Current research on developing collaborations across sectors for zoonoses prevention and control

National expert consultation on intersectoral coordination for prevention and control of zoonoses in India
27 November 2013
Hotel Royal Plaza, New Delhi, India

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CGIAR Research Program A4NH
Effectiveness Research

1. OH case studies – VSF
2. EH case studies - IDRC
3. OH initiatives – Bellagio group
4. OH clearing house
5. Ecohealth Journal
Economics Research

1. Sharing resources: efficiency & effectiveness savings
2. Controlling diseases in the animal reservoir rather than human victim
3. Early detection and management of emerging threats
4. Pandemic prevention
5. Generating insights and adding value
Costs & benefits of sharing resources

Developing country health sector expenditure: 250 billion
Developing country veterinary expenditure: 2 billion

<table>
<thead>
<tr>
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<th>Typical share of budget</th>
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<td>Laboratory facilities</td>
<td>3%</td>
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<tr>
<td>Education</td>
<td>7%</td>
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<td>Infectious disease campaigns</td>
<td>5%</td>
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World Bank (2012) estimates 25% savings across a range of joint services for AI and 7% additional costs = net savings of 18%
## Costs of zoonotic disease outbreaks (US$ billion)

<table>
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<tr>
<th>Period</th>
<th>Costs (conservative estimates)</th>
<th>Annual average</th>
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<tr>
<td>1998-2009</td>
<td>38.7</td>
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<td>2002-2004</td>
<td>41.5</td>
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<td>Total in 12 year period (1998-2009)</td>
<td>80.2</td>
<td>6.7 b</td>
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6 outbreaks other than SARS
- Nipah virus (Malaysia),
- West Nile fever (USA),
- HPAI (Asia, Europe),
- BSE (US),
- Rift Valley Fever (Tanzania, Kenya, Somalia)
  - BSE (UK) costs in 1997-09 only

SARS

Source World Bank 2012

Cost of averting 3.4 billion $ per year
Controlling diseases in animals and along the value chain chain

• Major zoonoses historically controlled in the animal reservoir (Brucellosis, TB, rabies, livestock parasites)
• Salmonella: Denmark reduced up to 95% in eggs, poultry and pork, by farm and VC intervention saving society US $25.5 million p.a (Wegnener et al)
• Rabies: over a period of 6-15 years, dog vaccination & PE more cost effective than PE alone
• Schistosomiasis: more effective when both cattle & people treated (Grey et al). Integrated programs generate $6 per $1 invested
• Brucellosis: cost effective when benefits to all sectors considered (Roth et al)
Political Economy Research

1. Emergence & development: STPH

2. Barriers & bridges: ILRI