Bridging the Research-Policy Divide in public health and environment in Asia

28 May 2009
The Australian National University
The Fellows
Strengthen the systemic capacity to stop the spread of MDR-TB in Henan, China

Guojie Wang
Henan Anti-TB institute
Henan CDC, China
Outline

- Context
- Problem scoping
- Solution
  - Stakeholder analysis
  - Action plan for policy issues
- Conclusions
Context

- **Global:** TB emergency (WHO, 1993)
  - TB cases: 13.7 M (0.5 M MDR) (2007)
- **China:** high TB burden
  - TB incidence rate: 98/100,000 (2007)
- **Henan:** about 10% of China’s TB cases
MDR-TB rate comparison with global level

[Bar chart showing MDR-TB and Initial MDR-TB rates for Global and Henan.]
Problem tree analysis

High MDR-TB prevalence

Economic development & Poverty

Effect

Individual level
- Life quality
- Mortality
- Threat to public health
- Threat to social stability
- Health resource
- Healthcare workers’ health

Community level

Health system

Problem

Cause

Individual level
- HIV/AIDS or other diseases
- High risk vocation
- Malnutrition
- Crowding

Community level
- Crowding, migration
- Poverty

Health system
- Low or late detection
- Improper treatment
- TB
- MDR-TB
Root cause of detection problem

- Low capacity of laboratory: space, equipment, skilled technician, reagents
- Doctor lacks related knowledge; Not enough doctors
- Patients can’t afford the test fee

Low or late detection of MDR-TB
Root cause of treatment problem

MDR-TB
Improper treatment

- No isolation ward
- Doctor lacks related knowledge
- No second-line anti-TB drugs available
- Patients can’t afford
- Patients can’t tolerate the side effects
- Treatment compliance of patients is poor
1. No space, equipment or reagents for lab
2. No isolated ward
3. No second-line anti-TB drugs
4. Patient can’t afford
5. No skilled technician
6. Dr lack related knowledge
7. Poor treatment compliance of patients

Key problems, needs and stakeholders:

- Provide
- Free
- Train
- Inpatient or Directly observed treatment

- Anti-TB institutions
- Financial support
- Health department
- Charity
- Provincial Anti-TB Institute
- doctor, nurse

Provincial Health department and Anti-TB institutions need financial support. Financial support is available through Charity and Provincial Anti-TB Institute. Providing training to skilled technicians can improve the situation. Inpatient or directly observed treatment is required for patients who can’t afford the treatment.
Solution: Strengthen the systemic capacity

Inputs to build capacity

- Equipments, second-line anti-TB drugs, reagents
- Training
- Increase healthcare workers
- Build isolation ward, provide room for lab
- Regulation of incentives and sanctions; reporting and monitoring system.
- Network; guideline for MDR-TB

Performance capacity (Tools)

Personal capacity (Skills)

Workload capacity

Facility capacity

Supervisory capacity (Staff and facilities)

Structure capacity

System capacity

Requires...

Requires...

Requires...

Requires...

Requires...
Conclusion

This policy brief shows:

- MDR-TB threatens the public health
- Increasing the budget to strengthen systemic capacity for detection and treatment will reduce MDR-TB.
Need for Coherent Institutional Framework for Better Food Planning in Pakistan

Kashif M. Salik

AUSAID Australian Leadership Awards Fellowship Program at ANU
“Bridging the Research Policy Divide”
Canberra, Australia
20 April – 28 May 2009
Outline

- Background
- Problem
- Alternative Solution
- Institutional Policy Framework at 3 levels: National, Provincial, District
- Stakeholder Mapping & Engagement
Institutions growth as compared to other factors

- Population Growth
- Institutions
- Economic Activities
- Social Challenges

1947 - 2008
2007: The bumper crop of wheat & Surplus of about 1.3 million tons
Government allowed to export the ‘surplus wheat’

But

The country experienced one of the worst wheat crisis during 2007
Reason:
• Poor Consumption estimations
• Lack of Market Surveillance Capacity

Result:
• Had to Import wheat at higher prices (Almost four times)
• Increase Food prices by 20%
Focal Problem:
No coordinated framework for responsive/planning for food shortages

Effects:
- Short term solutions
- Delayed actions
- Every event is crisis

Causes:
- Lack of Coordination from local to provincial and national level
- Little scientific & technical capacity to understand conseq. of climate change
- Lack of Coordination from local to provincial and national level outside of own sectors
- No Incentive
- Discourage new ideas
- Lack of Transparency
- Lack of Accountability
- Under funding & Staff
- Low priority
- Lack of resources
- No Education
- Brain Drain
- No Ex...
Possible Solutions

Option 1:
- is to retain the current institutional framework while improving efficiency through possible interventions

Option 2:
- the establishment of FOOD SECURITY COUNCIL
  - National
  - Provincial and
  - District level
National Food Security Council
- Policy formulation and Evaluation

Provincial Food Security Council
- Strengthen Information system e.g., Agri. water, market
- Research on Vulnerability of food system
- Planning, Implementation and Evaluation

District Food Security Council
- Data Collection and coordination b/w departments
- Data Digitization
- Establish early warning and response system
Engaging Stakeholders

**LOBBY:** Politicians, Bureaucrats, Technocrats

- **Lobbying**
- **Advocacy**
- **Media**
  - Remaining SH: scientist, NGO, Org. farmers

**Workshop**
- Involving all Stakeholders

**Recommendation to Establish**
- Food Security Council

- Identify alternatives
- Ownership of the policy process

**Mandated stakeholders**
- Planning Commission
- Min. Food, Agriculture, & Livestock
- GCISC
- Provincial Government
- Local Governments
Outcomes

Improved policy formulation and an effective inter-institutional response system

Better Planning and Coordination at the National, Provincial, and District levels

A Coherent Institutional Framework to Prevent Food Shortages in Pakistan
Managing Agricultural Production Variability through Seasonal Climate Prediction

Arif Goheer

AUSAID Australian Leadership Awards Fellowship Program at ANU
“Bridging the Research Policy Divide”
Canberra, Australia
20 April – 28 May 2009
Outline

- Prologue
- Problem Scoping
- Solution
- Who – Stakeholders
- How – Engaging the Stakeholders
- Epilogue
Prologue

- Agriculture is the engine of growth of Pakistan’s economy
- The production instability is a major concern which is inextricably linked to seasonal variability
- Seasonal variability is responsible for more than 50% in production instability
- Global Conversion of areas from food to fuel
Problem Scoping

Inability to manage inter-annual food crops production instability

Effects

- Slow Economic Growth
- Low Agri. Incomes
- Lack of investment In crop sector
- Higher Food Prices

Causes

- Increasing Inter-seasonal Variability
  - Climate Change
  - Internal Atmos. Processes
- Lack of timely Availability of inputs
  - Untimely Input imports
  - Poor Institutional Coordination
- Irrigation Constraints
  - Scarce surface water availability
  - Farmer Resources
- Changes in Cultivated area
  - International market
  - Local Market dynamics
Solution – Known Unknowns

**Challenge**

How to Adapt to the Increasing Inter-seasonal variability

**Solution**

Known Unknowns
Seasonal Climate Prediction

**Outcome**

Agricultural Crop Production Stability
Wheeling the Policy Cycle

Engaging the Stakeholders

Policy brief for adoption of Seasonal Prediction for Agri. decision making

Lack of Seasonal Forecasts

Agricultural Production Instability

Policy
Coupling the Context Assessment Tools

(Stakeholders’ Analysis – Influence Mapping)

- **Power**
  - High
  - Low

- **Interest**
  - Low
  - High

- **Min. Food Agri. Livestock Planning Commission**
  - Min. Food Agri. Livestock
  - Pak Ag Res Co
  - Pak Met Dep
  - GCISC

- **Policy**

**Stakeholders:**
- Farmers
- NGOs
- Media
- Planning Commission
Engaging the Stakeholders

**GCISC**
Climate change Res.

**PARC**
Agricultural Res.

**PMD**
Weather Forecast

**Scientific Discussions**
- Brainstorming Sessions
- Collection of Evidence
- Action plan

**TFCC Meetings**
- Need Identification
- Cost-Benefit Analysis

**Planning Commission**
- Stakeholder Workshop
  - Feed Back
  - New Information
  - Policy Recom.

**Policy**

**MinFAL**
Epilogue

- Adoption of seasonal climate prediction as a tool for agricultural production decision making.
- Formation of policy and institutional arrangements for the application of these forecasts.
Improving Policy for Reducing the Vulnerability of Bihar’s Food System Facing Climate Change

Gyaneshwar Singh
Senior Researcher

Gorakhpur Environmental Action Group, India
Website: geagindia.org
Flow of Discussion

- Bihar Profile
- Vulnerable Food Production System & its Causes
- Policy Options for Enhancing Adaptive Capacity
- Pathways to Influence Decision Makers
- Engagement of Voluntary Organizations
- Expected Outcomes
Bihar Profile

Geographical

• Locked By Mountains and Plateau
• Surrounded by Rivers (Ganga & Gandak)
• Drought and Flood Prone Area

Socio-economic

• 94 % Rural Population
• 2 % Agricultural growth rate
• 63% people below poverty line
• 80% people consume less calorie than national average
Problem & Causal Analysis

Problem: Vulnerable Food Production System

Reasons:
- Ineffective Implementation of Agri. Policy
- Lack of Agri. Policy
- Climate Change / Disaster

Effect: Farmers have problem accessing:
- Quality Inputs (eg. Seed)
- Agriculture Schemes & Program
- Modern Techniques and Information
Possible Policy Solutions

- National Food Security Mission
- National Horticulture Mission
- Agriculture Road Map
- ISOPOM (Oilseeds, Pulses, Oilpalm and Maize)
- Macro-mode Management
- Crop Insurance
- National Agriculture Development of Schemes
Policy Improving Process
Stakeholder Mapping

- **High Power, High Interest**
  - Agriculture Minister and Secretary (Decision Maker)

- **High Power, Low Interest**
  - Agri Tech Mgt Agency Governing Board
  - Local Governance

- **Low Power, High Interest**
  - NGOs, Media, Farmers

- **Low Power, Low Interest**
Pathways to Influence Policy Makers

- Media
- Gorakhpur Envir. Action Group
- NGOs (Key Stakeholder)
- Agriculture Minister & Department
- Farmers
- Local Governance
Role of Key Stakeholder

- **State Level**
  - Agri. Minister
  - Principal Secretary
  - Secretary
  - Director-Agriculture
  - Joint Dir Agri
  - Dy. Dir Agri
  - Agri Officer & ATMA
  - Agri Officer
  - Extension Worker

- **District Level**
  - Block Level
  - Village Level

- **Local Governance**
  - NGOs
  - Farmers
Outcomes

- Effective Implementation of Agricultural Policies will result in:
  - Empowered Stakeholders (NGOs, Farmers)
  - Increase of Farmer’s Access to Agri. Inputs & Technology
  - Enhance Adaptive Capacity of Food Production System
  - Improved Well Being & Food Security

**********
Triangle Shifts Mountains: Policy Model Tackling Urban Health in Thailand

Sam-ang Seubsman
Sukhothai Thammathirat Open University, Thailand
The country context

Middle income
62 million people

Urbanization rapid
- Now 40%
- By 2030 >60%

Nutrition transition
Fat intake ↑ 2x
Sugar ↑ 3x
Urban Health Outcomes

- Obesity
- Hypertension
- Diabetes
- Stress

- Family value
- Social network
- Soc. belonging

Urban worse off than rural people and causes are complex
Problem Tree Analysis

Focal Problem: Unhealthy urban people

Causes:
- Poor environment
- Unhealthy diet
- Physical inactivity
- Spiritually unhealthy

Effects:
- Increased dependency
- Increased health services
- Increased morbidity and mortality
- Reduce productivity

Urban health risk transition
Policy Brief
National Economic & Social Development Board

- Prioritize **healthy urban lifestyle** strategy
- Implement the strategy raising individual awareness, social movement and networking

**Immediate action**
- Maintain healthy weight
- Active life

**Incremental & sustainable**
- Environmental improvement
- Stress release program

---

Food, Physical

Individual approach ↔ Social movement & Networking
How can we influence the policy maker

**Message**
- Useful
  - Hot issues - metabolic syndrome
  - Related to national health policy

- Credible
  - Research findings
  - Senior health professionals recommend

- Politically costed
  - Fit in policy needs & agenda

Diabetes $A 5,000 million/yr

Policy maker influence mix
Triangle Shifts The Mountain

Research approaches

Urban ill health

Social Movement

Political willingness

Healthy urban lifestyles

Praves Vasi 2002
# SWOT Analysis of Stakeholders

<table>
<thead>
<tr>
<th></th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policy makers</strong></td>
<td>5-yr plans</td>
<td>less comm. contact</td>
<td>Fix &amp; Do culture</td>
<td>Economic recession</td>
</tr>
<tr>
<td><strong>NESDB</strong></td>
<td>Mil.Dev.Goal+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Community</strong></td>
<td>Knowledge Interests</td>
<td>less policy experience</td>
<td>previous success eg. PHC, AIDS,</td>
<td>commercial backlash</td>
</tr>
<tr>
<td>-Ministries</td>
<td>School Std. Fund</td>
<td></td>
<td>child health. fam. planning</td>
<td></td>
</tr>
<tr>
<td>-NGOs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Forums</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-THP**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*National Economic and Social Development Board  **Thai Health Promotion Foundation
Conclusions

To reverse an urban health risk, individuals and society must play crucial roles to tackle the problems.

Bodies of knowledge, social movements and political will are needed to shift mountains – problems which threaten humankind.
One Health
Strengthening Response Capacities to Emerging Infectious Diseases

Mary Elizabeth Miranda
Research Institute for Tropical Medicine, Philippines
1. Why One Health is important
2. SARS – a model for effective One Health collaboration
3. Alternative solutions with incremental approach
4. Use of force field analysis to understand stakeholder perspectives
5. Use of Potter model for systematic capacity building
What are Emerging Infectious Diseases

- Over 70% of emerging infections are transmitted from animals to human (zoonoses)
- Avian and swine influenza now in the forefront of global health problems
- A major threat to human and animal health, food security and the global economy
Cycle of SARS CoV zoonotic transmission

SARS
Addressed in the context of One Health
Problem tree analysis

Problem:
- Poor preparedness for and response to a pandemic of animal origin

Effects:
- Zoonoses control divided across health, agriculture, and environment sectors
- Silo of systems for managing a cross-cutting problem

Causes:
- Separate Departments & Separate Secretaries
- Discipline-specific approaches & systems
POLICY 1  Short term
Training and education on
One Health Systems

POLICY 2  Long term
National
One Health Commission

Systematic Capacity Building

Performance capacity

requires

Personal capacity

requires

Workload & Supervisory capacity

Facility & service capacity

requires

Structural capacity  Systems capacity  Role capacity

Potter & Borough. Systematic capacity building, Health Policy & Planning 2004
For change:
- Preparedness for emerging diseases of animal origin
- Central leadership, multidisciplinary action teams
- Build on existing structures, synergies, institutions

Against change:
- Turf issues, unwilling to give up leadership
- Investment on new office, new staff
- Longer time needed to build One Health mindset
**Key Outcomes**

**POLICY 1  Short term**

Effective *One Health System*
Critical mass of skilled public health and veterinary practitioners to manage emerging infections

**POLICY 2  Long term**

Effective *One Health Commission*
With over-arching responsibilities for emerging infections at the animal-human interface
Way Forward

• Develop a project design to show proof of concept of the One Health Management Authority in the Philippines

• Partners:
  ▪ concerned government sectors
  ▪ International
    » academic & research institutes
    » aid development agencies
In conclusion

ONE HEALTH POLICY for the Philippines

highlights the science of integration and its relevance to effective responses to emerging diseases at the animal-human interface