

Effectiveness of a Multisectoral Collaboration in Detection and Response to HPAI

West Bengal (India): A Case Study in 2008

Santanu Bandyopadhyay
India

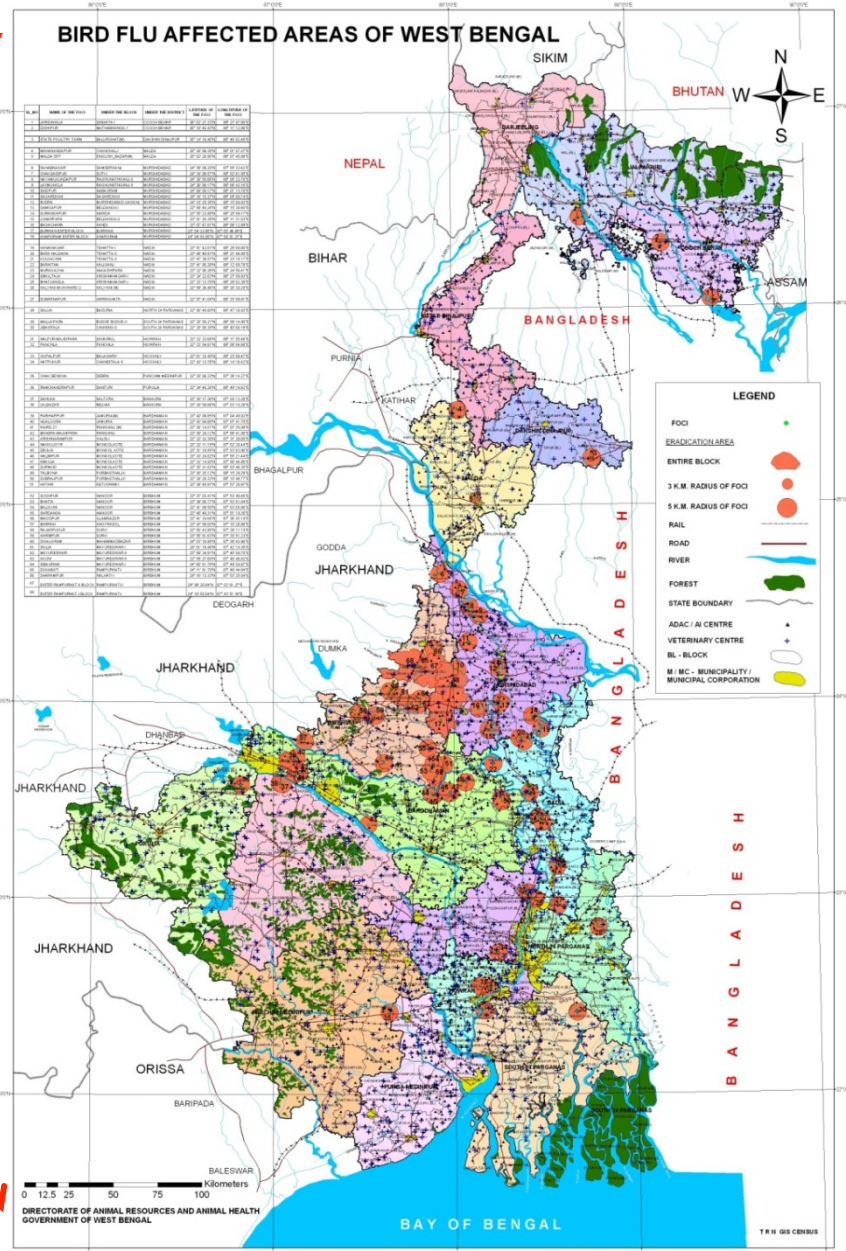
Highly Pathogenic Avian Influenza (bird-flu)

Indian Episodes: Early on:

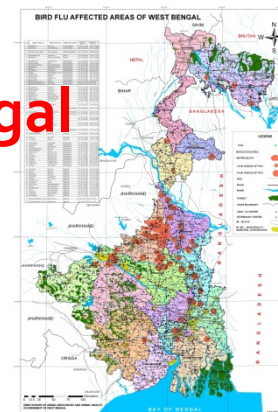
- ❑ 1st incidence in Feb-March, 2006 in two districts of Maharashtra State, which spilled over to adjacent districts of Gujarat and MP States. Regained freedom quickly
- ❑ 2nd episode is a small outbreak in a solitary backyard farm in Imphal district of Manipur in July 2007 In North-East fringe of the country with international border with Myanmar. Declared freedom in November, 2007.
- ❑ Then it struck in the Indo-Gangetic delta in 2008 in West Bengal and continued to affect this region and the neighbouring areas sporadically till today.



Situation that emerged in West Bengal in India in 2008-09



Basic facts of the HPAI outbreaks in 2008-09 in West Bengal



- ❑ The first episode in West Bengal was notified on 15 January, 2008 in two districts. Subsequently spread to 11 other districts of West Bengal in two months. Total 60 outbreaks in 2008.
- ❑ West Bengal has highest poultry per Sq.Km (382) in the country and about 90% is in backyard production system with least biosecurity.
- ❑ West Bengal has highest human population density (904) in the country
- ❑ It is primarily a rice-growing area with ~33% duck among poultry and an active Indo-Gangetic delta
- ❑ Culling of all poultry within 5 kms of the foci of infection (3 KM in the event of occurrence only in organized farm).
- ❑ Intensive human health surveillance in the area of culling operation
- ❑ Culling completed: 4.3 million poultry

The policy limitations when it first struck, i.e, 2006

In spite of a well laid out HPAI Preparedness Plan with the Federal Government.....

- ❑ **No Federal Law to declare an infectious disease in animals and implement stamping out**
- ❑ **No coordination mechanism between various sectors for control of a zoonotic disease epidemic either at the Centre or at local levels**
- ❑ **Inadequate laboratory capacity for diagnosis and rapid communication of results of emerging diseases**
- ❑ **Complicated channels for notification of diseases**
- ❑ **Massive stamping out never implemented except in sporadic cases of glanders in horses and Anthrax in animals.**
- ❑ **Compensation for stamping out never existed**
- ❑ **Inadequate infra-structure for massive field operation in animal health**
- ❑ **Resource constraints: Financial, mobilization of manpower**

Multisectoral Collaboration launched in the control of HPAI in West Bengal

- Informal sharing of news between AH and PH sectors about suspected poultry death
- Recognition of one each national reference laboratory in animal health and public health sectors for the diagnosis of HPAI.
- Poultry clinical specimens referred simultaneously to these two laboratories
- Deployment of RRTs simultaneously by AH and PH sectors in the affected and notified areas.
- Coordination with neighbouring states for poultry depopulation in 5 KM inter-state borders
- Coordination between the authorities of the Federal Government and the Local Government both in AH and PH sectors (vertical coordination)

Certain Classical Policy Intervention in 2008 in West Bengal

- ❑ Separate RRTs for animal and public health activities
- ❑ Para-veterinary staff to lead each animal health RRT. One Veterinarian to supervise several RRTs.
- ❑ Compensation not only for culled poultry but also for the loss of livelihood opportunities of the farmers
- ❑ Compensation against culling was instantaneous through multisectoral cooperation
- ❑ Establishment of cross-border dialogue with neighbouring countries, both bilateral and multilateral
- ❑ Sharing of gene sequences of the West Bengal virus isolates with neighbouring country
- ❑ Depopulation of poultry in the inter-state border areas

Contd.....

Continuing.....

- ❑ **An isolation ward was set up by public health authorities at each epicentre with facilities such as ventilator, pulse oxymeter, nebulizer, N 95 mask, PP meter, anaesthesia specialist and a physician**
- ❑ **The public health RRTs also helped in surveillance of poultry death outside the culling zone and informed animal health suitably**
- ❑ **Deployment of RRTs from several States both for assistance as well for learning while doing. Neighbouring countries also took part more for the purpose of learning**
- ❑ **Good examples of coordination between public sector and the civil society in allaying fear and spreading appropriate messages through mass communication media**

Challenges faced in multisectoral collaboration in West Bengal

- ❑ Despite having a Joint Working Group at the Central Governance, lack of such a coordination mechanism at the State Level (vertical but not horizontal)
- ❑ Both Public Health and Livestock are subjects for local administration (State)
- ❑ Each Department taking instructions individually both from local administrators and their counterpart Ministries at the Centre
- ❑ There was no common fund to cover both the animal health and public health activities for such emergencies
- ❑ Valuable time lost in declaring the epicentre and deployment of RRTs

Contd.....

Challenges....continuing

- ❑ Surveillance of public health got delayed due to late declaration of epicentre
- ❑ Health check up of members of the animal health RRT every day before start of operation delayed deployment
- ❑ Movement control of vehicles was difficult to impose, particularly when stamping out area came within National or State Highways.
- ❑ Closure of markets during episodes needed full cooperation of municipal authorities, law-enforcing agencies and traders. The attitude varied from place to place.

Lessons Learnt and Challenges to Overcome

- ❑ A clear understanding and skill required to identify an unusual disease event at the animal-human interface
- ❑ Requirement of Contingency Plans for existing and unknown zoonotic diseases integrating both animal and public health sectors
- ❑ Requirement of a joint surveillance in animal-human interface
- ❑ Emergency Plans should have well-integrated approach covering from central to the lowest administrative Divisions
- ❑ Creation of an Emergency Corpus Fund at each level of administration to be used for zoonotic infection control and containment

Contd....

Lessons....continuing

- ❑ A single authority for all sectors combined for a zoonotic disease emergency (as in ICS)
- ❑ Avoidance of blame-game in the face of an emergency and understanding each sector's requirements, limitations, sensitivities and planning together to strengthen coordination
- ❑ Adequate legislative provision for implementing emergency measures in the face of a zoonotic disease outbreak in consonance with the Disaster Management Plan
- ❑ Joint training on epidemiology of zoonotic infections and food-borne diseases
- ❑ Strong political commitment