The India Story

HIV in a Highly Populated Country

a presentation to IAPOS, November 1999

from:

Barbara HEINZEN, PhD

B E A D

Business Exchange on AIDS & Development

founded B E A D *1992*

Africa → Dev'g countries → All countries

Businesses

Anglo American

Booker Tate

Cargill

C.D.C.

Mixed membership & A business focus:

- **Contacts & introductions**
- **Policy Guidelines**
- **Library & seminars**
- **Management studies:**

Micro impact & LSHTM

Businesses

Glaxo Wellcome

Guinness

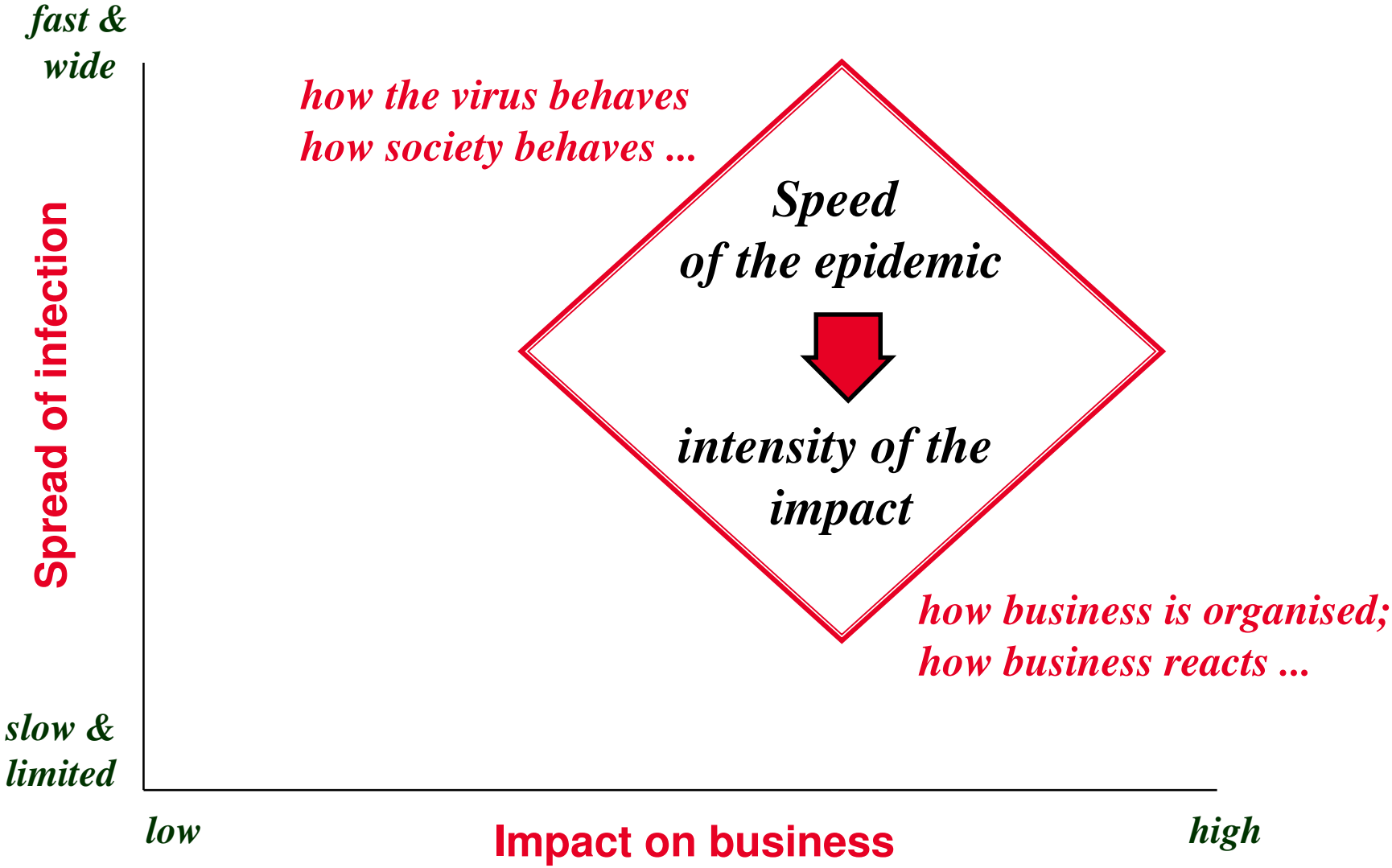
Heineken

Standard Chart'd

Unilever

HIV/AIDS → Costly → Infectious diseases

The Uncertainties of AIDS & Its Impact



Outline of Talk

I. The virus & the disease

II. The epidemic

III. Impacts on business

IV. Corporate responses

V. Conclusion

I. The virus & the disease

The Virus & Its Survival

Transmission of the Virus*

	India
• Sexual transmission	75%
• Perinatal transmission & breast-feeding	
• Infected blood & blood products	12%
• Dirty syringes	6%

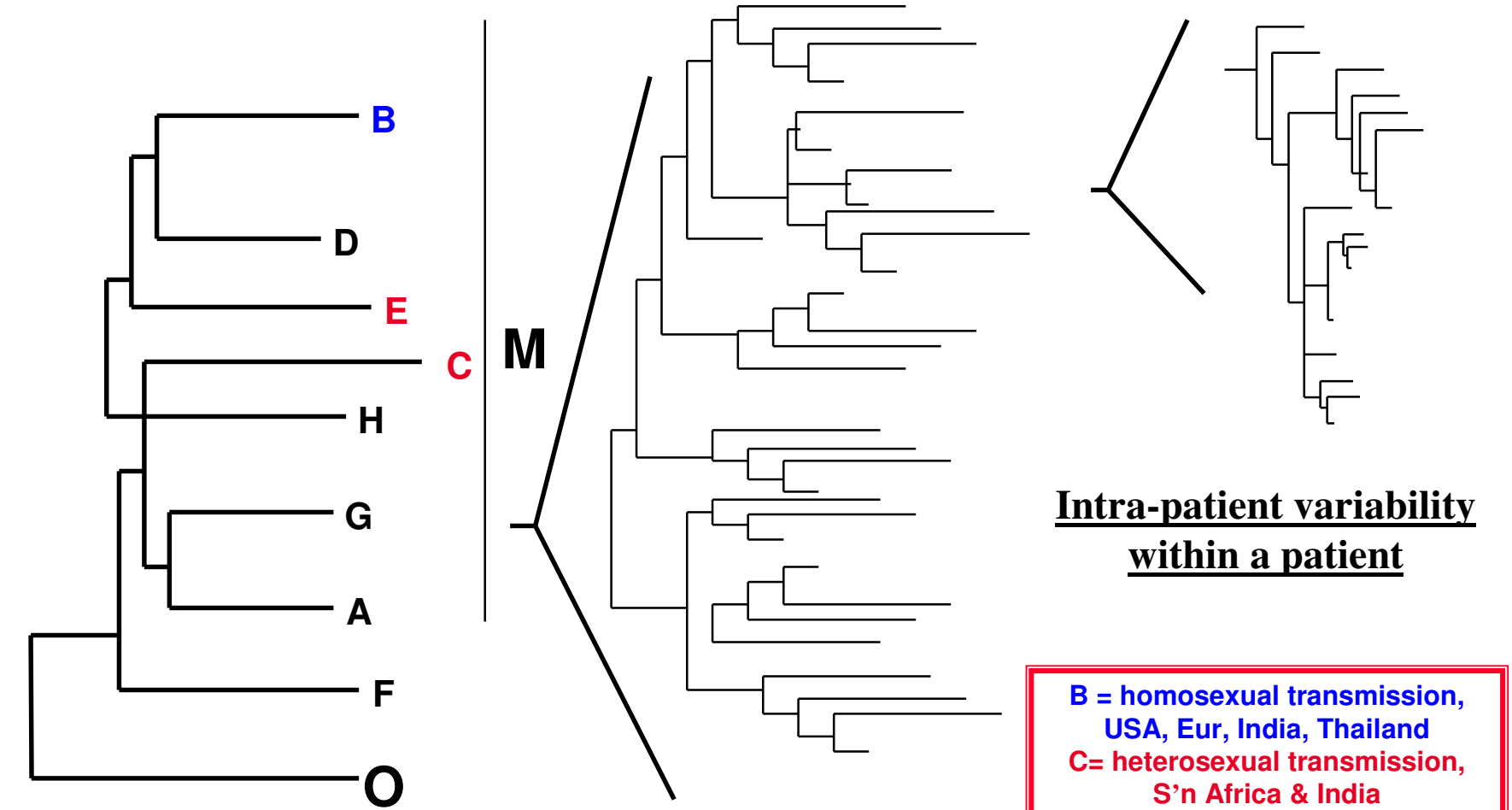
The Ecology of Transmission

Rapid evolution of the HIV virus

- **More rapid partner change => more virulent variants of HIV**
- **Higher risk of transmission of HIV with STD lesions**
- **Higher STD rate with poor sanitation & poor health care**

Source: of Indian statistics: Alaka M. Basu, et al "The Household Impact of Adult Morbidity & Mortality" in The Economics of HIV and AIDS: The Case of South and South East Asia, edited by David E. Bloom & Peter Godwin, Oxford U. Press, Delhi, 1997, citing NACO.

Rapid Evolution of HIV1



HIV1 subtype variability

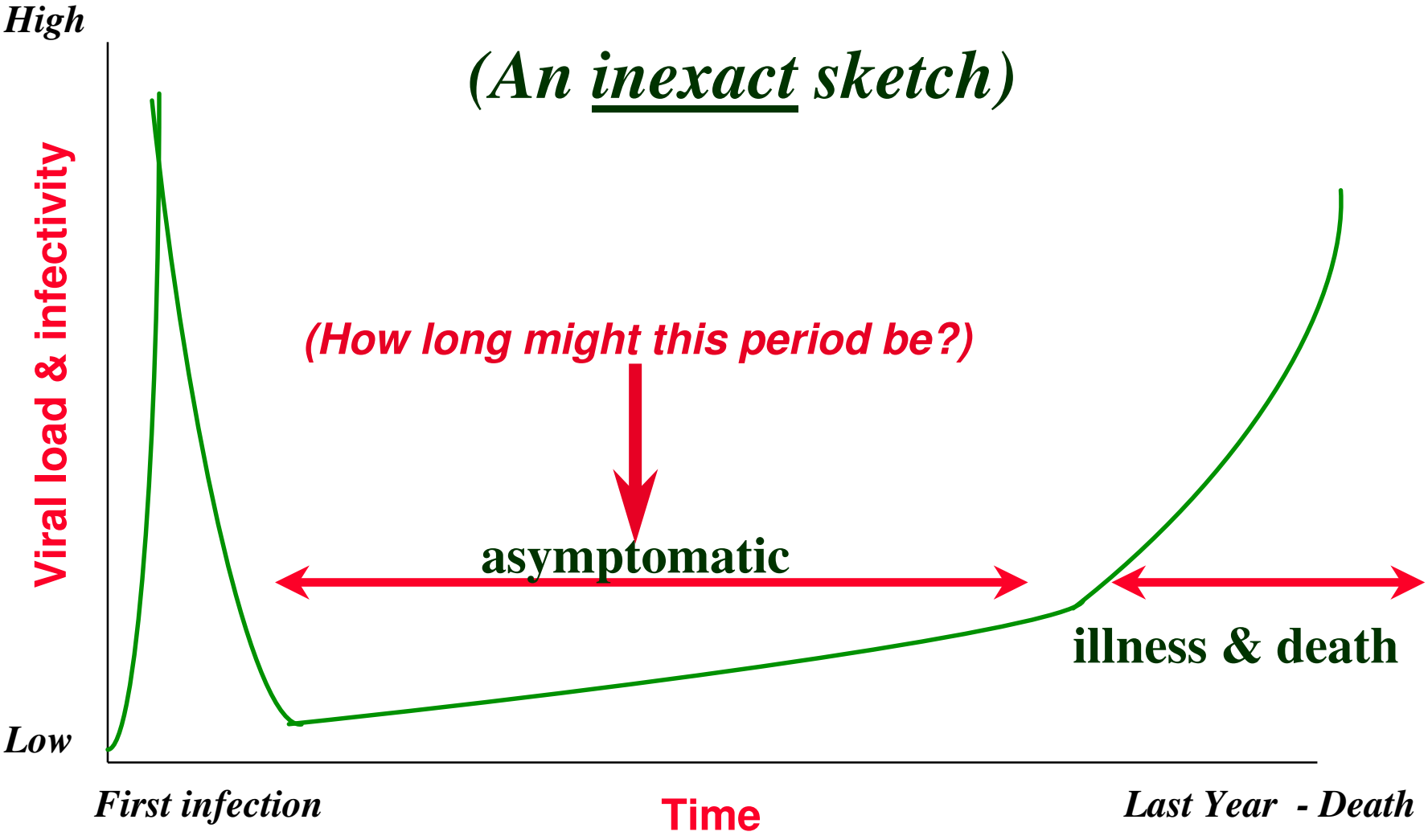
Inter-patient variability within a subtype

Intra-patient variability within a patient

B = homosexual transmission, USA, Eur, India, Thailand
C= heterosexual transmission, S'n Africa & India
E = heterosexual transmission, Thailand

*Source: approximately drawn copy from Phillis J. Kanki, et al, "Virology of HIV-1 and HIV-2: implications for Africa" AIDS **1997, 11** (supplB: S33-S42) * Jaap Goudsmit, Viral Sex, 1997, p. 52 & 56*

Infectivity & Natural History



Acute, Newly Acquire HIV Infections

Johns Hopkins University School of Hygiene & Public Health
tested Pune STD patients for p24 antigen
"Patents who test positive for p24 antigen are likely to have been infected within the last two to three weeks."

Findings

p24 antigen-positive patients, compared to p24-negative

HAD

• unprotected sex with commerical sex workers (5x more likely)

• active genital ulcers (3x more likely)

• fever & joint pain.

BUT NO CLEAR ASSOCIATION WITH:

enlarged lymph nodes, oral thrush, diarrheoa & rash

published in Journal of American Medical Association, Dec. 19, 1997;
reported in AIDS Analysis Asia, Vol. 4(1) January 1998

WHO Stages of the Disease

Stage 1	Stage 2	Stage 3	Stage 4
Asymptomatic	Minor symptoms	More severe symptoms	Other AIDS-defining conditions

(USA: before combination therapies)

10 years to serious illness — 2 years to death

Africa: lack of reliable data, but experience suggests:

7 years to serious illness
5 years with HIV 1-C in Southern Africa — 1 year to death

India is still an unknown.

*See: Alison D Grant, et al, "Natural history and spectrum of disease in adults with HIV/AIDS in Africa" AIDS **1997**, **11** (supplB: S43-S54)*

Early Manifestations of the Disease

AFRICA

in Tanzania & Botswana:
Herpes zoster*
("A lot of my workers have been getting a rash...")
in Kenya, among sex workers:
Pneumonia**

Most common manifestation in Africa is tuberculosis

INDIA

HIV 'markers' in Mumbai***
Tuberculosis
Diarrhoea
Hepatitis

*Source:s * talk to BEAD by Karl Rottcher, 1994? and personal communication from Adam, manager of Kings Pool Camp, Botswana, 1997. ** See also Alison Grant, op. cit. *** Emmanuel Eliot, "Changes in Mortality in Mumbai" in* ***The Looming Epidemic: The Impact of HIV & AIDS in India****, edited by Peter Godwin, 1998, Mosaic Books, New Delhi*

Notes on Progression of the Disease

"In India the prevalence of tuberculosis infection is 40% as evinced by tuberculosis testing. Of reported AIDS cases, 56% had tuberculosis of one or more organs."

Source: Shiv Lal & B.B. Thakur (National AIDS Control Organisation, Ministry of Health & Family Welfare, New Delhi) "The Problem of HIV and AIDS in India" in Current Science, vol. 69, no. 10, 25 November 1995

"It is reported that there are over 14 million persons with active tuberculosis in India." (citing the Annual Report, MOHFW, p. 167, 1996-97)

Source: "The Epidemic in India: An overview" in The Looming Epidemic: The Impact of HIV & AIDS in India, edited by Peter Godwin, 1998, Mosaic Books, New Delhi.

"The common first condition reported was TB. Among the other important clinical conditions reported were herpes zoster, herpes simplex and candidiasis. … Most respondents mentioned more general illnesses, which could be either because the doctors did not diagnose the clinical conditions or did not convey the neames to the respondents. It is also possible that the respondents did not remember the exact names. It is interesting to note that many individuals said they suffered from headaches, fatigue or fever. These could be the precursors to more serious conditions. Diarrhoea was another very common condition mentioned along with other stomach problems."

Source: Indrani Gupta "Planning for the Socio-economic Impact of the Epidemic: The Costs of Being Ill." in The Looming Epidemic, 1998, op. cit.

Common Opportunistic Infections in Madras

100 symptomatic HIV+ patients
with multiple opportunistic infections
1987-1993, Chennai (Madras)

Most common opportunistic diseases seen:

Tuberculosis	36.7%	75.7% of total
Oral Cadidiasis	24.6%	
Diarrhoea	14.4%	

Others, but a small proportion:

- herpes zoster
- cyptococcal meningitis
- fungal infections of the skin

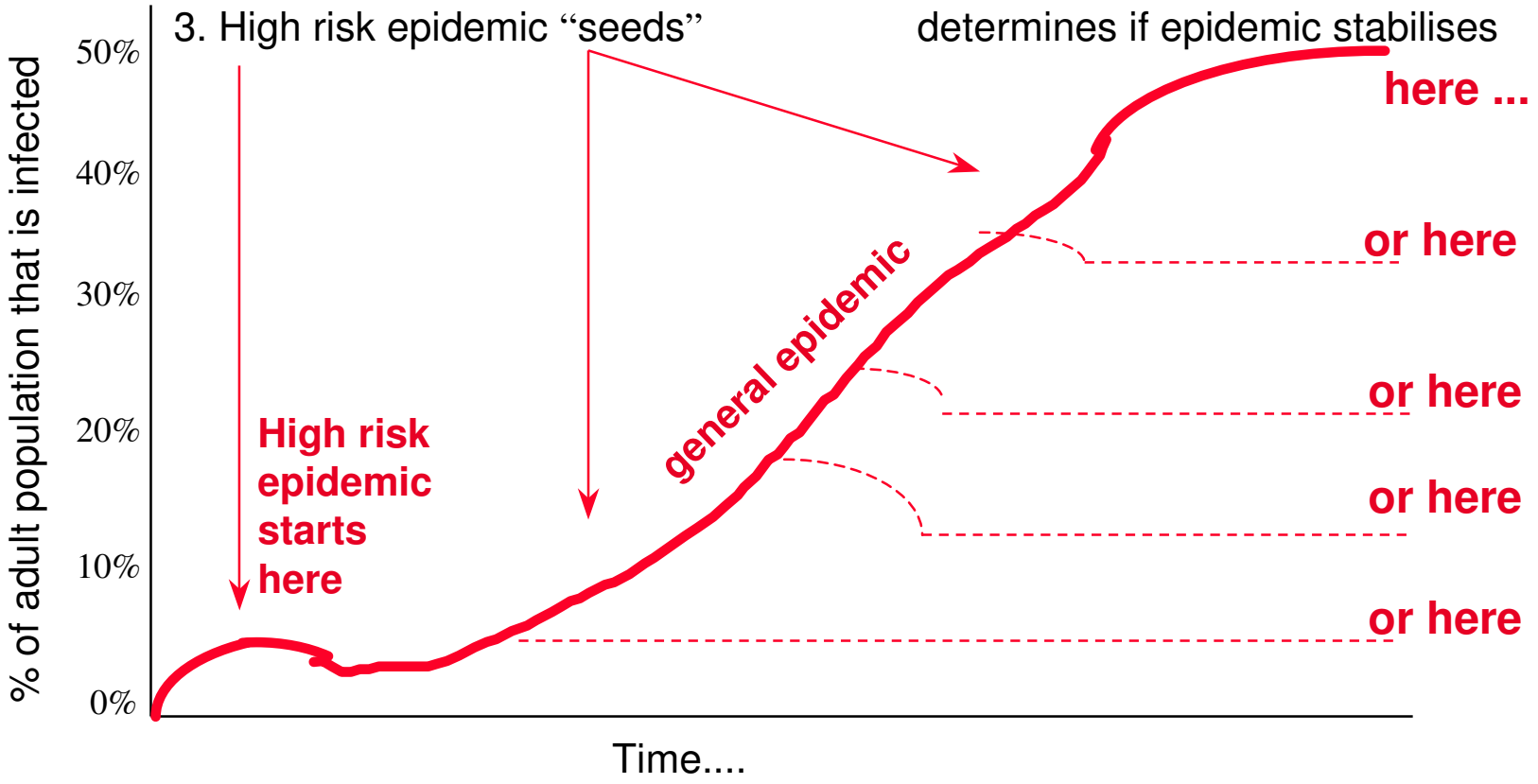
*40% prevalence of TB in India **

*Source:s Emmanuel Eliot, "Changes in Mortality in Mumbai" in **The Looming Epidemic: The Impact of HIV & AIDS in India**, edited by Peter Godwin, 1998, Mosaic Books, New Delhi; *Shiv Lal & B.B. Thakur (National AIDS Control Organisation, Ministry of Health & Family Welfare, New Delhi) "The Problem of HIV and AIDS in India" in **Current Science**, vol. 69, no. 10, 25 November 1995*

II. Nature of the epidemic

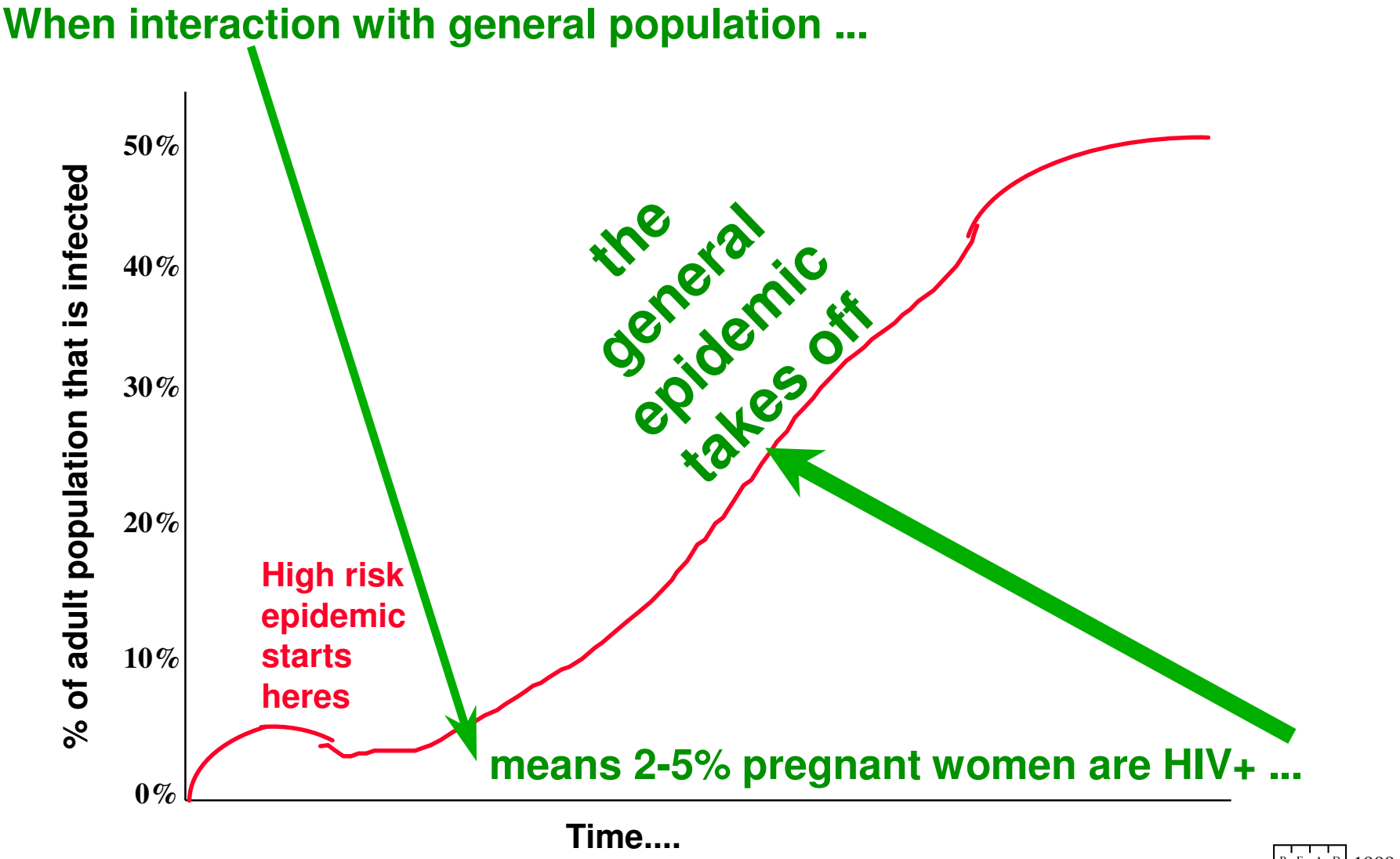
Simple Mechanics of an AIDS Epidemic

1. HIV Enters population invisibly
2. Hits high risk people first
3. High risk epidemic "seeds"
4. Size of high risk group +
5. Interaction with general popul'n determines if epidemic stabilises

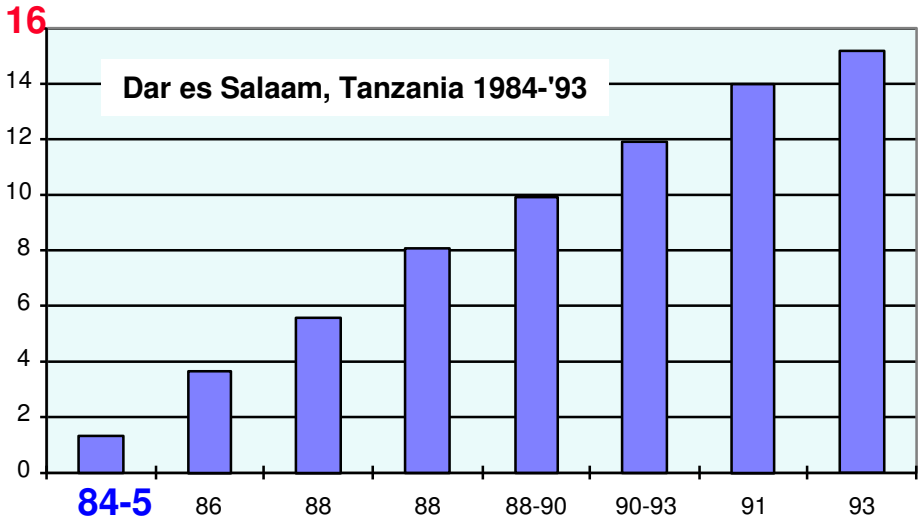


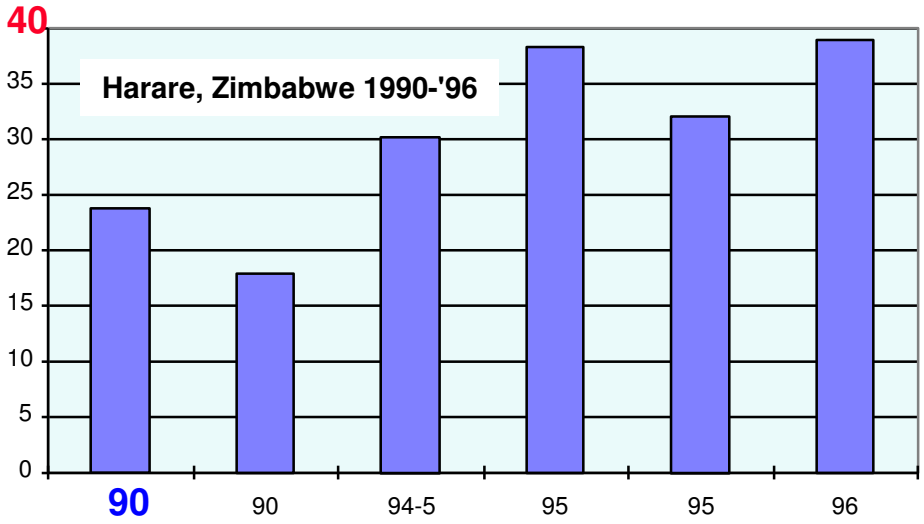
Disruptions of development mean: **- high risk group MAY be large,**
- interaction MAY be frequent.

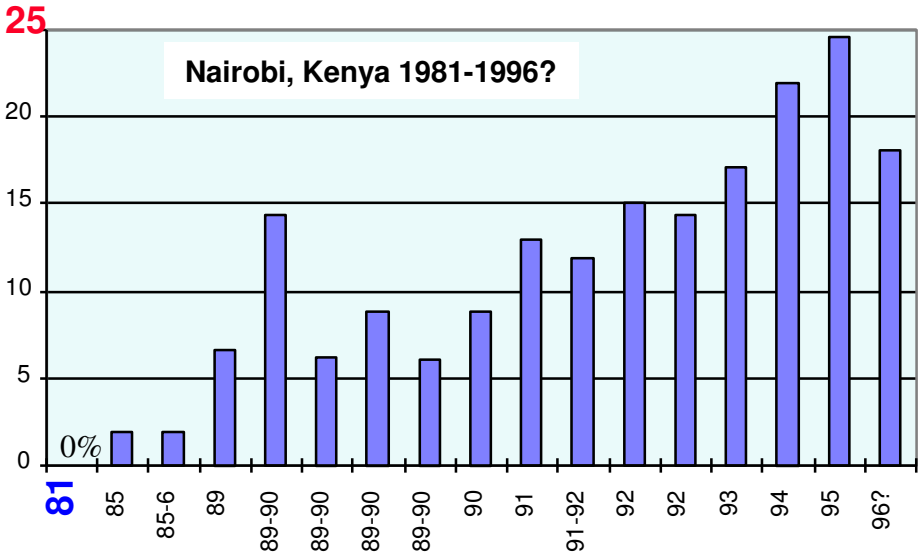
A Possible Turning Point:

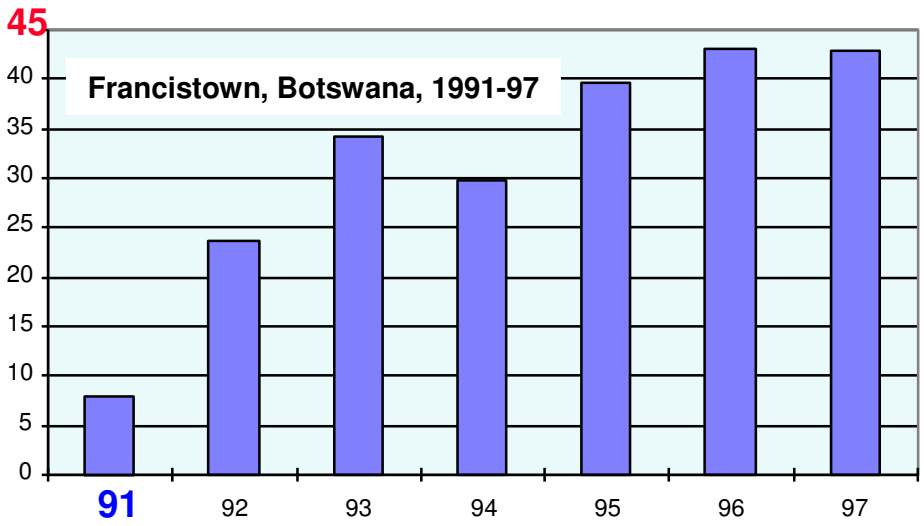


Pregnant Women in Africa: % HIV+







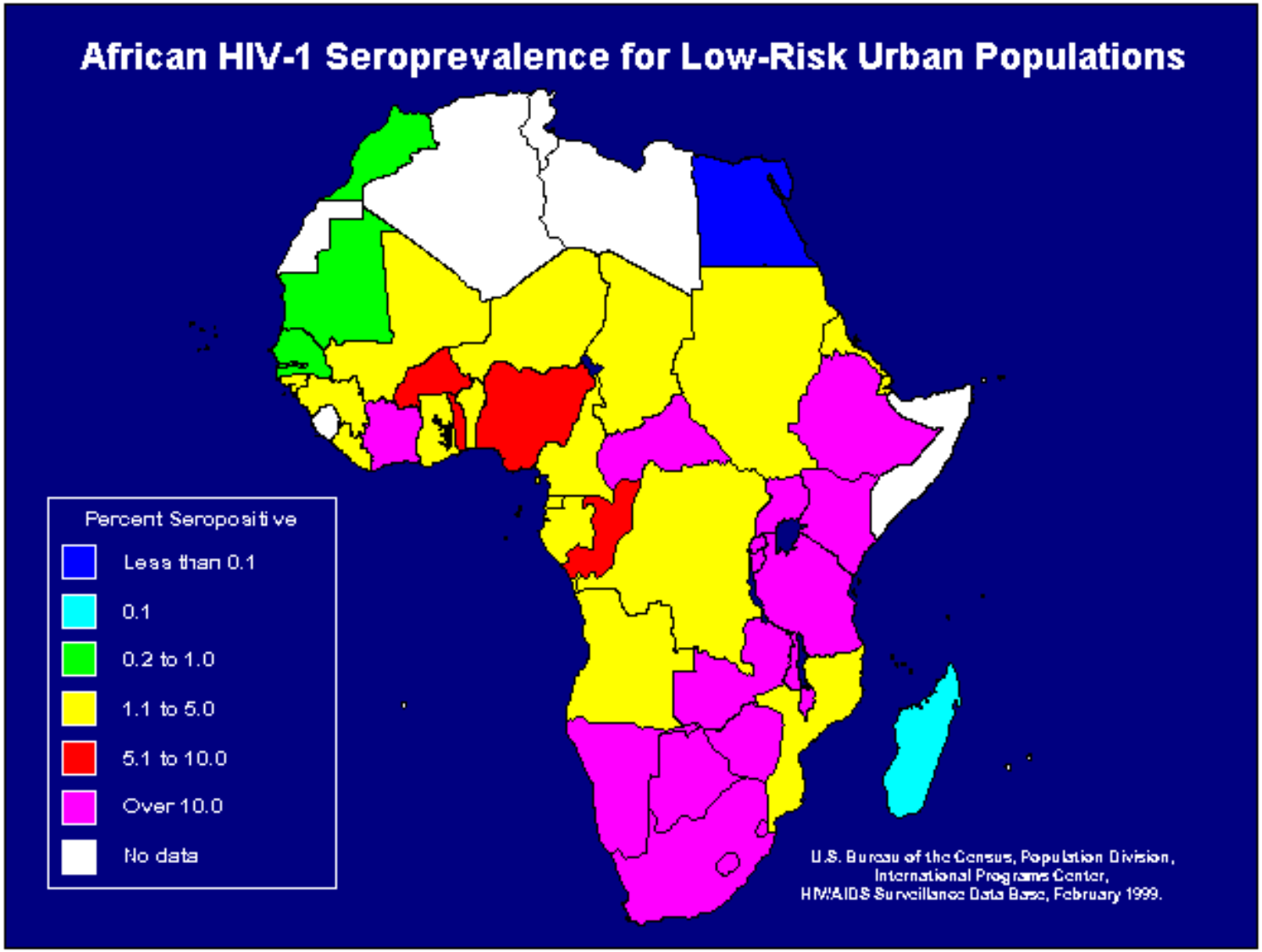


BEAD 1999

Source: U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Jan. 1998

HIV in India 99, p. 17

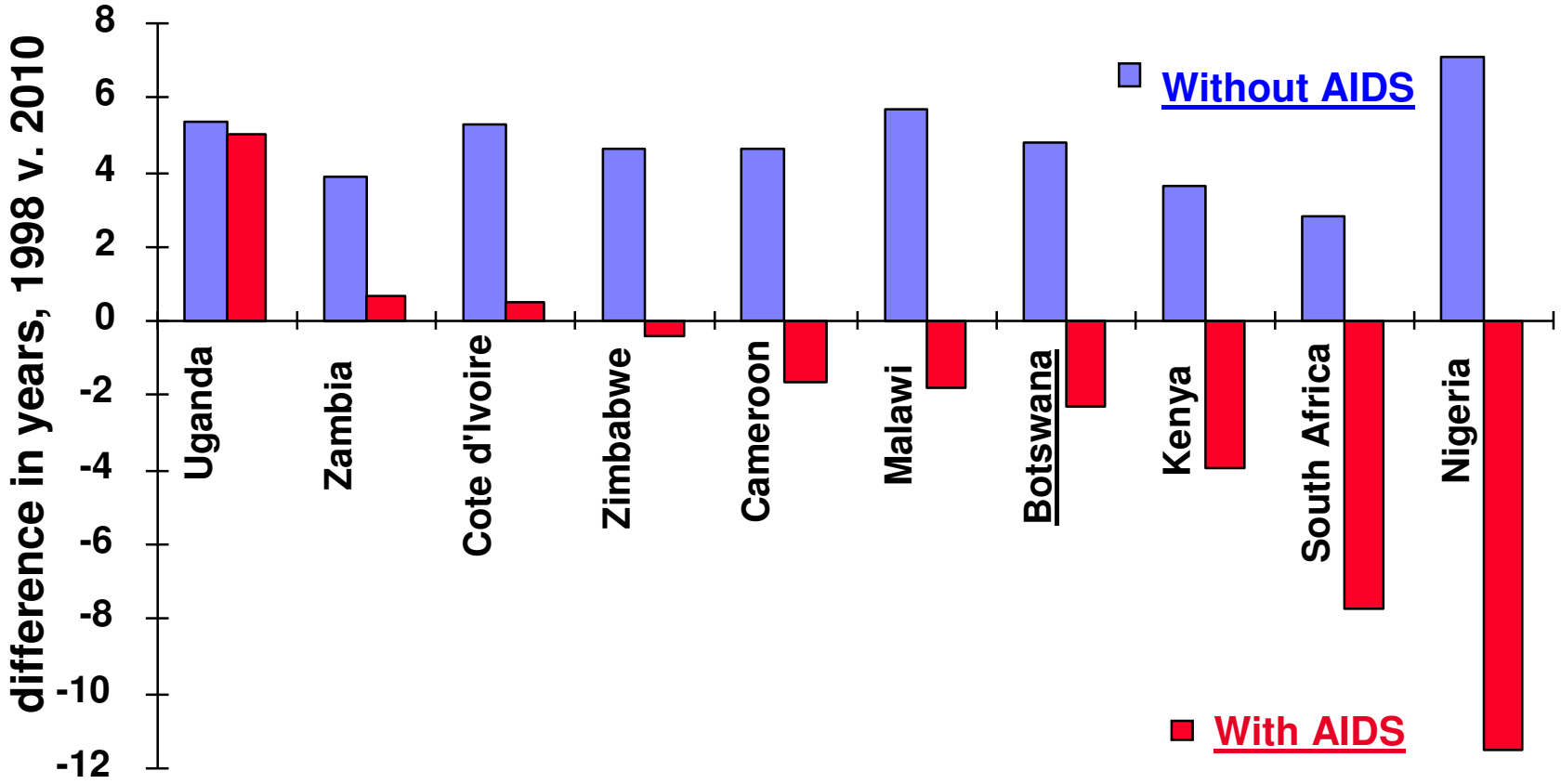
NB: Low risk = pregnant women, blood donors, or other persons with no known risk factor



Source: U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Feb. 1999

Projected Changes in Life Expectation

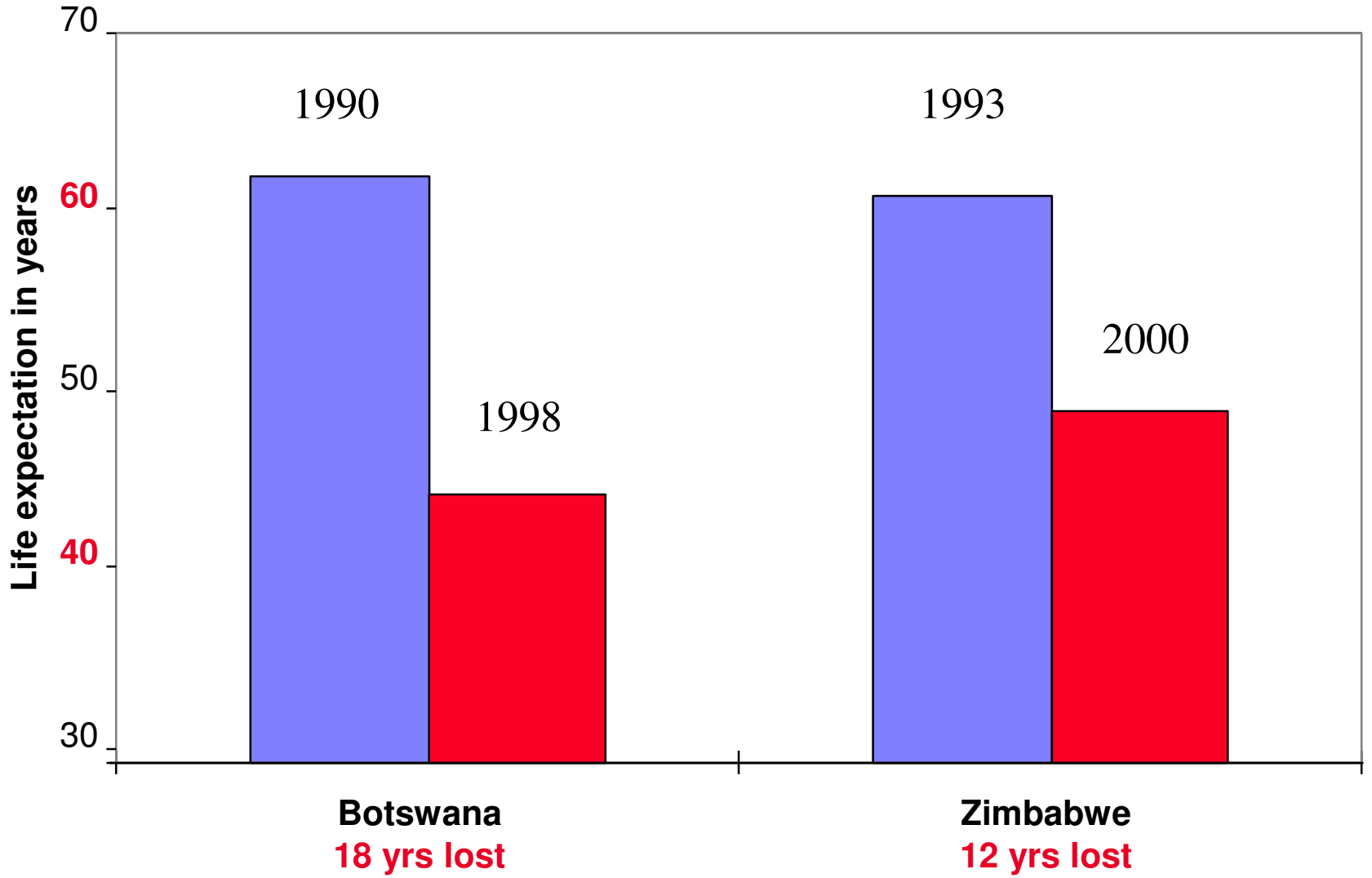
"Without AIDS, life expectation in Botswana would have RISEN by 4.8 yrs."



"With AIDS, life expectation in Botswana is expected to FALL by 2.3 yrs."

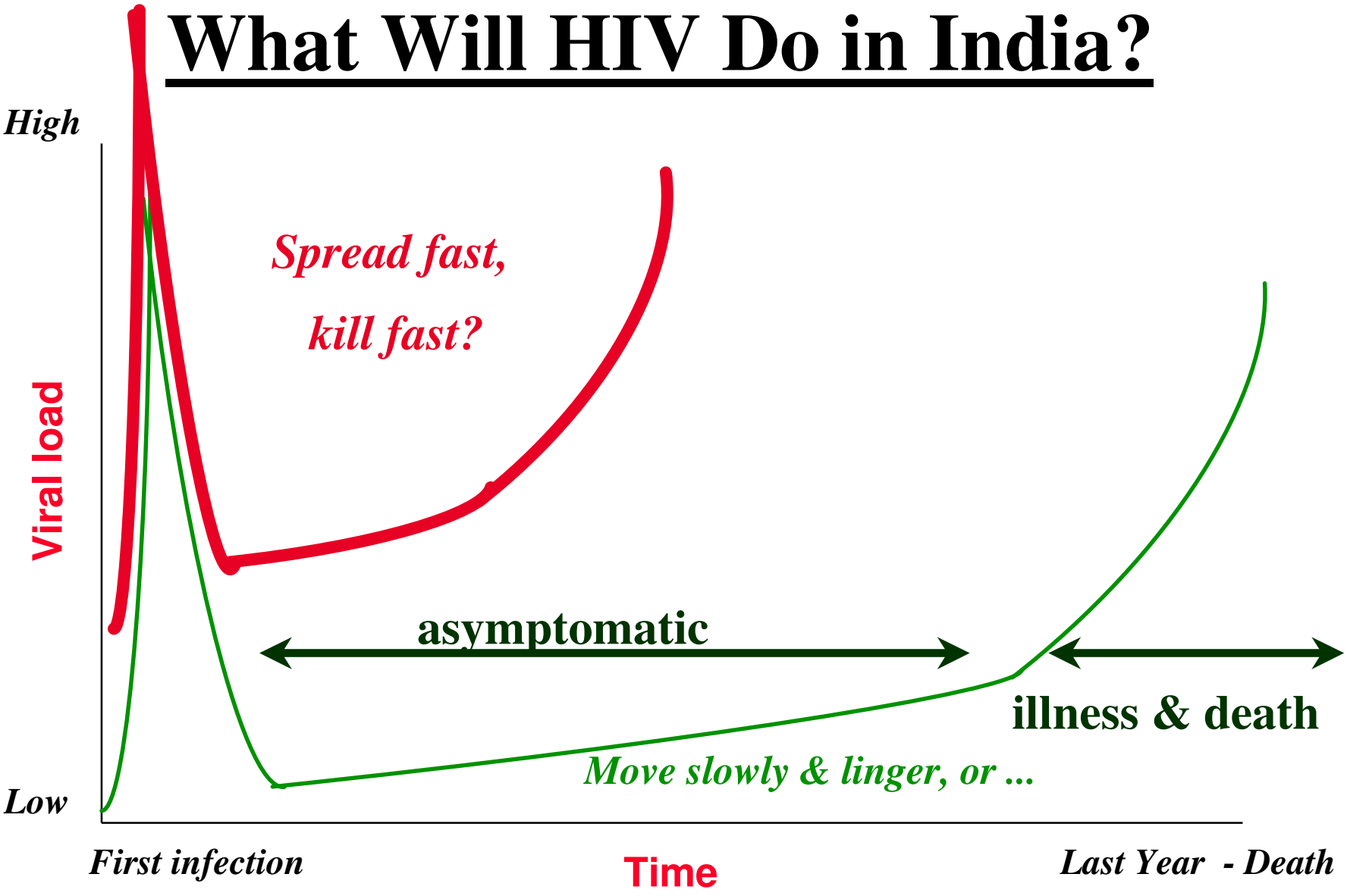
Source of data: U.S. Census Bureau, the Official Statistics, February 2,1999, p. 56

Actual Changes in Life Expectation, 1990s



Source of data: Lester Brown, "Life Support Fails" in The World Today, June 1999, p. 22

What Will HIV Do in India?



Opening Questions re: Epidemic

Unique

What is unique in India?

Indian Sexual Networks

Will they be like Africa or Thailand?

Diversity & Hierarchy

Will sexual mixing stay within social boundaries?

Unknown, but Dangerous

Why is the Indian epidemic unknown, but dangerous?

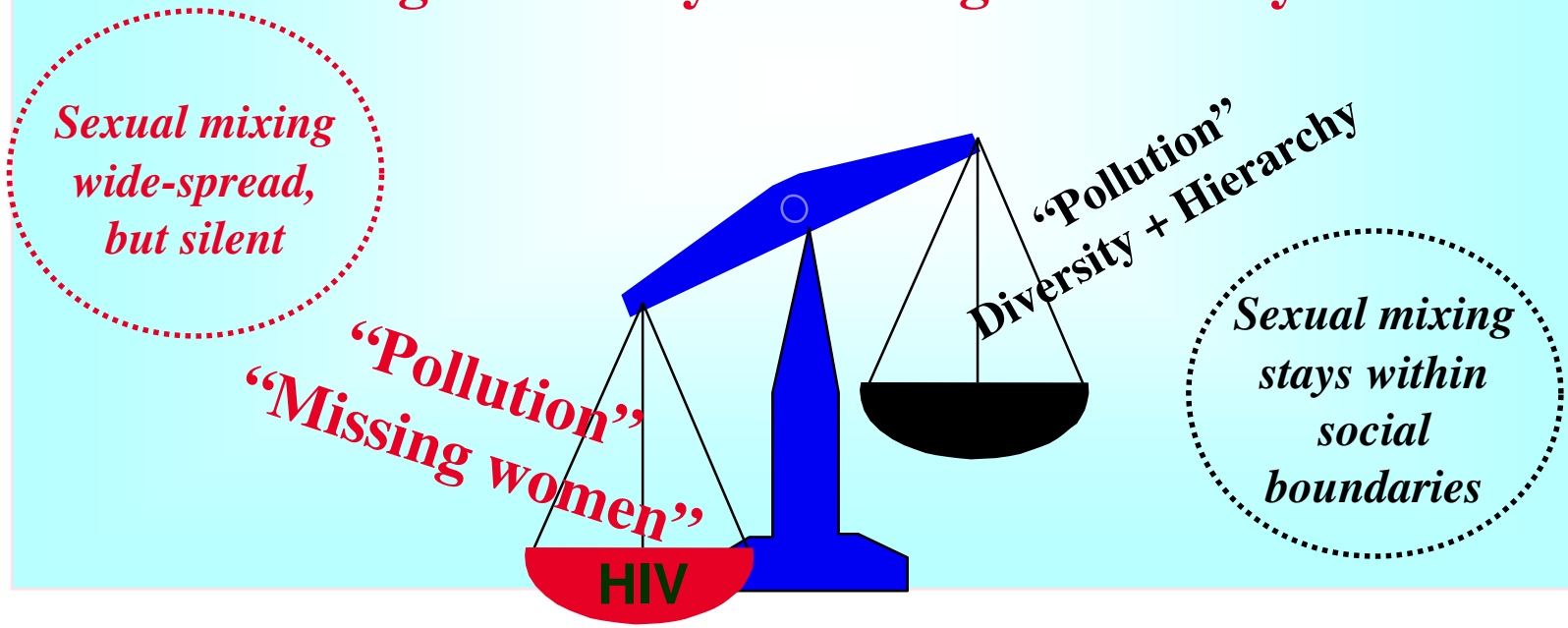
Speed & Intensity

How quickly might HIV spread in India?

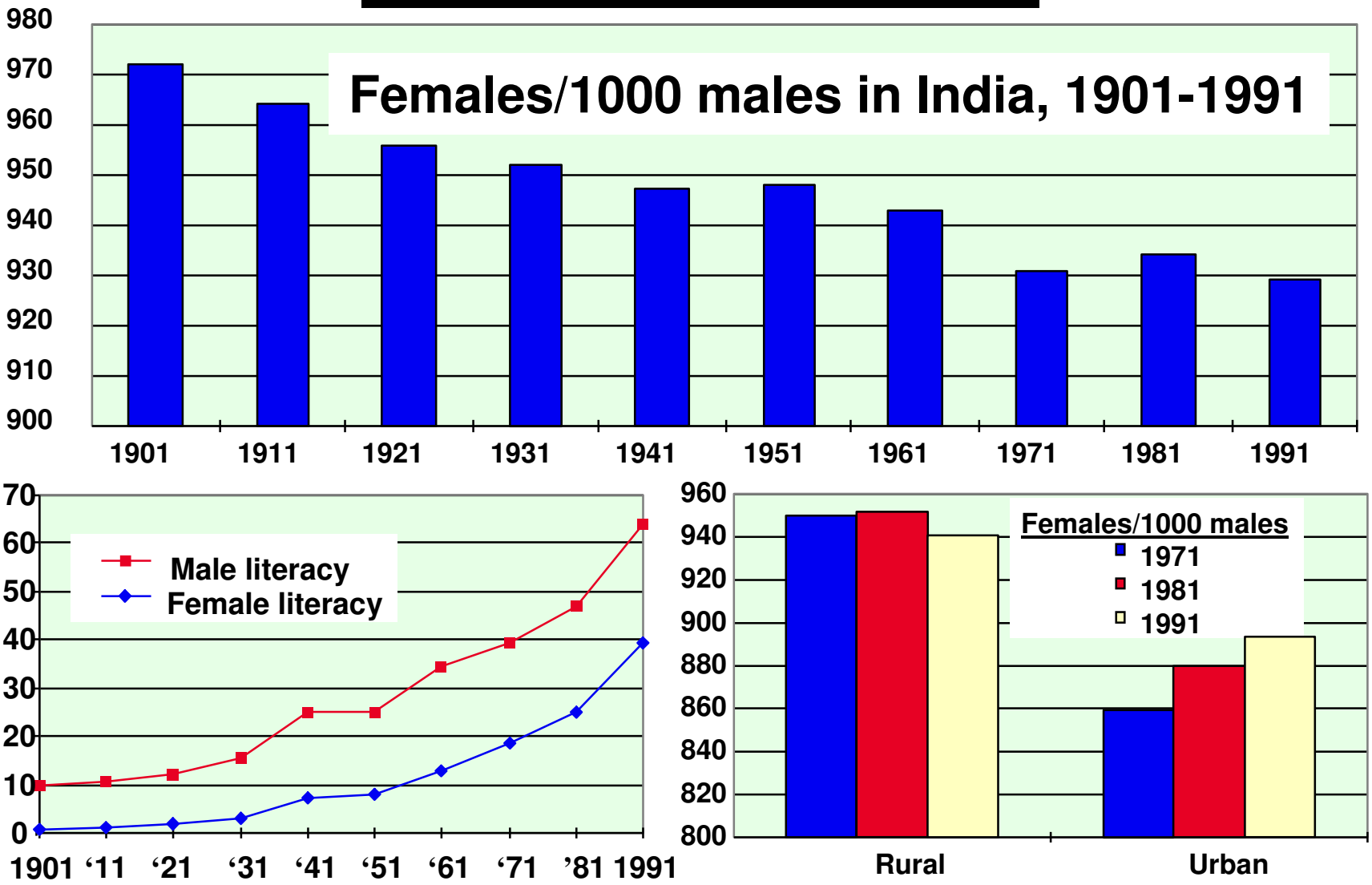
What Is Unique in India?

- "Missing women"
- The concept of "pollution"

High diversity PLUS high hierarchy



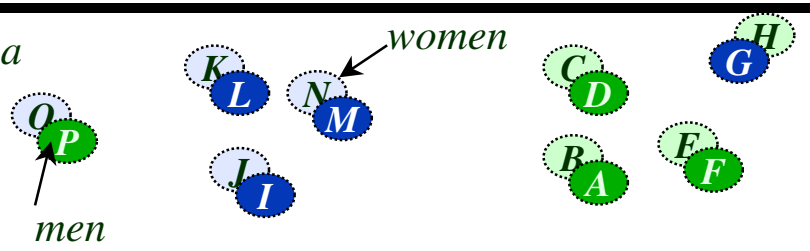
"Missing Women"



Source: Demographic Dynamism in India by Smita Bhutani, 1995, Discovery Publishing House, New Delhi, pages 87,93,105

Sexual Networks: Like Africa or Thailand?

8 couples mixing in Africa

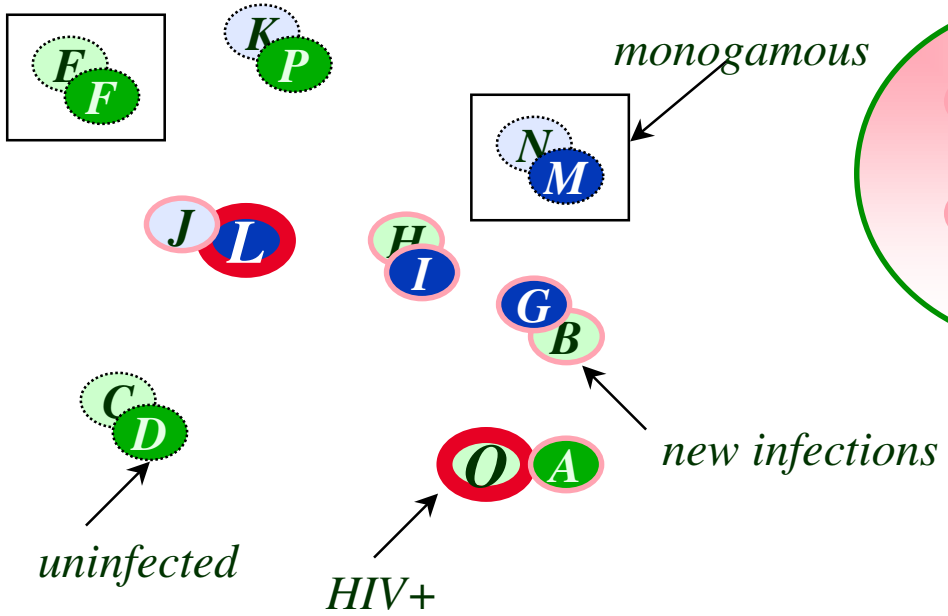


8 couples mixing in Thailand

In Africa networks, sexual partners change as circumstances change, more random mixing.
In Thailand, most women are monogamous, most men are experienced;
experience is gained through organised commercial brothels.

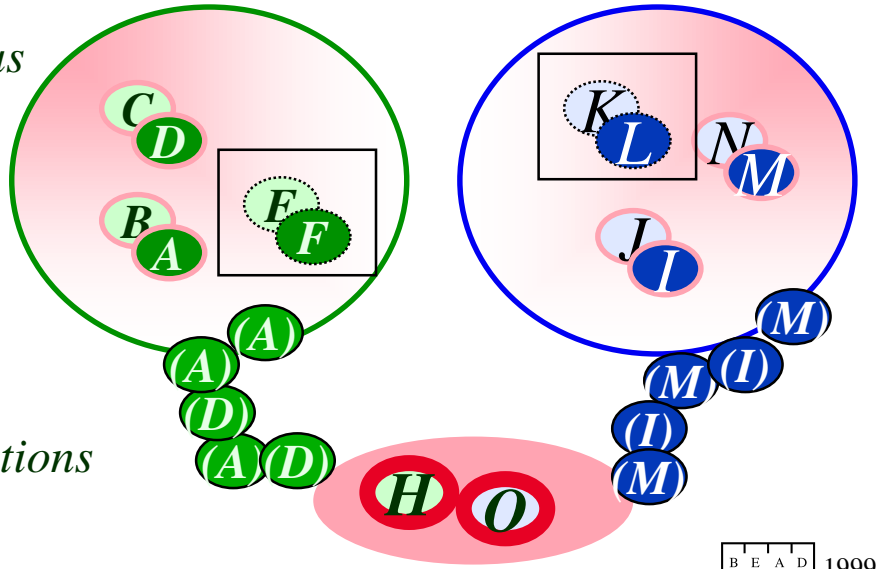
Africa: "Like this & like that"

Semi-random & casual



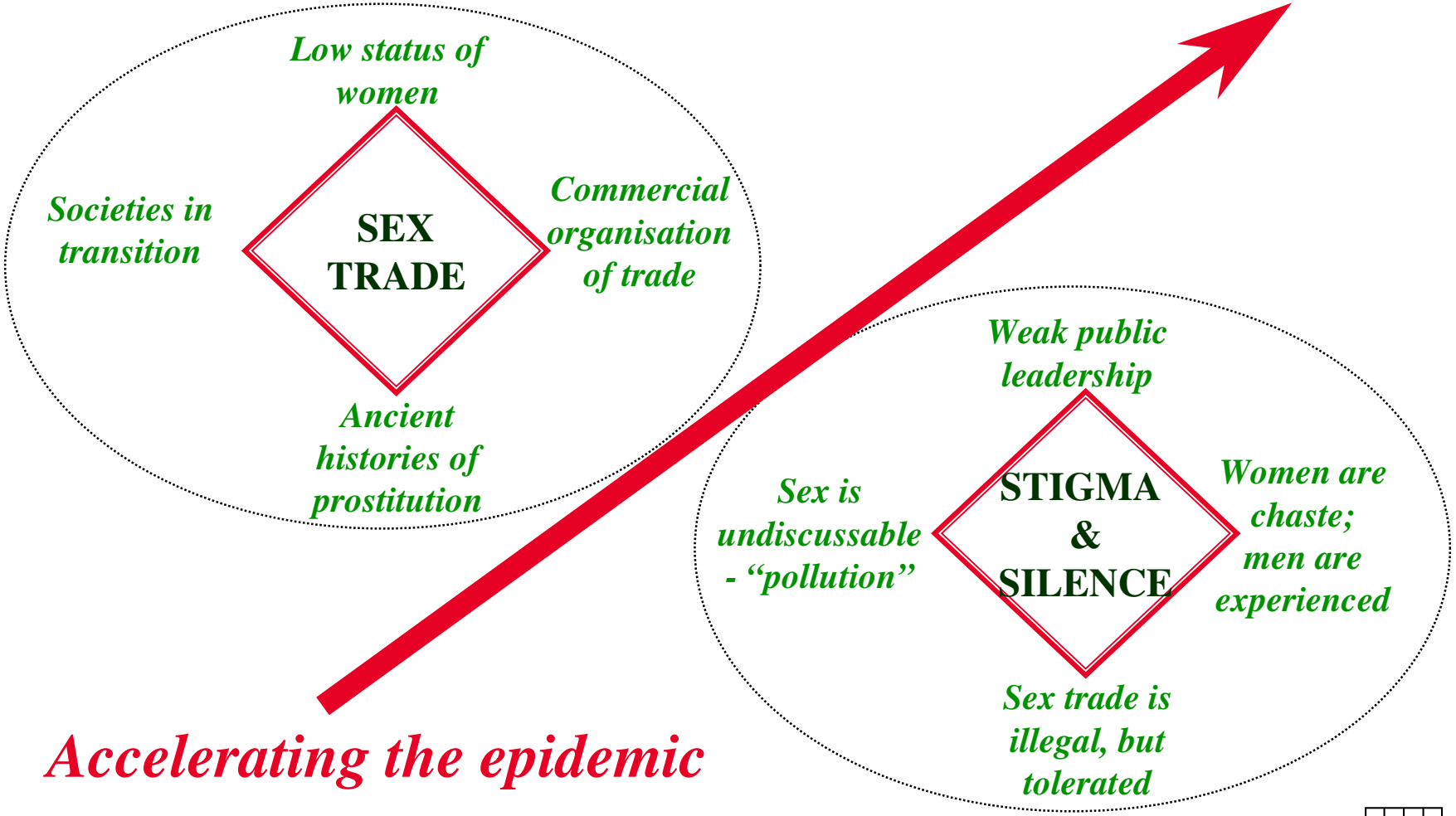
Thailand: "Like industrial production"

Organised & commerical

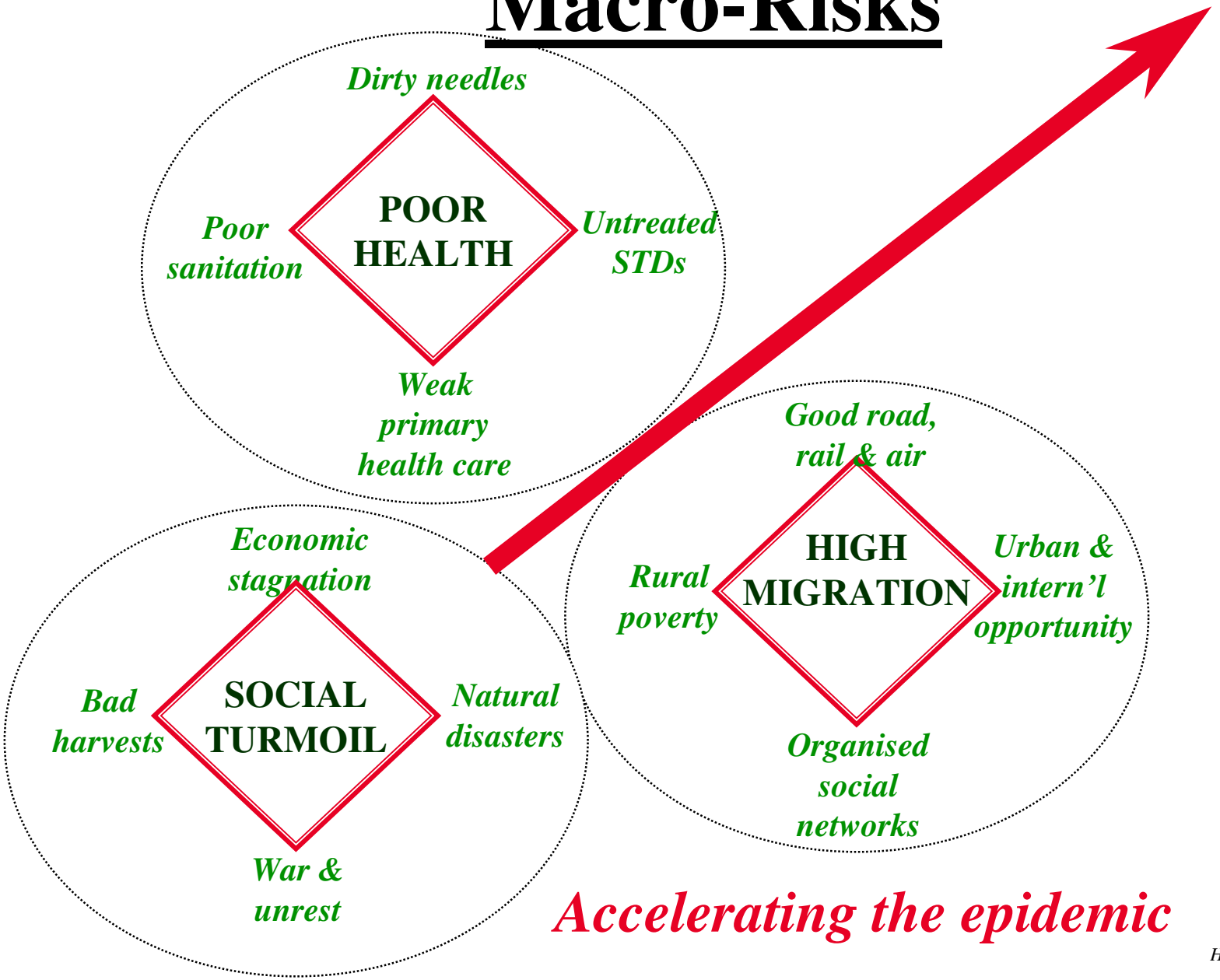


BEAD 1999
HIV in India 99, p. 25

Sex Trade & Silence



Macro-Risks



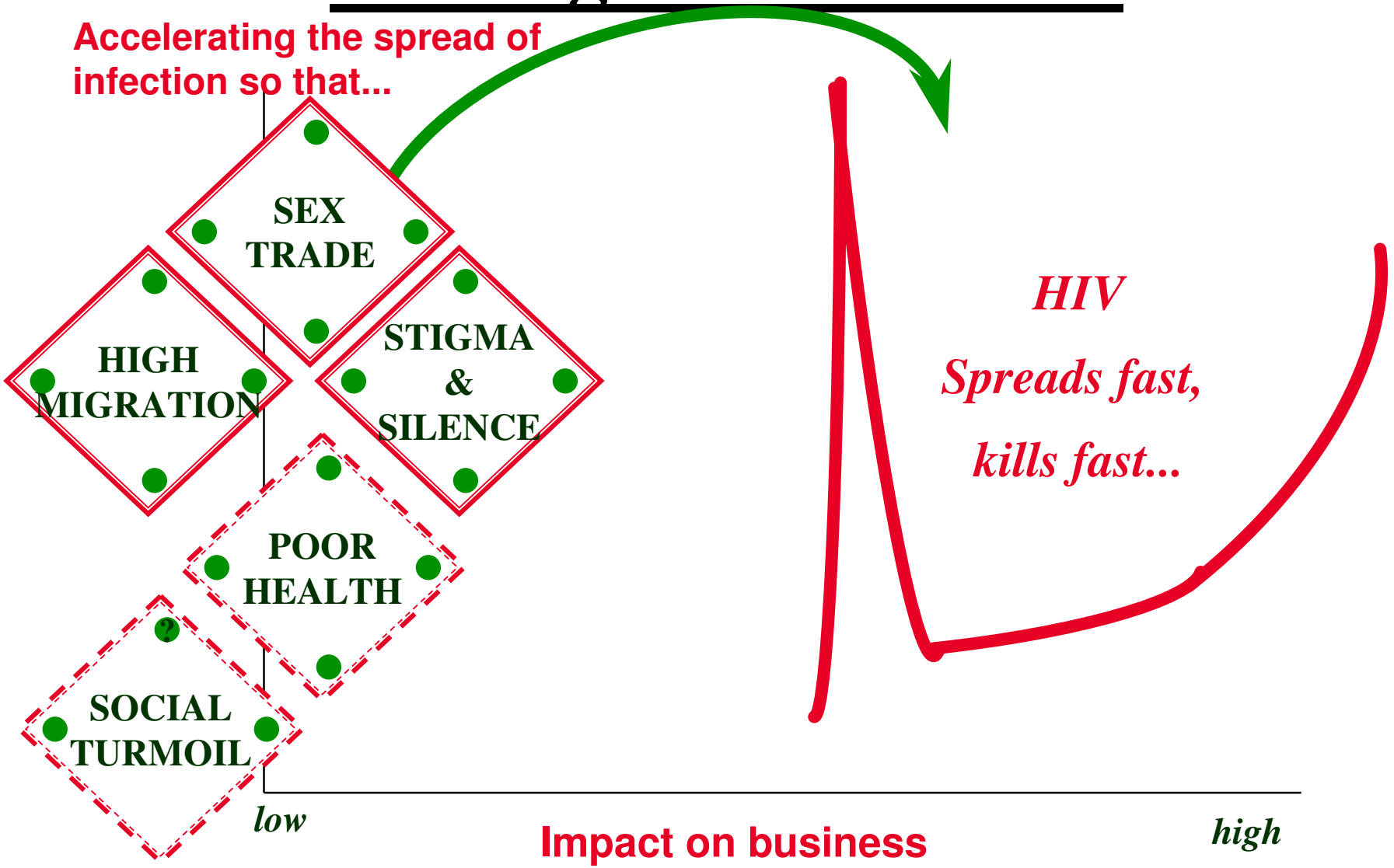
Accelerating the epidemic

Notes on Dirty Needles

"… One study in the Jalgaon district of Maharashtra (Duggal and Amin 1989) found that in its sample, 72 per cent of diarrhoea patients, 67 per cent of malaria patients, 61 per cent of those with measles, and 76 per cent of patients with heart ailments received injections. In our study, more than 60 per cent of respondent households had members who had needed an injection or an intravenous drip in the last two years (and even this may be an underestimate), and in only about half of these cases did the respondent know with certainty that the medical staff had used a disposable needle. (Whether so-called disposable needles are ever completely disposed of or are repackaged and find their way back into hospitaqls or drug stores in another issue and one that has been a matter of some concern in the popular press in recent time.)"

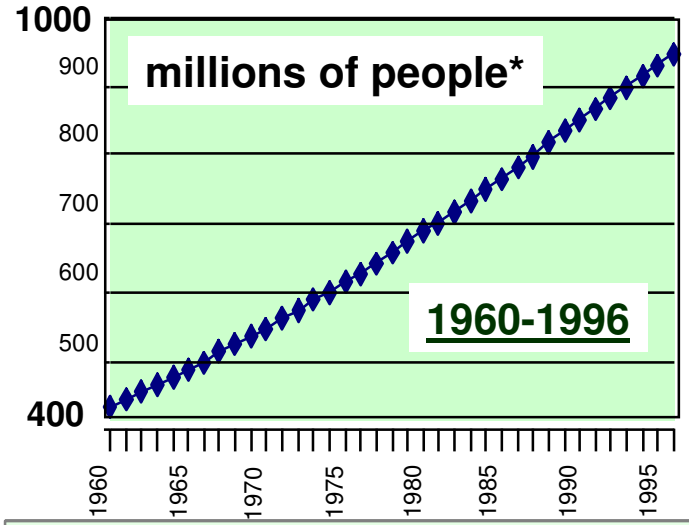
Source: Alaka M. Basu et al "The Household Impact of Adult Morbidity and Mortality: Some Implications of the Potential Epidemic of AIDS in India", in The Economics of HIV and AIDS: the case of South and South East Asia, edited by David E. Bloom, Peter Godwin. Delhi, Oxford University Press,1997, p. 119.

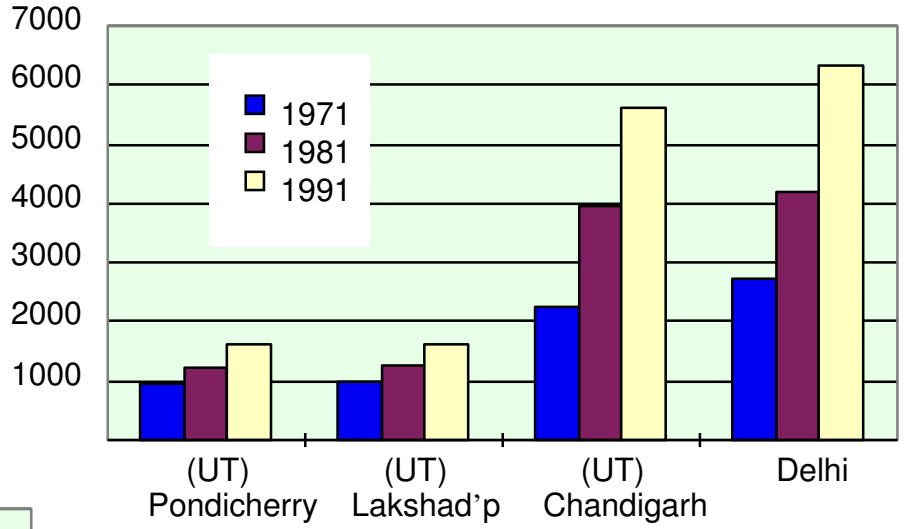
The Big Risks in India

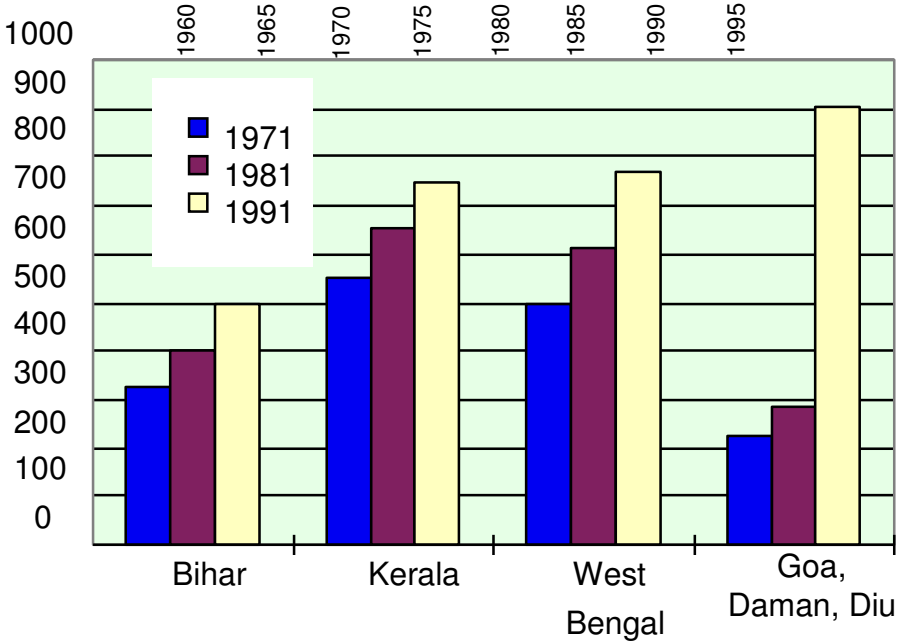


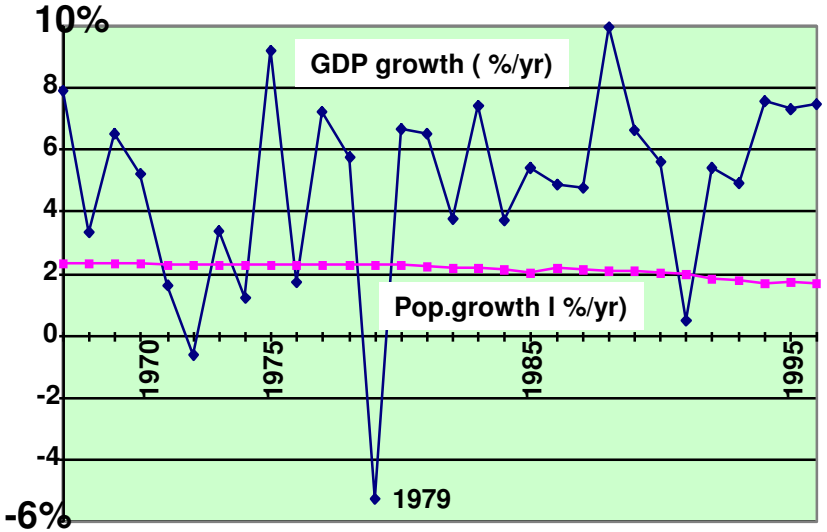
MIGRATION

Population: Growth, Density & Economy



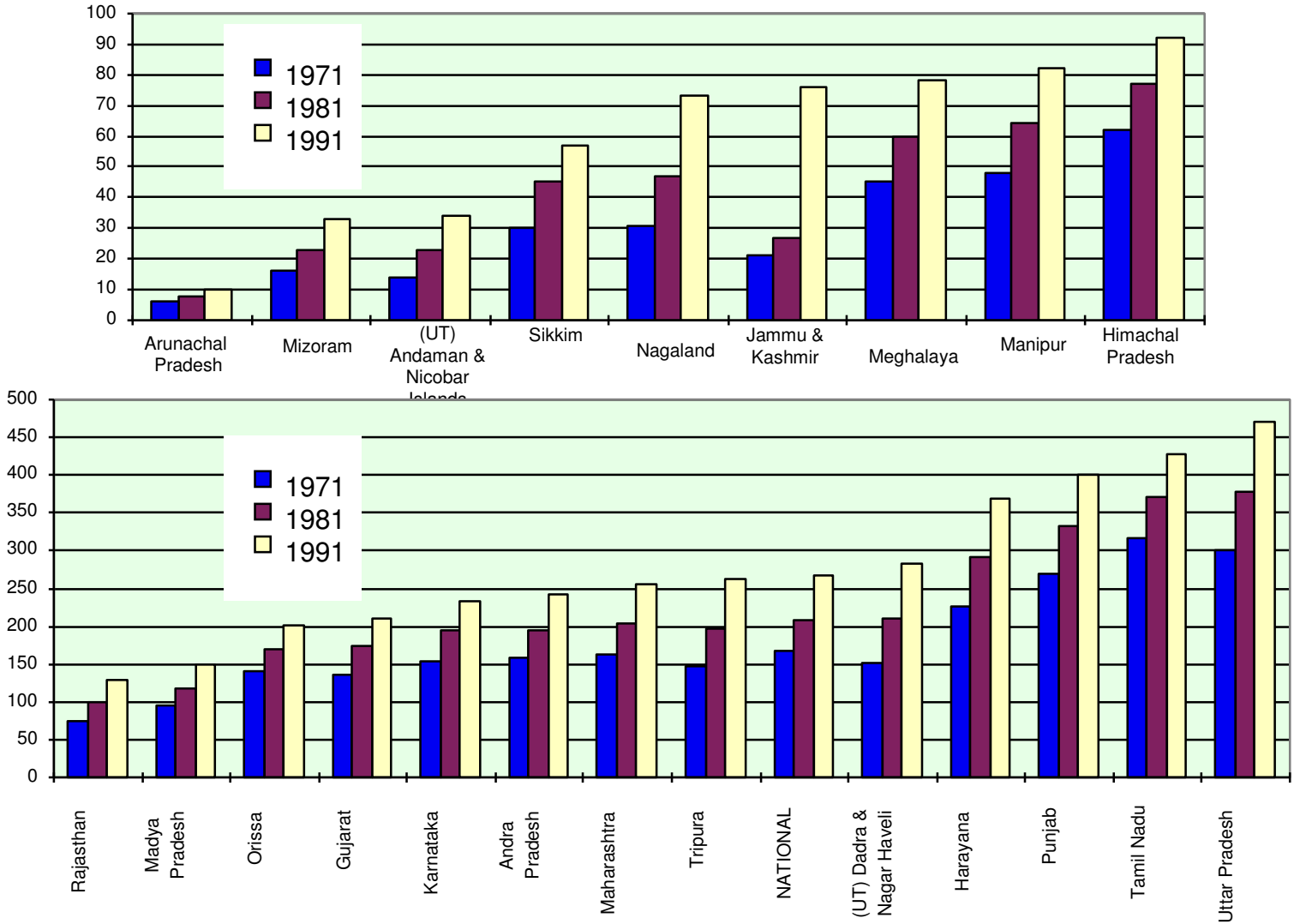






Source: Demographic Dynamism in India by Smita Bhutani, 1995, Discovery Publishing House, New Delhi, pages22, 27, 184; World Development Indicators 1998 (growth & population to 1996), World Bank

Density of Population/Km2

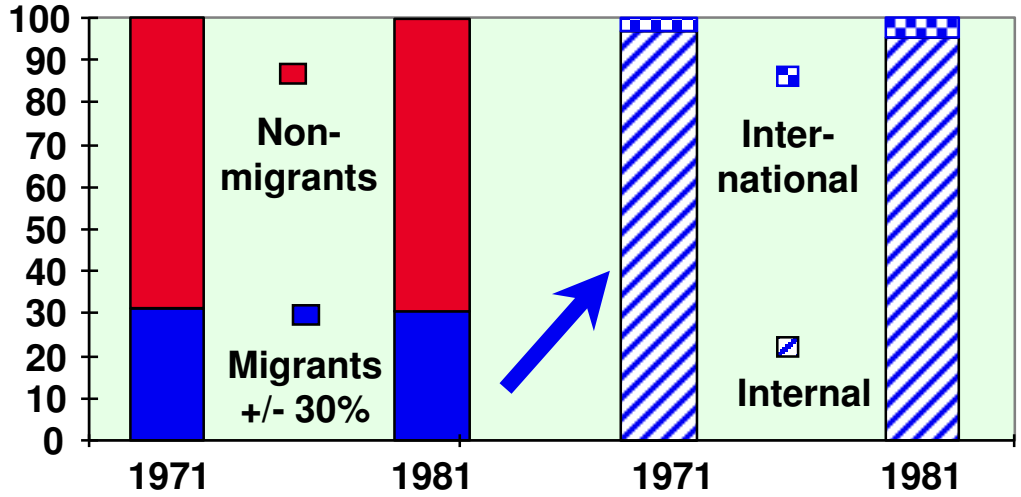


Source: Demographic Dynamism in India by Smita Bhutani, 1995, Discovery Publishing House, New Delhi, pages22, 27, 184

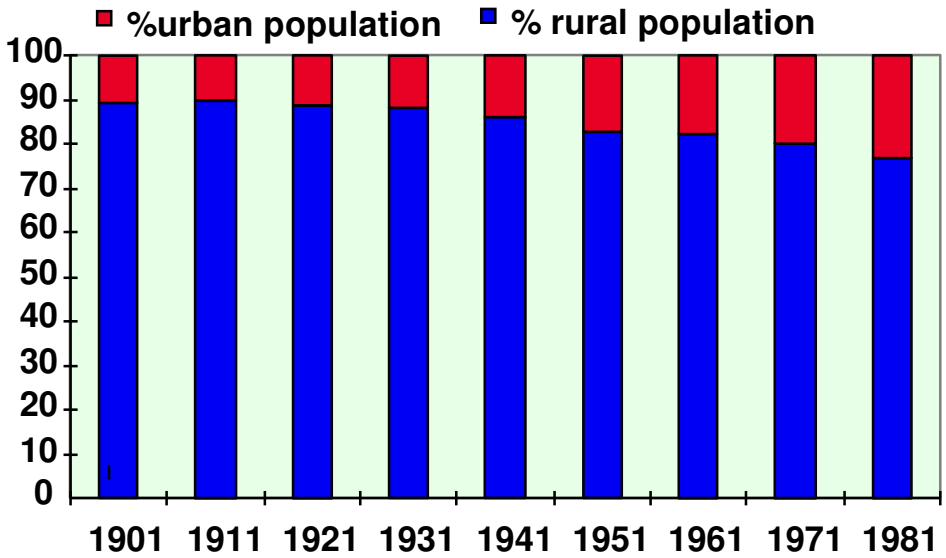
MIGRATION

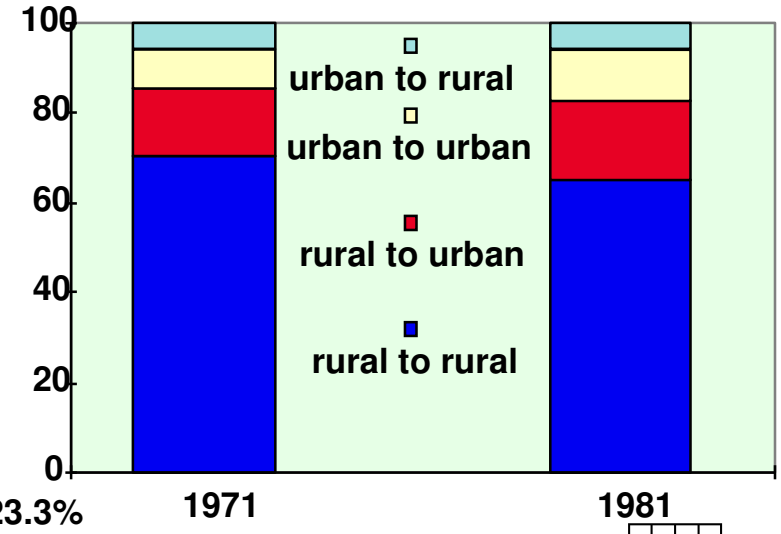
High Migration in India

World Bank 1996 Urbanisation = 27.1%



1981 Population = 685,184,692 30% of total =206 million people

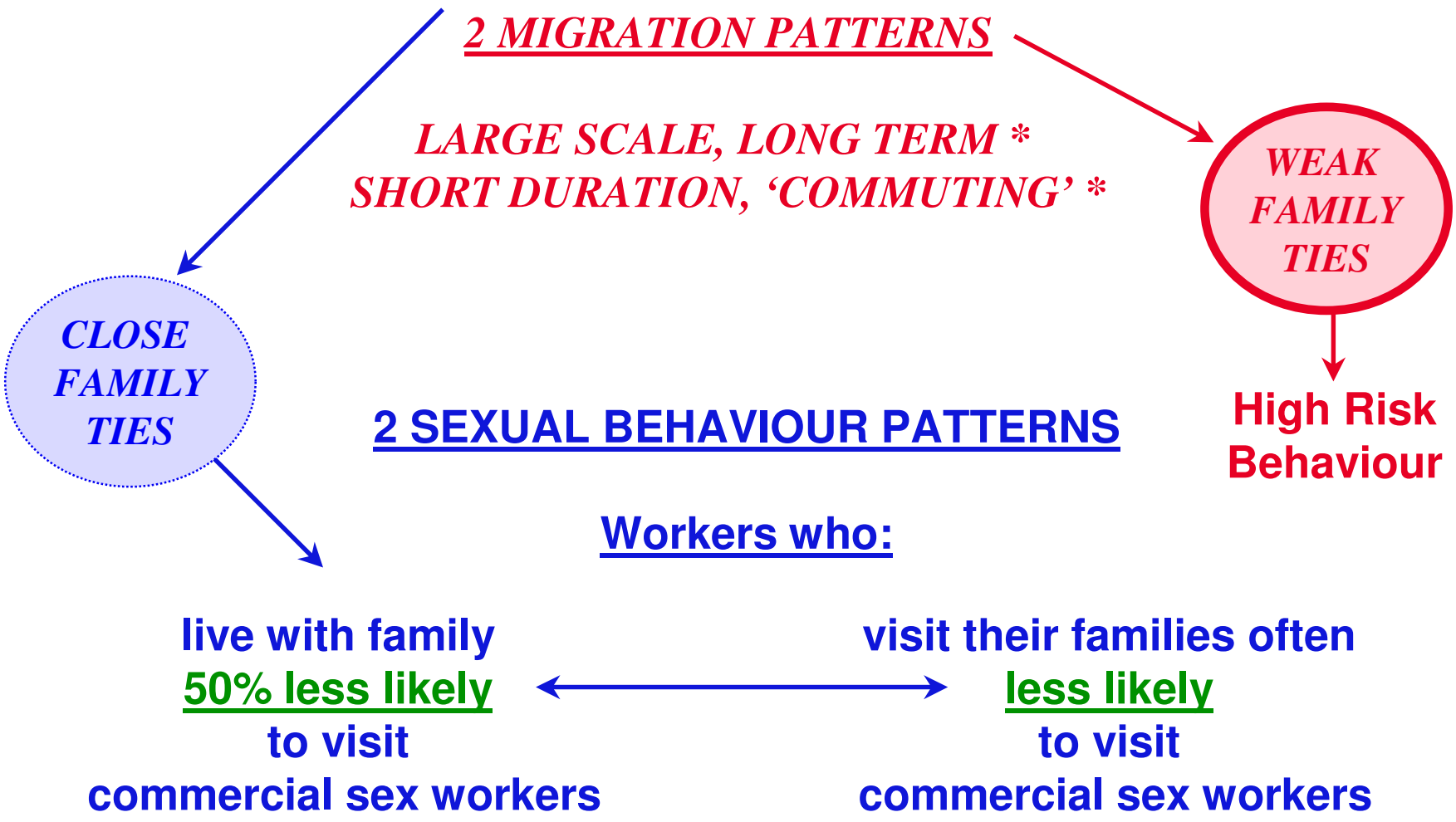




Source: Demographic Dynamism in India by Smita Bhutani, 1995, Discovery Publishing House, New Delhi, pages 13, 73

MIGRATION

Migration & Sexual Behaviour - 2 Kinds



*Sources: from articles in The Looming Epidemic, ed. by Peter Godwin, 1998, op. cit. * Tony Barnett, "The Epidemic in Rural Communities", p. 153; **Unpublished study by Centre for Operations Research and Training, UNDP Regional HIV Project, New Delhi, 1994/5, quoted in Subhash Hira, et al "HIV Infection in the Workforce …" , p. 140-42.*

MIGRATION

Migration & Sexual Behaviour - 2 Kinds

LARGE SCALE, LONG TERM *	SHORT DURATION, 'COMMUTING' *
Inter-regional migrants	*56 villages in Bihar*
(1981 Census)	10% resident < 3 months
10% were resident <1 year	47% resident 4-6 months
60% were resident > 10 years	16% resident > 10 months

CLOSE FAMILY TIES

WEAK FAMILY TIES

CORT STUDY**

of migrant workers in Mumbai & Delhi

20% of migrant workers live alone

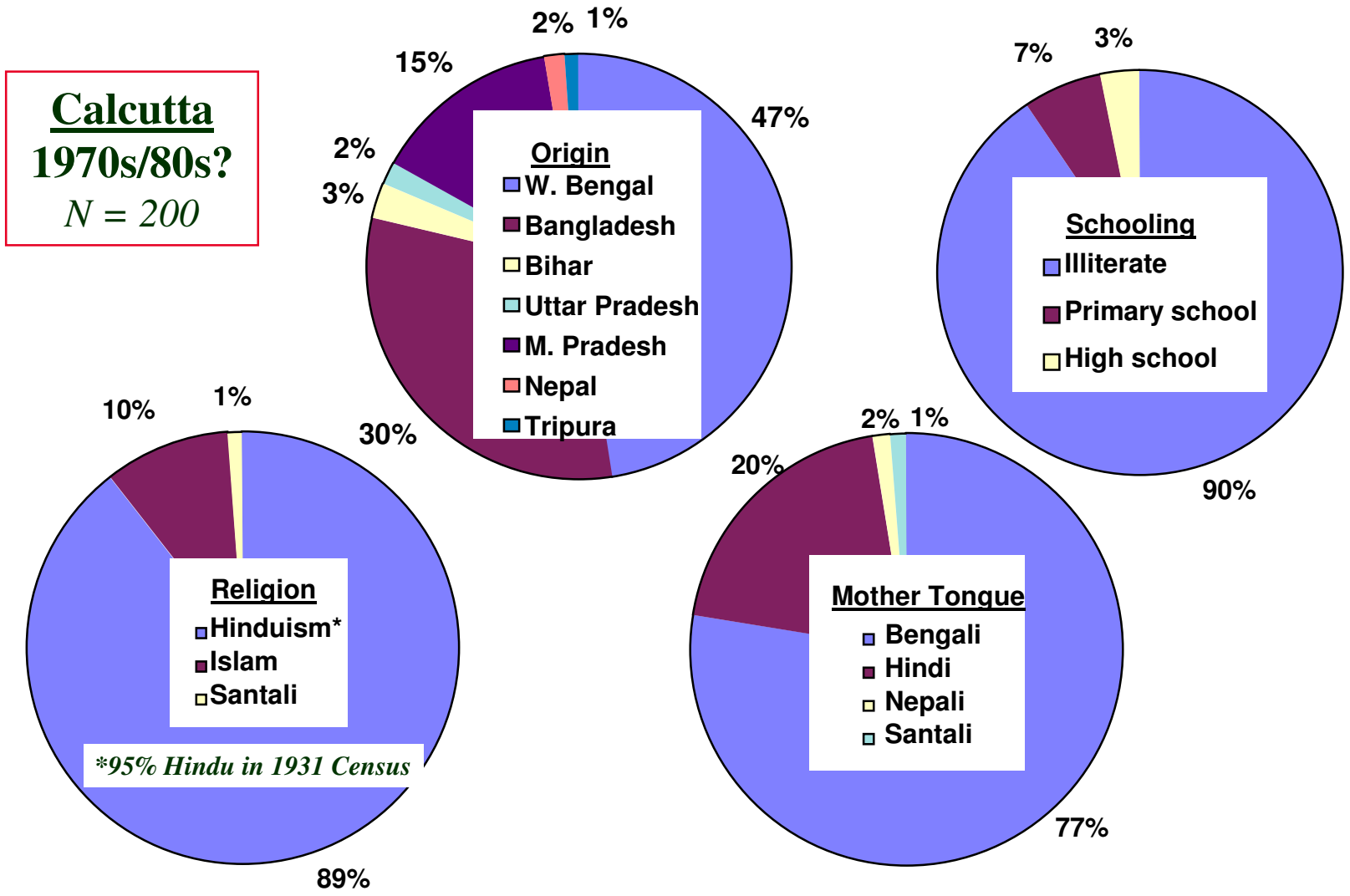
Mumbai	*Delhi*
• *46% of workers are migrants*	• *65% of workers are migrants*
• *56% of migrants from a distant state*	• *26% of migrants from a distant state*
• ***Workers living with family 50% less likely to visit commercial sex workers***	• ***Workers who visit their families often less likely to visit commercial sex workers***

*Sources: from articles in The Looming Epidemic, ed. by Peter Godwin, 1998, op. cit. * Tony Barnett, "The Epidemic in Rural Communities", p. 153; **Unpublished study by Centre for Operations Research and Training, UNDP Regional HIV Project, New Delhi, 1994/5, quoted in Subhash Hira, et al "HIV Infection in the Workforce …" , p. 140-42.*

SEX TRADE

Social Characteristics of Prostitutes

Calcutta
1970s/80s?
N = 200



Source: B. Joardar, Prositution in Historical and Modern Perspectives, Inter-India Publications, New Delhi, 1984, p. 76,72,93,96

SEX TRADE

The Sex Trade: Highly Organised

++ The landlord ... the procurers or traffickers ... the police ++

The Brothel Keeper

"the brothel keeper stands in the position of an employer…"

1988 study estimated the sex industry was a Rs 500 crore business = Rs5 billion*

Mashi

"she runs the business"

Self-employed prostitute

"very few in number"

Adia

"Adia means half"

Chukri

"no better than a slave."

*Source: B. Joardar, Prositution in Historical and Modern Perspectives, Inter-India Publications, New Delhi, 1984, p. 00-101, 122; * Carolyn Sleightholm & Indrani Sinha, Guilty without Trial, Rutgers U. Press, 1996, p.93*

SEX TRADE

The Sex Trade: Highly Organised

++ The landlord ... the procurers or traffickers ... the police ++

1988 study estimated the sex industry was a Rs 500 crore business = Rs5 billion*

The brothel keeper

"Every brothel is run on a commercial basis. In fact, the brothel keeper stands in the position of an employer… In our country sex selling for the interest of a third party is illegal so the prostitutes have no trade union rights."

Mashi

"The male brothel keepers appoint a Mashi -- the superintendent of the brothel, for the smooth functioning of the brothel house. … the 'Appointed Mashi' has to pay the lion's share to the male brothel keeper in whose house and on whose behalf she runs the business."

Self-employed prostitute

"… the 'self-employed' … are very few in number. An Adia prostitute can become self-employed prostitute, if she can constantly raise her voice and claim 'slef-employed' status and ultimately satisfy the Mashi. This is the general rule."

Adia

"The term Adia means half. But, in the brothel world it means a prostitute who gets half of her income. the rest half goes to the credit of the Mashi concerned."

Chukri

"The Chukri prostitute has to satisfy all the customers … In fact, the conditions of a Chukri prostitute is no better than a slave."

*Source: B. Joardar, Prositution in Historical and Modern Perspectives, Inter-India Publications, New Delhi, 1984, p. 00-101, 122; * Carolyn Sleightholm & Indrani Sinha, Guilty without Trial, Rutgers U. Press, 1996, p.93*

Tolerated, but Illegal

SEX TRADE

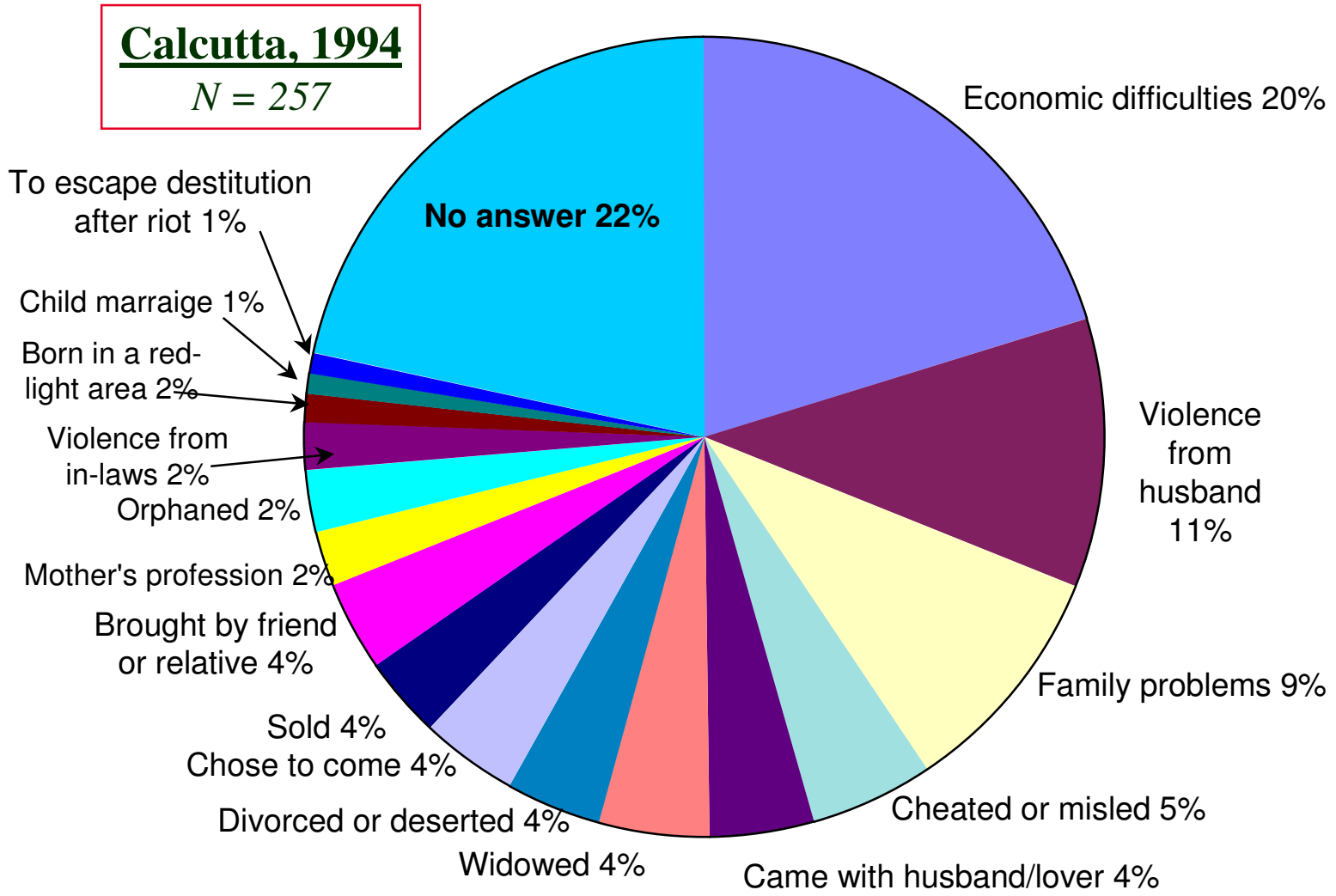
1929	*U.P. Nayak Girls Protection Act*
1930	*Madras Suppression of Immoral Traffic Act*
1933	*Bengal Suppression of Immoral Traffic Act*
	U.P. Suppression of Immoral Traffic Act
1934	*Bombay Devadasi Protection Act*
1935	*Punjab Suppression of Immoral Traffic Act*
1947	*Madras Davadasi Act*
1936	*Mysore Suppression of Immoral Traffic Act*
1948	*Bihar Suppression of Immoral Traffic Act*
1950	*U.P. Naik Girls Protection Act*
1952	*Saurashtra Preventon of Prostitution Act*
	Hyderabad Suppression of Immoral Traffic Act
1953	*M.P. Suppression of Immoral Traffic Act*
	Ajmer Prevention of Prostitution Act
1956	*All India Suppression of Immoral Traffic in Women and Girls Act*
1978	*All India Suppression of Immoral Traffic in Women and Girls Amendment Act*

2004 B.K.
Patiala Suppression of Immoral Traffic Act

Source: B. Joardar, Prositution in Historical and Modern Perspectives, Inter-India Publications, New Delhi, 1984, p. 232-33.

SEX TRADE

Reasons for Becoming a Sex Worker

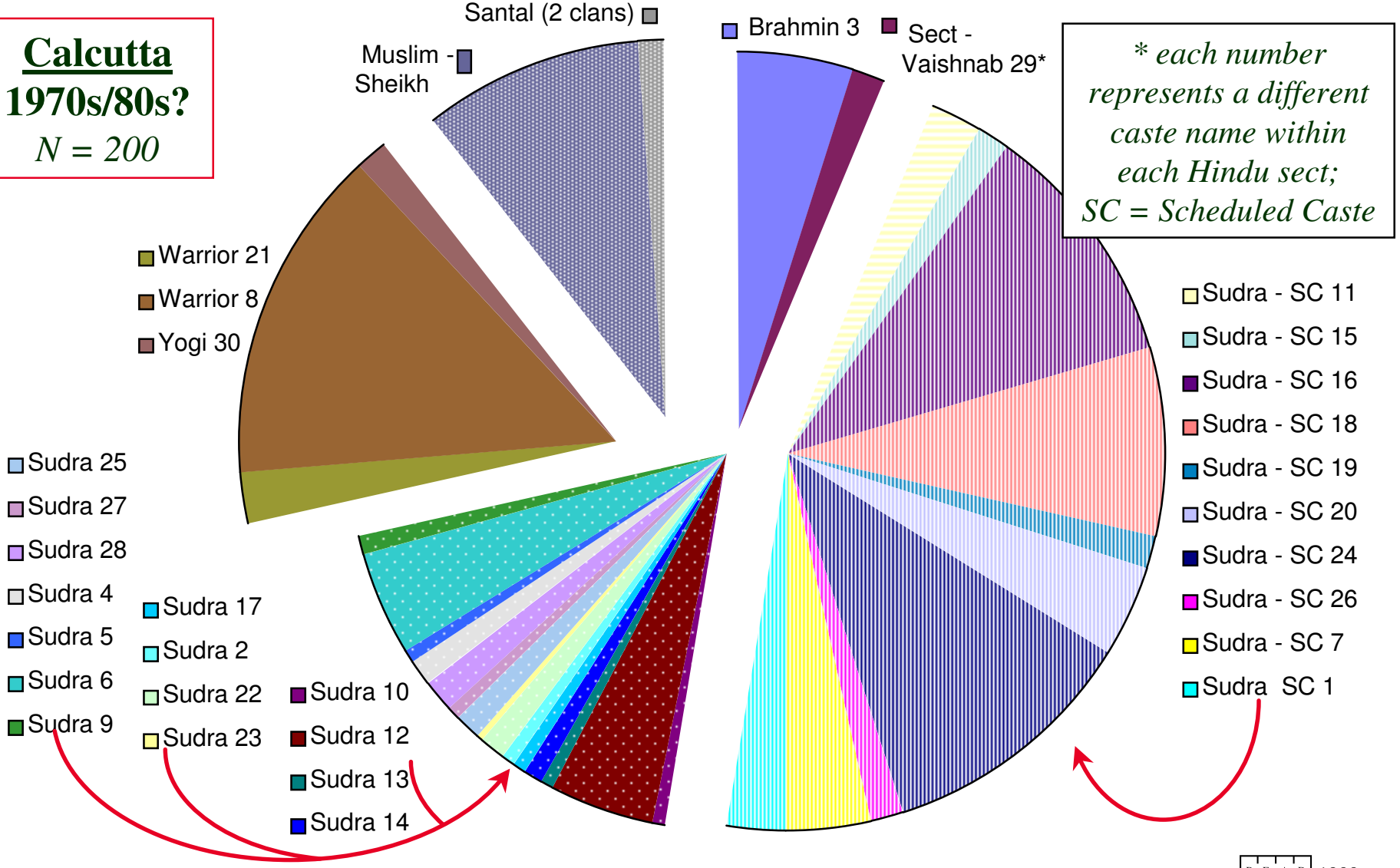


Source: Sanlaap Survey, 1994, quoted in Carolyn Sleightholm & Indrani Sinha, Guilty without Trial, Rutgers U. Press, 1996, p.16

SEX TRADE

Caste among Calcutta Prostitutes

Calcutta
1970s/80s?
N = 200



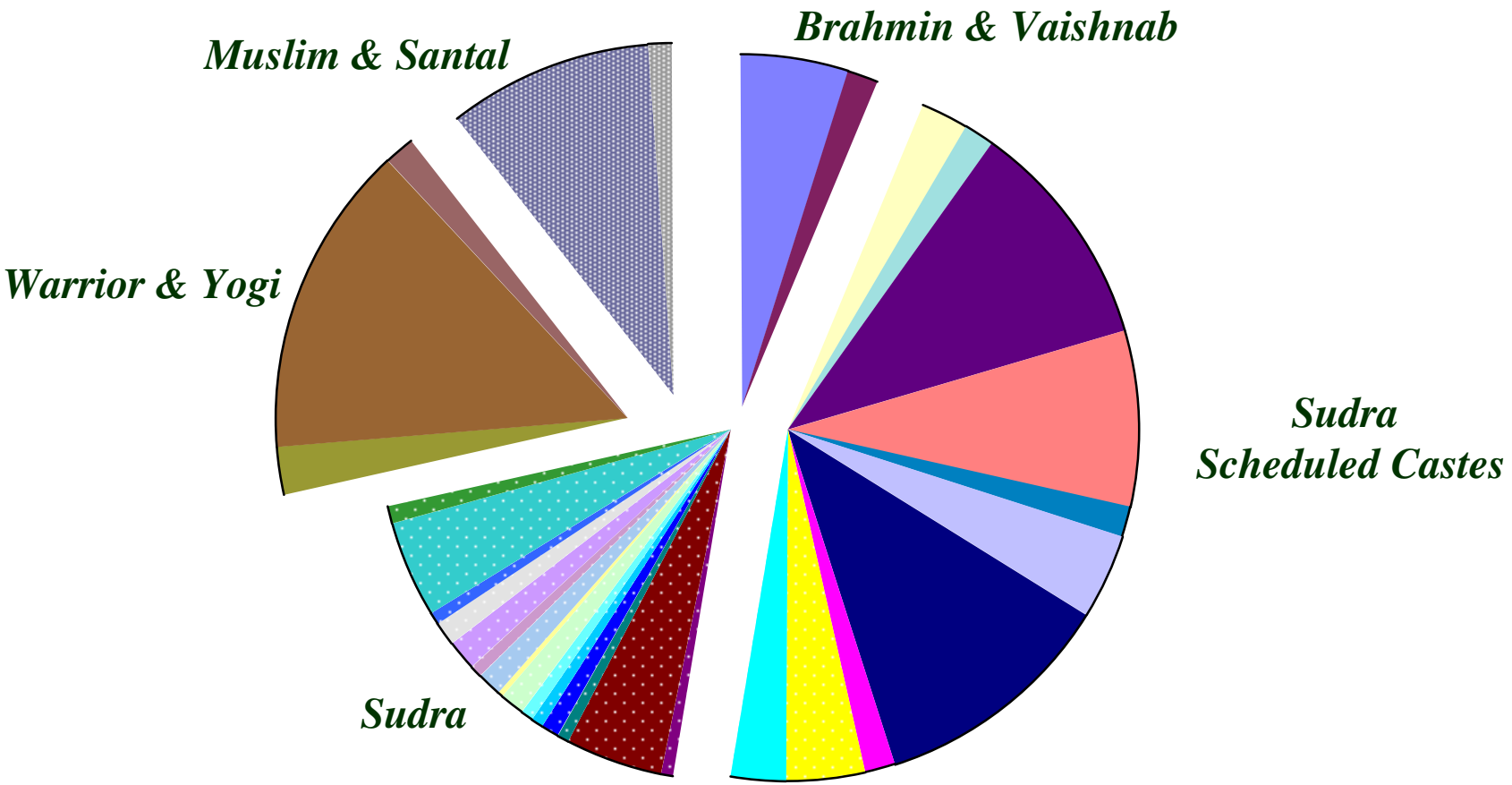
** each number represents a different caste name within each Hindu sect; SC = Scheduled Caste*

Source: B. Joardar, Prositution in Historical and Modern Perspectives, Inter-India Publications, New Delhi, 1984, p. 93.

SEX TRADE

Caste among Calcutta Prostitutes

"Here, no one bothers or ought to bother about the caste and such like things. But caste in Indian society dies really hard."



Source: B. Joardar, Prositution in Historical and Modern Perspectives, Inter-India Publications, New Delhi, 1984, p. 93.

SEX TRADE

Inter-caste Mixing in Brothels?

The Question Remains Unanswered ...

1970s/80s?

"In West Bengal the caste rigidity in interdining has declined in the conventional world. The same is the case inside the brothel. But like conventional societies of West Bengal caste hierarchical sentiment is still there.

"In the 19th century and the beginning of this century, the prostitute used to maintain caste hierarchy and never used to take rice from the lower caste prostitutes. … Here, no one bothers or ought to bother about the caste and such like things. But caste in Indian society dies really hard. Really, it is surprising indeed that in brothels a prostitute who is a Brahmin by her caste is held in great esteem than that of a non-Brahmin, specially lower caste prostitutes."

Source: B. Joardar, Prositution in Historical and Modern Perspectives, Inter-India Publications, New Delhi, 1984, p. 114; emphasis added.

STIGMA & SILENCE

Stigma and Silence

The Risks of "Fieldwork"

1970s/80s?

"A few days after this I met him again and I enquired about his good news. I can till now remember that at this he was bubbling with anger and replied "Please don't talk. You are a good boy -- I thought. I could not dream of 'that' that you are ……" He stopped.

"…Suddenly it came in my mind that he might have seen me coming out of any brothel area. … in fact, a few months back after doing field work in a brothel … when I was crossing the boundary wall of the brothel area with the help of a country made ladder ('mai'), he saw me from the suburban train."

Biswanath Joardar on being snubbed by the elder brother of a friend while doing his fieldwork for Prostitution in Historical and Modern Perspectives, published 1984, New Delhi, quoted on p.3

STIGMA & SILENCE

Silence and Stigma in the Workplace

Interview: Peter Godwin & "S", who is HIV+

1990s

S: "Well, the private sector speaks quite 'supportively' in public, but responds in quite the opposite way when it comes to their own workforce. … When the word gets around, employers and employees alike are panic-striken. 'His presence will affect our business' is the common reaction by employers. It is worse with the employees. People don't want to associate with him (though there are exceptions). Most people will say that they are uncomfortable working with an HIV positive employee."

Sources: The Looming Epidemic, ed. by Peter Godwin, 1998, op. cit. p. 149

Initial Answers re: Epidemic

Unique

Missing women, 'pollution', hierarchy & diversity

Indian Sexual Networks

More like Thailand

Diversity & Hierarchy

We don't know if sexual mixing stays within social boundaries.

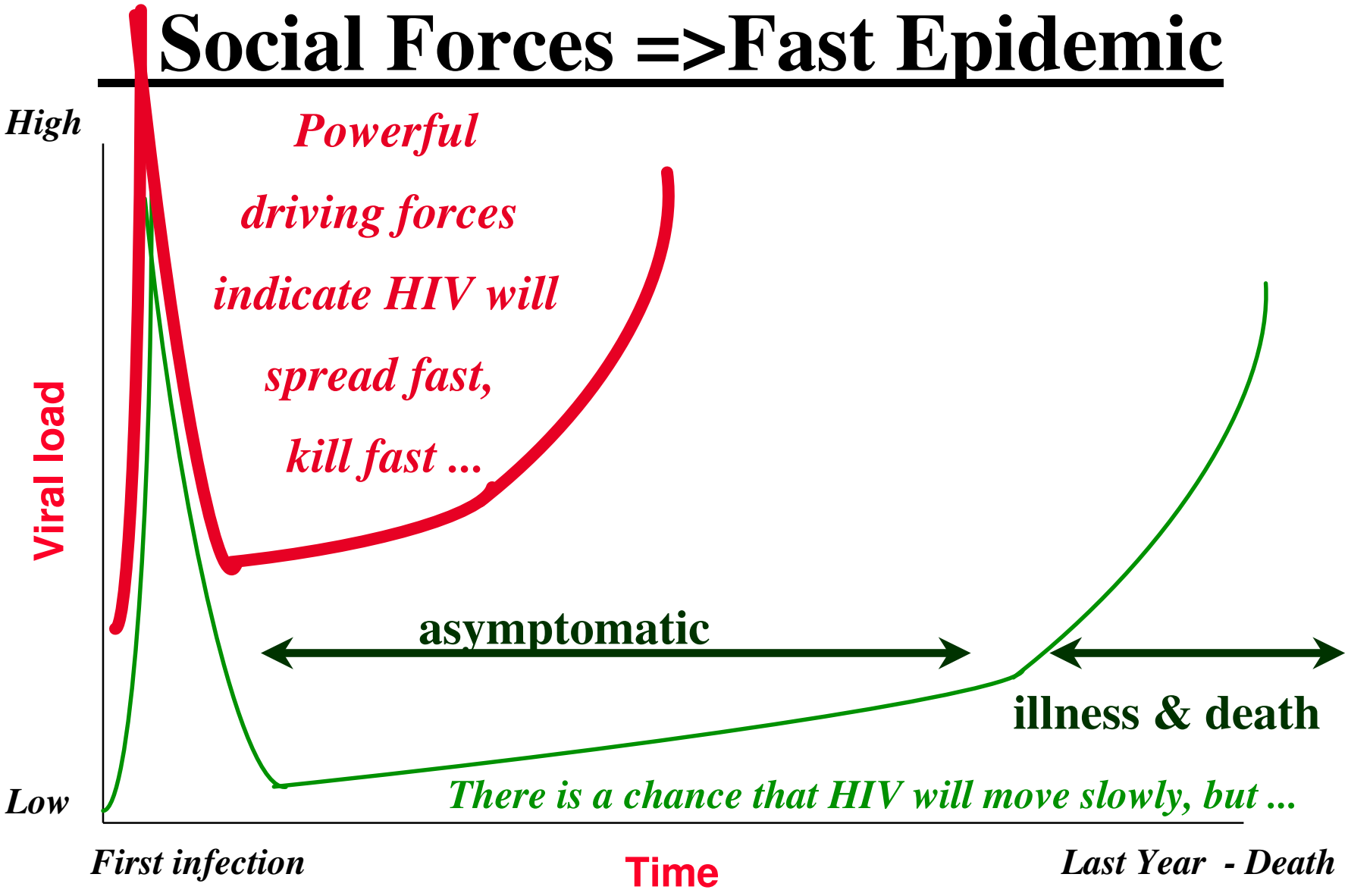
Unknown, but Dangerous

Silence makes the Indian epidemic unknown, but dangerous.

Speed & Intensity

How quickly might HIV spread in India?

Social Forces =>Fast Epidemic



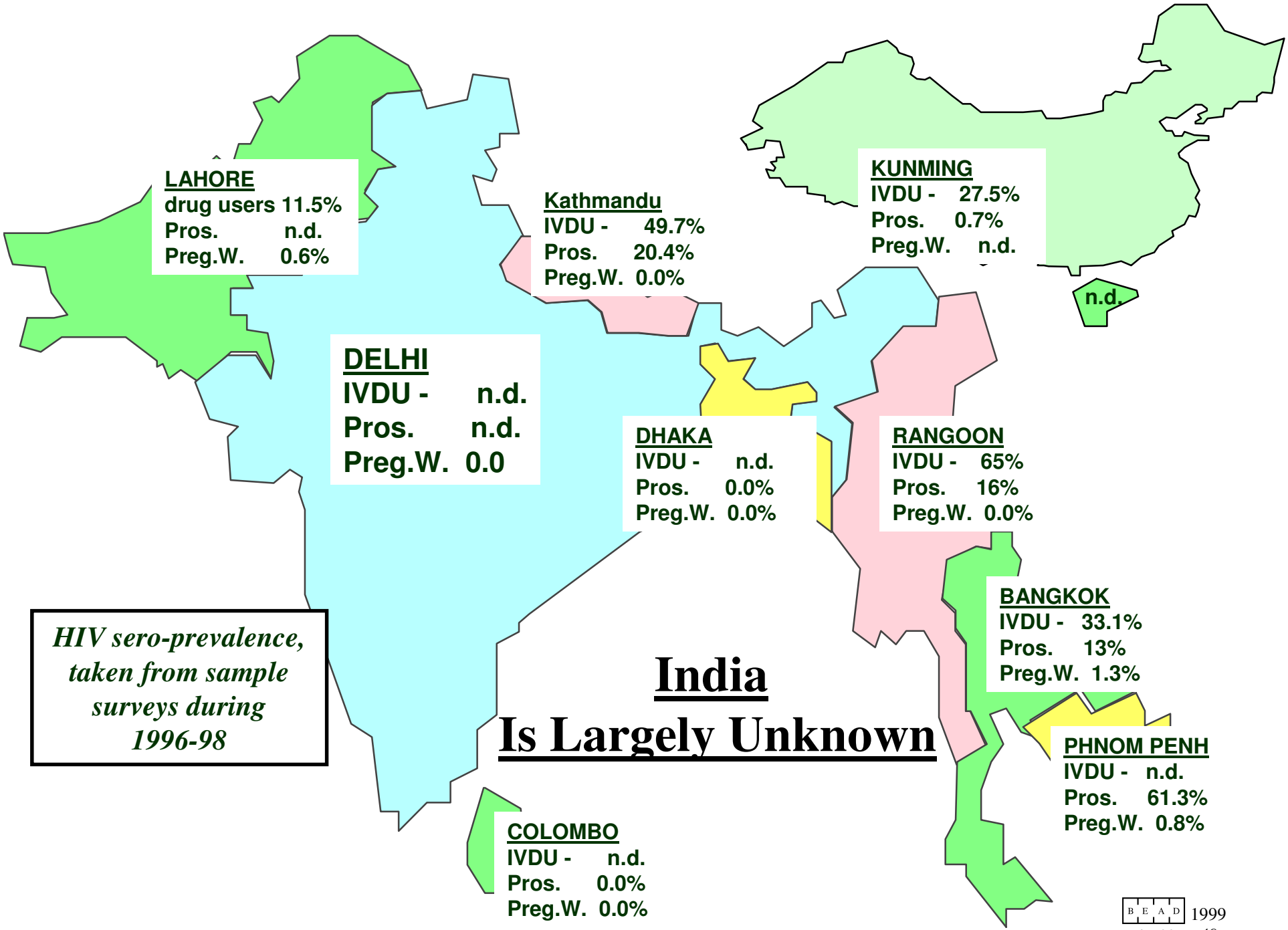
IV. What Is the evidence for HIV in India?

Comments & questions on
U.S. Bureau of the Census data
or a subscription to the CD/Rom

to

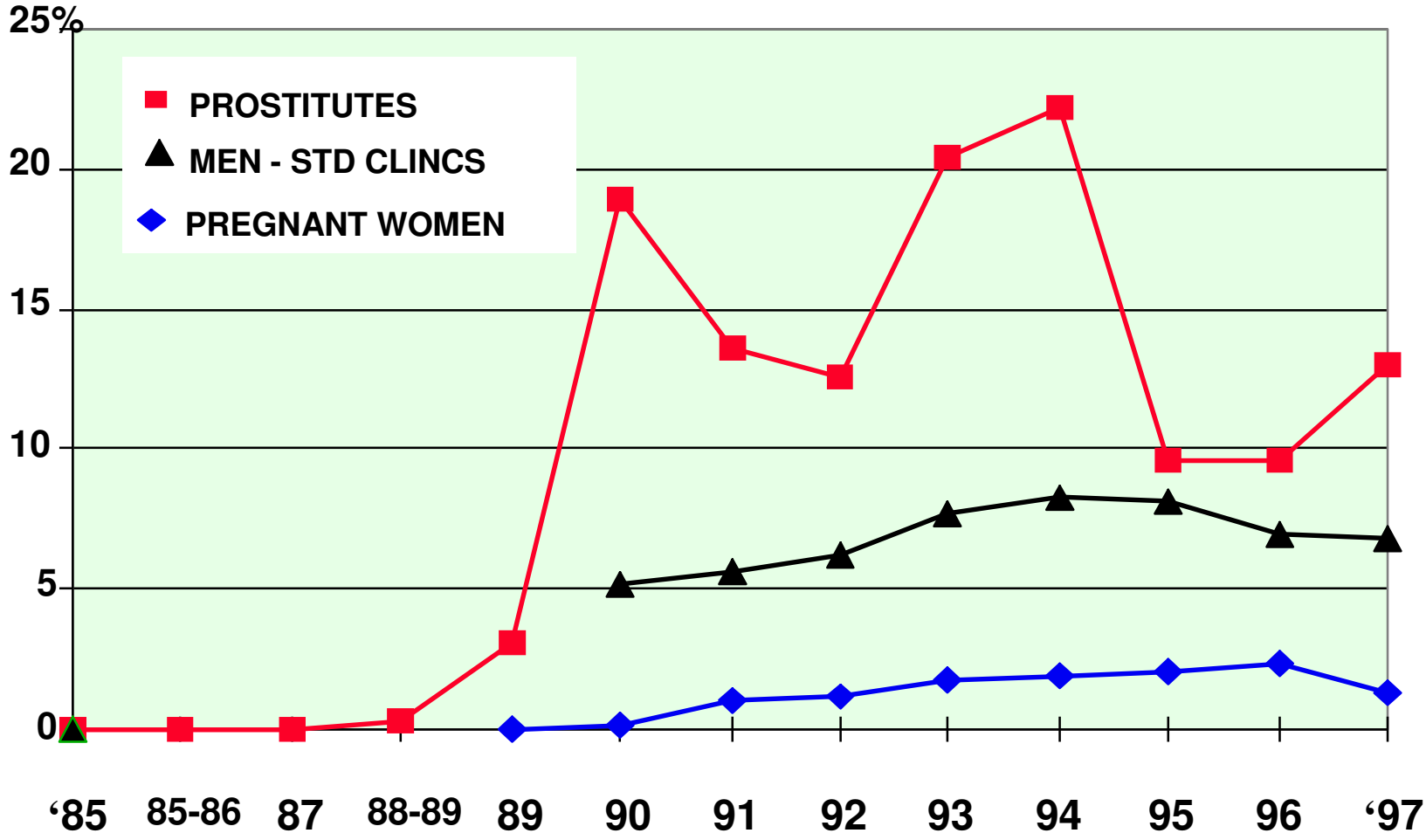
Karen A. Staneki (kstaneck@census.gov)

Karen A. Stanecki, Chief
Health Studies Branch
International Programs Center
Population Division
U.S. Census Bureau
Washington, D.C. 20233-8860
tel: +1 301-457-1406
fax: +1 301-457-3034



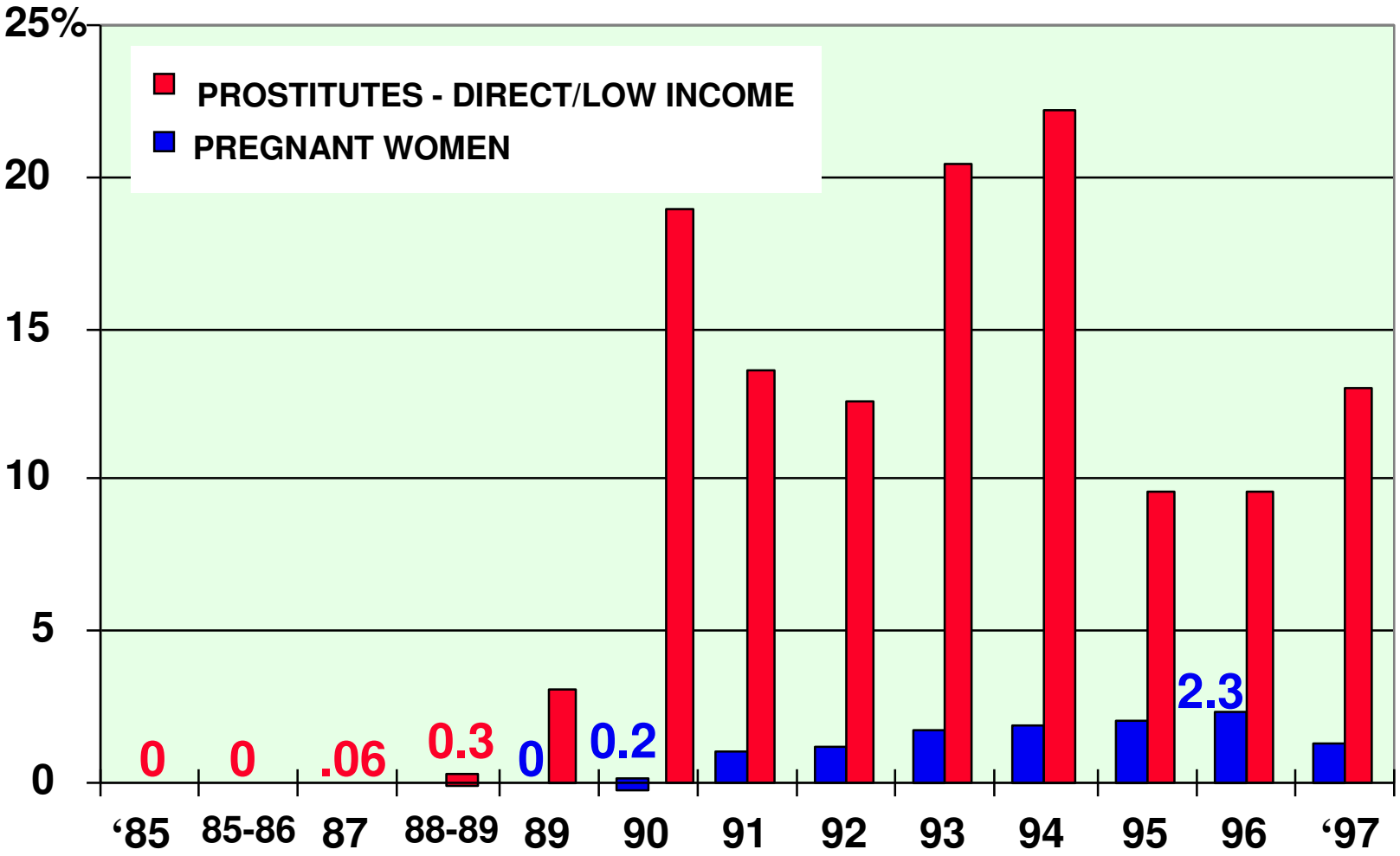
Source: U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Feb. 1999

Shifts in the HIV Epidemic - Bangkok



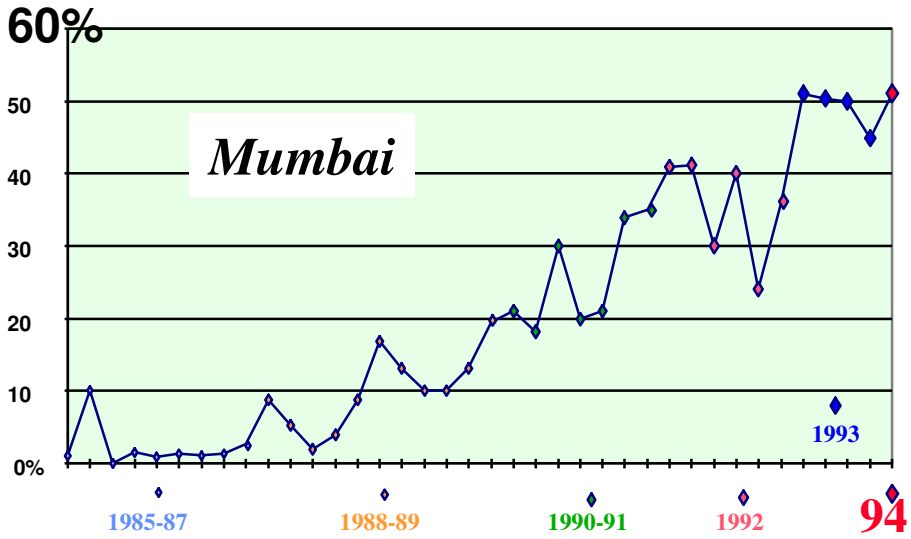
Source: U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Feb. 1999

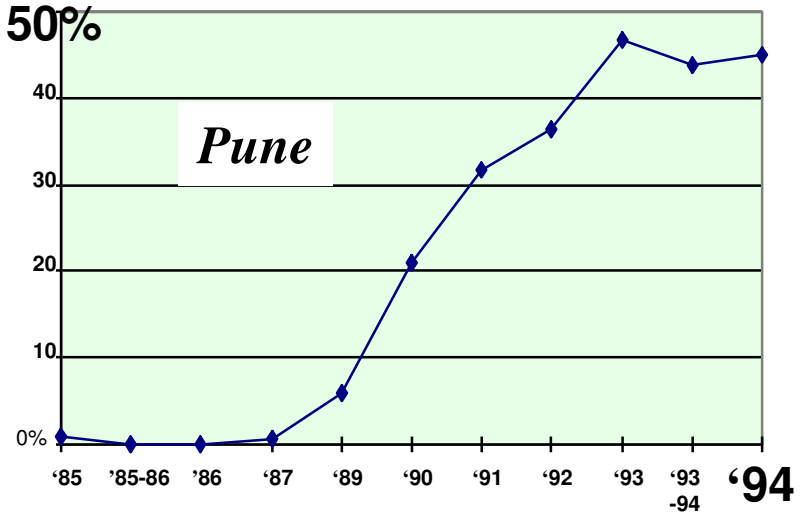
HIV+ Women in Bangkok

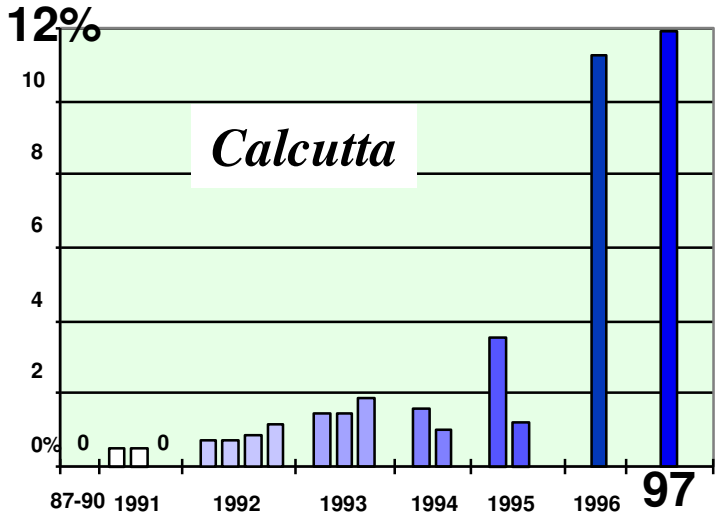


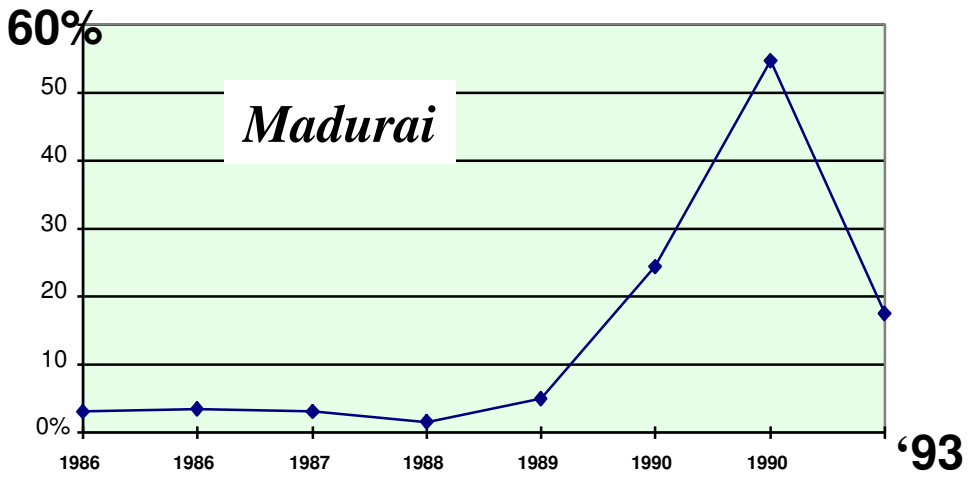
Source: U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Feb. 1999

HIV+ among Prostitutes



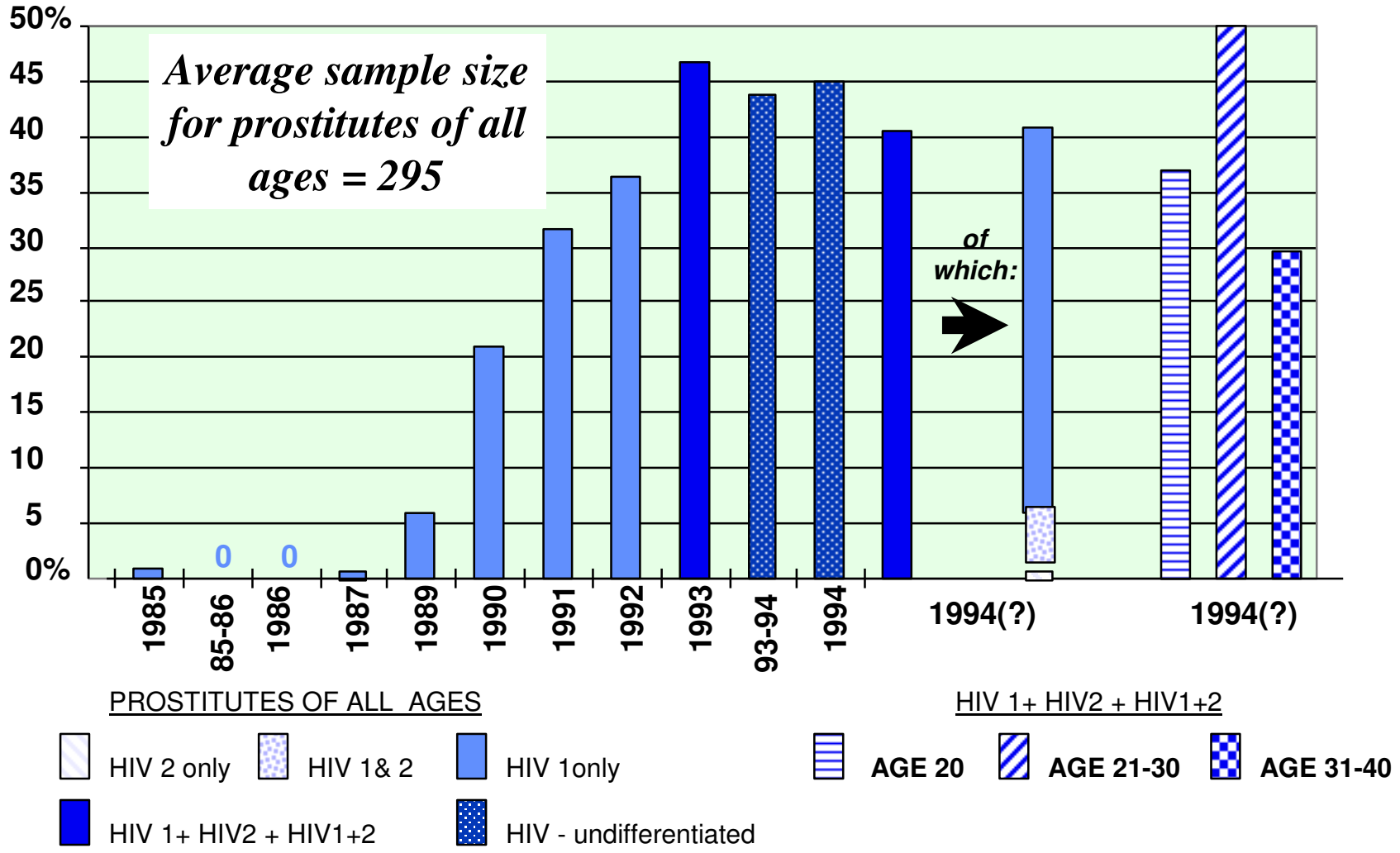






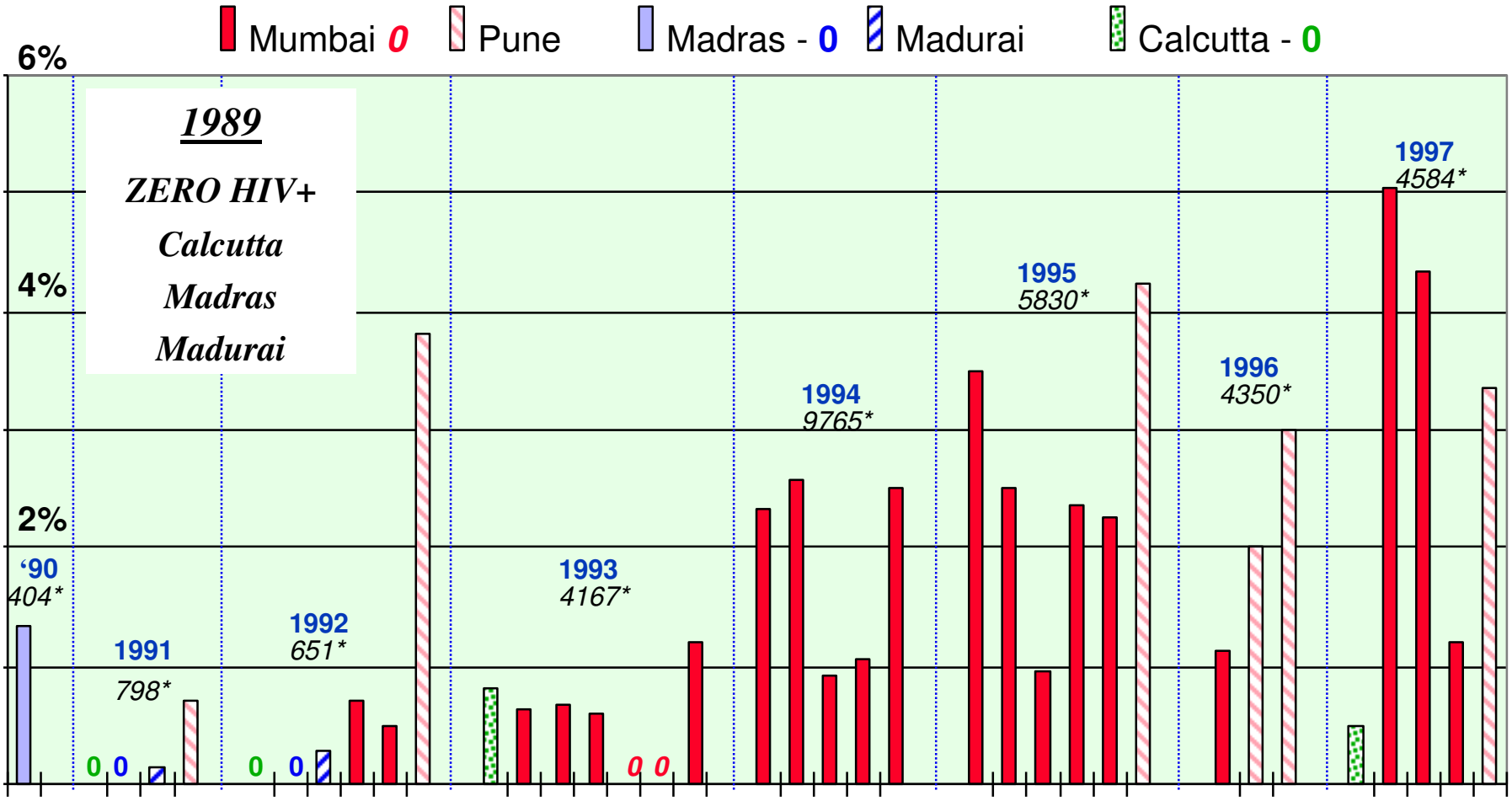
Source: U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Feb. 1999

HIV+ in Pune Prostitutes



Source: U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Feb. 1999

HIV+ among Pregnant Women



*average sample size, where given

Source: U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Feb. 1999

At Least Five Different Epidemics

Male to Male

Noticed in Chennai (Madras)

International Migration

via Saudi Arabia & other Gulf states

Northeast, Diguised Epidemic

IVDU epidemic crossing borders with Manipur

Unnoticed Rural Epidemic

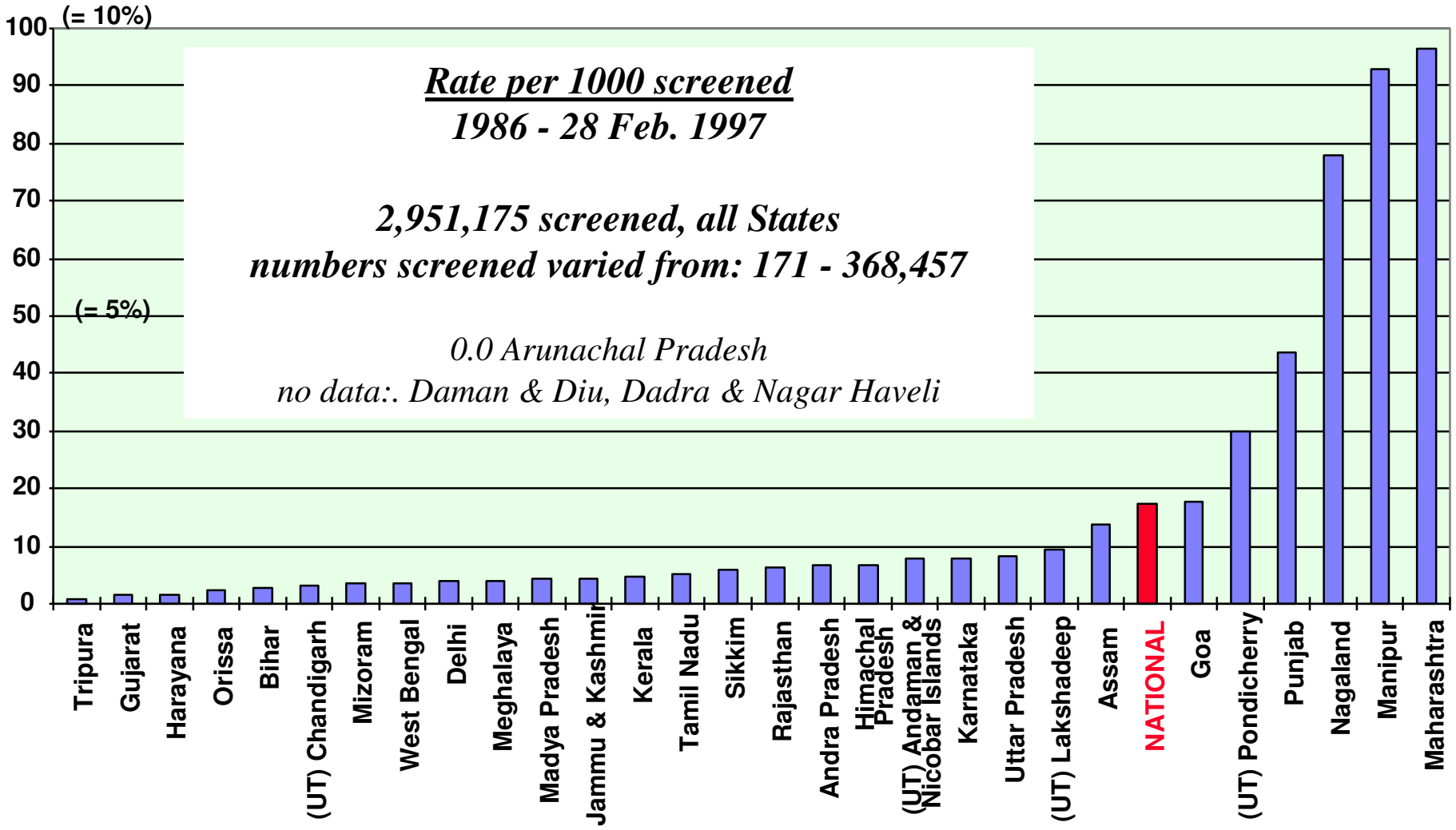
Migrating & 'commuting' workers between town & country

Urban Sex Workers ==> Middle Classes

Commerical sex trade spreading HIV more widely

Source: Conversation with Tony Barnett, University of East. Anglia, Nov.. 1999

Cumulative HIV Statistics for India

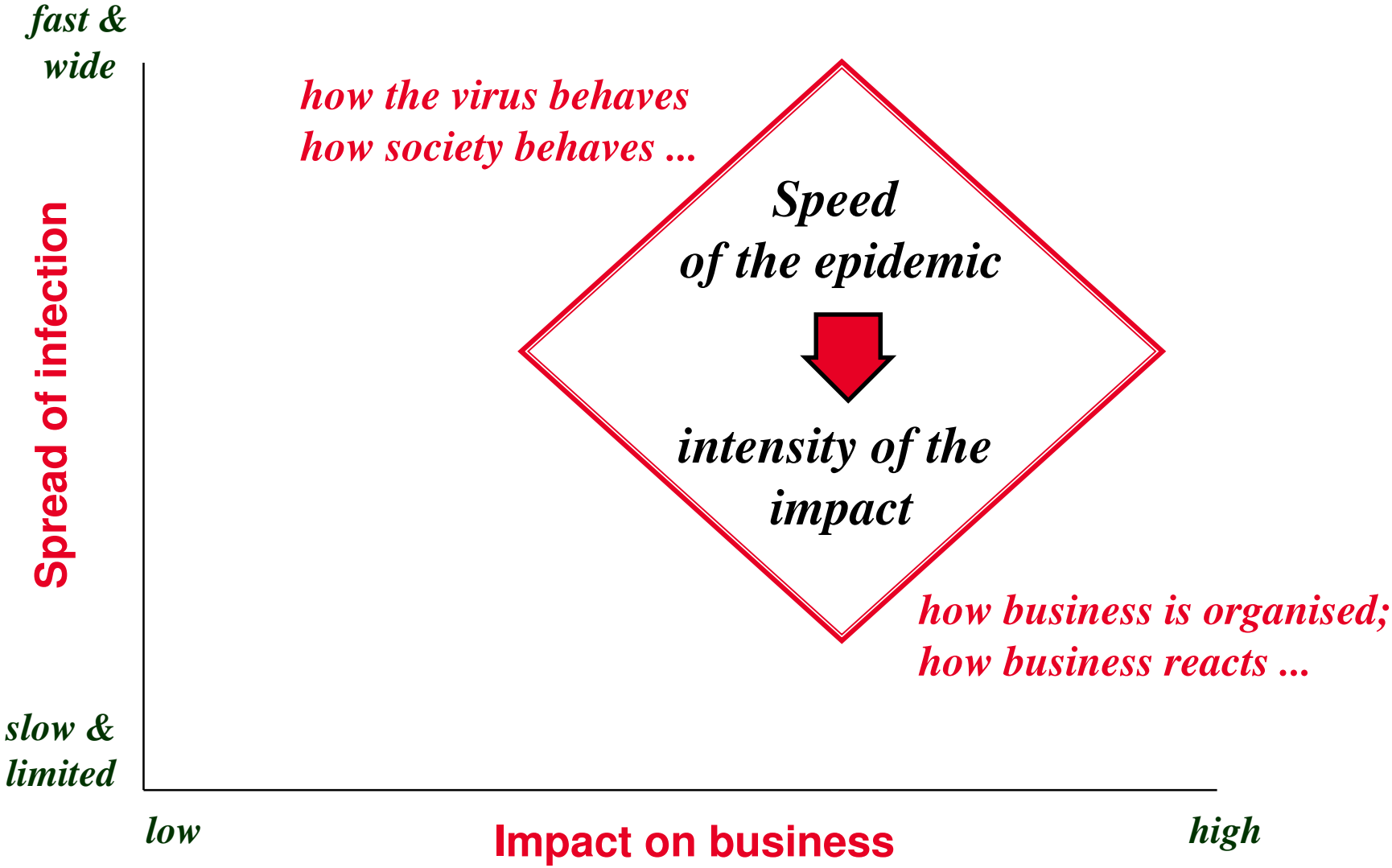


N.B. These numbers are probably biased towards high risk populations.

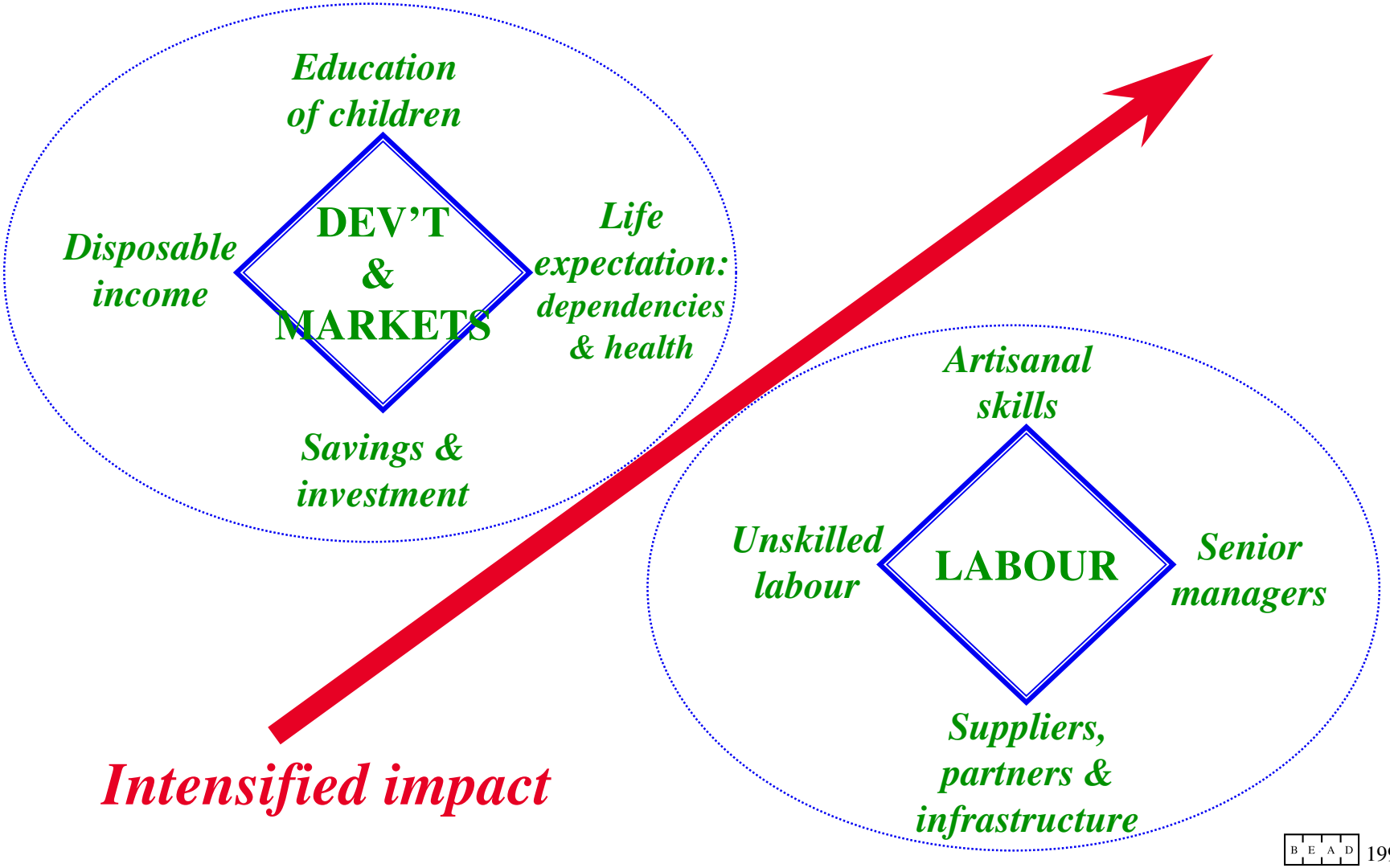
Source: AIDS Analysis Asia Vol 3 (3), May 1997

III. Possible Impacts

The Uncertainties of AIDS & Its Impact



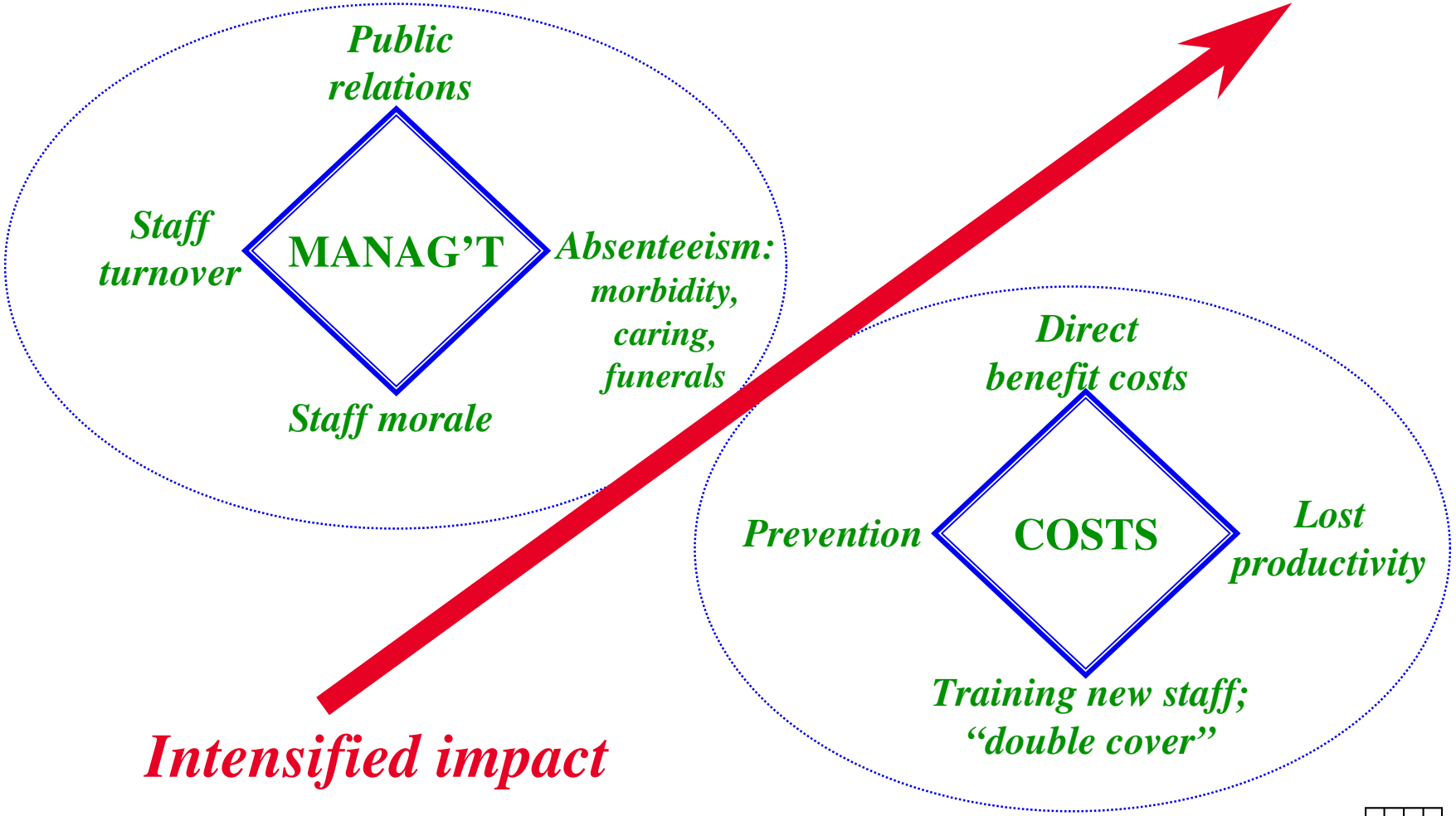
Possible Wide Impacts



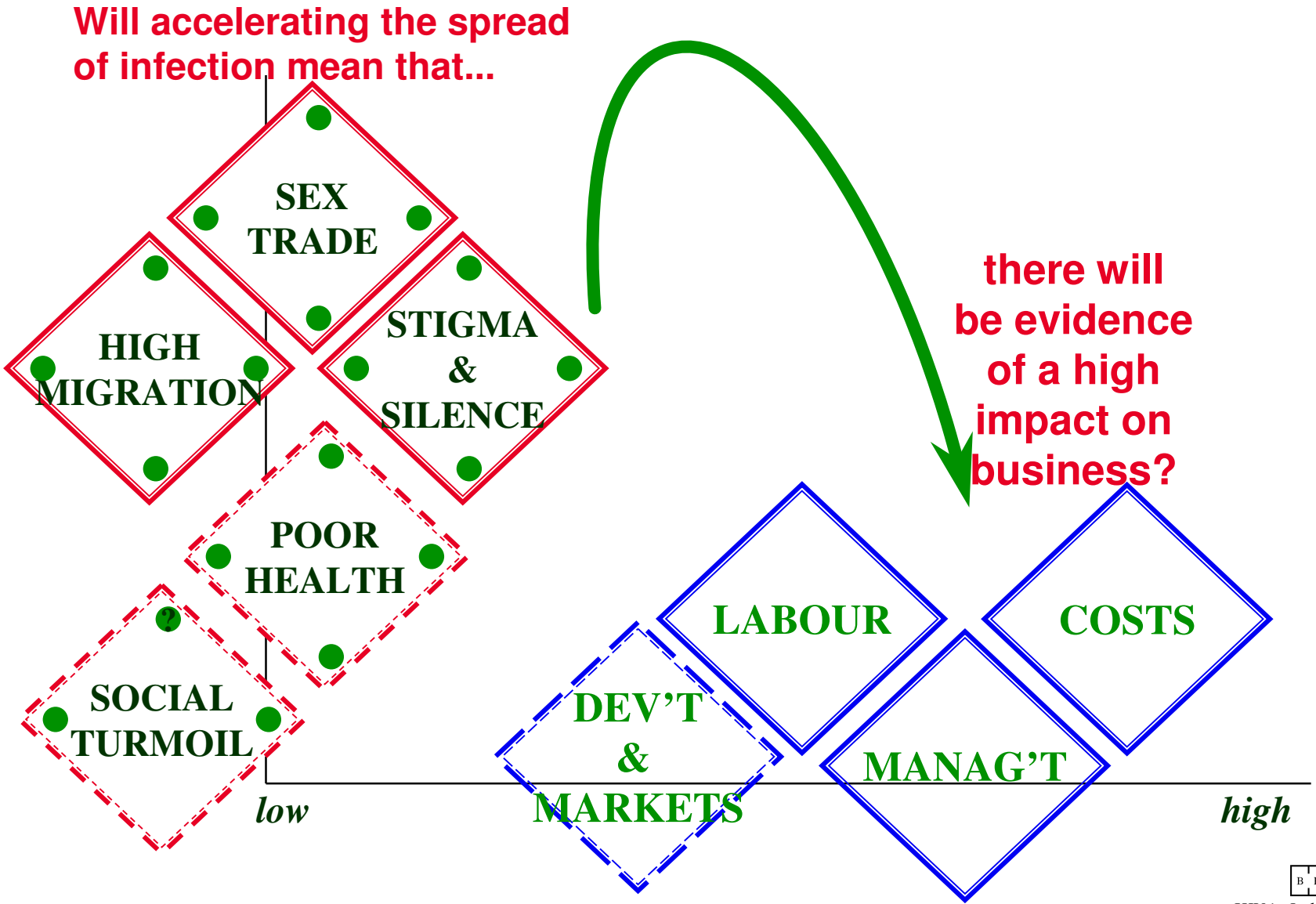
BEAD 1999

HIV in India 99, p. 59

Possible Immediate Impacts



The Big Risks in India



Low Impact on GDP Growth?

DEV'T & MARKETS

"Not withstanding the consensus … there are good reasons to suspect that [studies of the impact of AIDS on GDP growth] overstate the seriousness and immediacy of the threat ..."

Backed by statistical model showing that AIDS had a:

Five Reasons:

1. Surplus labour

may mitigate output loses.

2. HIV/poverty link

better educated will take precautions

3. Normal adjustments

(both social & economic) will mitigate costs.

4. AIDS-related medical care costs

will not hit savings in longer run.

5. AIDS case projections are overstated

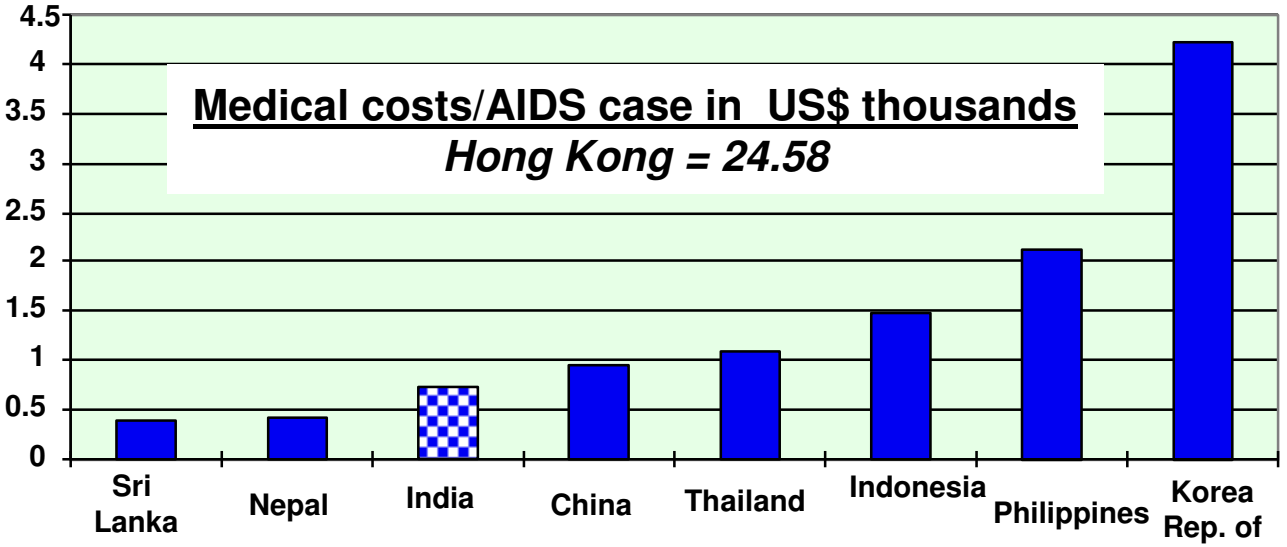
c.f. Thailand & USA

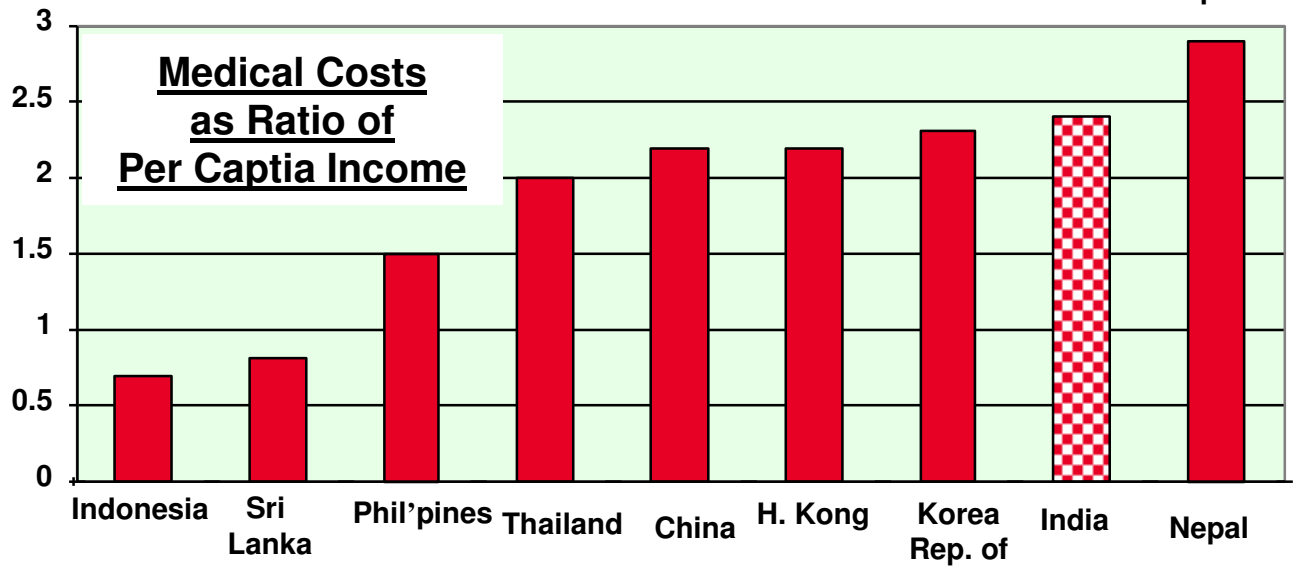
"statistically insignificant effect on … growth … controlling for other factors "

Source: David E. Bloom & Ajay S. Mahal "AIDS, Plu, and the Black Death: Impacts on Economic Growth and Well-being", in The Economics of HIV and AIDS: the case of South and South East Asia, edited by David E. Bloom, Peter Godwin. Delhi, Oxford University Press,1997, p. 25-26,27.

Comparative Cost of AIDS in Asia

DEV'T & MARKETS





From unpublished paper "Economic Implications of HIV/AIDs in Asia", Draft June 1996 by David Bloom & Ajay Mahal, in BEAD library

Impact on Disposable Income

DEV'T & MARKETS

majority from Andra Pradesh & Tamil Nadu

167 people living with HIV

mean age: 33 yrs (range: 19-65 yrs old)
82% male; 64% married; 32% single
72% had at least one child
53% had at least a bachelor's degree

(non-health)
Expenditure/month

Food	**44%**
Personal	**25%**
Rent	**21%**
Utilities	**10%**

2,257 Rs

85%
did not know when infected
26 months - knowledge
40 months infection

37%
at least one condition/illness

(all conditions)
Health Expenditure

Medicines	**54%**
Consultations	**20%**
Diagnostics	**18%**
Transport	**7%**

4,017 Rs

*Source: I*ndrani Gupta "Planning for the Socio-economic Impact of the Epidemic: The Costs of Being Ill." in The Looming Epidemic, ed., Peter Godwin_1998, op. cit. p. 106-110; NB: does not seem to be a random sample, but based on"accessilibity and availability of respondents"*

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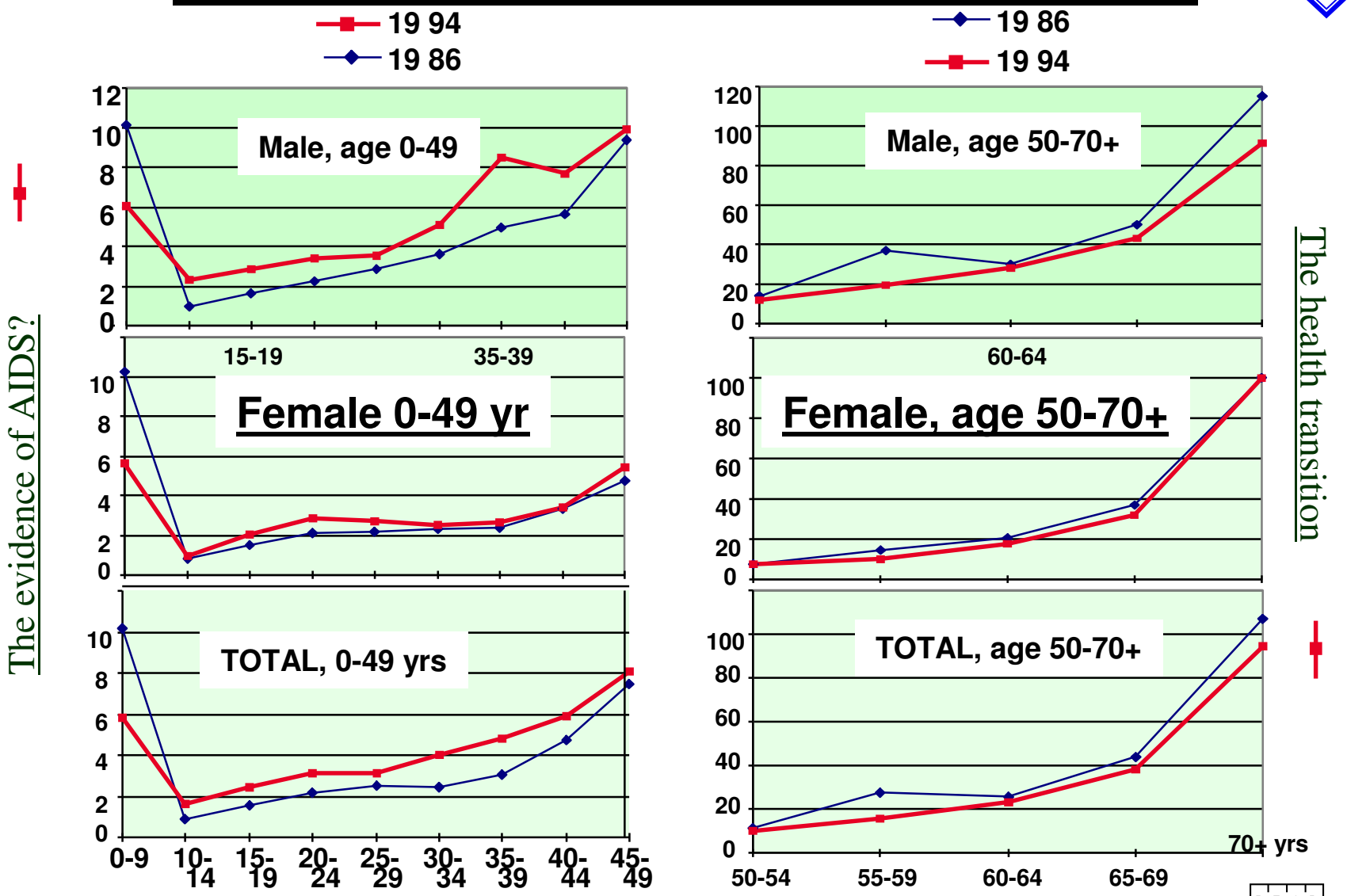
Deaths per 1000

Age & Mortality in Mumbai

LABOUR



BEAD 1999

Source: Emmanuel Eliot, "Changes in Mortality in Mumbai ...." in The Looming Epidemic, ed., Peter Godwin 1998, op. cit. p. 69-70

HIV in India 99, p. 66

Occupations/Education of HIV+

LABOUR

Among 3520 HIV+ people referred to
AIDS Research & Control Centre, J.J. Hospital, Mumbai (p. 142)

HIV+ Individuals:	Males	Females
- High school or higher ed.	27%	18%
- In skilled work	41%	--
- Housewives	--	68%

Studies of Industrial labour in Madras, Delhi & Mumbai
Transport workers in Bengal & Indian Railways - 1994/95

Engaged in multi-partner sex	Workers
- Self-reporting	20-25%
… with condom use	5%
- Said colleagues did	54%
- HIV+ truck-drivers Calcutta & Kashmir	7-10%

Source:Subhash Hira et al, "HIV Infection in the Workforce and Its Perceived Impact on Industry" in The Looming Epidemic, ed., Peter Godwin 1998, op. cit. p.141-142

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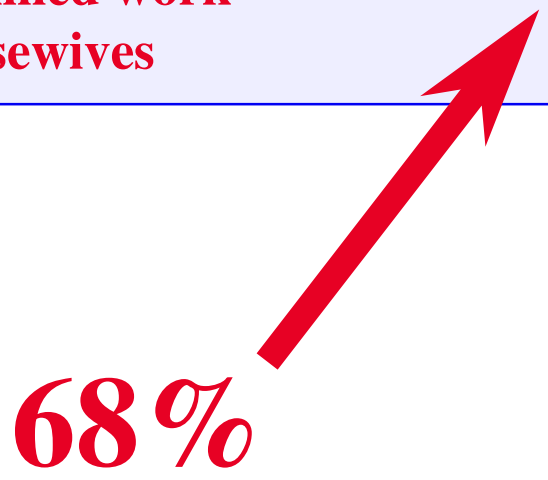

Source:Subhash Hira et al, "HIV Infection in the Workforce and Its Perceived Impact on Industry" in The Looming Epidemic, ed., Peter Godwin 1998, op. cit. p.141-142

Occupations/Education of HIV+

LABOUR

1994/95 studies of
Industrial labour in Madras, Delhi & Mumbai &
Transport workers in Bengal & Indian Railways

54%

"of colleagues"

Engaged in multi-partner sex	Workers
- Self-reporting	20-25%
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Household Cost of HIV

Interview: Peter Godwin & "S", who is HIV+

1990s

S: "In my own preliminary survey of costs with 47 people in Madras city, 14 women and 33 men, I found that treatment costs were 56% of household expenditure -- that is more than half of what the household was spending on survival. …

"One of the most important effects of HIV/AIDS here in India starts right from the diagnosis. … people with HIV frantically start to search for treatment, for a cure, right from their day of diagnosis. Consequently they exhaust all their resources. Because of this, households experience some impact even before, or without any illness or death among their own members."

Sources: The Looming Epidemic, ed. by Peter Godwin, 1998, op. cit. p. 124

Lost Work Hours/Days

MANAG'T

Among 167 HIV+ People

mean number of days of illness = 193 days over 26-40 months*

Among Three Companies in Madras**

Medical Cause	% of all lost hours
1 case of AIDS	3%
TB	11%
Viral fever	62%
Accidents/injuries	8%

*Sources: *I*ndrani Gupta "Planning for the Socio-economic Impact of the Epidemic." and ** "The Making of an Epidemic" by Peter Godwin, both in The Looming Epidemic,1998, op. cit. p. 112 & p. 20 respectively.*

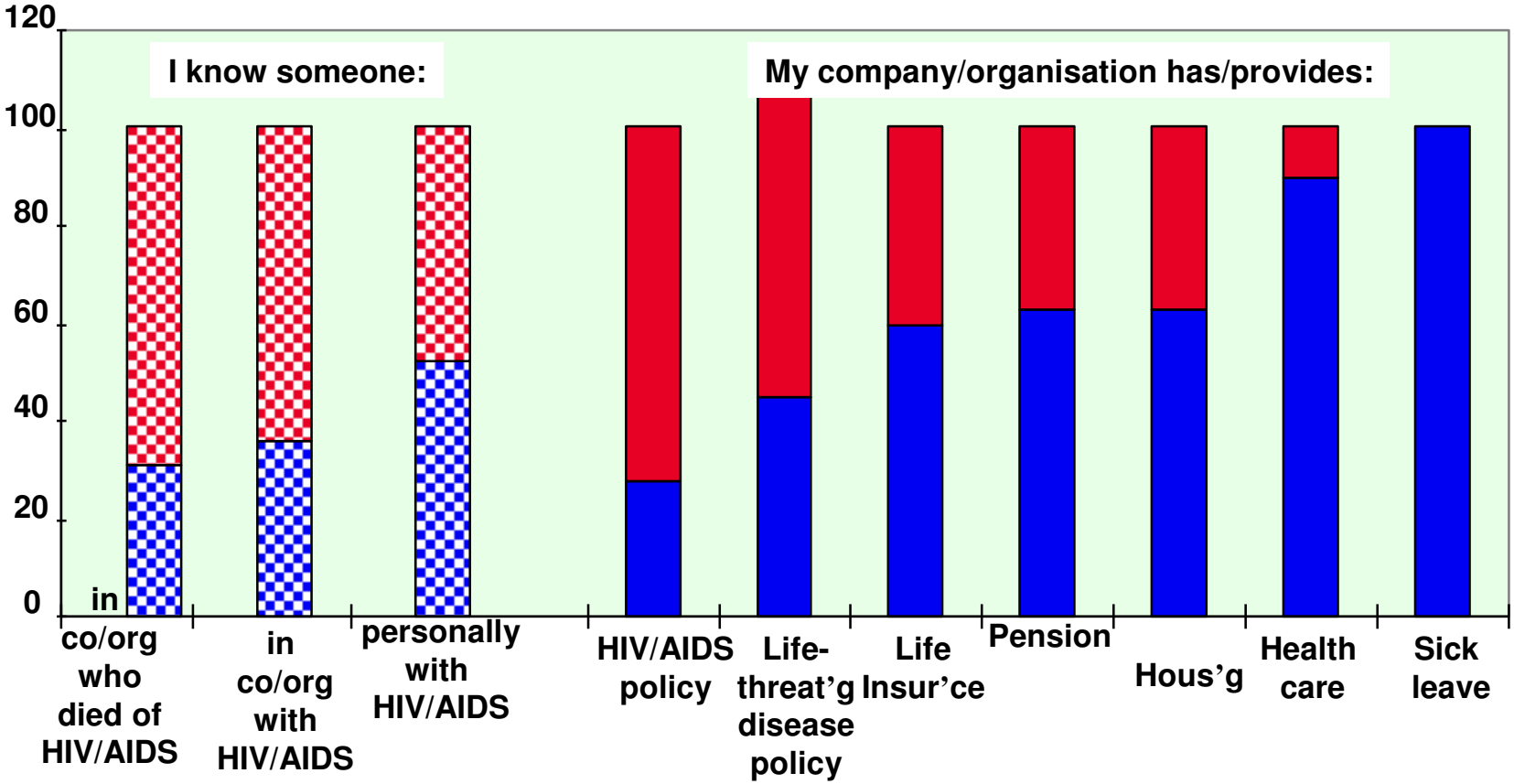
Experience with HIV/AIDS

COSTS

%no

%yes

Among participants at HIV/AIDS Workshop organised by Confederation of Indian Industries & British Council, New Delhi, 1996



From draft workshop report on "The Workshop on the Socio-Economic Impact of HIV/AIDS on Indian Industry", New Delhi, September 1996, in BEAD library

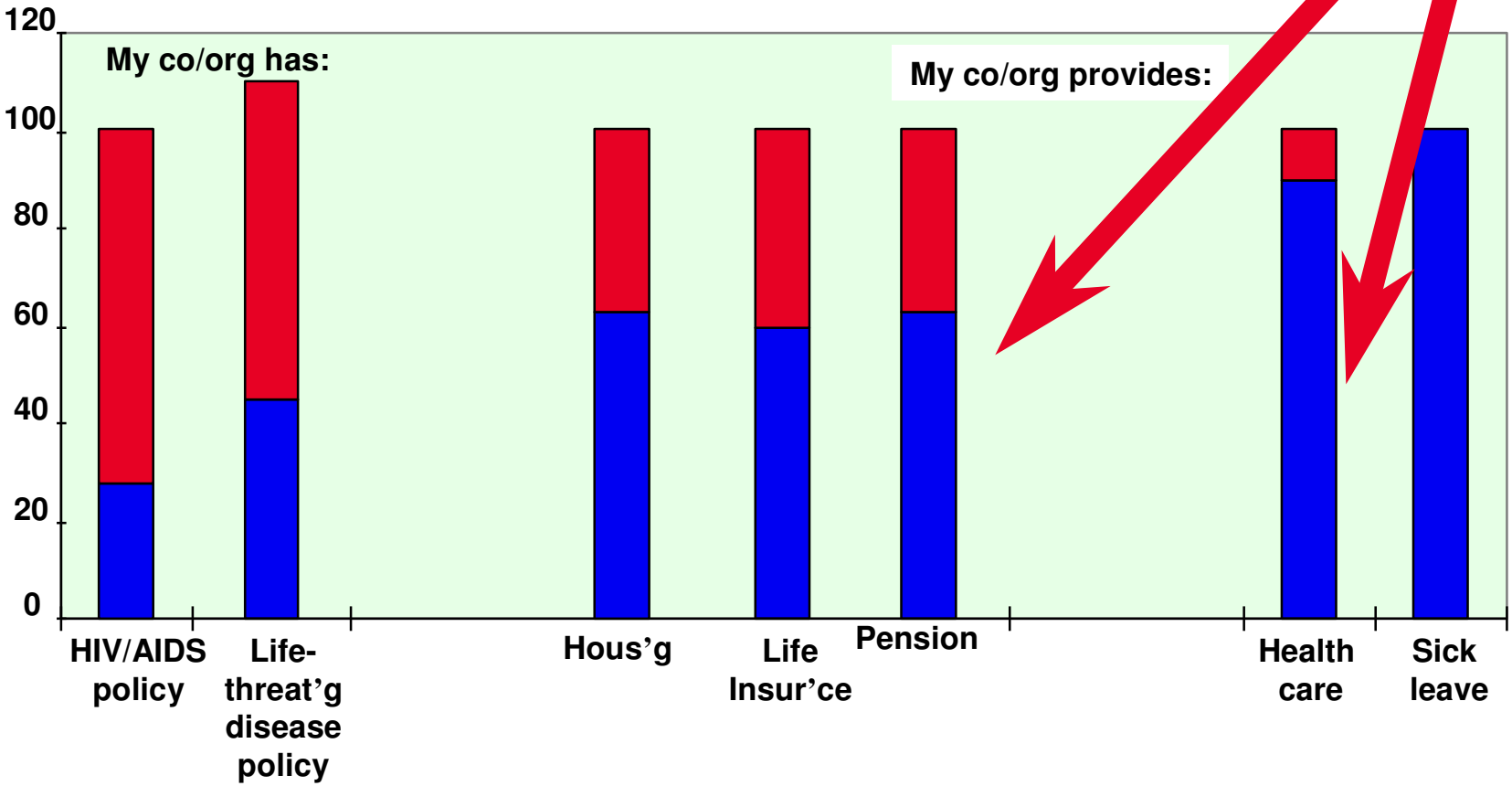
Employment Costs of HIV/AIDS

COSTS

%no

%yes

Among participants at HIV/AIDS Workshop organised by Confederation of Indian Industries & British Council, New Delhi, 199



From draft workshop report on "The Workshop on the Socio-Economic Impact of HIV/AIDS on Indian Industry", New Delhi, September 1996, in BEAD library

V. Corporate responses

Business Coalitions

Thailand

Malaysia

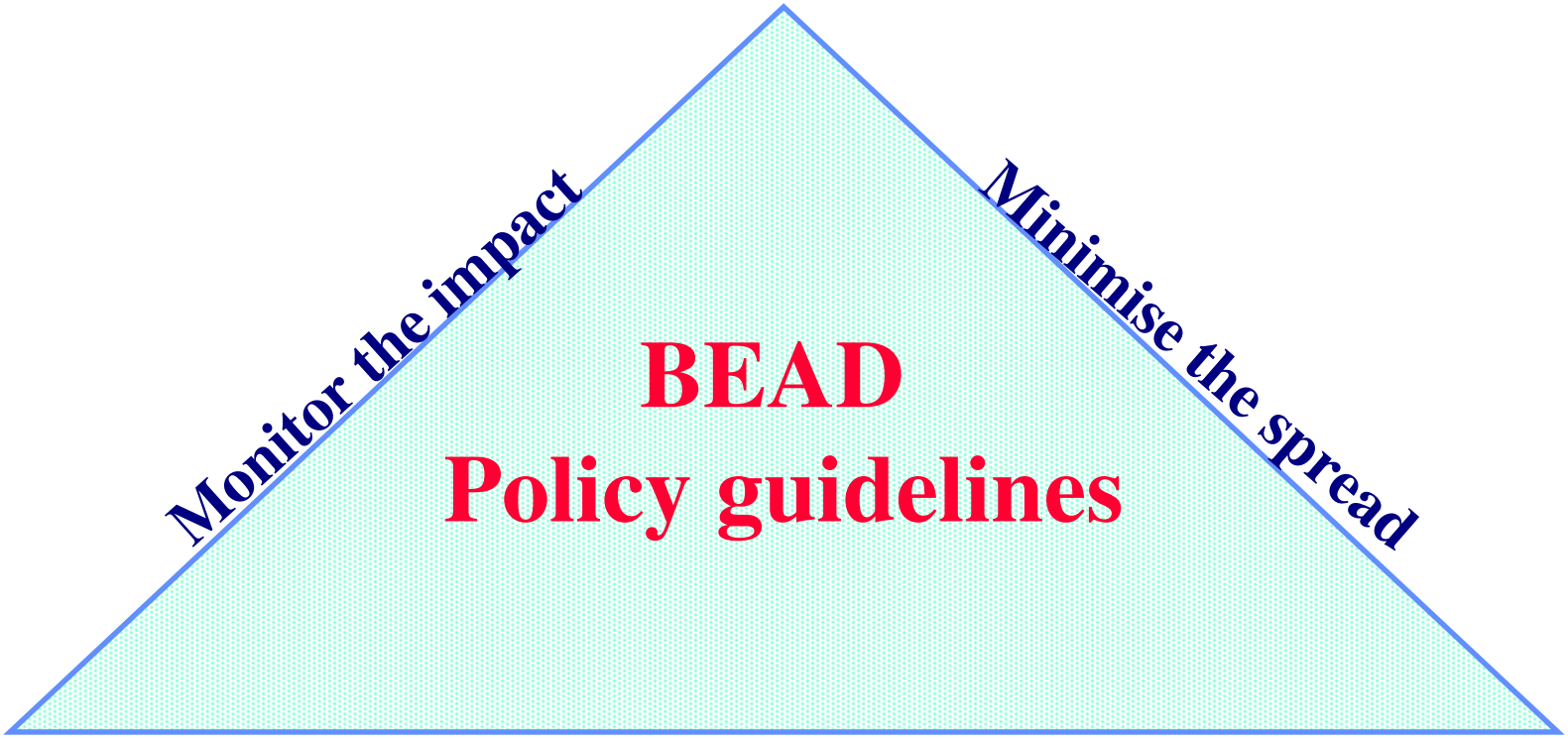
Botswana

South Africa

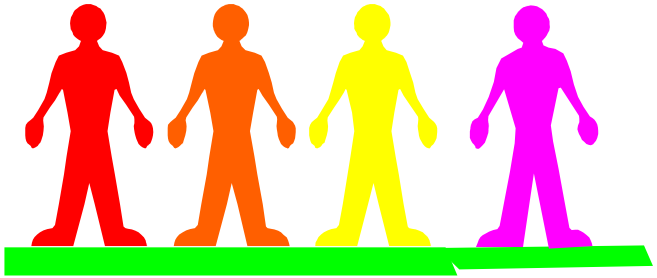
United States

London - BEAD

“Costly Diseases in Developing Countries”



Monitor: "Inform Yourself"



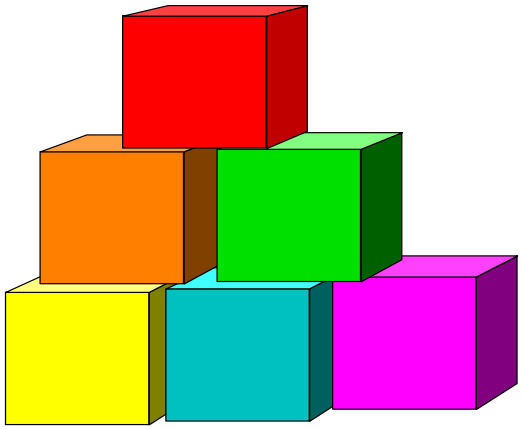
Profile of the work force: age, sex, health, availability

Employment costs & benefits

Profile of community health

Sources of help and information

Minimise the Spread

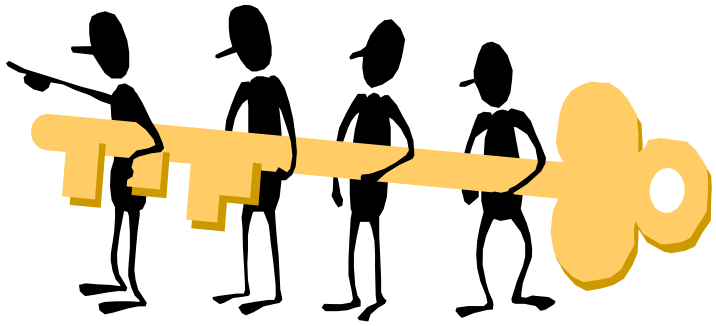


Simple Measures

- free/cheap condoms
- clean/disposable needles
- clean water for bathing
- treat STDs
- general education on hygiene

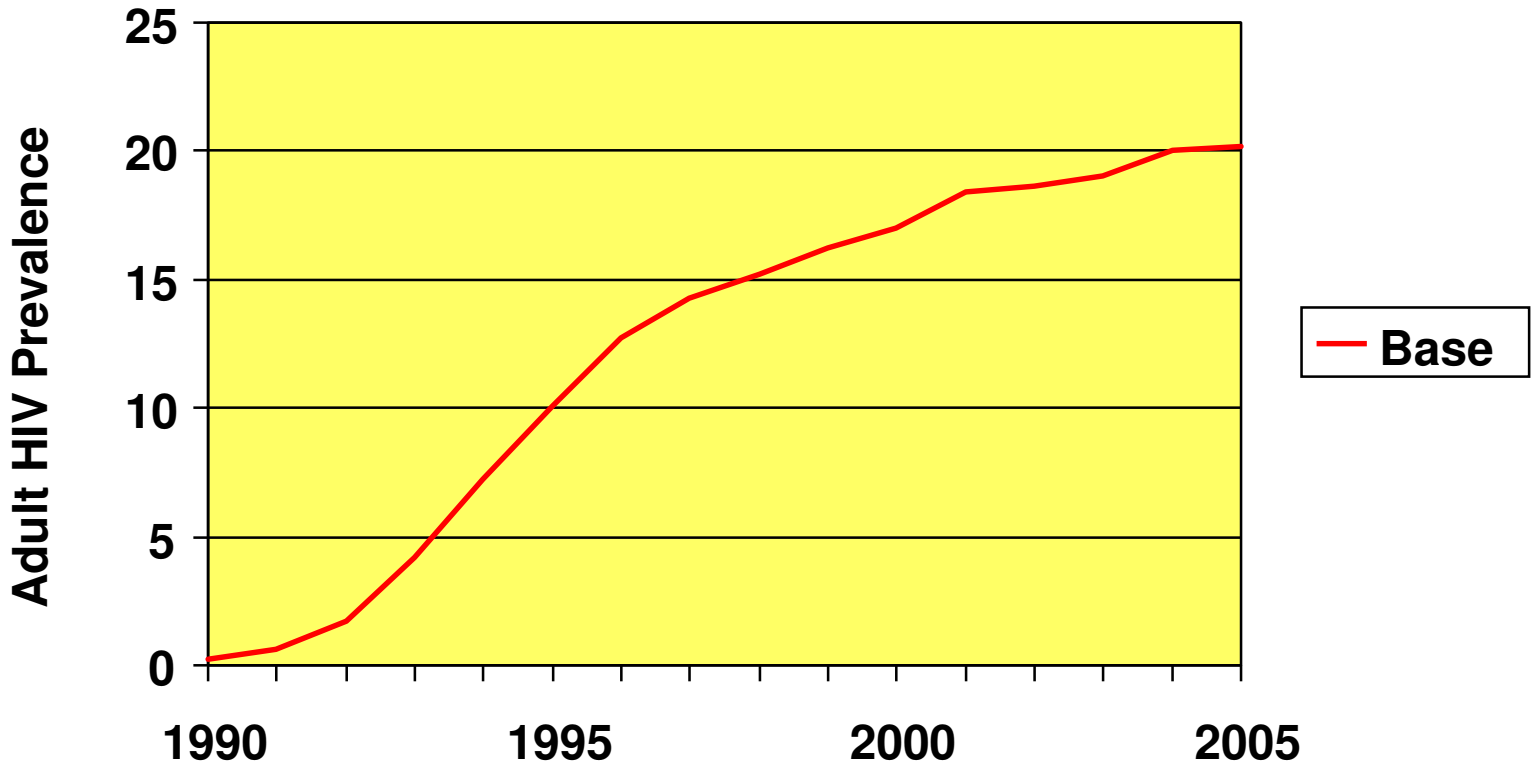
Education in Work Force & Community

- management committment
- work force participation
- continuity
- appropriate messages
- peer education



Work with others

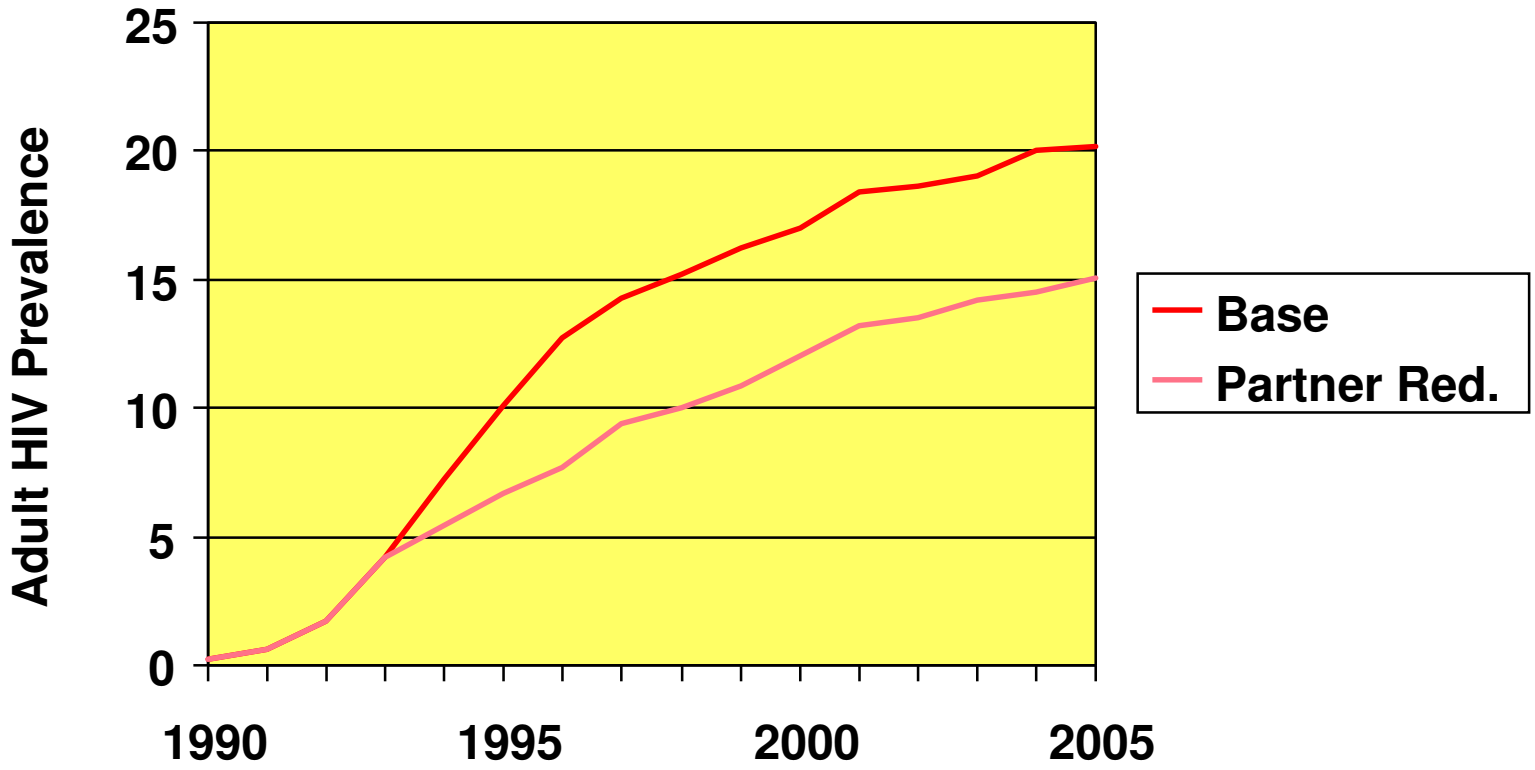
The Effects of AIDS Interventions



Based on simulation modeling of typical high prevalence urban areas.

Source: AIM 1999

The Effects of AIDS Interventions



Based on simulation modeling of typical high prevalence urban areas.

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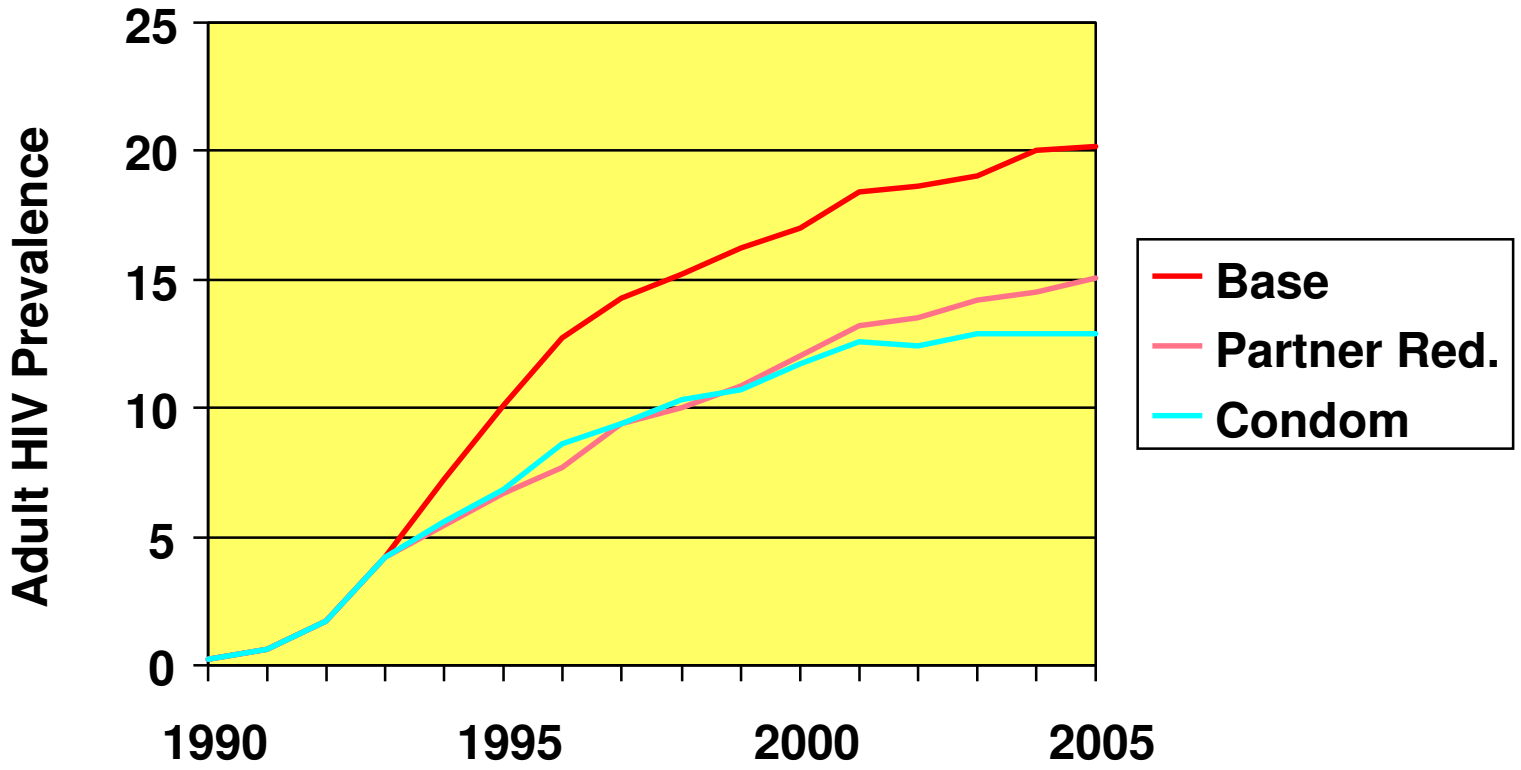
The Effects of AIDS Interventions



Based on simulation modeling of typical high prevalence urban areas.

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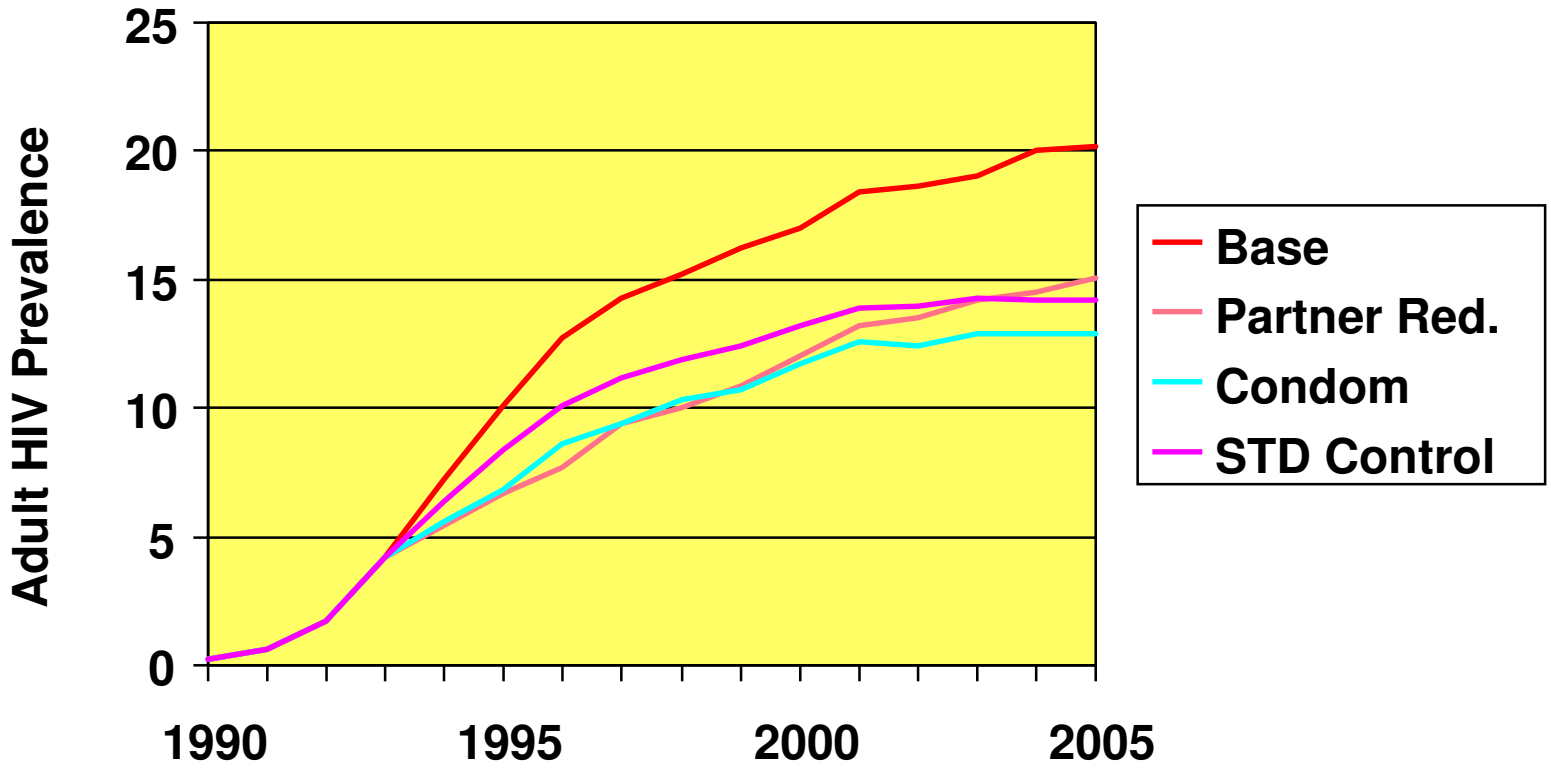

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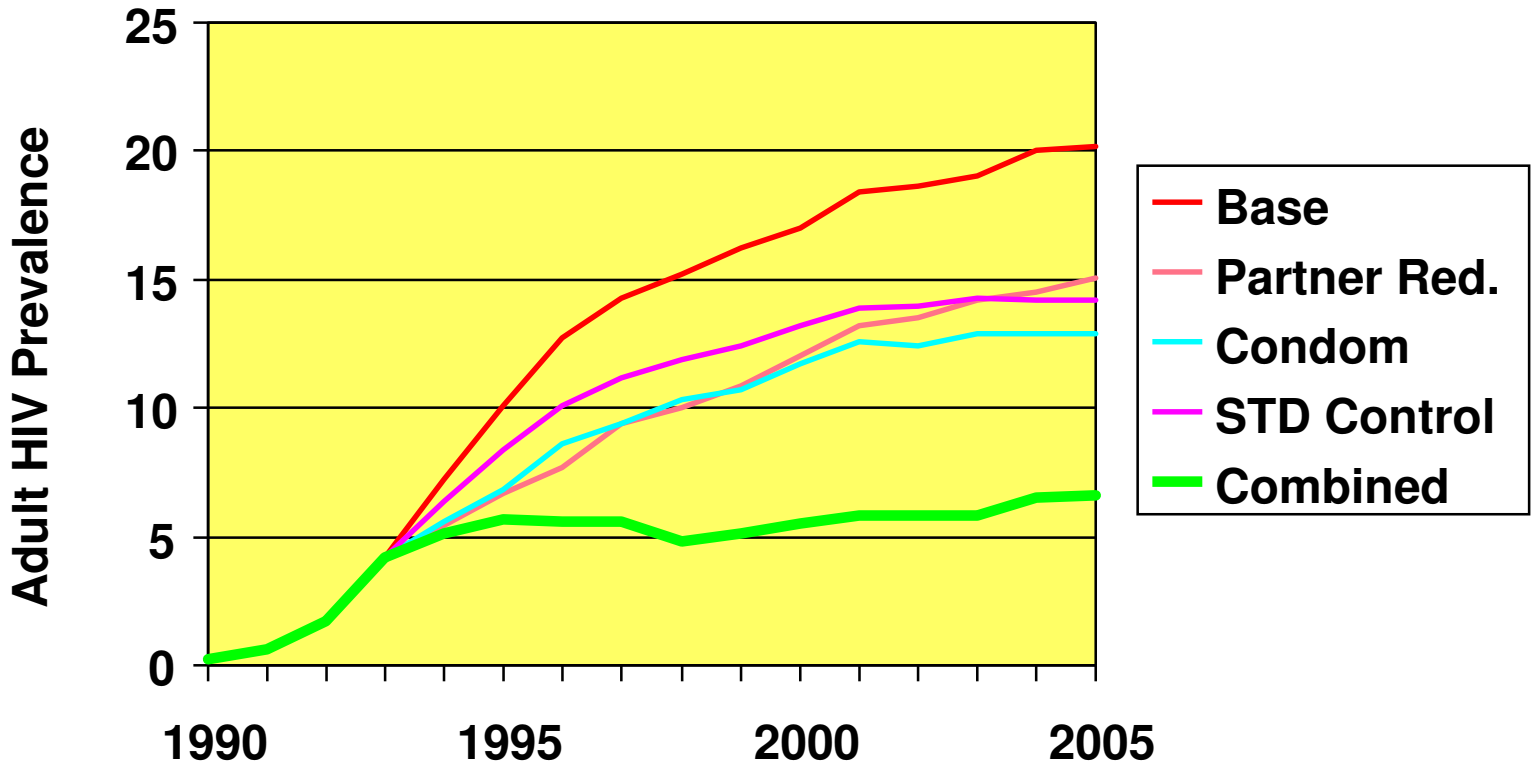
Source: AIM 1999

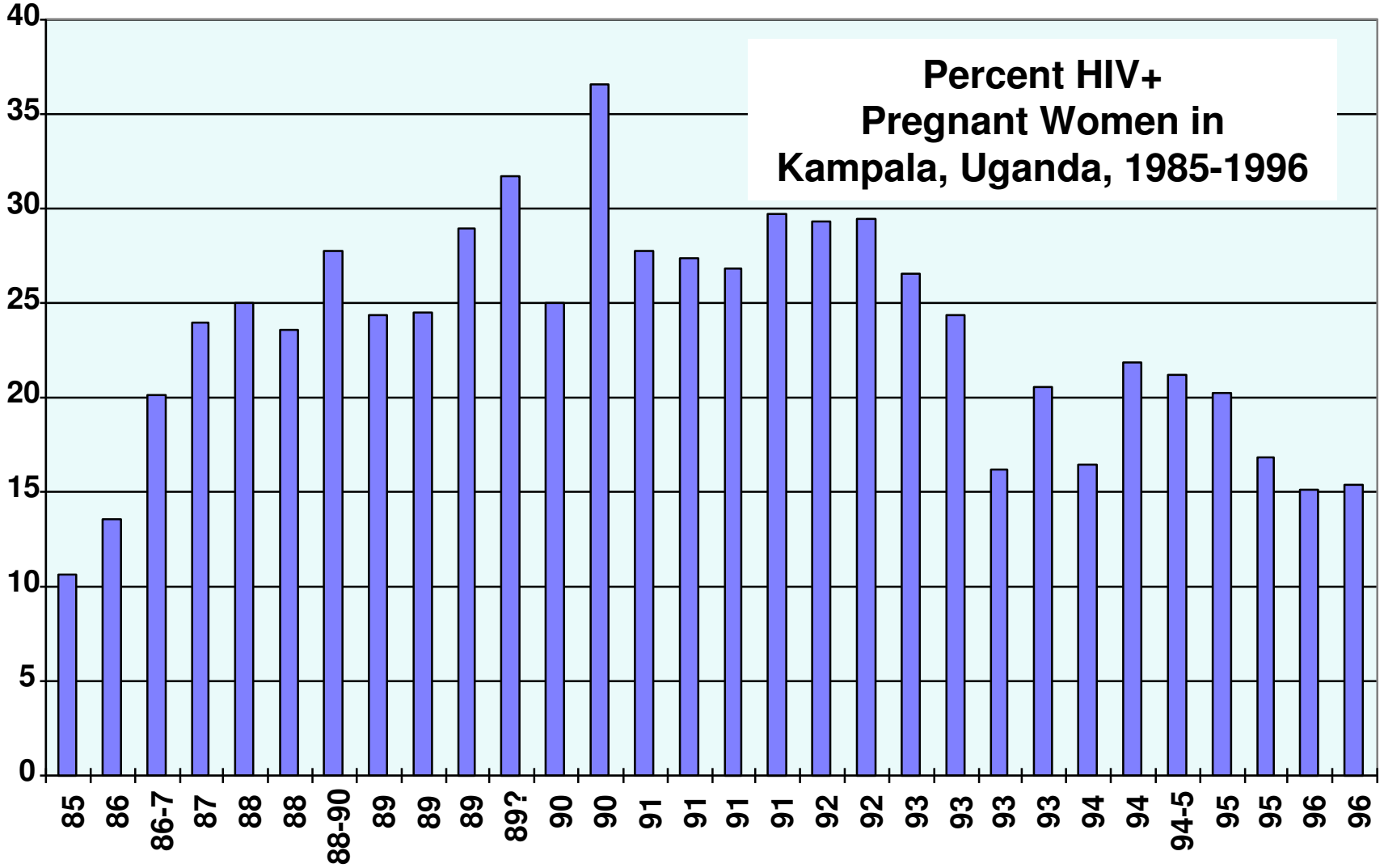
The Effects of AIDS Interventions



Based on simulation modeling of typical high prevalence urban areas.

Source: AIM 1999

The Achievements of Uganda



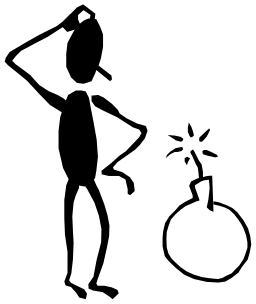
Source: U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Jan. 1998

Manage the Consequences

Prepare a policy

Sickness & disability at work

Cost implications



Recurrent dilemmas

Managing the Consequences

Prepare a policy on serious illness

- Who is responsible?
- Who should be consulted?
- Work force involvement
- What are the financial limits?
- What are the time limits?

Cost implications

- The need for monitoring
- Medical
- Insurance
- Provident funds
- Pension funds
- Recruitment, training & productivity
- Education

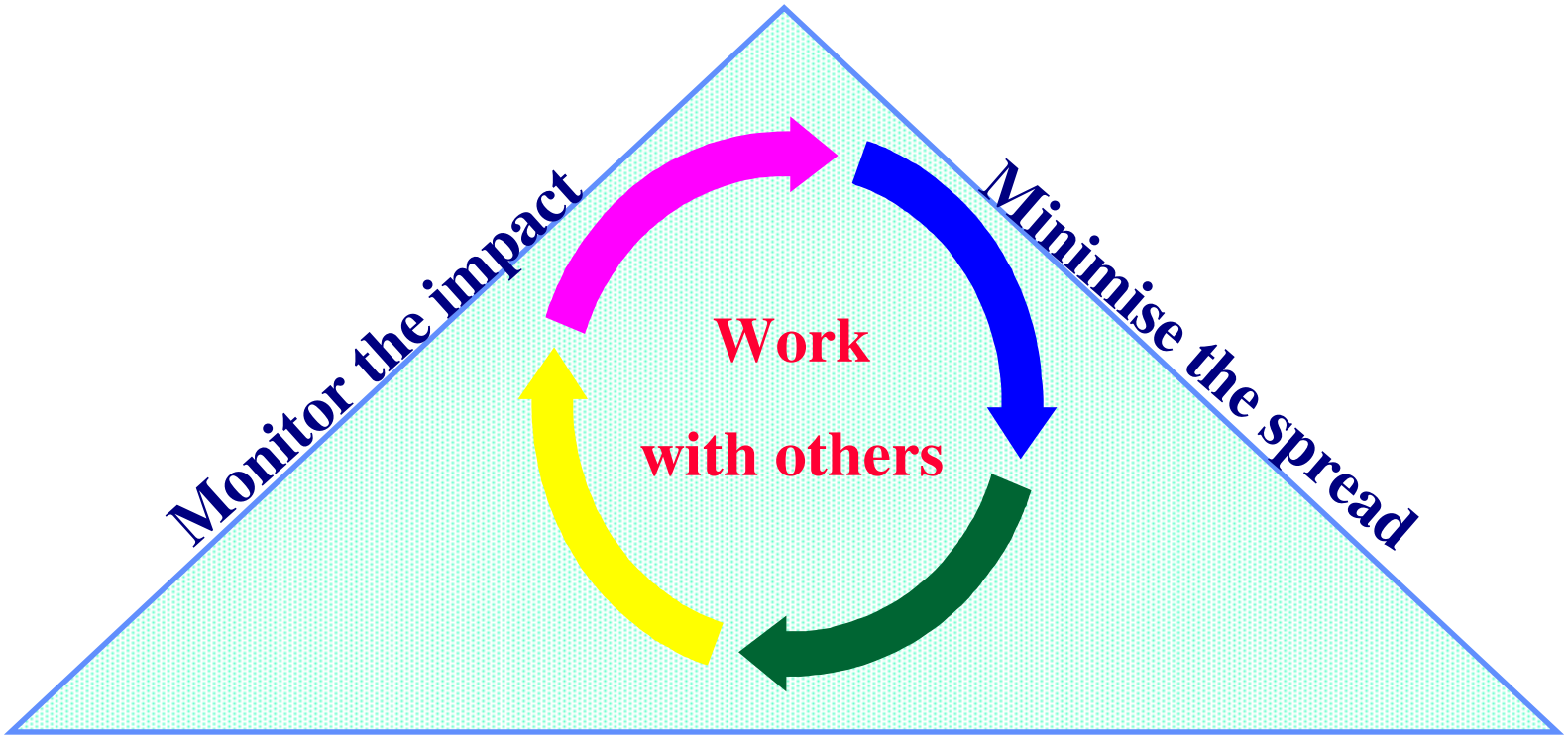
Sickness & disability at work

- Confidentiality
- Absence due to chronic illness
- Medical treatment
- Other entitlements

Recurrent dilemmas

- Pre-employment medicals
- Special risks
- Victimisation
- **Strategic Review**

We CAN Reduce the Potential for Disease



The Lesson of AIDS

Time needed to change behaviour

Stage 1	Stage 2	Stage 3	Stage 4
Invisible epidemic	Awareness	Acceptance	Behaviour change
	Friends sicken and die	*Acceptance & care in the community*	*Individual behaviour starts to change*

The Paradox of AIDS:

No sign of disease --

no sign of success

Source: First BEAD Group Seminar, April 1992

V. Conclusion

Silence is deadly.

BEAD 1999

HIV in India 99, p. 90