Eliminating Neglected Tropical Diseases in the South-East Asia Region

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About the WHO South-East Asia Region…

- Home to 25% of world's population and 45% of world's poor
- Six of 14 million deaths due to communicable diseases; an interplay by socioeconomic, ecological and behavioural factors
- At least half a billion people with poverty suffer from NTDs, e.g leprosy, lymphatic filariasis, yaws ,visceral leishmaniasis
- High economic and social costs
- Many NTDs are targetted for elimination

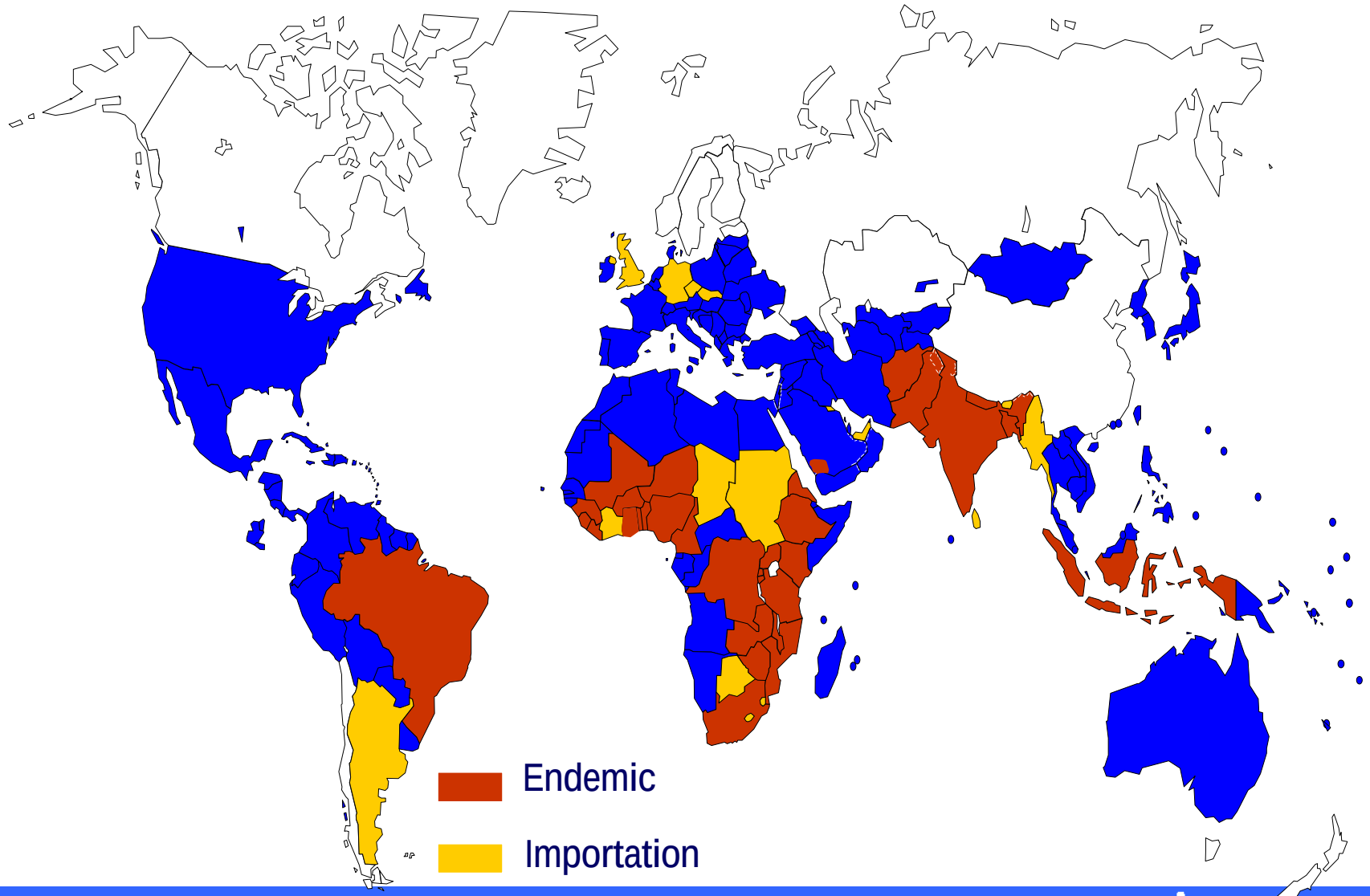
Rationale for disease elimination/eradication

- Focuses attention on a priority public health need
- Time-bound programme; saves considerable amount of money
- Can dramatically reduce burden of disease and deaths
- Benefits broad spectrum of public health

World Health Assembly resolutions, 1947- 2010

- 1947 PAHO adopts proposal for eradication of *A.aegypti* from Americas
- 1954 Yaws eradication goal declared by WHO
- 1955 8th WHA adopts goal of malaria eradication
- 1958 11th WHA adopts goal of smallpox eradication
- 1986 39th WHA declares goal of guinea worm eradication
- 1988 41st WHA declares goal of global polio eradication by 2000
- 1991 44th WHA resolution on leprosy elimination by 2000
- 1997 50th WHA resolution on elimination of LF by 2020
- 2010 63rd WHA declares goal of measles eradication by 2015

Smallpox: endemic in 31 countries, 1967

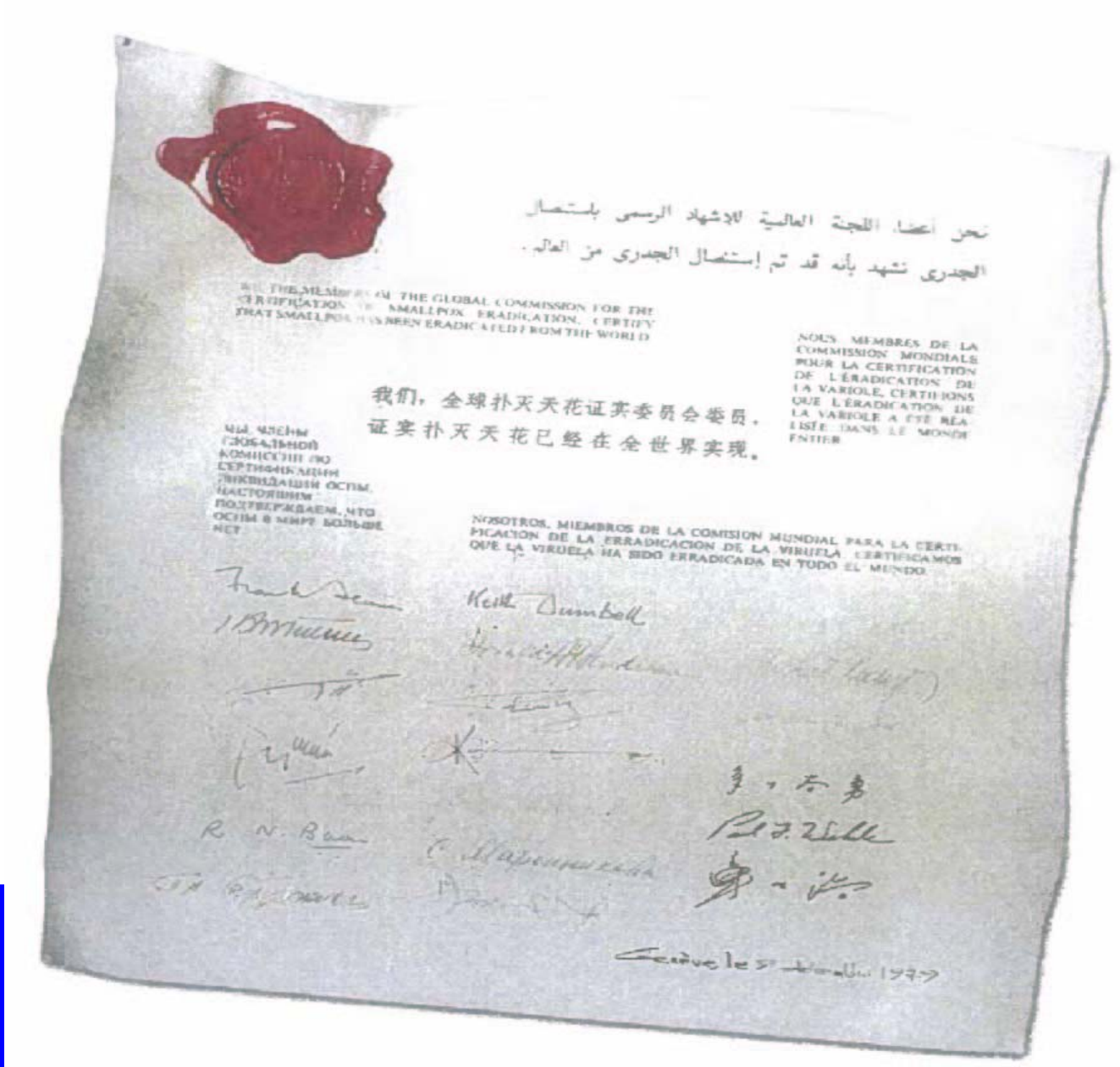


1967-1978: implementation of a new evidence-based strategy

- **Search:**
  - house to house
  - market
  - public gatherings/festivals

- **Containment:**
  - isolate patient
  - vaccinate household members/contacts
  - vaccinate 30 neighbouring households
  - ± vaccinate rest of village/ neighbouring villages

1980: Certificate of Eradication



Lessons from smallpox eradication for other programmes

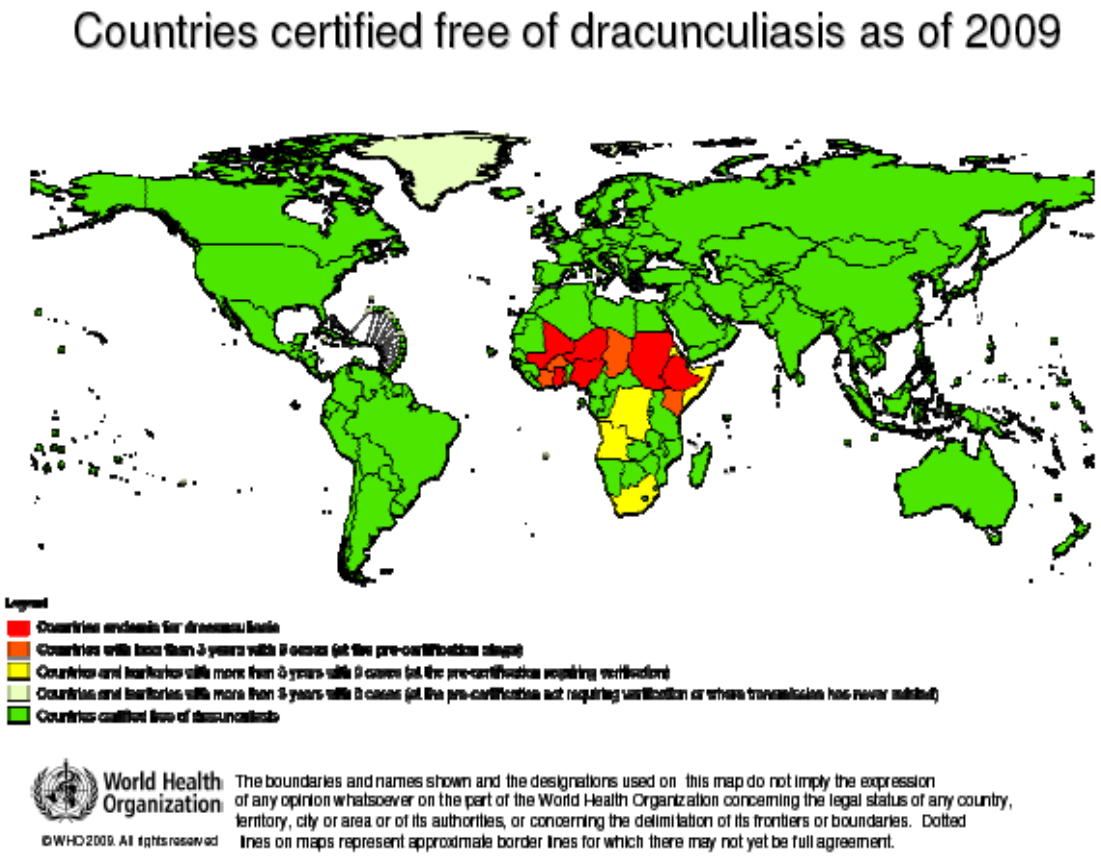
- Smallpox eradication succeeded because of:

  -- a strategy based on disease epidemiology
  -- effective tool and technique to deliver it
  -- strategy based on science, local culture determined the tactics
  -- power of coalitions and team work
  -- management flexibility and trust

Adapted from William Foege, New Delhi, July 31, 2009

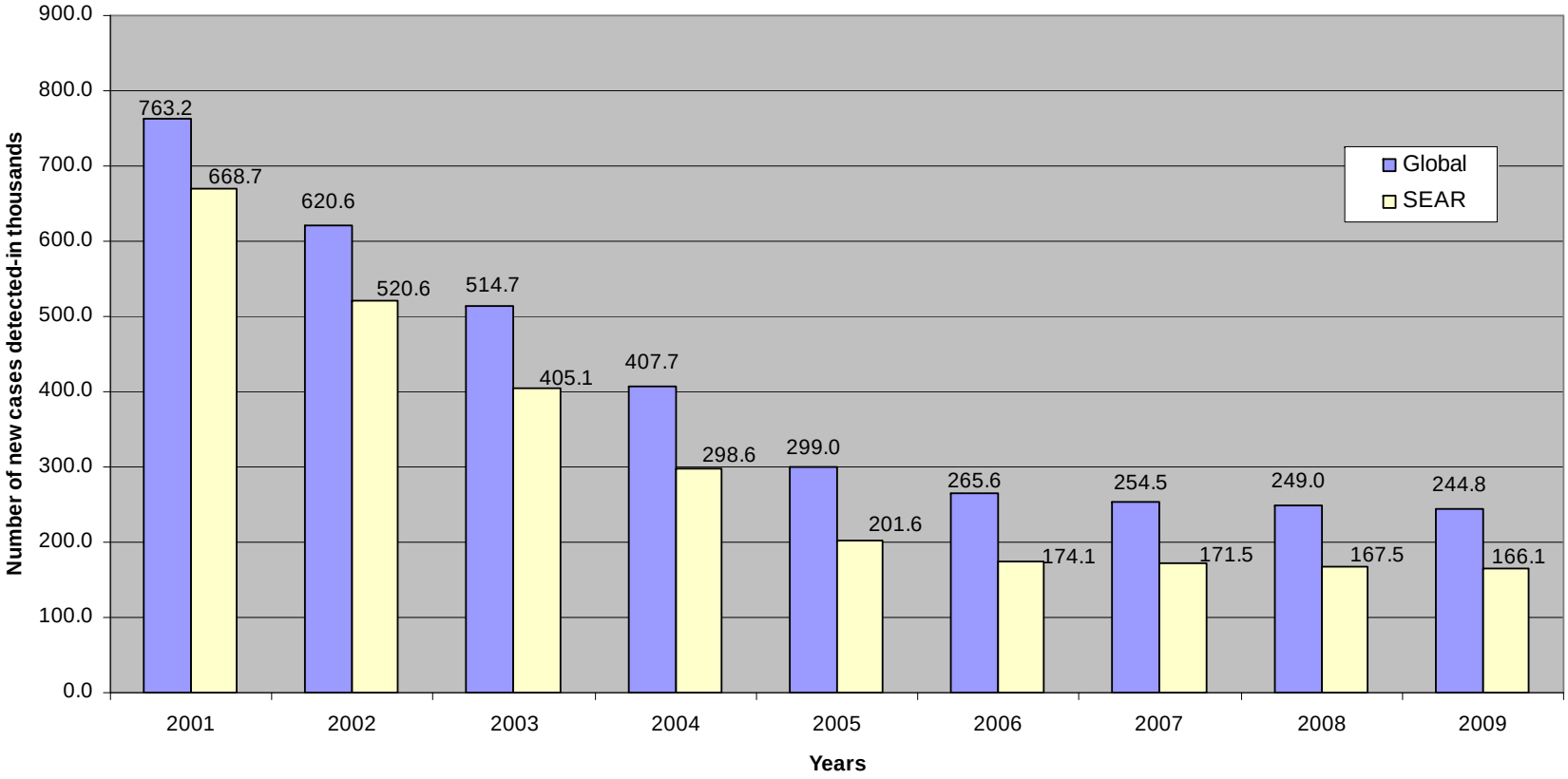
Guinea worm disease eradication, India

- National Guineaworm disease programme in 1983
- 40,000 Guinea worm cases annually in 12,840 endemic villages across 89 districts of 6 States
- The last case was reported in July 1996 in Jodhpur district of Rajasthan
- The country was certified as disease free on February 15, 2000



Leprosy and the impact of MDT

Fig: Trends of new case detection of leprosy, Globally and in South East Asia Region 2001 - 2009

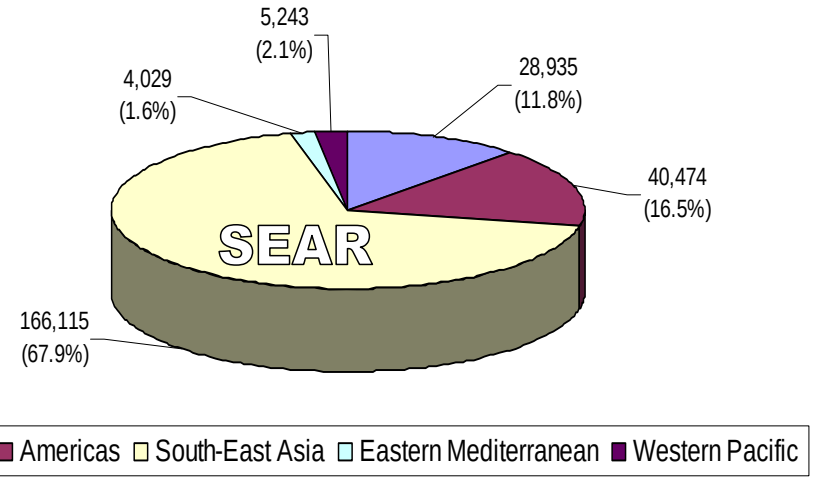


Data source: Weekly Epidemiological Record, No. 35; Vol.85; 27 August 2010

Some lessons from Leprosy elimination program…

- Intensified and well organized program; MDT proved an effective intervention
- Strong political commitment, and from partners
- Un-interrupted and free MDT supply

Fig. 4: Number of new leprosy cases detected, by WHO Region during 2009



Data source: Weekly Epidemiological Record, No. 35; Vol.85; 27 August 2010

The challenges ahead

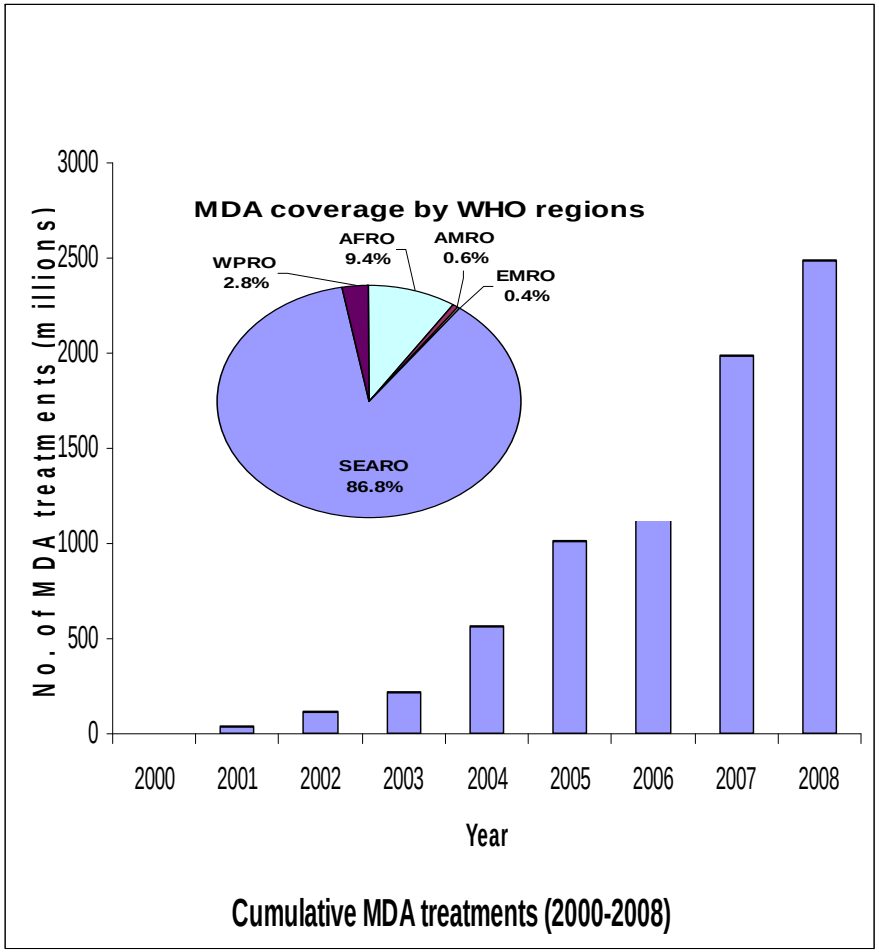
- Sustaining gains from leprosy elimination
- Enhanced Global Strategy for further reducing disease burden due to Leprosy (2011-2015)
- Issues:
  - -- sustained funding and MDT drug donation
  - -- disability prevention & addressing social stigma, human right issues

Lymphatic filariasis

- 50% of the 120 million infected people globally are in the region.
- 9 out of 11 countries endemic for LF
- The elimination strategy: mass drug administration (MDA) or preventive chemotherapy (PCT) with DEC and albendazole

Progress in LF elimination

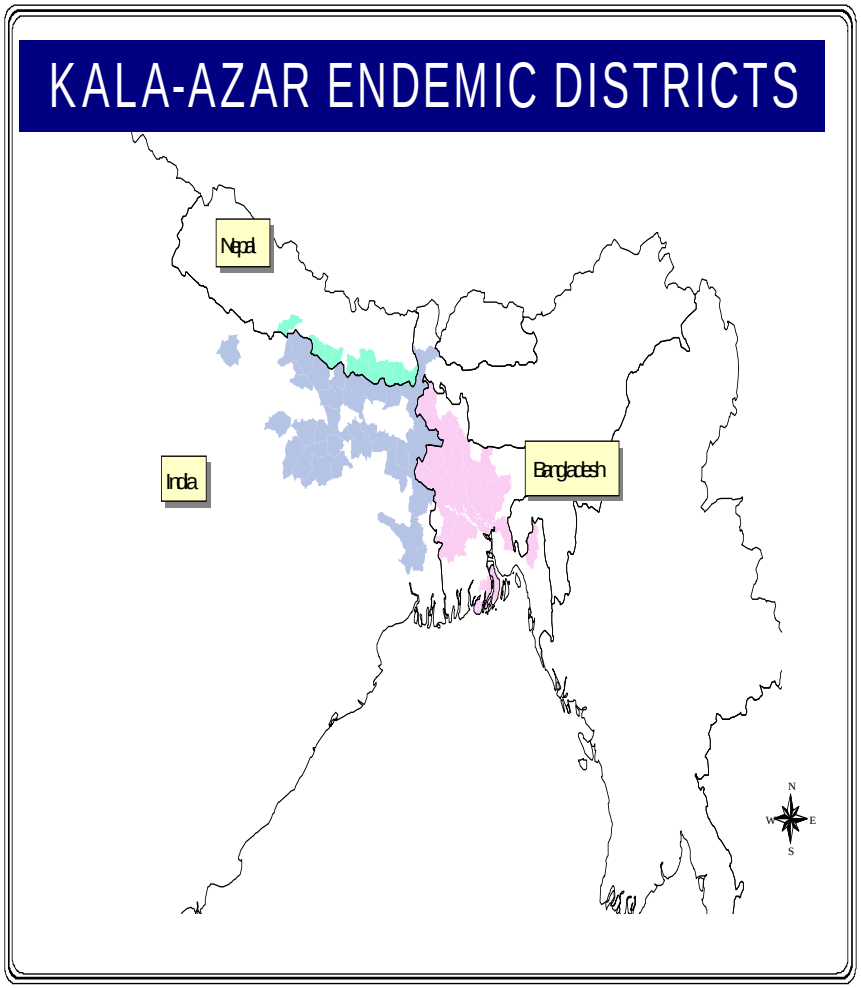
- MDA coverage doubled from 2008 to 2009
- More than 85% of the global MDA now occurs in the SEA Region alone
- Maldives, Sri Lanka & Thailand achieved LF elimination
- In India, 77% of the endemic districts (192 of 250) have microfilaria rate of less than 1%



Visceral leishmaniasis: a unique opportunity for elimination …

- New cases in 2010:

  India (25,113 cases), Bangladesh (2763) & Nepal (418)
- A life- threatening NTD; mostly women and children
- A disease of the poorest of the poor, living in border areas
- Amenable to elimination only in SEA Region



Factors favouring elimination…

- Unique epidemiology: man is the only reservoir; confined to limited area; only one vector (Phlebotomus argentipes)
- Technology: rapid diagnostic kit (rk39); effective & relatively safe oral drug (Miltefosine); effective vector control measures
- Political commitment: MOU signed by Health Ministers of the 3 countries
- History shows the way

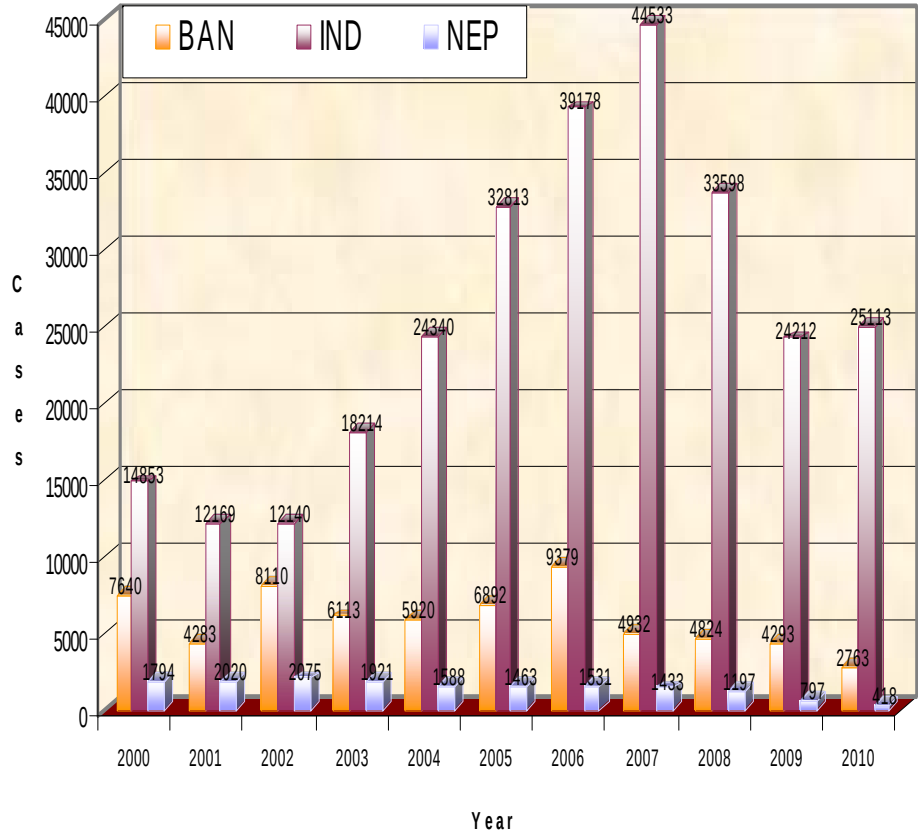
Commitment from the governments of Bangladesh, India & Nepal

- MoU signed on May 18, 2005, Geneva between India, Bangladesh and Nepal for Elimination of Kala-azar from South East Asia Region by 2015.

Strategy adopted…

- Early diagnosis and complete treatment
- Integrated Vector Control (IRS, LLIN)
- Effective Disease Surveillance
- Social mobilization and partnership
- Operational research

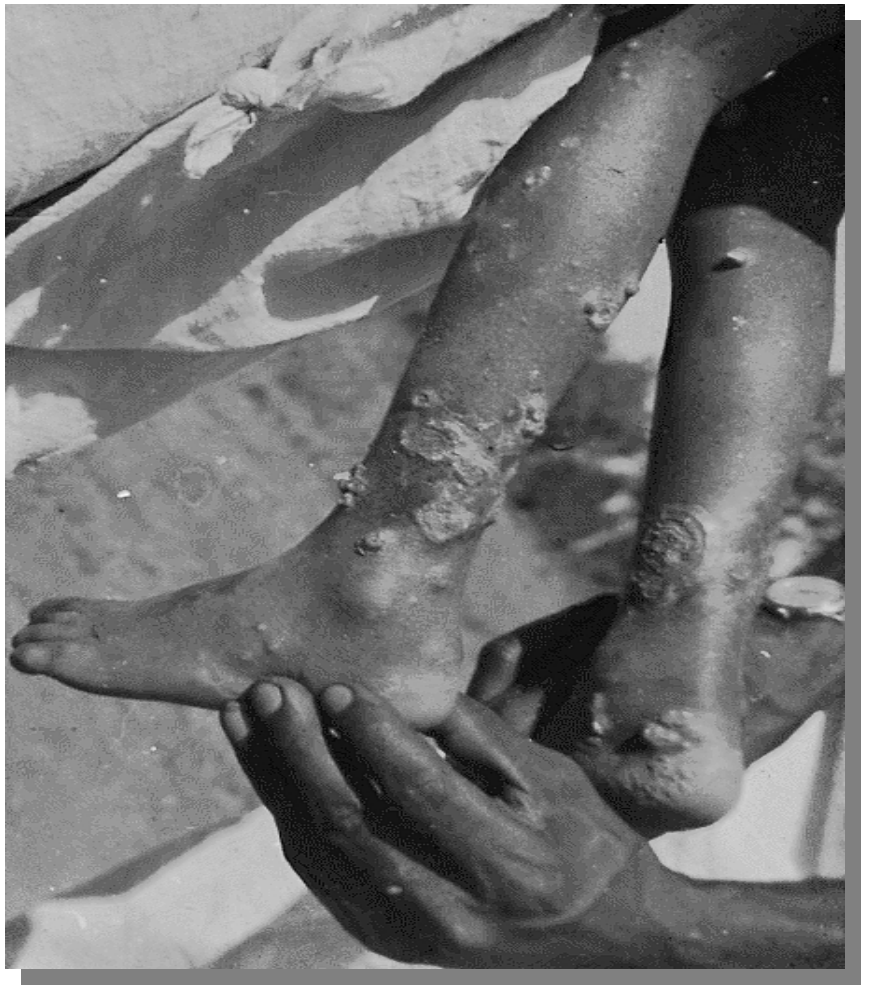
Kala-azar Cases in WHO SEA Region, 2000-2010



Source: Country reports, 2010

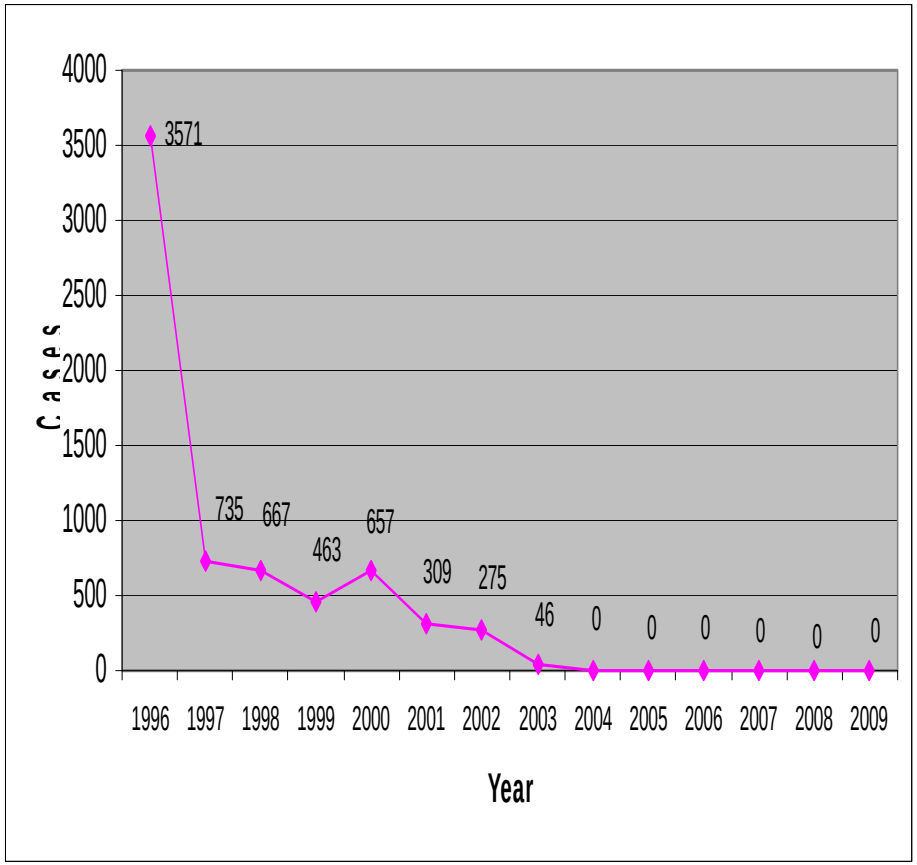
Yaws: a disease of the poorest of the poor

- A non-venereal treponematosis affecting skin in early stage and bones at late stages
- Prevalent primarily among poor tribal populations; 50% of new cases are children <15 years
- Treatment with a single dose of intramuscular injection of benzathine penicillin



Yaws eradication strategy, India

- Transmission: human to human through close contact; Treponema pertenue is agent
- Strategy: active search & treatment of cases and close family contacts with single dose of benzathine penicillin; community mobilization
- India achieved elimination
- Indonesia & Timor Leste to follow



The challenges still remain

- Many challenges to Region's endeavor to eliminate NTDs:
  - -- sustaining political commitment and resources
  - -- ensuring uninterrupted supply of drugs
  - -- reaching the underserved and hard to reach
  - -- fostering partnership across countries, communities and with partners
  - -- countering stigma and discrimination

- WHO is promoting integrated approach, assisting endemic countries technically and in mobilizing resources both from partners and the governments within the Region.

In conclusion…

History shows that disease eradication and elimination is possible!

- Targets for elimination
  - Lymphatic filariasis by 2020
  - Leishmaniasis by 2015
  - Yaws by 2015

- What is needed
  - Sustained political commitment
  - Ensured resources
  - Partnerships

- Expected Benefits of eliminating NTDs
  - Significant improvement lives of the poor and neglected population
  - Increased productivity and economic growth
  - Reduced poverty

Thank you!

World Health Organization
Regional Office for South-East Asia