

HIV, Hunger and Livelihoods: Have We Missed Something?

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Integrating health, nutrition and food security: Making the case
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Content

- Situating food & livelihood in relation to HIV's dynamics
- Empirical evidence of the strength & immediacy of the link (Malawi & Zambia)
- Are efforts to secure food & livelihood having a significant & inadvertent preventive effect?
 - HIV & watershed development in India:
strategic modelling based on realistic scenarios
- Barriers & bridges to seizing the opportunities

Making sense of food, livelihood & HIV/AIDS links

- To those at the grassroots, these links are, for the most part, no mystery:
 - Food underpins health
 - Health makes it possible to work & produce or procure food
- But the links are obscured by specialization & sectoral organization
- Hunger, poverty & inequalities are seen as structural determinants of HIV: slow to change & beyond the reach of near-term action in support of prevention

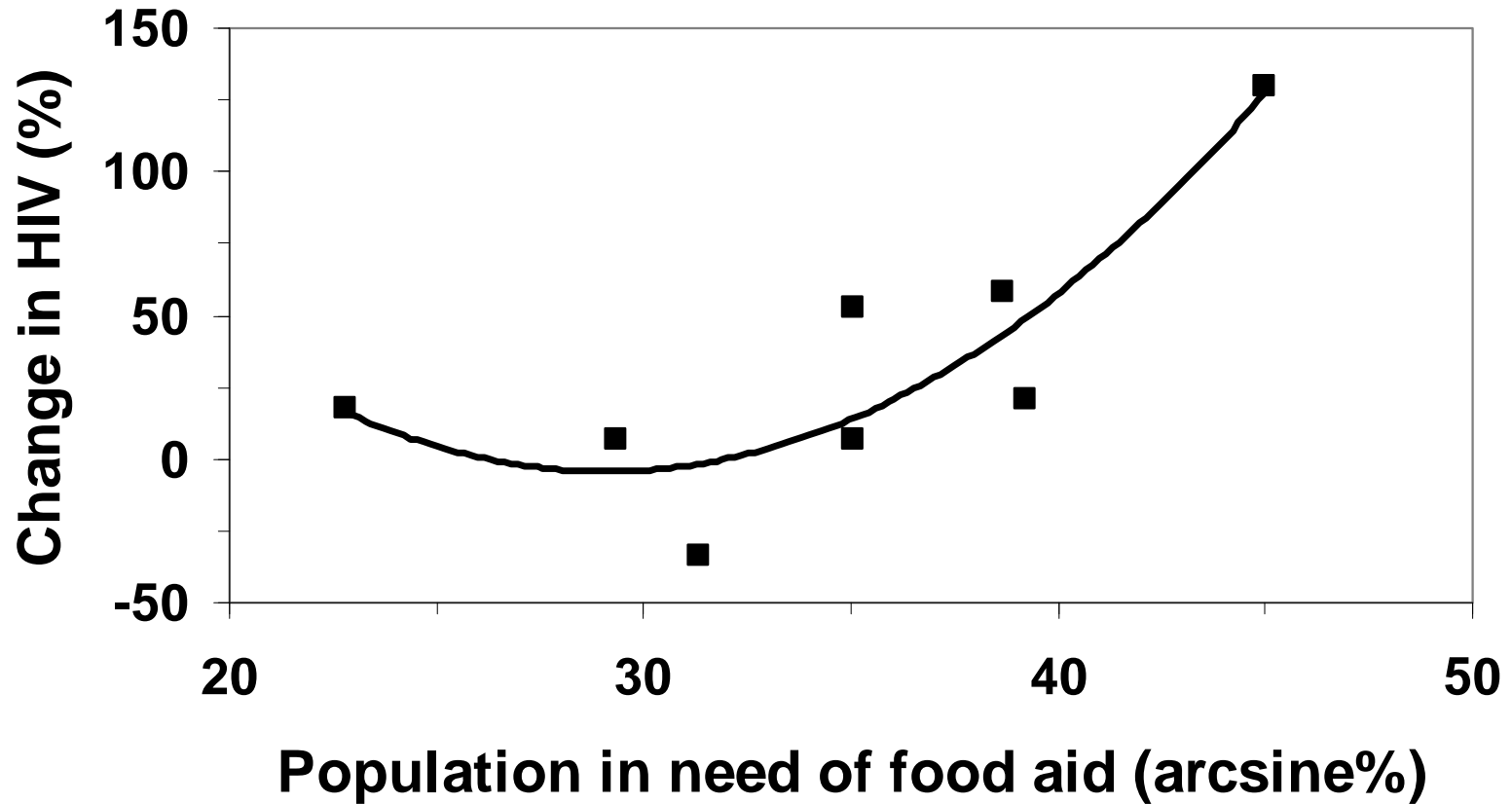
The Southern Africa Food Crises 2001-3

- Localized flooding & mid-season drought
- Impact exacerbated by growing poverty and the spread of AIDS
- Policies amplified vulnerability to climatic variability e.g. in Malawi
 - Long term: erosion of crop/livestock diversity
 - Short term: reduced input support, sale of strategic grain reserve & late responses
- Maize price rose 3-4 fold in most markets

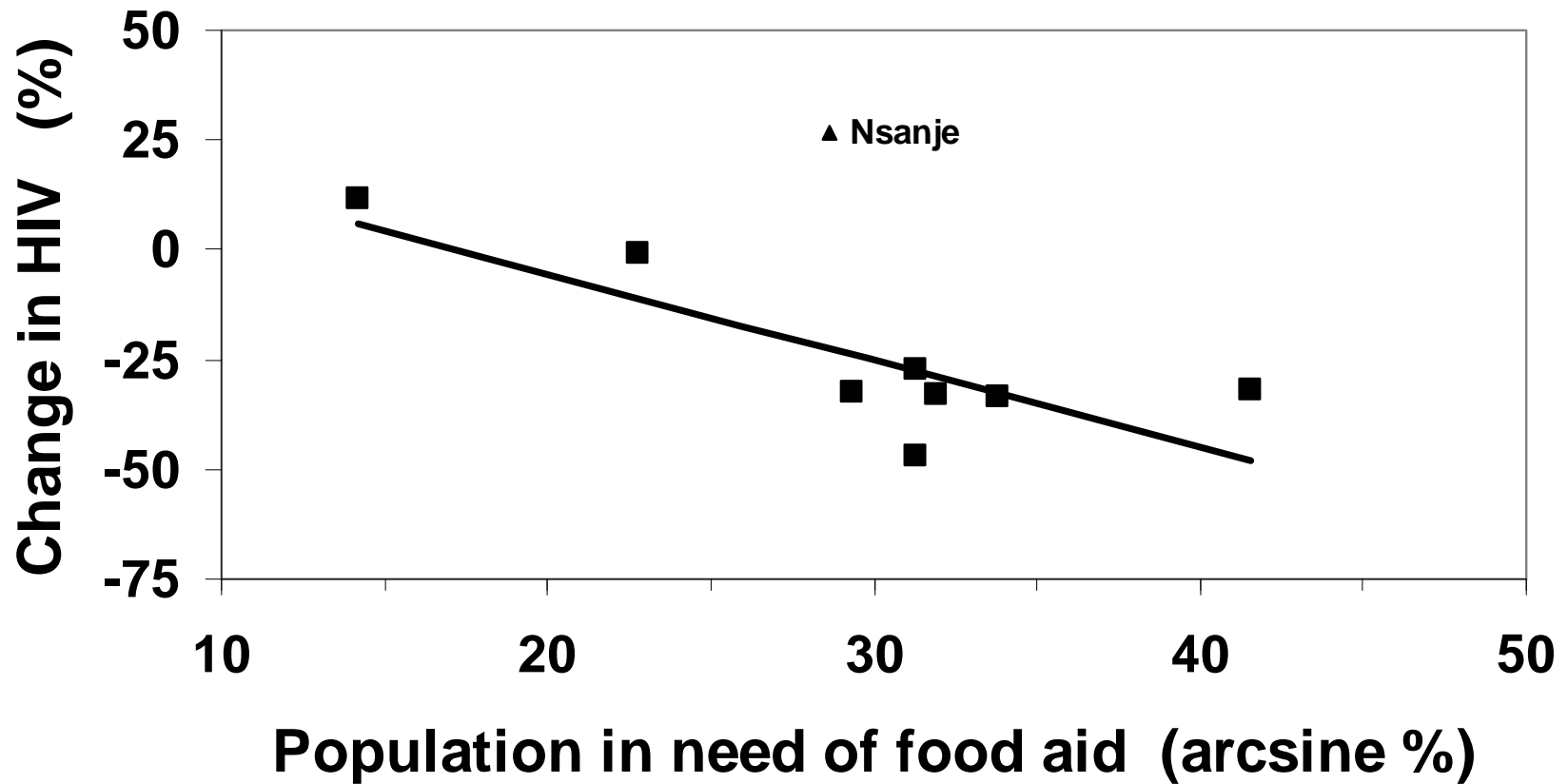
Hunger pushed people further into situations of HIV risk

- Transactional (“survival”) sex: Young women sent out for a bowl of grain; sex for day work
- Early marriage: Young women forced into unwanted relationships with older men
- Violence: Increased domestic violence reported
- Distress migration: People moved to towns & cities for food/work; most frequent among households with chronically-ill adults

Change in HIV 1999-03 vs rural hunger Malawi, Rural antenatal sites (R = 0.88, P<.02)



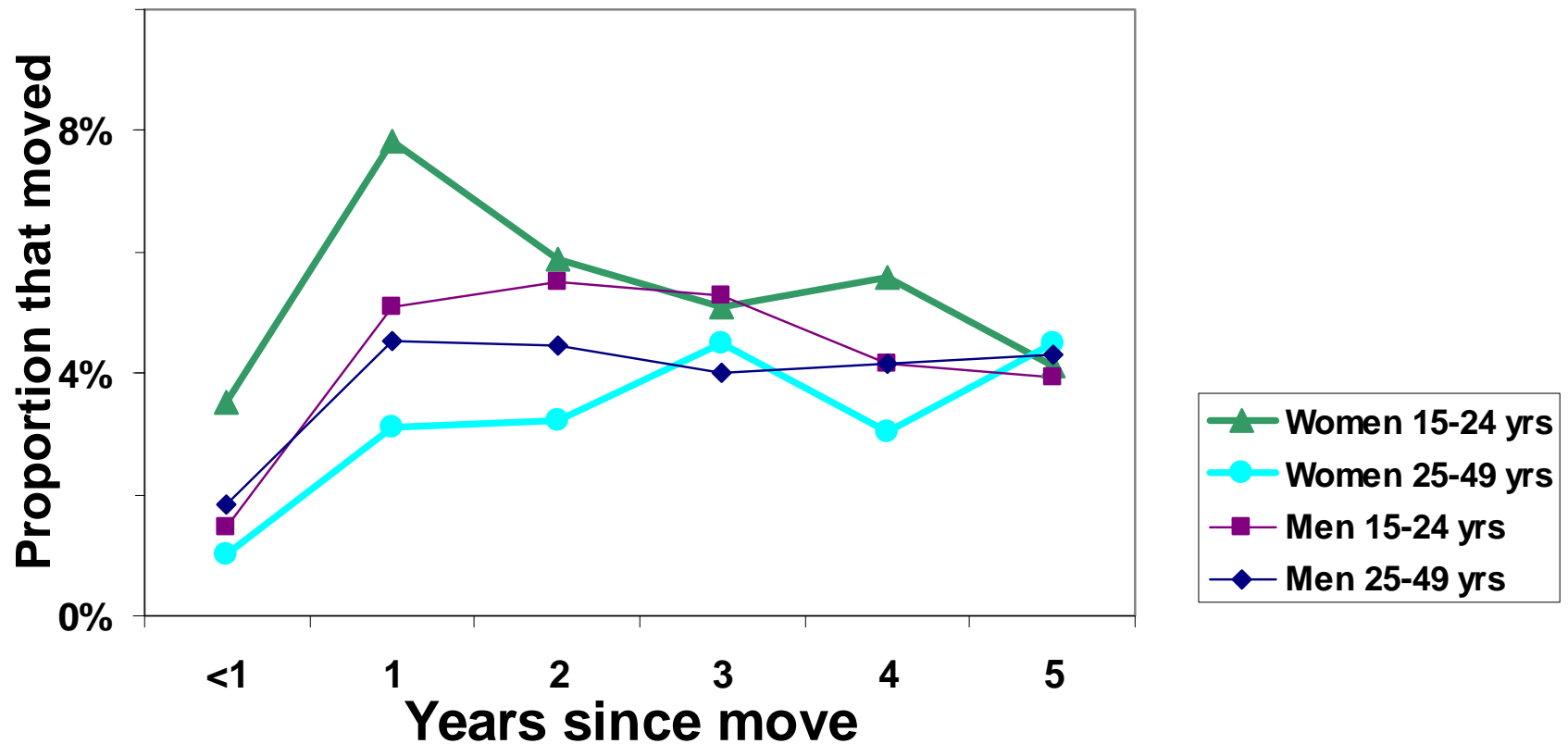
Change in HIV 1999-03 vs rural hunger Urban/semi-urban antenatal sites $(R=-0.82, P=.01)$



Why these contrasting trends?

- In rural areas, survival sex, violence & early marriage would have broadened sexual networks & increased concurrency
 - impact on HIV proportional to hunger
- In urban/semi-urban areas, movement from rural areas, where HIV is less prevalent
 - impact on HIV inversely proportional to hunger in rural surrounds

Supporting evidence: rural-urban movement (HH survey 2004-5)



Further supporting evidence

- Correlation between change in HIV and rural hunger at urban/semi-urban sites greater for women 15-24 yr ($r = -0.77^*$) and esp. 20-24 yr ($r = -0.88^{**}$) than for women 25-49 yr ($r = -0.67\text{ns}$)
- Similar pattern in Zambia, esp. at rural sites

A pulse of hunger, unevenly distributed, has left a clear & immediate imprint on HIV's distribution across two countries

→ “Structural” factors not necessarily slow-changing

→ Consequences of the crises & poor policies worse than thought, still working out

→ “Do no harm” – avoid actions that undermine food & livelihood security

→ Actions that have reduced vulnerability to shocks, that help secure food & livelihood, may be having inadvertent preventive effects

The state of practical understanding

- A few attempts to enlist food or livelihood security interventions in HIV prevention for specific groups
 - Education, micro-finance & self-organization among sex workers (Sonagachi, Kolkata)
 - Micro-finance with women's group in S. Africa
- Potential of population-level interventions has been explored with scenario modelling, based on an Indian example

Watershed Development in India

- Integrated water & soil conservation measures
- \$500 M/yr invested annually in India
- Striking effects on vegetation & water
- Programs increasingly concerned with participation, equity & relieving distress
- Distress migration much reduced in some cases
- Structural inequality in WSD: top/common lands/landless benefit less than bottom/private lands/farmers without close attention

Epidemiological context

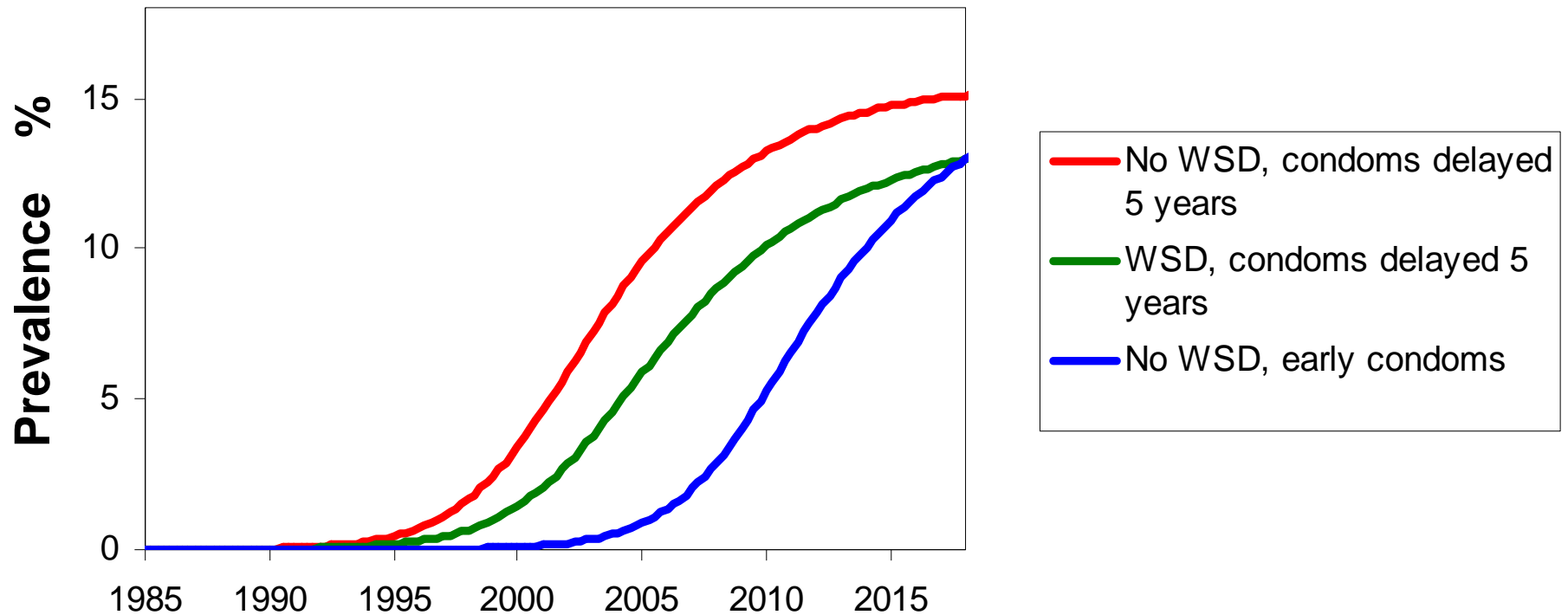
Bagalkot district, N. Karnataka

- 3% HIV; 50% higher in rural than urban
- Men 35% more than women, but 15-19 yr girls 5x more likely to be infected than boys
- Labourers, migrants most infected
- Poor knowledge of HIV/AIDS & prevention
- Dispersed sex work, rural & urban

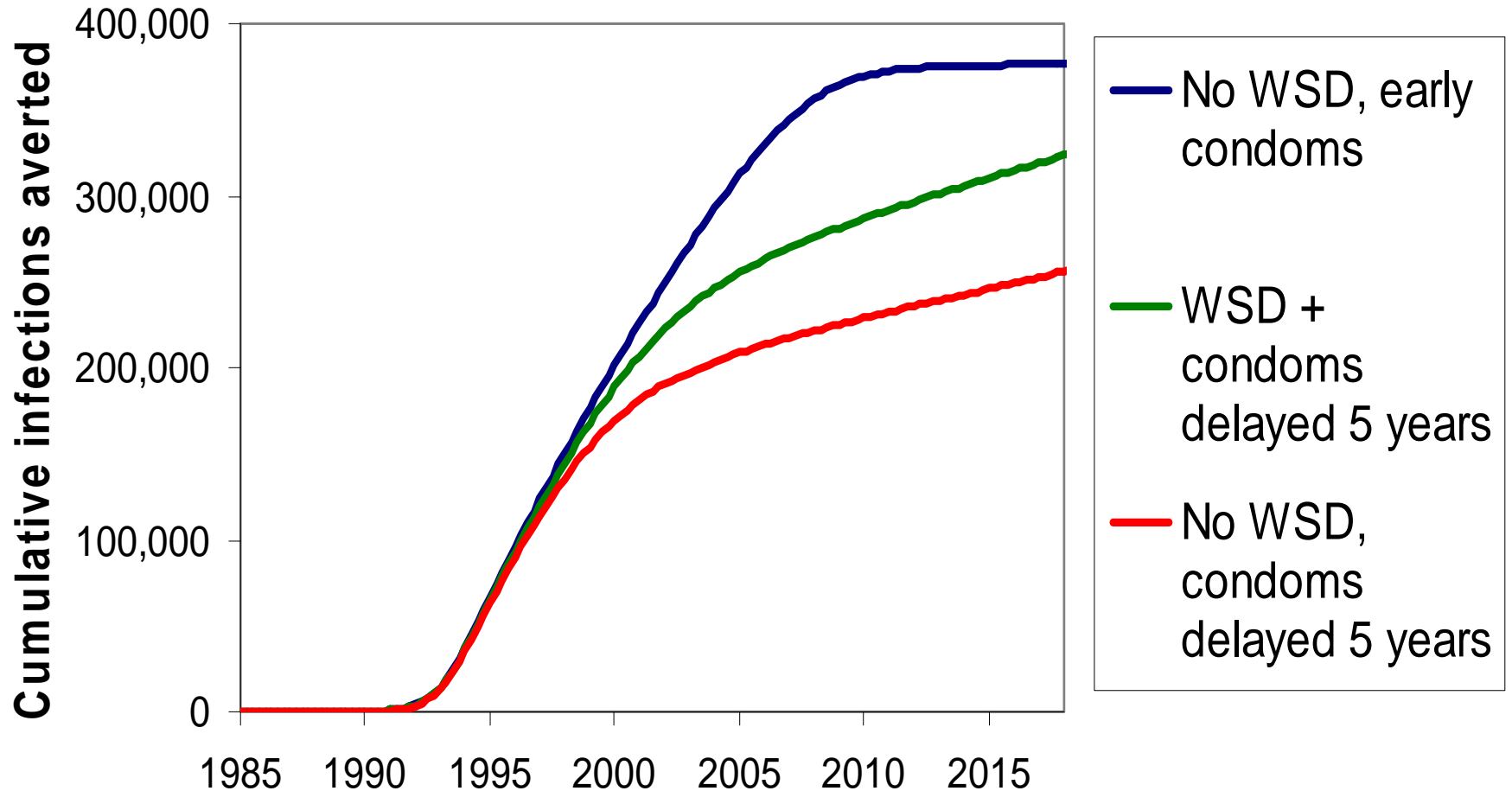
Baseline scenario

- Urban (186K) and rural (455K) adults
- 3 interacting sexual activity classes: high urban, low urban & low rural
- 25% of rural adults migrate, join high class
 - 5% of migrants are women
- Migrant men: 3x partners than non-migrants; other parameters as in Bagalkot
- WSD reduces distress migration by 40%
- Simulate scenarios using ASIST

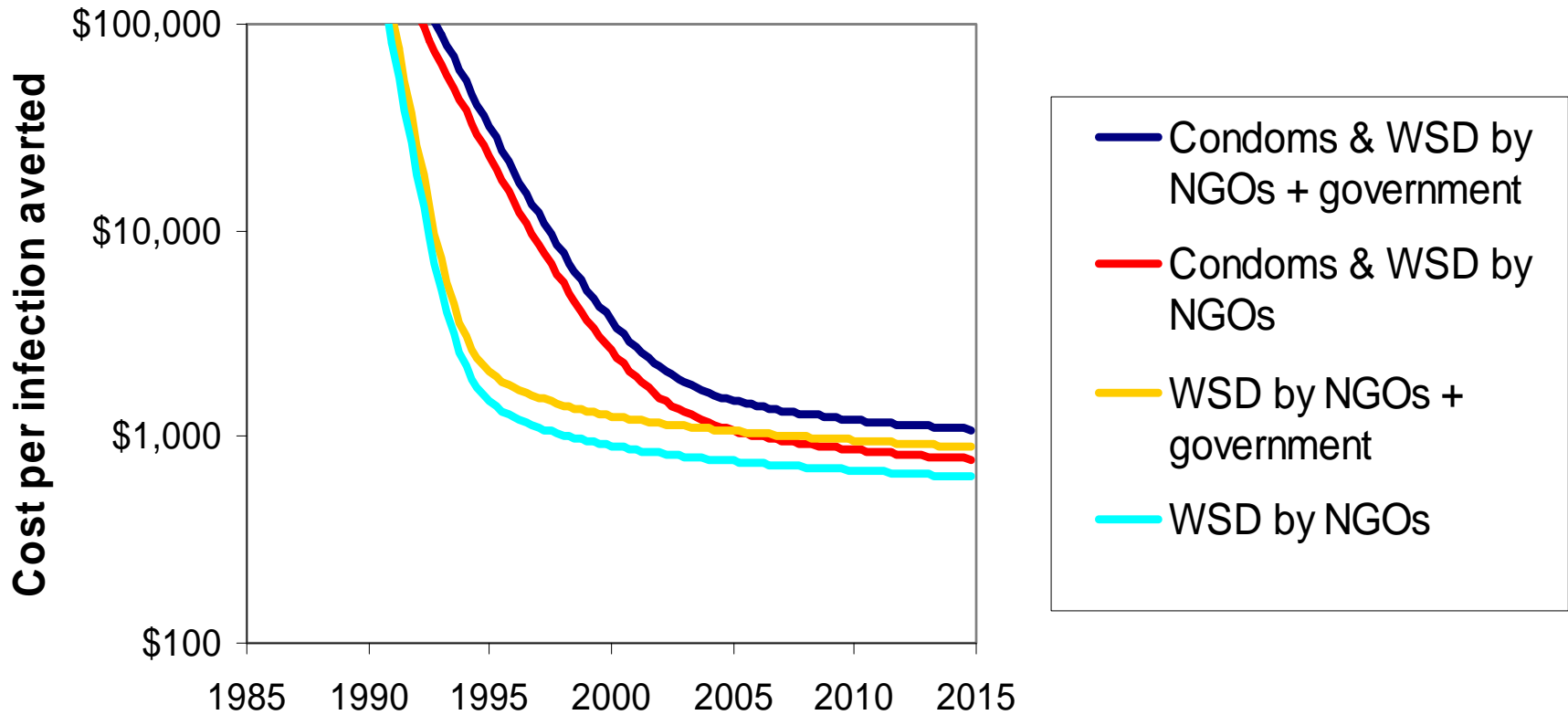
Effect of WSD and condom promotion on HIV prevalence



WSD mitigates the effect of a delayed public health response



Cost-effectiveness of WSD in averting HIV infections



Further results

- Sensitive to women's involvement in migration and their benefits from WSD
- WSD's impact relatively scale-neutral
- Changes in rural people's behaviour (migration) affects HIV prevalence in low-risk urban as well as rural population, the distribution depending on the pattern of migration & interaction

Conclusions

- WSD and related actions may, in some cases, be making a significant, inadvertent & uncounted contribution to HIV prevention
- In addition to & dependent on other benefits – economic, social, environmental
- These results near to a “best case”
- But where the landless have been harmed & distress increased, WSD may contribute to HIV’s spread – the “worst case”

Conclusions

Research needed:

- Are people enabled to avoid other situations of risk (early marriage, domestic violence, survival sex locally)?
- Test the predictions
- Assess the operational consequences

Walking & chewing gum - better

WSD offers at least 2 potential synergies with HIV/AIDS prevention/control:

- Institutions like Self-Help Affinity Groups can ease health workers' access to marginalized groups & facilitate discussion
- Greater understanding of HIV/AIDS risks + access to livelihood options that can help people avoid them can lead to far more effective prevention

Walking & chewing gum - better

- Need to consider impacts & synergies on WSD e.g. increased support for equity – *the* critical issue
- Can we afford not to pursue such synergies?
- Can we meet our goals e.g. MDGs if we pursue them one-by-one?
- We need more, different people under the tree to get the systemic thinking we need

