank You for Your Attention!

