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VIỆN THÚ Y - NIVR

Evolution of Avian Influenza surveillance strategy in Vietnam 2007-2015

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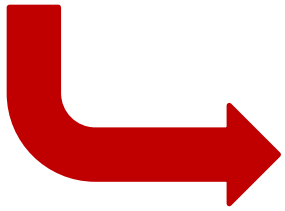
REVASIA Research Program workshop:
« moving from research to policy decision » 2nd workshop
16th June 2015, NIVR, Hanoi

National strategic plans

- Integrated National Action plan on Avian Influenza Control and Human Pandemic Preparedness (Red Book – 2006-2008) (MARD and MOH).
- The Integrated National Operational Program for the Avian and Human Influenza (OPI – Green Book) (2009-2015)
- Viet Nam Integrated National Operational Program on Avian Influenza Pandemic Preparedness and Other Emerging Infectious Diseases Plan (AIPED) (Blue Book - 2011 – 2015)



"To act as a framework to call for international and national funding supports"

AI surveillance system objectives

- 2006-2011 (**surveillance of avian influenza**)
  - Passive surveillance: early case detection for control
  - Active surveillance:
    - Post-vaccination monitoring
    - Prevalence measurement
    - Viral detection and monitoring (LBM)

AI surveillance system objectives

- 2011-2012 (circular N° 1109 /TY-DT: **surveillance of avian influenza**):
  - Passive surveillance: early case detection and control (to prevent spread of epidemics)
  - Active surveillance:
    - viral monitoring in LBM;
    - early warning to adjust control actions
    - Surveillance in Farms: under supervision of District and Sub-DAH, private budget
  - End of national vaccination strategy (official decree N° 3410/VPCP-KTN)

AI surveillance system objectives

- 2013-2017 (National Operational Plan on Avian Influenza Control and Prevention):
  - To gradually control and **move to eradication** phase of HPAI in Viet Nam and prevent widespread epidemics
  - Compartmentalized control: "In 2015, Southern East provinces will have completely been free from H5N1"
  - Passive surveillance: **case finding for control** (***All poultry flocks confirmed or suspected to avian influenza are reported***. *Timing from outbreak detection to treatment (sample collection, culling…) is shortened to 3 days for low land and 4 days for high land/remote regions*.)
  - Active surveillance: To detect virus circulation in poultry (ducks) flocks and monitor changes of viruses (LBM).

AI surveillance system objectives

- 2013 (circular N° 16/2013/TTLT-BYT: prevention and control of **zoonotic diseases**):
  1. Influenza A (H5N1).
  2. Rabies
  3. Streptococcus (swine)
  4. Anthrax.
  5. Leptospirosis

Lessons learned 2006-2012

(source: National Operational Plan on Avian Influenza Control and Prevention 2013-2017)

- Strong leadership and effective instructions of the party and government and political commitments of various bodies on avian influenza control and prevention have been crucially important.
- Technical and financial supports of international organizations and countries have been essential to ensure effective program.
- The success of the program depended much on the leading role of the government and localities, international supports and close collaboration between agricultural and health sectors.
- To make the program successful, the participation of the entire political system is important, in which the agricultural and health sectors should always play a leading role.
- Timely dissemination of information about the disease situation on mass media and to related international organizations (OIE, FAO) is crucial.
- **Policies to support disease control (compensation to bird culling, credit and regimes supporting staff, who run disease control and vaccination…) need to be more openly disseminated.**
- **Communication to raise local awareness and behavior change need to be further strengthened.**
- In reality, these lessons have also been applied in the control and prevention of other infectious diseases such as foot and mouth, pig respiratory and reproduction syndromes with good results been recorded.

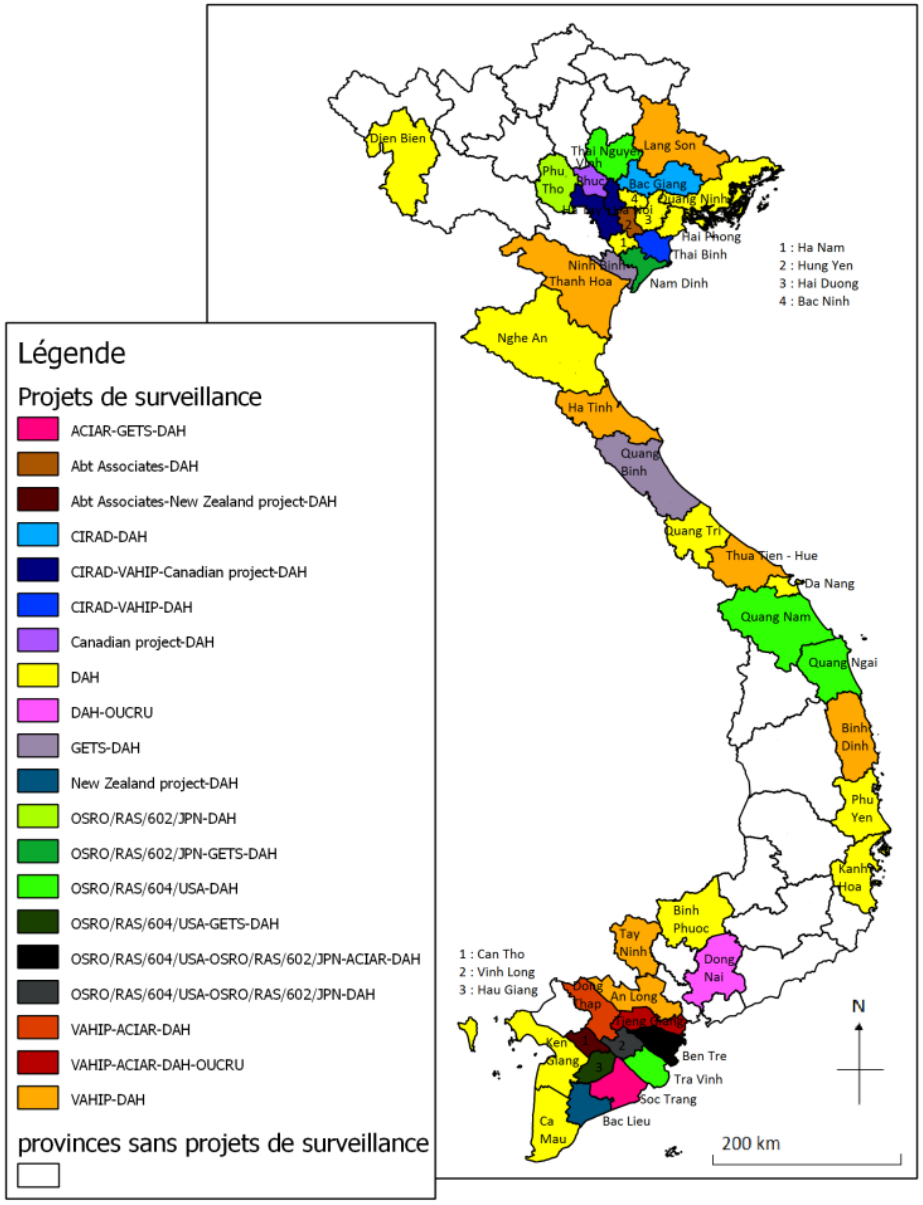
Review of surveillance activities 2007-2011

Project type		National system	Projects strengthening national surveillance system						Research projects with surveillance activities			
			ACTIVE SURVEILLANCE		Capacity building (and active surveillance for project 604)							
Acronyme du projet (Mise en œuvre/financement)		PASSIVE and ACTIVE SURVEILLANCE (DAH / MARD-International)	VAHIP 2007-10 (DAH/ World bank)	GETS 2008-11 (DAH-FAO/ USAID)	602 2006-08 (DAH-FAO/ JTF)	604 2009-11 (DAH-FAO/ USAID)	Al Mekong Initiative Associates 2006-09 (Abt Ass./USAID)	VSF-CICDA 2006-07 (USAID/ FAO)	ACIAR 2006-10 (ACIAR/ AusAid)	Massey Uni. 2007-11 (NZ Aid)	GRIPAVI 2007-11 (NIVR-CIRAD) (MAEE)	OUCRU 2009 (WT)
Scale / Location (nbr of Provinces)		National	11 North / Centre / Sud	5 North/ Centre / Sud	4 North / Sud	22 North / Centre / Sud	5 North / Centre / Sud	30 North / Centre / Sud	3 South	2 South	4 North/ South	2 South
Public services capacity building												
post-vaccinal sero-monitoring												
Type of study	Sero-monitoring Farms											
	Viral surveillance Farms											
	LBM viral surveillance											
	Slaughterhouse viral surveillance											
	Sentinel farms (serology and virology monitoring)											
	Wild bird											
	Illegal trade											

Source: *Duteurtre V, Delabouglise A, Goutard F, Nguyen Viet Khong, Duteurtre G Roger F, Peyre M. Review and interactions between avian influenza surveillance protocols in Vietnam. In preparation*

RESULTS

- Complementarity geographic
  - Different provinces,
  - Different species,
  - Different objectives
  - Focus on high risk provinces



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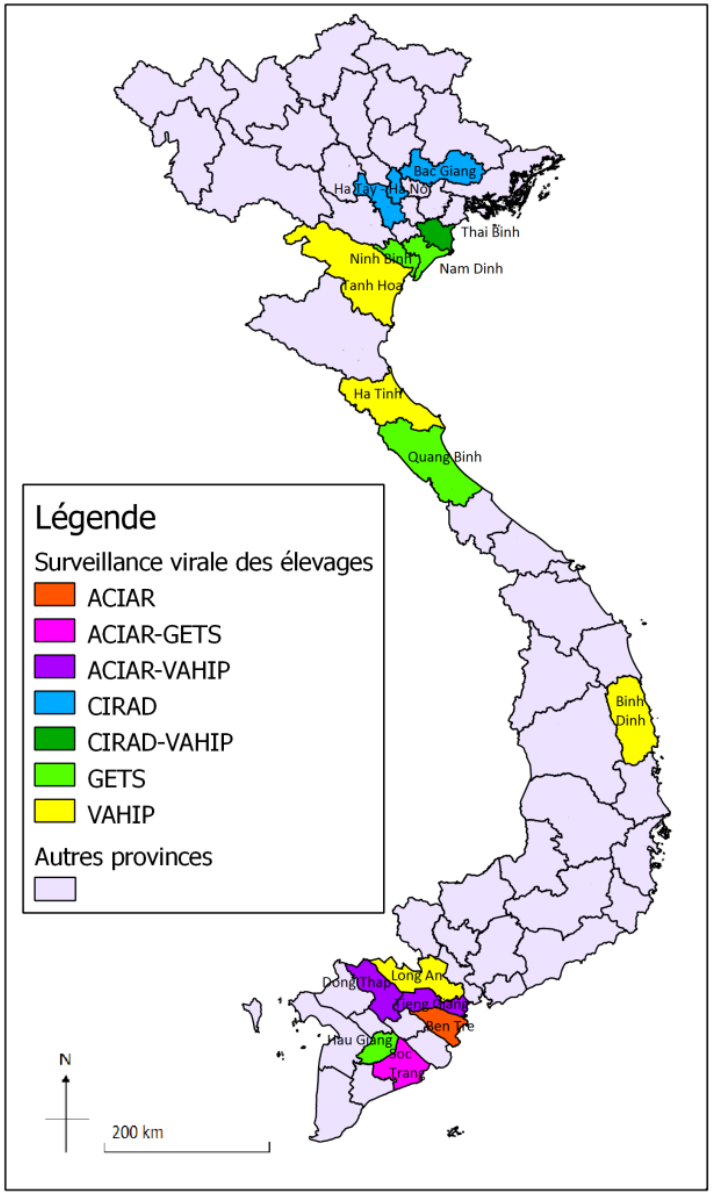

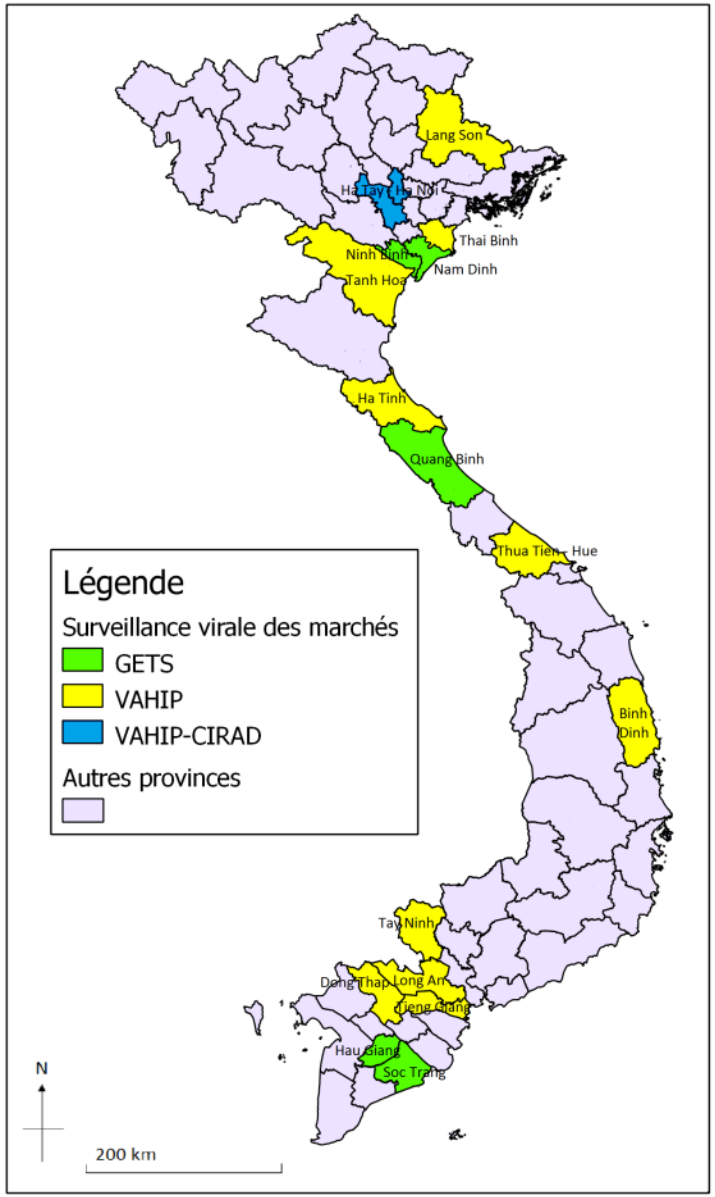

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RESULTS

- Spatial complementarity
- Closer links of development projects with National level authorities (DAH)
- Active surveillance relies on external funding
- Limited involvment of private stakeholders (reduce to fund participation)
- Limited role of evaluation (including economic evaluation) to inform new strategies (3/11)
- **Cost-effective active surveillance to ensure sustainability**

Source: *Duteurtre V, Delabouglise A, Goutard F, Nguyen Viet Khong, Duteurtre G Roger F, Peyre M. Review and interactions between avian influenza surveillance protocols in Vietnam. In preparation*

Mains challenges

- Technical issues to ensure timeliness (transport of samples; analyses timing)
- Cost of tests/procedures
- Involvement of farmers in surveillance activities
- Involvement of local authorities
- Animal traceability for LBM and slaughterhouses surveillances

Source: *Duteurtre V, Delabouglise A, Goutard F, Nguyen Viet Khong, Duteurtre G Roger F, Peyre M. Review and interactions between avian influenza surveillance protocols in Vietnam. In preparation*

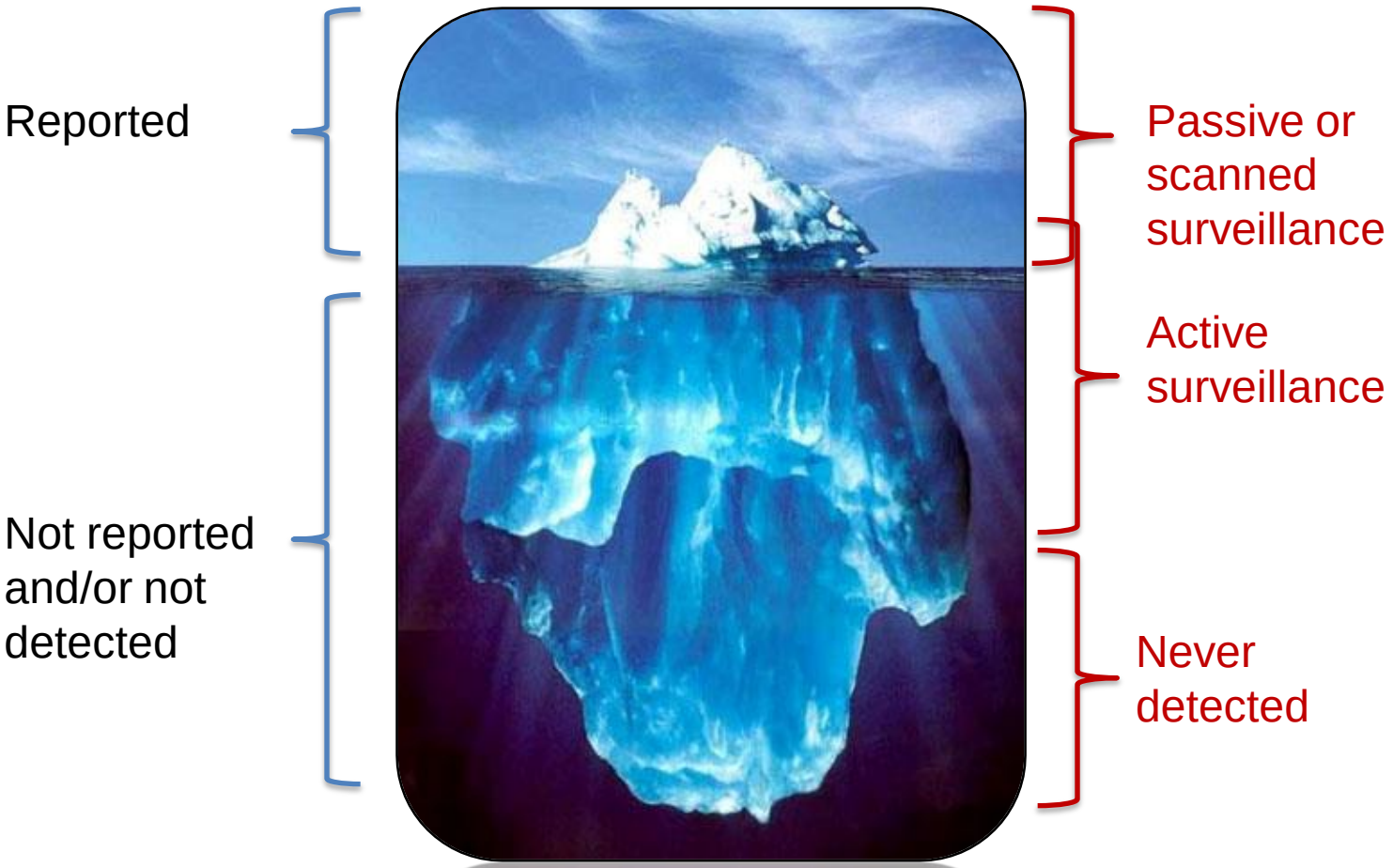
Innovation

To use evidence based information generated by evaluation to inform the design of cost-effective surveillance strategies

Why? Quality of data generated

- Assess the adequacy between objectives and results (e.g. case detection for control ≠ for eradication)
- Best use of ressources
- Ensure trust in the sanitary situation: trade issues
- Ensure efficacy and relevance of control measures/strategies

Wy do we need to evaluate surveillance?



Innovation

To use evidence based information generated by evaluation to inform the design of cost-effective surveillance strategies

Requirements

- Standardised evaluation methods and tools
- Quantitative evaluation methods
- Economic evaluation methods

REVASIA Research Program

Innovative methods to evaluate animal health surveillance systems in South East Asia

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1956

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anses
alimentation, environnement, travail

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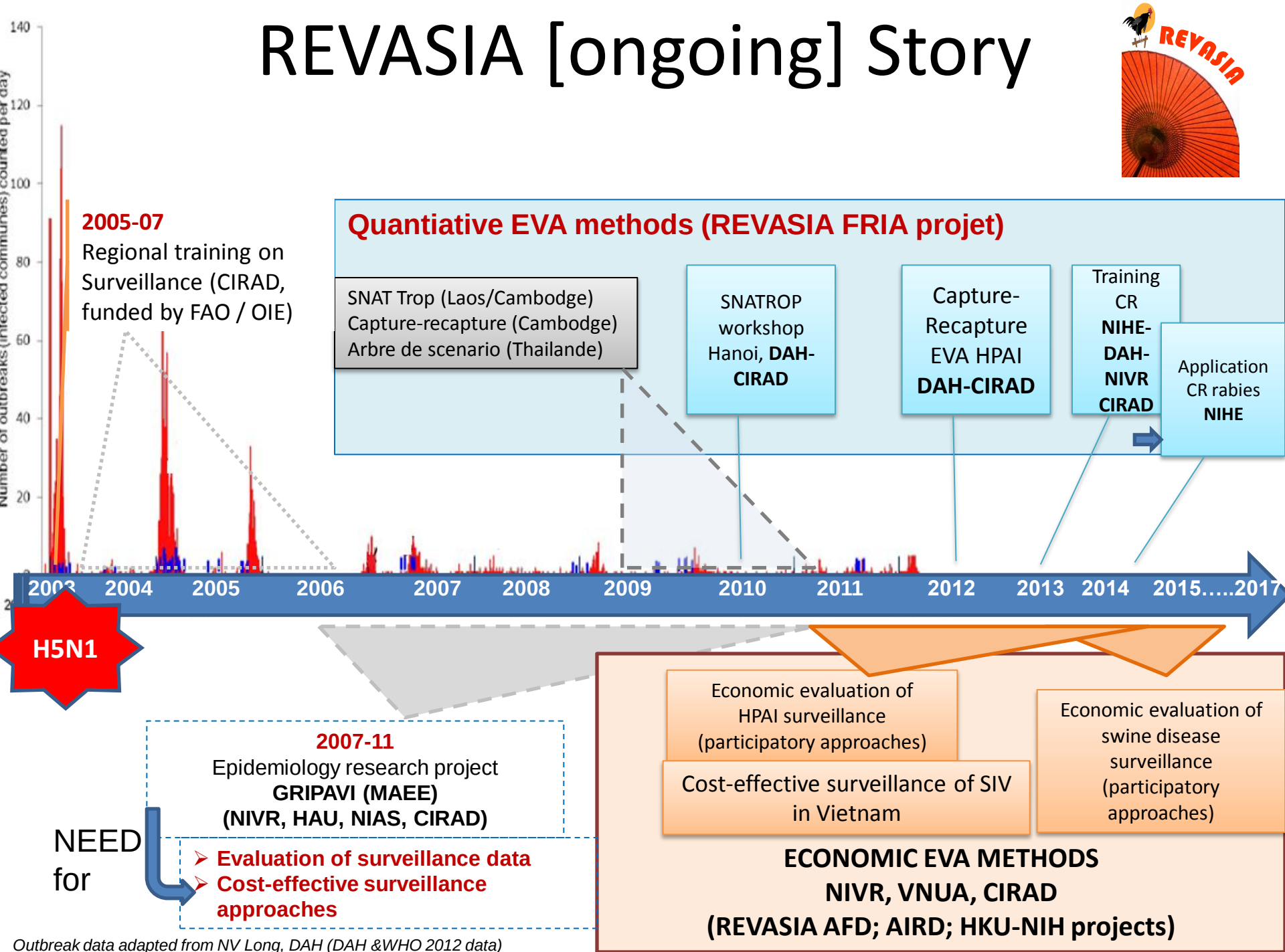
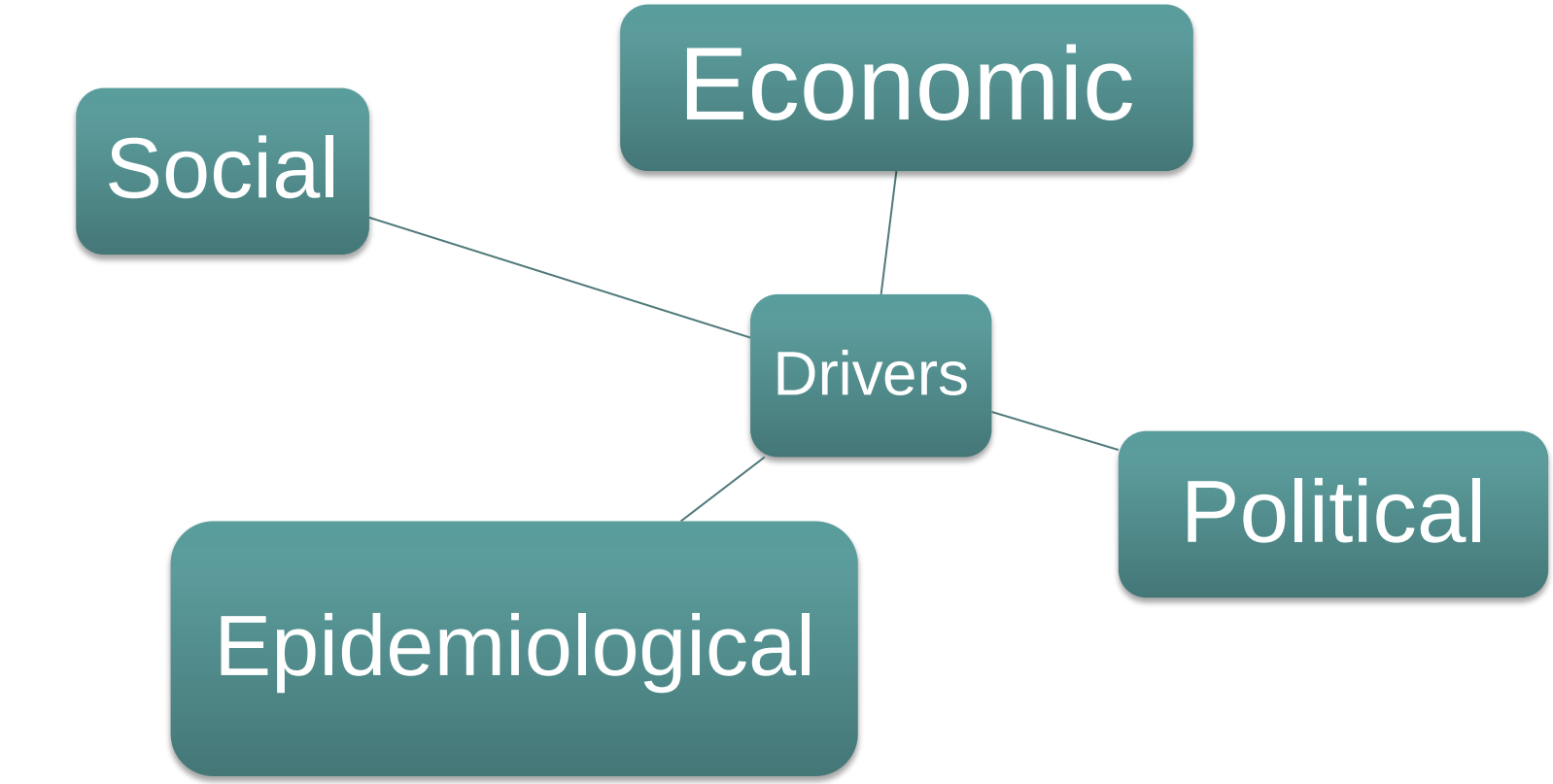


Outbreak data adapted from NV Long, DAH (DAH &WHO 2012 data)

Animal Health Surveillance: evaluation challenges



Call for Interdisciplinarity

Animal Health Surveillance: evaluation challenges

Local surveillance

National level

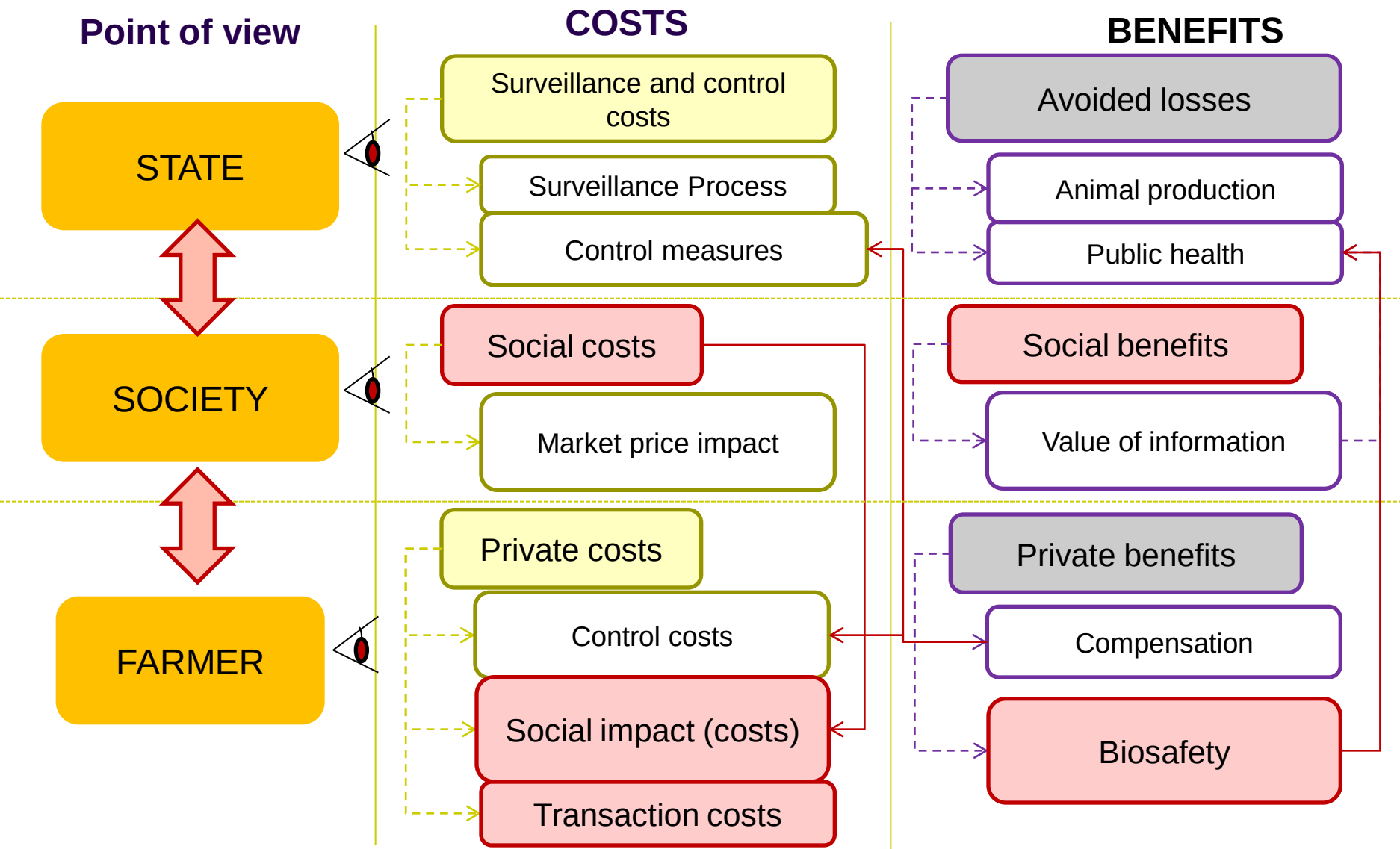
Province

District

Commune

Farmers

Perception issues



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