INTER-AGENCY FORUM TOWARD INTEGRATED EPIDEMIOLOGIC SURVEILLANCE IN THE AMERICAS
THE WORLD BANK PERSPECTIVE

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Integrated Epidemiologic Surveillance

- Knowledge Services
- Convening Services
- Financing Services
  - Globally
  - By World Bank Region
    - Argentina
    - Mexico
    - Nicaragua
- Conclusion
Practitioners’ toolkit for agriculture public expenditure analysis.

Towards a One Health approach for controlling zoonotic diseases.

Towards One Health Interim Lessons from the Global Program on Avian and Human Pandemic Influenza

Enhancing control of highly pathogenic avian influenza in developing countries through compensation

How do we improve public expenditure in Agriculture?


The Economics of One Health
The Bank has been working closely with developing countries, donors, the UN System Influenza Coordinator, WHO, FAO, OIE and others to implement integrated country programs (animal health, human health, communications, pandemic preparedness/disaster risk management).

Ministries of Agriculture and Health of Vietnam, with Bank support, hosted a workshop on cross-sectoral collaboration.

Conclusions presented to the Hanoi ministerial conference on animal and pandemic influenzas, and proceedings published.

The Bank reported to a series of ministerial conferences on progress and on financing gaps, documenting a significant and rapid decline in support after 2008.
Financing Services - Globally

78 Bank-supported AHI programs in 60 countries 2005-2010
US$3.9 billion to developing countries
US$1.3 billion from Bank
$0.1 billion grants

Bank endorsed the global framework to provide a global public good of pandemic prevention and preparedness

AHI response has become an example of concrete, effective work in the Bank, across sector units and regions, to respond to a global challenge
Financing Services - Globally

- All 78 Bank-supported AHI programs in 60 countries:
  - Followed One Health approaches, with collaboration between
    - public health and veterinary services
    - Ministries of Health and of Agriculture (livestock) and others
    - Bank teams from Agriculture, Health and Poverty Reduction departments
  - Included surveillance components (in some cases financed by other sources)
Financing Services: Africa & Middle East

- **AHI**
  - Joint planning & implementation of Avian Flu campaigns in 12 countries in sub-Saharan Africa and 8 countries in MNA

- **Rift Valley Fever**
  - Kenya: risk-based planning tool
  - Madagascar: integrated approach
  - Mauritania: cooperation

- **Several human and animal diseases**
  - Chad: joint vaccination campaigns
  - Southern Sudan: joint use of cold chain facilities
  - Tanzania: multidisciplinary team
Financing Services: East Asia

- **AHI**
  - Cambodia, Indonesia, Lao PDR, Myanmar and Vietnam: joint planning and implementation of avian flu campaigns
  - China and Mongolia, partly in Viet Nam: both sectors share common strategies and teams; One Health Master Degree training for human & animal health professionals

- **Incident Response Information System (IRIS) for Emerging Infectious Diseases:**
  - common information platform for vet and human health sectors for China and Mongolia
    - System is owned by human and animal health sectors.
    - Both sectors post their information into this common platform mutually accessible.
    - Decision-maker and user-friendly system, GIS-referenced, with data analysis and visualization function.
    - Supports bio-surveillance, holistically covering both animal and human health, and can be expanded to cover plant diseases as well.

- **Brucellosis**
  - China and Mongolia: mass vaccination of livestock
  - joint investigation and interventions by both sectors
  - cross-border collaboration for disease response
Financing Services – Europe and Central Asia

- **AHI**
  - Joint planning & implementation of Avian Flu campaigns in 13 countries

- **Brucellosis**
  - Kyrgyz: farm visits detecting in human and animals

- **Several diseases**
  - **Azerbaijan**: Strengthening MoH capacity for Communicable Disease Surveillance Project
    - National strategy on communicable diseases
    - Implementation of International Health Regulations (IHR)
    - Electronic Integrated Disease Surveillance System supported by geographic information systems (GIS)
Financing Services – Central Asia

- **First Regional One Health Project closed in September 2011**
  - Participated Kazakhstan, Kyrgyz Republic, Tajikistan, Uzbekistan, and Turkmenistan as an observer
  - Joint effort of international organizations including CDC, OIE, IPFRI, Swiss Tropical Institute, FAO etc.

- **Project included TA for**
  - Gap analysis in veterinary and human health for control of zoonosis. Four CA countries successfully completed Performance of Veterinary Services analysis, supervised and approved by OIE.
  - Assessment tool for human health using essential public health functions adopted for control of zoonotic diseases. First tested in CA is now used in Turkey as well.
  - Economic analysis of cost of zoonotic diseases. Assess full economic cost using parameters such as loss of production of meet and cheese, and competitiveness in the world market.
  - Food safety analysis and competitiveness. All participating countries prepared national and regional plans to address food safety in light of WTO accession and customs union (exports).
Financing Services: South Asia

- **AHI**
  - Afghanistan, Bangladesh, Bhutan, India, Nepal and Sri Lanka: joint epidemiology training

- **Zoonotic Diseases**
  - India Integrated Disease Surveillance Project includes a component on avian influenza
  - Co-ordination, sharing of information and improvements in surveillance systems between the human health and animal health counterparts at the central, state and local levels in India.
  - A network of human and animal labs evolved for avian influenza, but has had a role and relevance in outbreaks of other zoonotic diseases.
  - The Project has been closely co-ordinated between the HNP and Agriculture sectors at the Bank.

- **Rabies**
  - India: vaccination/sterilization of dogs
Financing Services: Latin America and Caribbean

- **AHI**
  - Argentina, Bolivia, Brazil, Chile, Costa Rica, Dominican Republic, Haiti, Honduras, Mexico, Paraguay and Uruguay
  - Knowledge exchange platforms to facilitate collaboration and project development in Agriculture and Health sectors, such as the LAC Agriculture Innovation and Agricultural Sustainability portal.
  - Aiming at improving
    - intersectoral collaboration and communication
    - efficiency of surveillance and diagnosis of diseases
    - effectiveness of resource use and control
    - efficiency of infrastructure development
Financing Services: Argentina

- **Argentina AH1N1 Influenza Project** US$ 180 million
  - Strengthen the capacity of the epidemiological health surveillance system to
    - prevent, monitor and evaluate influenza activity
    - control epidemic waves of A/H1N1 influenza.

- **Results**
  - Number of cases after vaccination reduced from over 6 million in 2009, to under 14,000 in 2010
  - 94% doses of A/H1N1 vaccine applied
  - 22,000 influenza diagnostic laboratory tests carried out
  - 37 Health Situation Rooms certified for influenza surveillance and control
  - Social communication modules for both indigenous and non indigenous population
  - 5 independent technical audits performed, and one cost-benefit study.
Financing Services: Mexico

- **Mexico A/H1N1 Influenza**
  - Third Basic Health Care Project allocated US$25m to laboratory equipment, laboratory supplies, anti-viral medicines and medical supplies
  - Project US$491 million (cancelled) for strengthening the capacity of the health system to monitor the spread of the influenza viruses and to control epidemic waves
  - Grant US$ 1.7m ($1.1m cancelled): support to the State Health Systems for promoting preventive behaviors related to AHI.

- **Results**
  - 4 million vulnerable beneficiaries, including indigenous people
  - 9 Federal Entities with the highest number of indigenous population in the country carried out communication campaigns for Influenza A/H1N1 prevention targeted to high risk and/or marginalized population groups
Financing Services: Nicaragua

- **Nicaragua A/H1N1 Influenza Project US$5million**
  - Strengthen the capacity of the epidemiological health surveillance system to
    - prevent, monitor and evaluate influenza activity
    - control epidemic waves of AH1N1 influenza.

- **Results**
  - 230,000 heads of households received information on prevention of A/H1N1
  - Innovative surveillance posts at schools
  - 75% laboratories certified on control of A/H1N1
  - All hospitals trained in disease control and case management
  - Drugs and medical supplies distributed throughout the country
Integrated Epidemiologic Surveillance - Challenges

- Emphasize the broader ecological context/environment and identify and address root/upstream causes of disease.

- Integrate
  - Human and animal surveillance systems managed by Health and Agriculture into one common “umbrella” system.
  - Fragmented subnational systems into a unified national system.
Integrated Epidemiologic Surveillance - Recommendations

- **Common approach to disease surveillance and response**
  - Common strategy
  - Generic capacity
  - Common platforms and tools for designing and implementation of disease surveillance and response
  - Joint teams

- **Use of already existing contact points** facilitates identification and tracing (e.g. rabies, influenza).

- **Keep the merged epidemiological systems as simple as possible** to facilitate integration.

- **Establish subnational Situation Rooms**, which can make the system more manageable and the information generated more relevant to the situation in each coverage area.

- **Generate information that will guide decision making of all stakeholders.**

- **Use results-based financing (RBF)** to implement an integrated epidemiological system.