Outline and Progress of the OIE/J(S)TF Project for Strengthening HPAI control in Asia

3rd OIE Regional Meeting on Strengthening Animal Health Information Networking in Asia under the OIE/JTF Project for Strengthening HPAI Control in Asia
(Tokyo, Japan, 15-16 September 2010)

Itsuo Shimohira
OIE Regional Representative for Asia and the Pacific

Major activities of OIE Asia-Pacific

- **Improvement of Animal health information systems and communication**
- **Prevention and control of HPAI**
- **Prevention and control of emerging/ transboundary animal diseases (include CSF)**
- **Standardization of registration for veterinary medicinal products**
- **Prevention and control of Aquatic animal diseases**
- **Support for control of FMD**
- **Prevention and control of BSE and other TSEs**
- **Support for WTO-SPS Agreement including risk analysis**

HPAI control and Prevention Projects in Asia by OIE Asia-Pacific

HPAI Control Projects in the Region

•Big concern of the disease in the Region:
HPAI: Resurgent and continuously reported since 2003 and even in 2009 and 2010 and negative economic impacts and risks to animal and human health

1. OIE/J(S)TF Project for the Region
OIE Project of HPAI control in Southeast Asia
(2006-2007: Phase I)

2. Epidemiological changes of HPAI in Asia
OIE/J(S)TF Project for strengthening HPAI control in Asia
1) 5 year Project for Asia (2008-2012)
2) 2 year Project for Asia (2008-2009 : Phase II)

OIE HPAI Control Projects in Asia (1)

1. OIE/JSTF Project for HPAI control in Southeast Asia

(2006-2007; Phase I)

8 participating countries : **Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand and Vietnam**

(1) Improvement of Regional and National HPAI control strategies

- Suggestion on control strategies including a contingency plan

(2) Encourage HPAI information sharing to further strengthen regional early warning system

- Workshop on Epidemiology and Joint workshop on control of HPAI

(3) Strengthen diagnostic capacity of National and Regional collaboration laboratories

- Regional and National Training courses on diagnosis of HPAI
- Improve the capacity of diagnostic equipment such as a Real-Time PCR etc

(4) Improvement surveillance of field veterinarian and para-professionals

- Training courses for field veterinarian and para-professionals

Capacity buildingn of the laboratories for diagnosis and surveillance for HPAI (Phase I)

National training : On-site Hands-on training on Real-Time PCR for rapid diagnosis
Regional training : DNA analysis for Central laboratories in the region

Capacity buildingnof the laboratories for diagnosis and surveillance for HPAI

- **Procurement Equipment and Renovation of the laboratories**

To improve the capacity of the diagnosis
(Real Time PCR, DNA Sequencer and other equipment)
To improve the biosecurity condition in the laboratories
(Safety Cabinet II, Renovation of Laboratory , etc.)

Cycler for Real-Time PCR

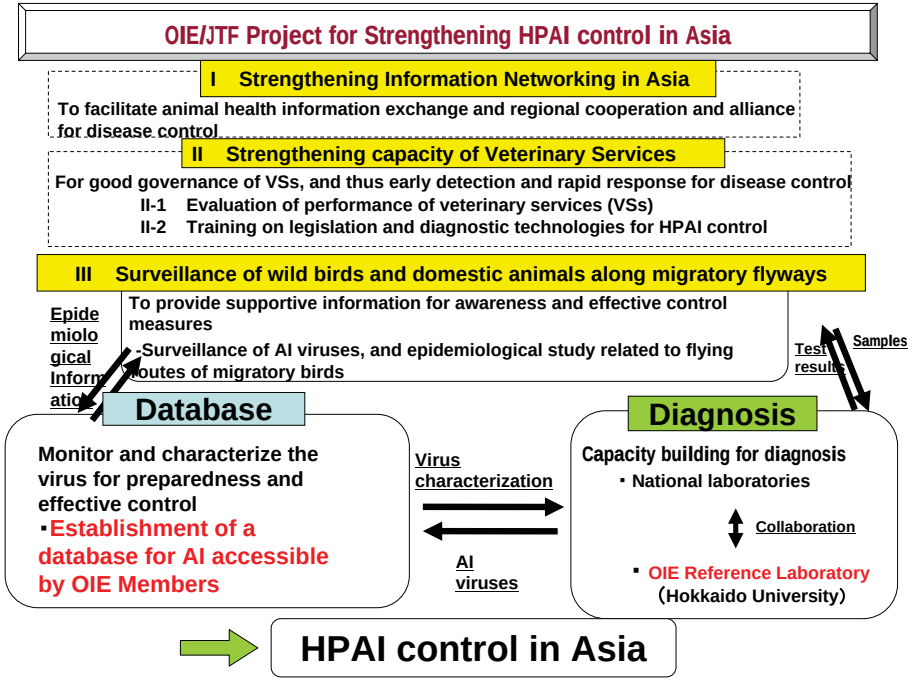
Sequencer
(for central ref. lab)

Biosafety Cabinet C II

OIE HPAI Control Projects in Asia (2)

1 OIE/JTF Project for strengthening HPAI Control in Asia
(5 year project under Regular Fund; 2008-2012)
(1) Strengthening Information networking in Asia (including HPAI control strategies)
(2) Strengthening capacity of Veterinary Services (Capacity building including legislation etc.)
(3) Surveillance of wild birds and domestic animals along migratory flyways, and strengthening Data-base at OIE Reference Laboratory

2 OIE/JSTF Project for strengthening HPAI Control in Asia
(under Supplementary Special Fund; Phase II, 2008-2009)
(1) Capacity building of HPAI laboratory diagnosis and surveillance
(2) Procurement of Laboratory equipment and materials
participating countries:
: **India, Sri Lanka, Pakistan, Nepal, Bhutan and Bangladesh + Mongolia**



Activities under OIE HPAI Control Projects in Asia (3)

1. OIE/JTF Project for strengthening HPAI Control in Asia (5 year project; 2008-2012)

(1) Inception Meeting for consultation on the Project, Tokyo, Japan, April 2008

(2) Expert Meeting on HPAI control in Asia, Tokyo, 1st :October, 2008, 2nd: May 2009 and **3rd :June 2010**

(3) Information Networking Meeting, 1st : November, 2008, Tokyo, 2nd : September, 2009 ,Tokyo, and **3rd September ,2010**
(to be presented by other session)

(4) Regional training workshop on legislation and disease control strategies (Combined with 2nd Information Networking Meeting) September,2009 in Tokyo
- Meeting for Improvement of the Legslation and Information Networking for enforcement of disease control measure
- Visit to Animal Hygiene Service Centres of prefectural government (Kyoto) to study the enforcement of disease control measures in Japan as example.

(5) Surveillance of wild birds and domestic animals along migratory flyways,
- Surveillance in Hong Kong and Vietnam, Laos and Mongolia, 2008 -2010
  * Possibility of Surveillance in Some countries in South Asia for 2010-
- Isolated AI viruses were analyzed and establish the Data base in Reference Laboratory(2009-)

(6) HPAI molecular Data analysis Workshop, OIE Reference Laboratory (Hokkaido University), May 2009

Outline of Surveillance of Wild Birds and Domestic animals

Site of surveillance (2008 - 2010)

Vietnam (North and South), Mongolia, Laos, Hong Kong SAR

Samples

Domestic Birds (around the sampling area of Wild Birds)
: 300-400 in each surveillance area

Wild Bird + Environment
: around 100 Wild Birds, 50-60 from Environment

Virus from Dead Wild Birds : Isolated viruses from Hong Kong SAR

Result :

- Isolated AI virus from domestic animals (ducks in South Vietnam)
- HPAI virus from Dead Wild bird (provided from Hong Kong SAR)
- Not isolated AI virus from Samples of alive Wild Birds
- Genetic analysis data of each virus were registered in Data base

Viruses isolated in Vietnam (South) in 2009

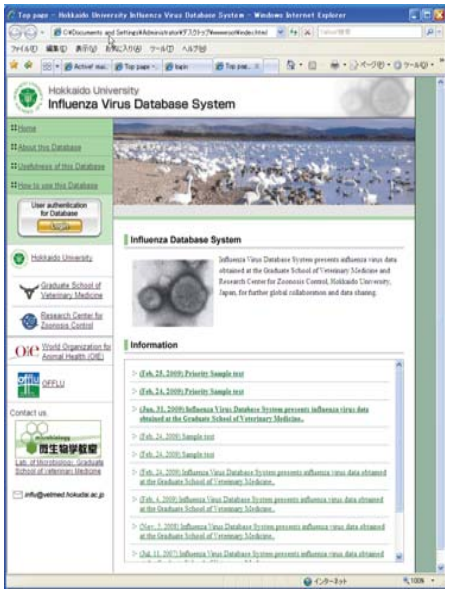
Place of sampling		Subtypes of Isolated virus (number)
Household	A	-
	B	H9N2 (1), H4N6 (2)
	C	H4N6 (2)
	D	H4N6 (2)
	E	-
	F	-
	G	-
	H	H9N2 (3), H4N6 (1)
	I	H9N2 (14)
	J	-
	K	-
Live bird market	A	H3N8 (1)
	B	H9N2 (6), H11N3 (2)
Market		H9N2 (1), H3N2 (1), H11N3 (1), H11N9 (1)
Slaughterhouse		H9N2 (1)
	Total	31 isolated viruses

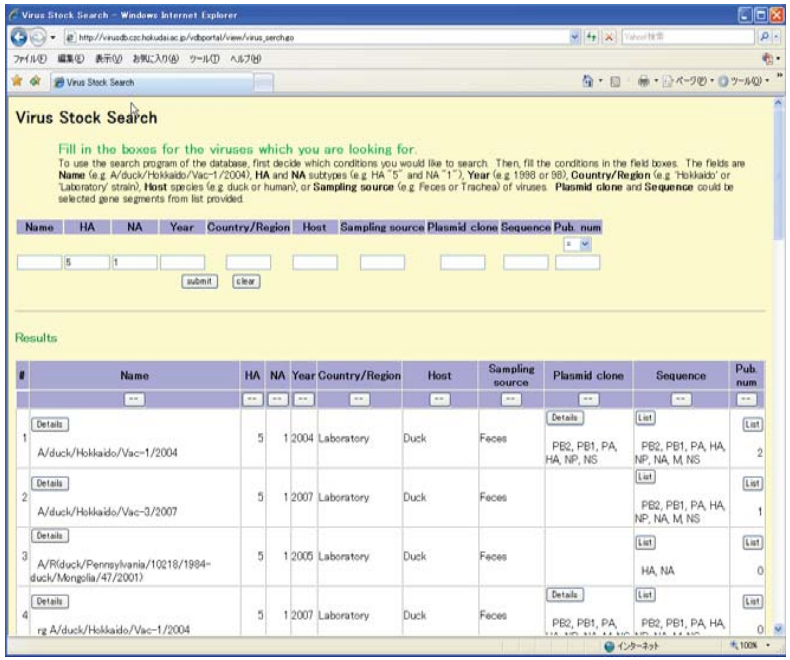
Characterization of avian influenza viruses isolated in Hong Kong

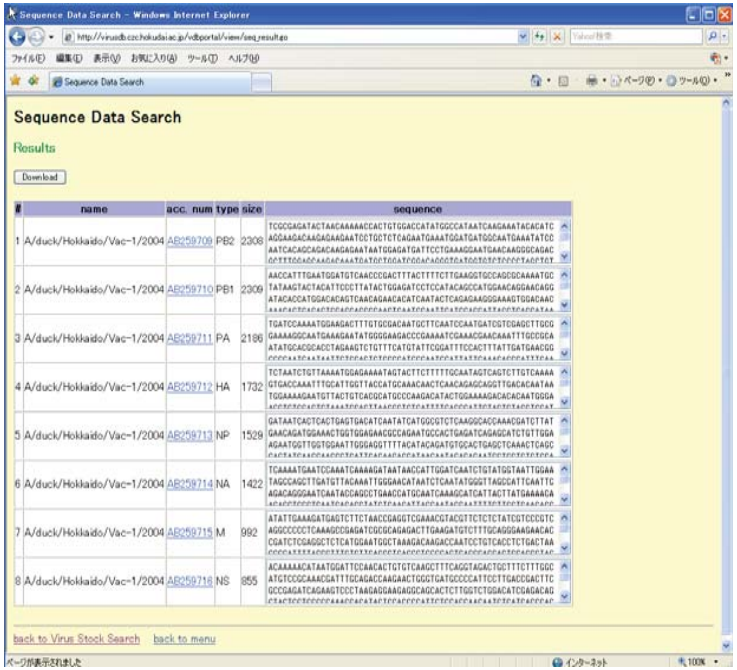
Name of the isolates	Sequence analysis		
	Genebank/EMBL/DDBJ Accession No.		HA gene Clade
	HA	NA	
A/house crow/Hong Kong/7677/2008 (H5N1)	AB517661	AB517662	2.3.2
A/grey heron/Hong Kong/779/2009 (H5N1)	AB517663	AB517664	2.3.2
A/peregrine falcon/Hong Kong/810/2009 (H5N1)	AB521159	AB521160	2.3.4
A/large billed crow/Hong Kong/885/2009 (H5N1)	AB521161	AB521162	2.3.2
A/crested myna/Hong Kong/1178/2009 (H5N1)	AB521163	AB521164	2.3.2
A/feral pigeon/Hong Kong/3409/2009 (H5N1)	AB557629	AB557630	2.3.2
A/oriental magpie robin/Hong Kong/9298/2009 (H5N1)	AB557633	AB557634	2.3.2
A/white-backed munia/Hong Kong/4519/2009 (H3N2)	AB557631	AB557632	-

Total H5 N1 viruses were isolated

http://virusdb.czc.hokudai.ac.jp/vdbportal/view/index.jsp







Activities under OIE HPAI Control Projects in Asia (4)

2. OIE/JSTF Project for strengthening HPAI Control in Asia (Phase II: 2008-2009)

(1) Capacity building of HPAI diagnosis and surveillance

- National Hands-on Workshop on Real-Time PCR for diagnosis of HPAI
- Regional Training course for the staff of National laboratories on Genetic analysis technologies for HPAI

(2) Procurement of Laboratory equipment and materials

To support (1) above; Laboratory capacity building

Phase II: 7 countries (East and South Asian countries)

India, Sri Lanka, Pakistan, Nepal, Bhutan and Bangladesh+ Mongolia

- Identification of national laboratories and listing the required laboratory diagnostic equipment and materials (2008)
  (7countries, 23 Laboratories are selected)
- Procurement of the equipment and renovation of the laboratories(2009-2010)

HPAI Lab. Training(1)

- **National Hands-on training**;

Training of Real Time PCR in 4 countries in February-March 2010

- Participants : 38
  from Bangladesh(6), Bhutan(12), Nepal(10), Sri Lanka(10)
- Training subject
  - HPAI control and Capacity building and Veterinary Services
  - General guidance of Real-Time PCR for the diagnosis of HPAI
  - Hands-on Training of Real-Time PCR
    Compare SYBR Green Method and TaqMan Method)

- H5 sub-type of AI virus was detected by Real-Time PCR with SYBR Green Method in the suspected field samples from outbreak area in Bangladesh, Bhutan and Nepal during the Training .

- It was the first case to achieve the molecular diagnosis by Real-Time PCR successfully in Bhutan

HPAI Lab. Training(2)

- **Regional Hands-on training**

Training of Molecular Analysis by DNA sequencer in Kathmandu, Nepal, in March 2010

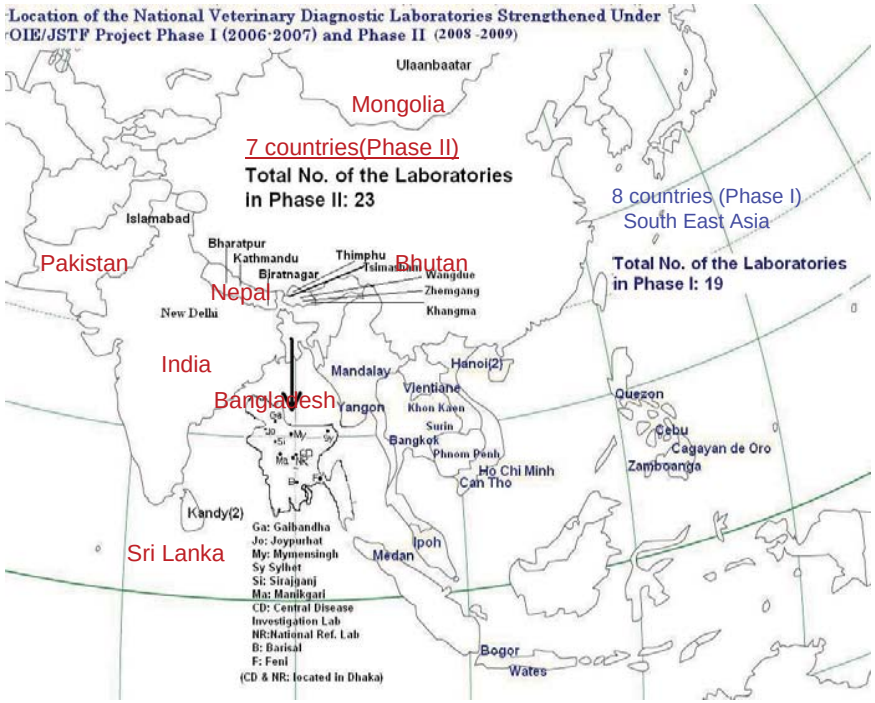
(from 4 countries: Bangladesh, Nepal, Sri Lanka and Mongolia)

- Sequence analysis of HA cleavage site (Diagnosis of HPAI and LPAI)
- Hands on Training : PCR and Genetic Analysis
- Introduction of Application of Genetic Analysis in Pakistan

- Differentiation between HPAI and LPAI by Gene sequence in HA cleavage site

- Establish the network of the Laboratory staff in the sub-region

- Understand future prospect of utilization of DNA Sequencer (application for whole Genome sequencing, other diseases diagnosis(FMD, PPR viruses) and analysis of genetic disorders etc, by the example in Pakistan)



OIE Hands-on Technical Training in SAARC Region under OIE/JSTF Project Phase II (2008 – 2009)

National Training

Diagnosis with Real-Time PCR

in 4 countries

(Nepal, Bangladesh, Bhutan, Sri Lanka)

Regional Training

DNA Sequencing

in Kathmandu, Nepal

Resource Person : Dr Zaheer Ahmed and Dr Naila Siddique,

From Pakistan: National Reference Lab for Poultry Diseases

Thank you for your attention!!

Outline the meeting

OIE/JTF Project for Strengthening HPAI Control in Asia

Component III: Strengthening HPAI Control in Asia-

Kenji Sakurai

OIE Asia-Pacific

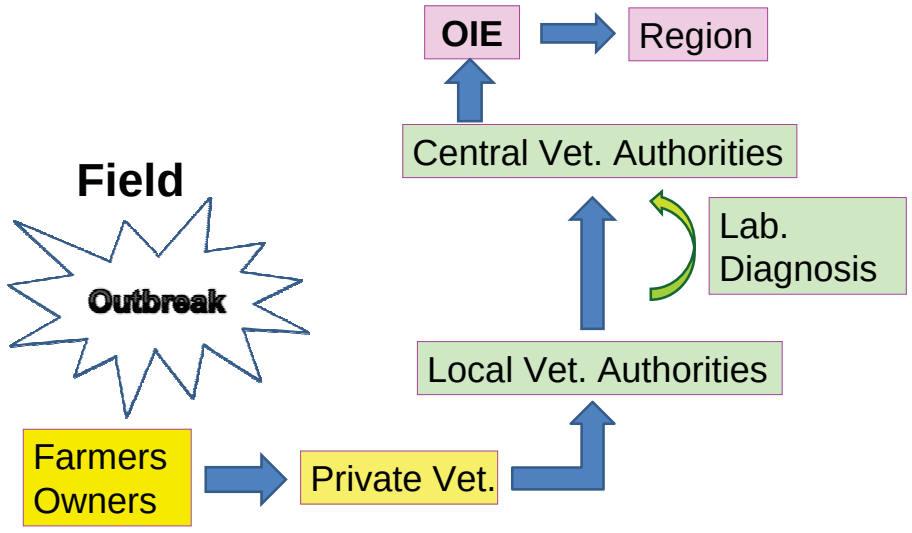
Contents

Concept

To improve animal disease situation in Asia…

1. **Strengthening Animal Disease Information Networking at national & regional levels**
2. **Improving diagnostic capacity of national laboratories**
3. **Improving Veterinary legislation**
4. **Improving control & prevention measures**

Flow of disease notification



Some key aspects to be considered

1. Socio-economic aspect
2. Geographical aspect
3. Cultural aspect
4. Religious aspect
5. Social infrastructure
6. Legal aspect, Veterinary legislation
7. Political aspect

Purpose of Meeting

1. To share and exchange updated information, experiences, ideals and lessons from recent outbreaks *of HPAI, FMD, new variant PRRS, etc.*
2. To review progress made by OIE members after the 2nd meeting
3. To discuss how to improve Animal Health Information Networking at national and regional level

Questionnaire survey in 2008

Questionnaire was sent to 24 OIE members in Asia in August 20008 to collect information on animal health to strengthen animal disease control in Asia.

- **Main areas**

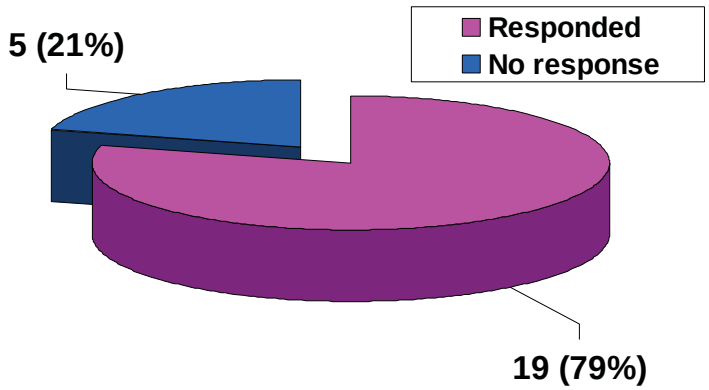
1.Legislation support on Animal Health

2.Animal Disease Information Reporting mechanism

3.HPAI Control & Prevention

4.Diagnostic Capacity of HPAI

Response to Questionnaire



1. Legislation support on Animal Health

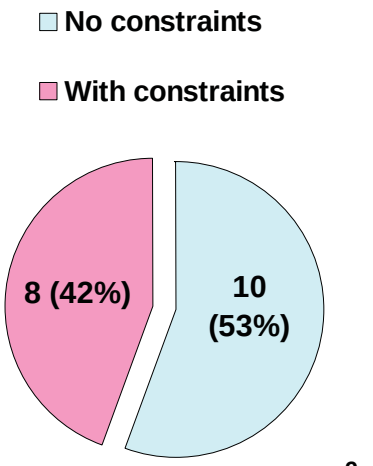
- **Question 1:**

"Any constraints to develop legislation or enforce the legislation?"

- **Response:**

(1) No constraints: 10 (53%)

(2) Constraints: 8 (42%)



1. Legislation on Animal Health and Disease Control

Main constraints reported from 8 OIE members

1) Limitation in human resources: 75%

2) Limitation in capacity of staff: 75%

(1) Insufficient technical & scientific inputs to develop policies,

(2) Lack of local expertise concerning development of legislation that addresses local needs, as well as, in consistent with international regulations and agreements,

(3) Inadequate resources and logistics in evolving a comprehensive method involving all stakeholders in developing an effective implementation mechanism

3) Limitation in financial support: 38%

2. Animal disease information reporting mechanism

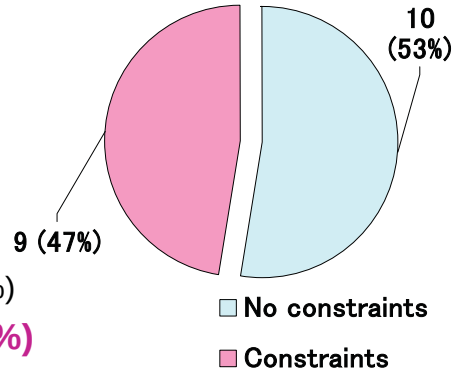
- **Question 2:**

"Any constraints in current animal disease reporting system?"

- **Responses:**

(1) No constraints: 10 (53%)

(2) Constraints: 9 (47%)



2. Animal disease information reporting mechanism

Main constraints reported from 9 OIE members:

1. Limitation of communication means (Geographical reason<remote areas, etc.>, etc.):
2. Limitation of human resources, financial resources:
3. Constraints on technical knowledge of field staff in animal disease reporting:
4. Constraints at field level (farmers' side):
   - Lack of knowledge
   - Low literacy
   - Fears for losing their animals
   - Low incentives to report
5. Reporting systems still to be strengthened:

3. HPAI Control

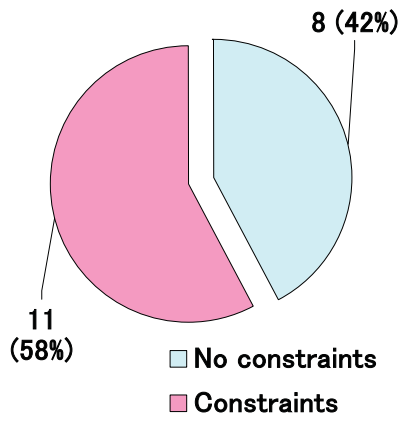
- **Question 3:**

"Any constraints encountered during implementation of HPAI control measures?"

- **Responses:**

(1) No constraints: 8 (42%)

(2) Constraints: 11 (58%)



3. HPAI Control

Main constraints reported from 11 OIE members

1) Low bio-security (Backyard) :
2) Difficulty in having cooperation from farmers : (restriction on movement of animals)
3) Lack of awareness about the risk of AI at field level:
4) Financial limitation at local and national level :
5) Low and slow release of compensation prevents timely reporting and effective culling :
6) Limitation of human resources/technical constraints (e.g. capacity of epidemiology, training) at VS:
7) Legislation to be strengthened and enforced :
8) Limitation in equipments, materials:

4. Diagnostic Capacity on HPAI

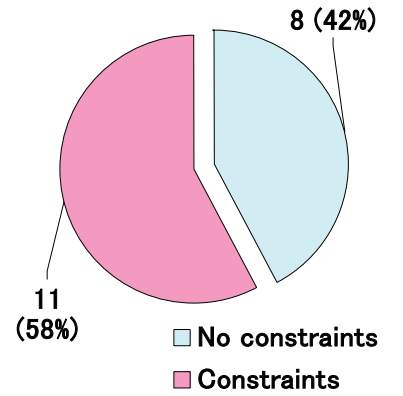
- **Question 4:**

"Any constraints or difficulties at national lab. in terms of diagnosis particularly on AI?"

- **Responses:**

1) No constraints: 8 (42%)

2) Constraints: 11 (58%)



4. Diagnostic Capacity on HPAI

Main constraints reported from 11 OIE members

1. Limitation of human resources:
2. Limitation of Lab. Equipments, materials, etc.:
3. Limitation of facilities:
4. Lack of technical background of Lab. Staff:
5. Sharing of test protocols, materials, information and experiances:

Question 5

What kind of inputs/actions are needed to solve/alleviate constraints or problems?

Main Responses

1. **Technical / financial support to strengthen or improve capacity of diagnosis, surveillance system**
2. **Improvement of awareness of small farms on biosecurity (developing awareness materials, etc.)**
3. **Training of farmers**
4. **Training of VS staff (Vet. &Para-professional)**
5. **Promoting communication and sharing experiences on outbreak responses.**
6. **Strengthening capacity of Lab.**

Previous Discussions in 2008-2009

- **1st and 2nd Meeting:**

Discussions to identify (1) problems, (2) causes and (3) possible solutions in each stage of information network/flow;

Stage 1: Farmers/Owners of animals
Stage 2: Private veterinarians
Stage 3: Local VS (including Lab.)
Stage 4: Diagnostic Lab. (Central)
Stage 5: Central VS

Outcomes of discussions

Stage 1	Sub-stage	Problems	Solution/Action
Farmer	1. Detection of disease	1. Un-noticeable (not clear in clinical sign) 2. Lack of knowledge	1. Awareness campaign 2. Seminar
	2. Notification of disease	3. Lack of communication means 4. Reluctant to report (Worries for culling) 5. Reluctant to report (Not enough compensation, no incentive) 6. Weak in application of legal enforcement	1. Incentive 2. Compensation 3. Budget 4. Awareness

Outcomes of discussions

Stage 2	Sub-stage	Problems	Solution/Action
Private Vet.	1. Detection of cases	1. Difficult in differential diagnosis	1. Awareness 2. Training 3. Incentive 4. Budget
		2. Lack of knowledge in disease	
	2. Notification to local VS	3. Lack of knowledge of the importance of notification	1. Training 2. Awareness 3. Incentive
		4. Weak in communication means	1. Budget
		5. No desire	1. Incentive 2. Awareness

Outcomes of discussions

Stage 3	Sub-stage	Problems	Solution/Action
Local VS	1. Laboratory diagnosis	1. Lack of sampling materials (cold chain, etc.)	1. Budget
		2. Competence of staff	2. Training
		3. Difficulties of confirmation in the field	3. Training 4. Budget
		4. Weak in diagnostic facilities & instruments	
	2. Notification to Central SV	5. Late or incomplete information from farmers	1. Improve networking
		6. Incomplete information about sample	2. Improve networking
		7. Quality of samples	3. Training

Outcomes of discussions

Stage 4	Sub-stage	Problems	Solution/Action
Central Lab.	Laboratory diagnosis	1. Weak in diagnostic facilities	1. Budget
		2. Lack of human resources	1. Budget
		3. Competence of staff	2. Training

Outcomes of discussions

Stage 5	Sub-stage	Problems	Solution/Action
Central VS	Notification	4. No direct chain of command	1. Direct chain of command
		5. Transportation and communication means	2. Budget
		6. Promotion on merit	3. Incentive

Outcomes of discussions, 2nd Meeting

Common Solutions/Actions

1. Awareness for disease detection and notification
2. Improvement of vet networking between central and local levels
3. Incentive
4. Compensation
5. Training
6. Budget
7. Revision of Legislation

Summary of Progress Reports in 2010

Kenji Sakurai
OIE Asia-Pacific

Thank you very much for your cooperation

Bangladesh, Bhutan, Brunei, Cambodia,
PR China, Chinese Taipei, Hong Kong SAR,
India, Indonesia, Japan, RO Korea, Laos,
Malaysia, Maldives, Mongolia, Myanmar,
Nepal, Pakistan, Philippines,
Singapore, Sri Lanka,
Thailand, Vietnam

Content of Progress Report

1. **Report I**: Current situation concerning animal disease info. Networking
2. **Report II**: Progress in relation to strengthening animal disease info. Networking
3. **Report III**: Progress in relation to legislation support
4. **Report IV**: Strengthening animal disease info. Networking in the region

Report I

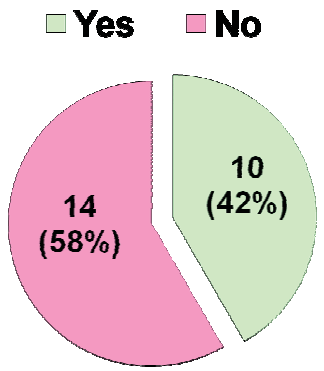
(Question) "Is your Information Networking System working well?

Out of 23 Members…

Yes: 10 Members (42%)

No: 14 Members (58%)

**One country checked both "yes" & "No."*

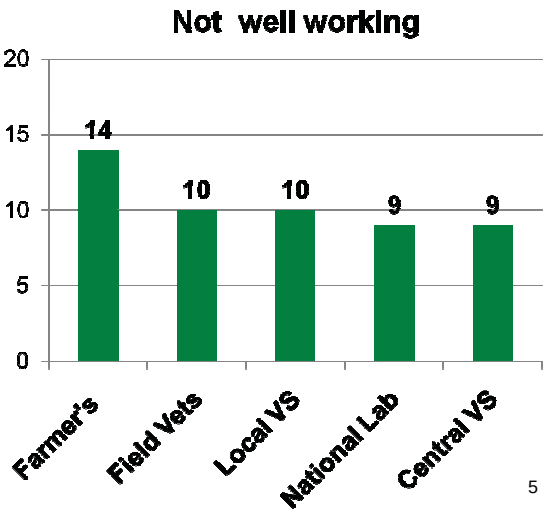


Is your Information Networking System working well?

Out of 23 Members…

"No": 14 members

If No, where do you see problems?



1. Problems at Farmer's Level

14 Members (61%)

1. Reluctant to report
2. Lack of knowledge on animal disease
3. Low level of knowledge about disease notification
4. No communication means for notification
5. Under-reporting due to low incentive
6. Lack of law enforcement

2. Problems at Private Vet's Level

10 Members (43%)

1. Lack of knowledge on animal disease
2. No communication means for notification
3. Under-reporting due to low incentive
4. Lack of law enforcement

3. Problems at Local VS

11 Members (48%)

1. Poor communication facilities
2. Lack of motivation in epidemiology survey
3. Limited diagnosis capacity
4. Lack of knowledge on importance of notification

4. Problems at National Lab.

9 Members (39%)

1. Lack of expertise
2. Lack of diagnostic capacity
3. Lack of budget
4. Lack of updated knowledge

5. Problems at Central VS

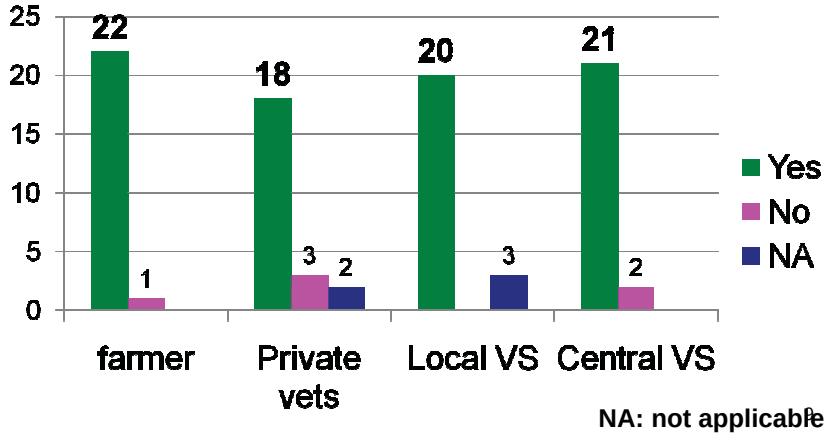
9 Members (39%)

1. Shortage of expertise
2. Shortage of trained staff
3. Lack of diagnostic capacity
4. Lack of budget

Report II

Activities done after 2nd Meeting in relation to strengthening of animal disease information networking

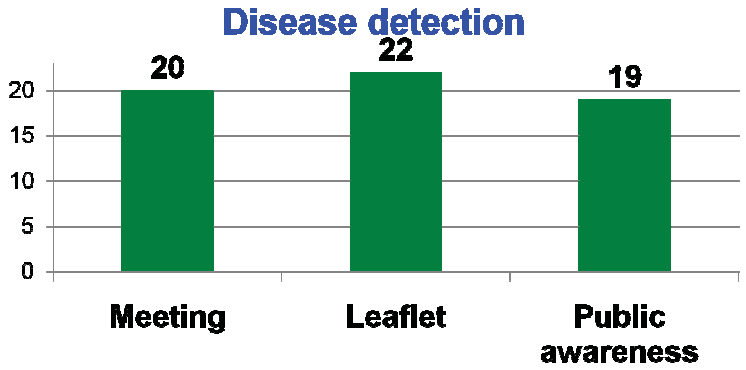
Out of 23 members…



NA: not applicable

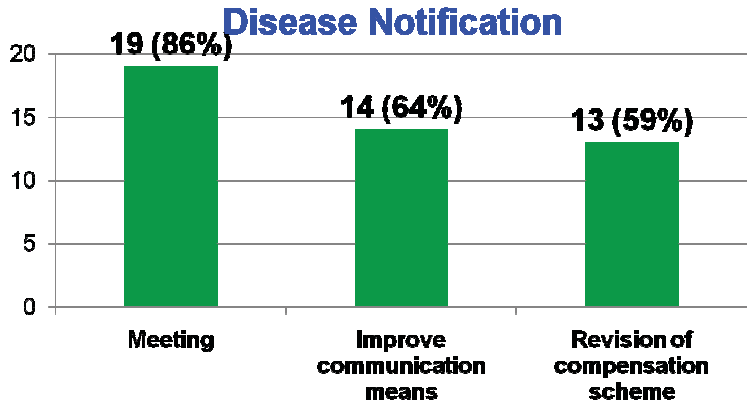
Activities done to improve Disease Detection capacity of Farmers

Out of 22 members…



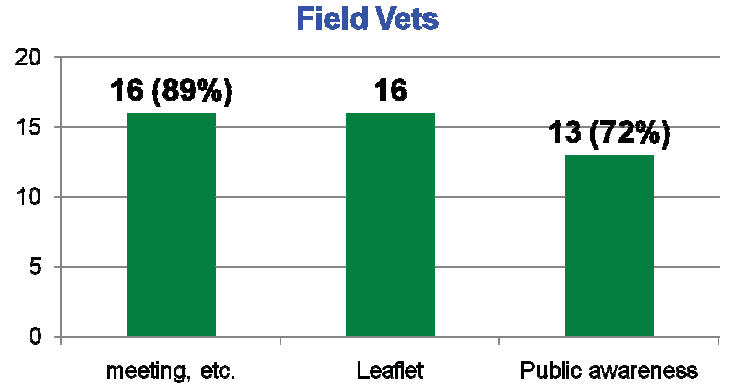
Activities done to encourage Farmers to notify diseases

Out of 22 members…



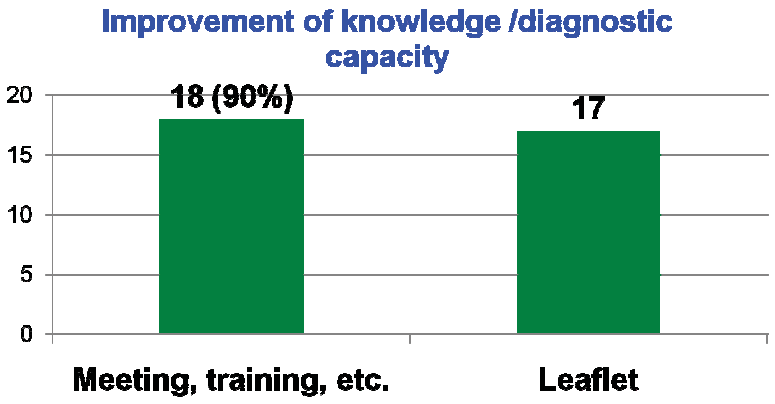
Activities done to improve field Vet's knowledge of animal disease

Out of 18 members…



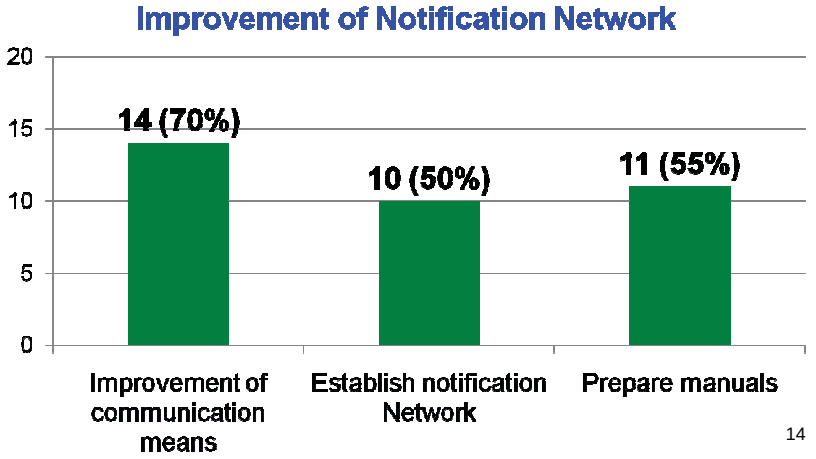
Activities done to improve local VS's knowledge/diagnostic capacity on animal disease

Out of 20 members…



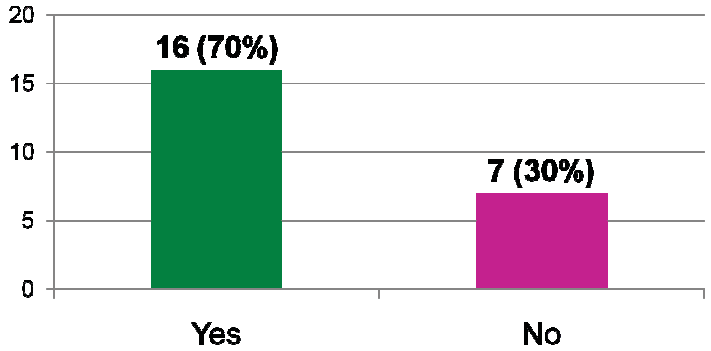
Activities done to improve local VS's Notification Network on animal disease

Out of 20 members…



Report II
Progress done after 2nd Meeting in relation to Legislation Support

Revision/Drafting of legislation, New law, etc.



Some key facts recognized -1

1. Sixty (60) % of respondents think that their animal disease information networking is not working well.
2. The challenges/problems are most likely to be observed at farmer's level compared to other level.
3. Almost all of the reported problems/challenges coincide with those identified in the previous meetings or questionnaire.
4. Most of the OIE Members in Asia have been making efforts through various activities to improve animal disease information Networking after the 2nd meeting in 2009.

Some key facts recognized -2

5. The efforts have been made at every stage of the information networking.
6. Sixty (60) % of respondents reported some progress in relation to the improvement of compensation scheme to encourage farmers to report disease cases.
7. Seventy (70) % of respondents reported some progress in relation to the strengthening of legislation Support on animal disease control and prevention.

Some Questions

1. How do you evaluate the outcomes of activities done over the last year?
2. Do you think your animal disease information networking system has been improved in some extent?
3. What is your plan for the next 1 year in relation to strengthening animal disease information networking?

Direction for Discussion Session

(16 September 2010)

Kenji Sakurai

OIE Asia-Pacific

Time table for 16 Sep. 2010

	Part	Time allocation	Time	Remarks
1	Direction for discussion	10 min	8:30-8:40	OIE AP
2	Report from participants	70 min	8:40-9:50	13 participants
	Coffee break	20 min	9:50-10:10	
3	Report from participants	50 min	10:10-11:00	9 participants
4	Discussion on Regional alliance	15 min	11:00-11:15	3 Volunteers
5	Wrap-up	15 min	11:15-11:30	OIE AP

Brief Report from participants

1. Allotted time for you: 5 min

(1) Your speech: 3 min. (2) Q & A: 2 min.

2. Your Speech is expected to cover the following.

(1) Main (high prioritized) problems/challenges & possible solutions:

Please select and introduce 3 problems/challenges that you reported in your "Progress Report," along with causes and solutions.

(2) Progress/Activities done after the 2nd Meeting:

Please introduce one or two progress/activities done in relation to the problem that you selected above.

(3) Strengths:

Please introduce one strength that you mentioned in your Report I

Report from participants

Stage	Problem/Cause	Solution/action	Progress
1. Farmer			
2. Private Vet			
3. Local VS			
4. Central Lab.			
5. Central VS			

Cambodia (example)

No.1: Communication/public awareness

- Problem: Lack of means for communication such fax/phone
- Cause: Due to damage of fax, not enough
- Action/solution: Need financial support and maintenance

No.2: Reporting network

- Problem: we have existing network but not work well
- Cause: Lack of training and incentive
- Action/solution: Need more training for field staff and incentive

No.3: Laboratory diagnosis

- Problem: Lack of reagents, kits, chemical, consumable
- Cause: No financial support from government
- Action/solution: Need financial and maintenance support and assurance for laboratory staff

Japan (Example)

No.1:

- **Problem**: (Hesitation to notify of suspicious cases)
- **Cause**: (Concern of misdiagnosis)
- **Action/solution:** (Improvement of communication among stakeholders)

No.2:

- **Problem**: (Insufficiency of foreign animal health information)
- **Cause**: (Insufficient communication between local veterinary officers and private veterinarians)
- **Action/solution**: (Improvement of communication between local veterinary officers and private veterinarians)

No.3:

- **Problem**: (Insufficiency of information on wildlife diseases)
- **Cause**: (Lack of information networking system on wildlife diseases)
- **Action/solution**: (Close communication between Animal Health Authority and Wildlife Preservation Authority)

(Example)

Strengths in Animal Disease Notification System

(Cambodia)

- We have an existing reporting system network from central to **grass root level**.
- Some staff of 24 provinces were trained for animal disease reporting using standard formats

(Japan)

- Educated farmers, better network of local veterinary officers and established legal framework

Report from participants: Bangladesh

Stage	Problem/Cause	Solution/action	Progress
1. Farmer			
2. Private Vet	Lack of man power	Increase the number	
3. Local VS	Lack of man power	Increase the number of staff	
4.Central Lab 5. Central VS	Lack of man power	Increase the number of staff	

Report from participants: Bhutan

Stage	Problem/Cause	Solution/action	Progress
1. **Farmer**			
2. Private Vet			
3. Local VS			
4.Central Lab **5. Central VS**	No formal information exchange programme with neighboring countris	Initiate cross border meeting and include Bhutan in the cross border project	

Report from participants: Brunei

Stage	Problem/Cause	Solution/action	Progress
1. **Farmer**			
2. Private Vet			
3. Local VS			
4.Central Lab **5. Central VS**	Small number of Veterinarians Inability to fulfill certain requirements with the current workload	Currently expanding our building capacity for future	

Report from participants: Cambodia

Stage	Problem/Cause	Solution/action	Progress
1. **Farmer**	Lack of means for communication	Financial support	
2. Private Vet	Lack of means for communication	Financial support	
3. Local VS	Lack of means for communication	Financial support	
4.Central Lab **5. Central VS**	Lack of means for communications	Financial support	

Report from participants: PR China

Stage	Problem/Cause	Solution/action	Progress
1. **Farmer**	Limited diagnosis	Training	
2. Private Vet	Limited diagnosis	Training	
3. Local VS	Limited diagnosis (limited education)	Training	
4.Central Lab **5. Central VS**			

Report from participants: Chinese Taipei

Stage	Problem/Cause	Solution/action	Progress
1. Farmer	Poor public awareness of notifiable diseases	Continuous education and communication by meeting, campaign, TV	
2. Private Vet			
3. Local VS			
4.Central Lab 5. Central VS			

13

Report from participants: Hong Kong SAR

Stage	Problem/Cause	Solution/action	Progress
1. Farmer			
2. Private Vet			
3. Local VS			
4.Central Lab 5. Central VS	Susceptible to the risk of local outbreak from disease crosses territorial boundary	To maintain close communication and cooperation with Mainland China and Macau authorities	

14

Report from participants: India

Stage	Problem/Cause	Solution/action	Progress
1. Farmer			
2. Private Vet			
3. Local VS			
4.Central Lab 5. Central VS			

15

Report from participants: Indonesia

Stage	Problem/Cause	Solution/action	Progress
1. Farmer	Reluctant to report diseases	1. Continuous Public awareness, 2. Compensation 3. Law enforcement	
2. Private Vet			
3. Local VS			
4.Central Lab 5. Central VS			

16

Report from participants: Japan

Stage	Problem/Cause	Solution/action	Progress
1. **Farmer**			
2. Private Vet	Hesitation to notify of suspicious cases	Improvement of communication amongst stakeholders	
3. Local VS	Hesitation to notify of suspicious cases	Improvement of communication amongst stakeholders	
4.Central Lab **5. Central VS**			

Report from participants: Laos

Stage	Problem/Cause	Solution/action	Progress
1. **Farmer**	Inadequate of qualified personnel	Need more qualification through subject matter training	
2. Private Vet			
3. Local VS			
4.Central Lab **5. Central VS**			

Report from participants: Malaysia

Stage	Problem/Cause	Solution/action	Progress
1. **Farmer**			
2. Private Vet			
3. Local VS			
4.Central Lab **5. Central VS**	Data & information received not complete and timely	Simplify the reporting system using electric communication system	

Report from participants: Maldives

Stage	Problem/Cause	Solution/action	Progress
1. **Farmer**			
2. Private Vet			
3. Local VS	Inadequate data collection, diagnosis procedure	Improve capacity Proper record keeping-database	
4.Central Lab **5. Central VS**	Inadequate data collection, diagnosis procedure	Improve capacity Proper record keeping-database	

Report from participants: Mongolia

Stage	Problem/Cause	Solution/action	Progress
1. Farmer			
2. Private Vet	Delayed notification about disease suspicious case to local Veterinary unit	Awareness and improve knowledge Legal basis of obligation	
3. Local VS			
4.Central Lab 5. Central VS			

Report from participants: Myanmar

Stage	Problem/Cause	Solution/action	Progress
1. Farmer	Lack of awareness of disease control	Public awareness activities	
2. Private Vet	Lack of awareness of disease control	Public awareness activities	
3. Local VS			
4.Central Lab 5. Central VS			

Report from participants: Nepal

Stage	Problem/Cause	Solution/action	Progress
1. Farmer			
2. Private Vet			
3. Local VS			
4.Central Lab 5. Central VS	No compulsory provision for notification to all stakeholders (Lack of legislation to enforce all stakeholders)	Provision of veterinary legislation	

Report from participants: Philippines

Stage	Problem/Cause	Solution/action	Progress
1. Farmer			
2. Private Vet			
3. Local VS			
4.Central Lab 5. Central VS	Quality of data and information sent to Central VS	Improvement of information system	

Report from participants: Singapore

Stage	Problem/Cause	Solution/action	Progress
1. **Farmer**	Prompt reporting of mortality in farms	Regular inspection to farms Briefing farmers on procedures to notify	
2. Private Vet			
3. Local VS			
4.Central Lab **5. Central VS**			

Report from participants: Sri Lanka

Stage	Problem/Cause	Solution/action	Progress
1. **Farmer**			
2. Private Vet			
3. Local VS			
4.Central Lab **5. Central VS**	Absence of an efficient, appropriate software programme for animal disease data collection and management networking	Develop WAHID compatible software for common use by member countries	

Report from participants: Thailand

Stage	Problem/Cause	Solution/action	Progress
1. **Farmer**	Lack of animal disease interest in farmers (backyard system)	Public awareness campaign Various IEC materials to be produced and distributed by using diverse media to reach each target audiences	
2. Private Vet			
3. Local VS			
4.Central Lab **5. Central VS**			

Report from participants: Vietnam

Stage	Problem/Cause	Solution/action	Progress
1. **Farmer**	Under-reporting Low incentive Lack of laws enforcement Lack of knowledge		
2. Private Vet	Under-reporting Low incentive Lack of law enforcement	Strengthening field veterinary services by paying monthly allowance Revision of compensation rates and issuing updated regulations on animal disease notification	
3. Local VS			
4.Central Lab **5. Central VS**			

Activities on Animal Health Information Networking and TADs

OIE Regional Meeting on Strengthening Animal Health Information Networking in Asia, 15 – 16 September 2010, Tokyo, Japan

Pawin Padungtod
Regional Project Coordinator
Emergency Center for Transboundary Animal Diseases (ECTAD)
FAO Regional Office for Asia and the Pacific (RAP)

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- FAO HQ, Regional and Country office
- Contributors
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  - Scott Newman, FAO-HQ
  - Acty George, FAO-RAP
  - Peter Daniels, CSIRO-AAHL

FAO Activities on Animal Health Information Networking and TADs

- Regional Epidemiology Consortium
- Regional Laboratory Network for HPAI Diagnosis in SE Asia
- EMPRESi – Asia

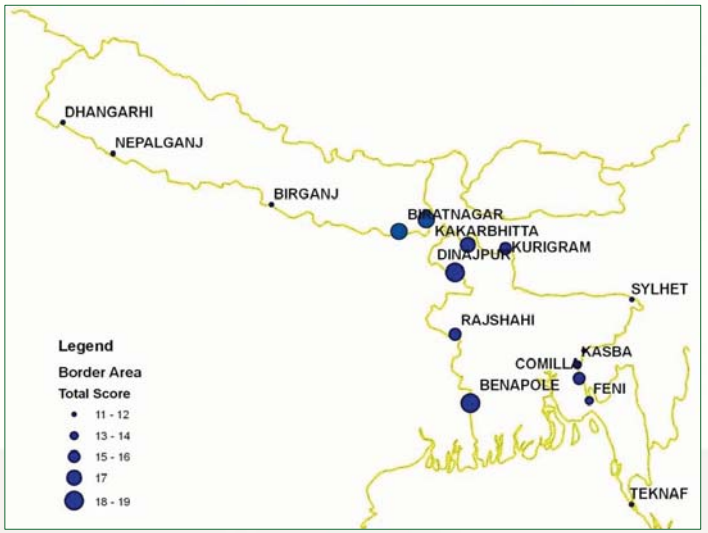
Regional Epidemiology Consortium

- Member
  - Government Agency
    - CIRAD (France)
    - DAFF (Australia)
  - University
    - CSU (USA)
    - MU (Australia)
    - RVC (UK)
    - ULB (Belgium)
  - International Organization
    - OIE
    - ILRI
    - DAI

Regional Epidemiology Consortium

- Regional Framework of Collaboration
  - Veterinary Epidemiology Capacity Building
    - Field Epidemiology Training Programme for Veterinarian
  - Information Sharing
    - EMPRESi
  - Knowledge Identification and Utilization
    - Improve understanding of disease dynamics and risk at the regional level in terms of production and supply chain
    - Improve understanding of roles of wildlife and migratory species in disease dynamic and transmission

Cross-border Risk of Disease

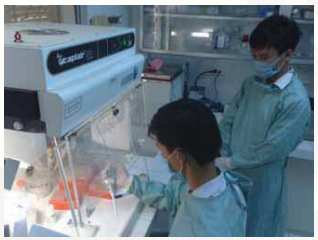


Regional Laboratory Network for HPAI Diagnosis

- Capacity development
- Quality assurance
- Sharing of biologic materials
- Sharing of information
  - AI-Network-Asia
  - EMPRESi

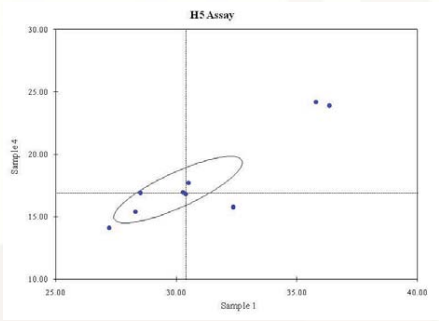
Strategic Framework for Capacity Building for HPAI Laboratory Diagnosis and Networking

- Policy and Management
- Physical Facilities
- Equipment
- Laboratory Personnel
- Testing Protocol
- Sharing information and biologic materials

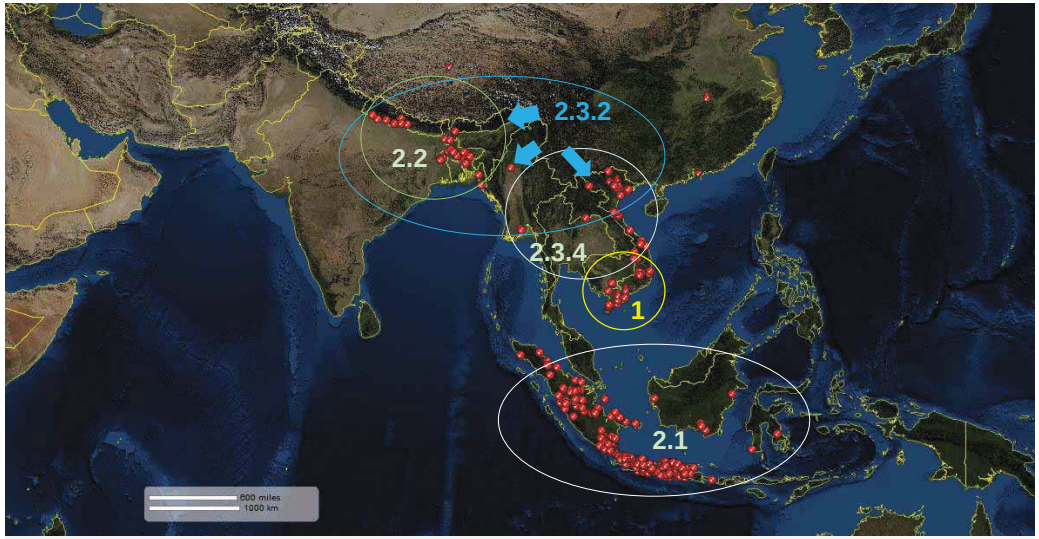


Quality Assurance

- Workshop
  - Harmonize QA, biosafety, testing protocols
- Training
  - Regional
    - Regional resource people
  - Sub-regional
    - Trainers
  - In-country
    - Laboratory staff
- Reference reagents
- Proficiency testing



HPAI HA Clades 2010



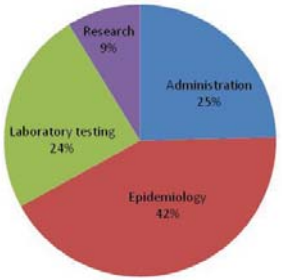
Sharing of biologic materials

- Submission of samples from outbreaks and surveillance to reference laboratory
- Quality control of test reagents (validation)

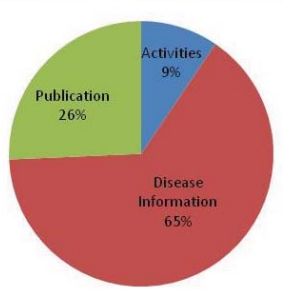
Information Sharing

- AI-Network-Asia email circulation

Subscriber Composition
(n = 300)



Circulated Materials Composition
(n = 74)



EMPRESi – Asia

- Web based
  - Access : http://ectad-asia.fao.org/ea-server/
  - Manual : http://ectad-asia.fao.org/ea-server/manual/ECTAD%20Asia%20public%20user%20guide.pdf
- Disease tracking information system
  - Sharing several types of reports
  - Integrated database i.e. GLIPHA
  - GIS mapping and analysis tools
- Document management system
  - Protocols
  - Publication
- Forum for discussion
  - Regional
  - Country

EMPRES EMERGENCY PREVENTION SYSTEM

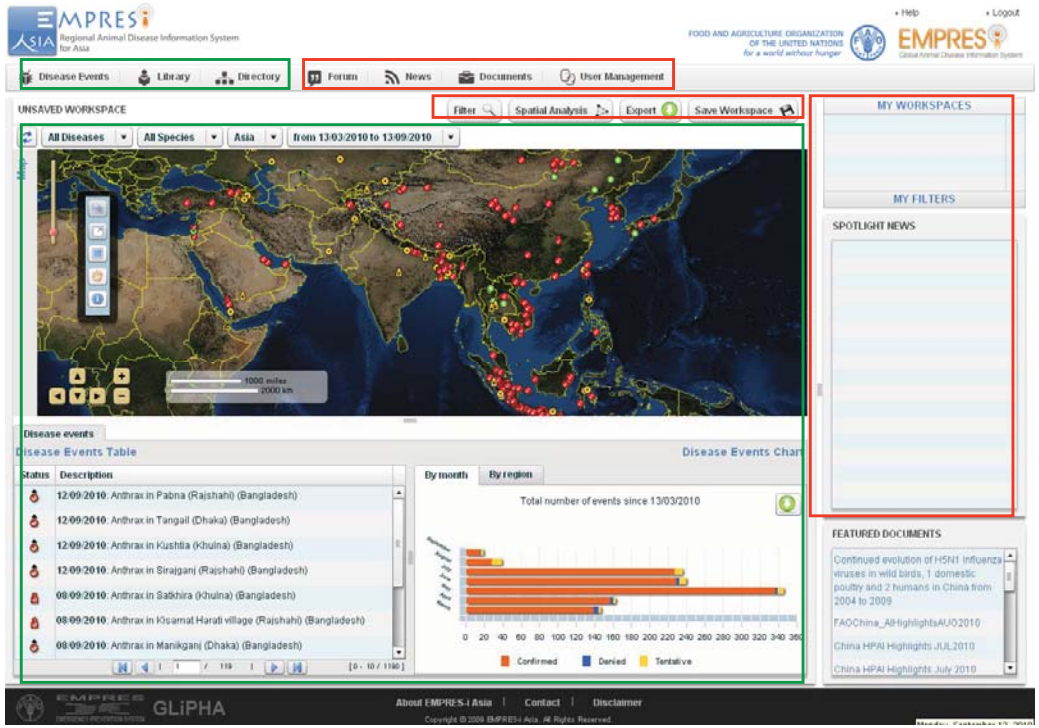
FAO/OIE GF-TADs GLOBAL FRAMEWORK FOR THE PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES

FAO/WHO GLEWS GLOBAL EARLY WARNING SYSTEM

EMPRES Asia Regional Animal Disease Information System for Asia

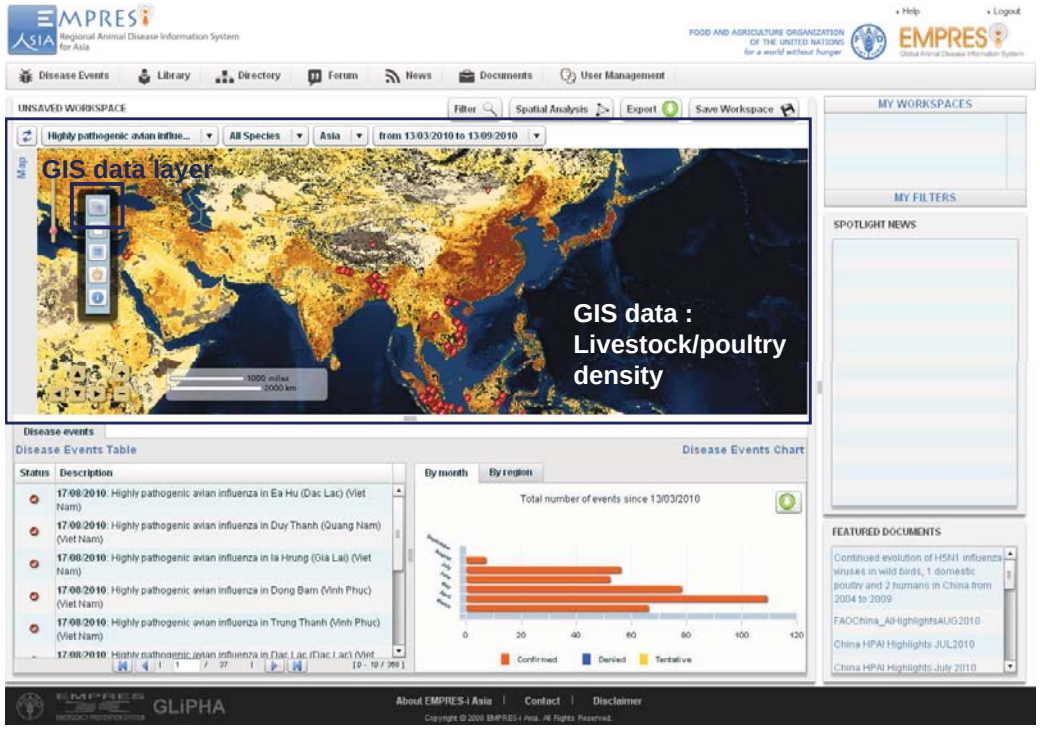
EMPRESi-Asia

Public User	Disease events
	Library
	Directory
Authorized users	Workspace filter
	Insert events
	Forum
	News
	Documents
Administrators	Validate disease events
	Grant user authorization



EMPRESi-Asia

- HPAI and FMD data available
- GIS tools
  - Browse spatial data i.e. livestock density
- Spatial analysis tools
  - Proximity analysis
    - Distance to nearest feature
  - Zonal analysis
    - Statistics within buffer zone
    - Statistics within administrative area



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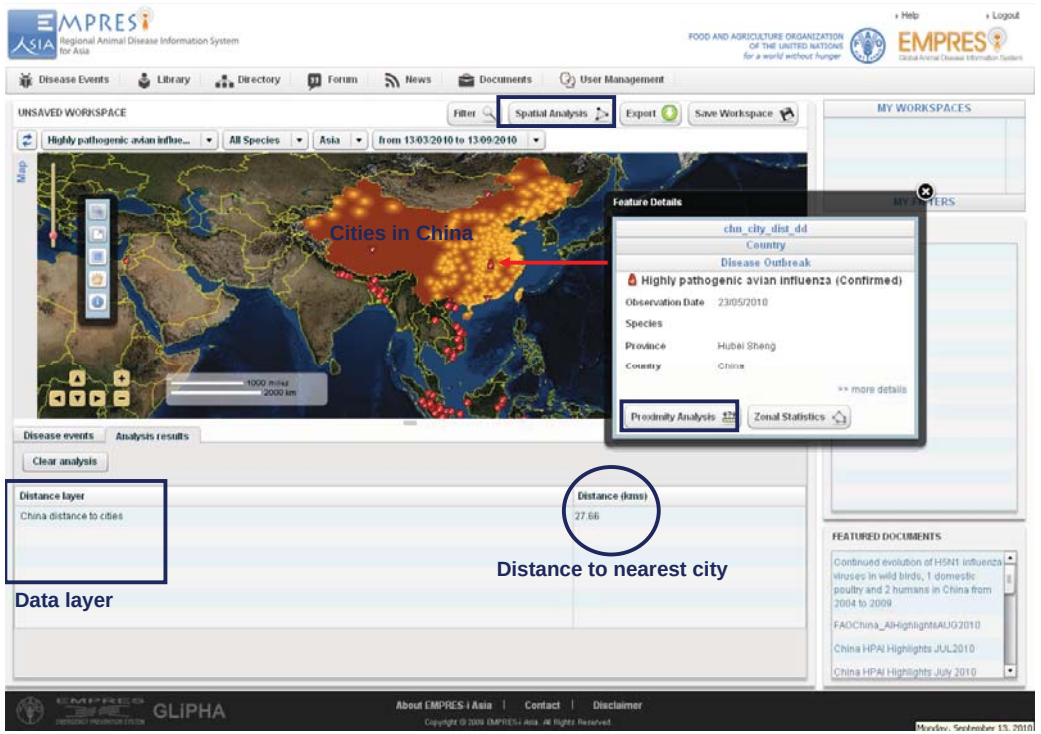

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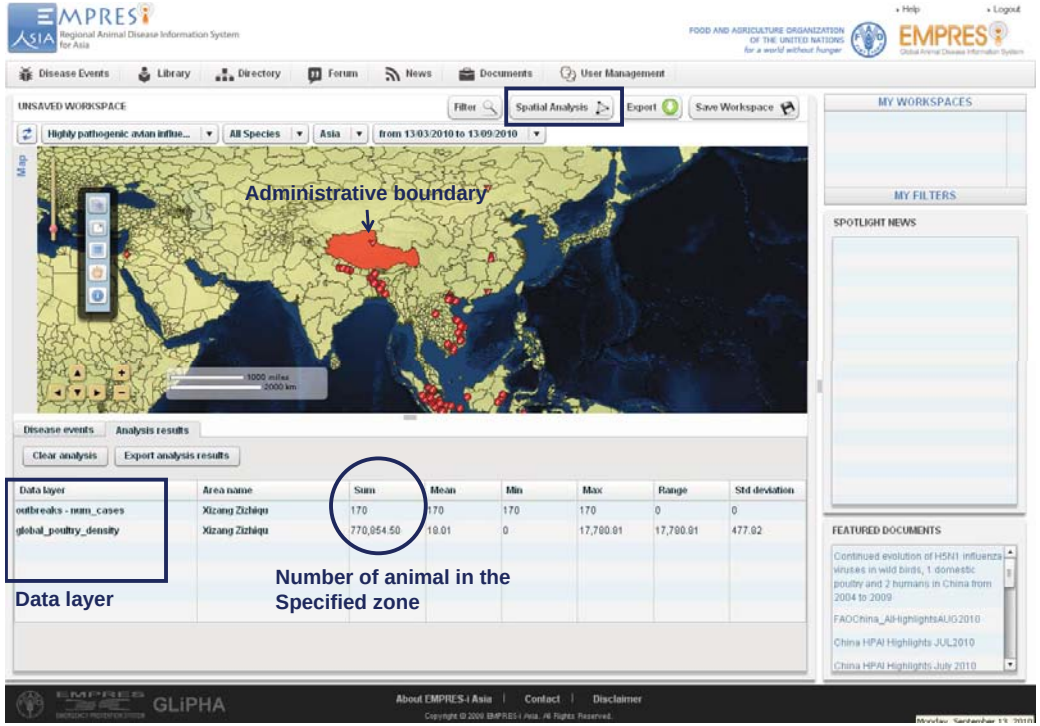

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Food and Agriculture Organization of the United Nations

Key Lessons for Future Network

- Coordination and collaboration among FAO projects and other international key partners would minimize duplication but maximize efforts and resources with good outputs and outcomes for member countries.
- Efficient networking can be maintained through a network of people
  - Maintain the communication through trainees from various projects
- Existing regional networks for epidemiology and laboratory for HPAI should be good platform for future emerging diseases for the region

OIE Activities in Animal Health Information Networking and Veterinary Legislation

Dr Karim Ben Jebara
Head
Animal Health Information Dpt

Third OIE Regional Meeting on Strengthening Animal Health Information Networking in Asia under the OIE/JTF Project for Strengthening HPAI control in Asia

Tokyo, Japan, 15-16 September 2010

WORLD ANIMAL HEALTH INFORMATION SYSTEM WAHIS

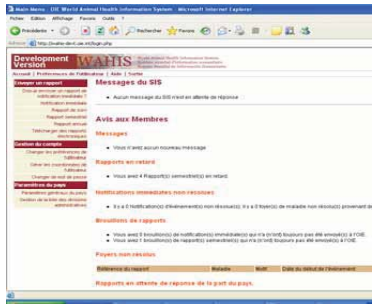
WAHIS online notification

- WAHIS
  - Provides countries with a simpler and quicker method of sending sanitary information => compliance countries with their international obligations vis-à-vis the OIE
  - Allows countries to benefit from the new capabilities put in place to produce essential and useful information while minimizing possible errors or delays
  - Countries' data benefit from the systems reliability and safety

World Animal Health Information System (WAHIS)

Access to WAHIS application allows users from Member Countries and Territories, namely Delegates or their nominees, to electronically submit notification reports:

- immediate notifications
- follow-up reports
- six-monthly reports
- annual reports



General objectives of the System

Immediate notifications and Follows-ups

OIE's early warning system

International alert messages

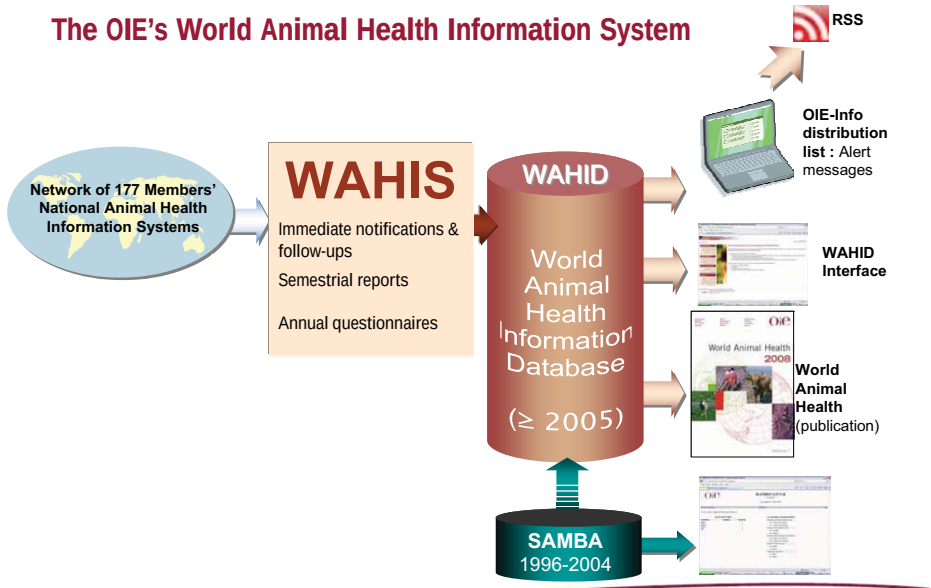
Rapid response

Regular information through six-monthly and annual reports

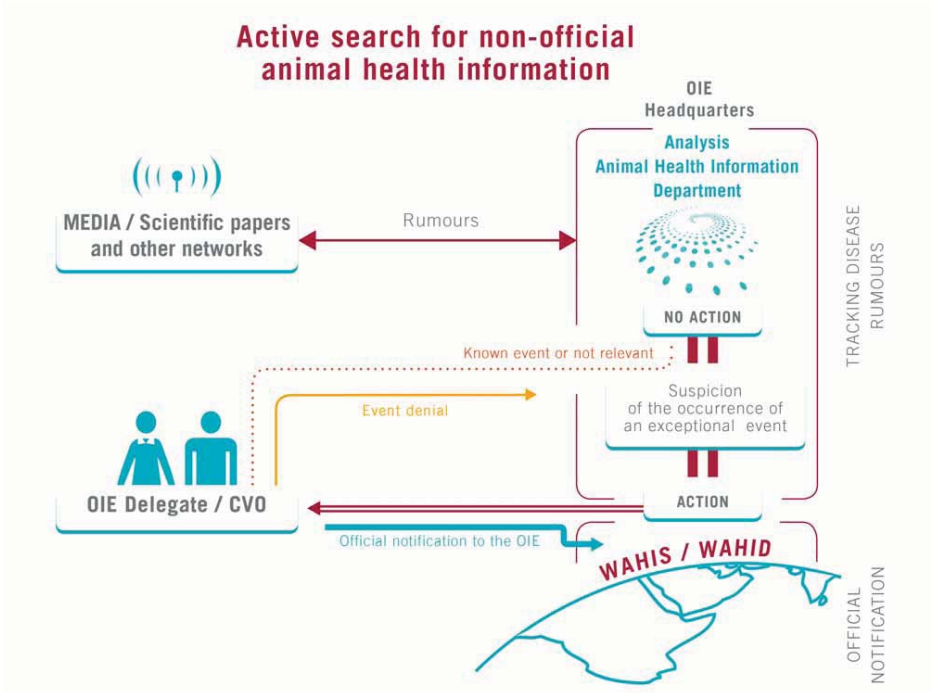
OIE's monitoring system

To monitor OIE Listed diseases (presence or absence) over time

The OIE's World Animal Health Information System



Active search for non-official animal health information



Objectives

- Improve transparency of the animal health situation worldwide
- Improve the efficiency of the OIE's Early Warning System for better animal disease awareness and preparedness

OIE NETWORKS

- OIE Reference Laboratories
- OIE Collaborating Centers
- OIE Delegates
- OIE Focal Points
  - ✓ Animal health information systems
  - ✓ Wildlife
  - ✓ Aquatic animal diseases
  - ✓ Veterinary medicinal products
  - ✓ Animal welfare
  - ✓ Animal production & food safety

WAHIS EVOLUTION - WAHIS 2

Recent crises: need to adapt to the situation notification of diseases in wild animals

The OIE is aware of the ***sensitivity of WAHIS data*** *and the possible consequences of* ***reporting diseases in wild animals*** *by putting* ***unjustified trade barriers***

This may have sometimes a side effect of countries not notifying on diseases observed in wild species, which limit transparency

Better understanding of disease situation in both domestic and wild animals, better risk analysis for importing countries and less unjustified trade barriers.

Among the new functionalities

1. Differentiated registration and display for the **occurrence codes**, when relevant, between domestic animals and wild animals (started in 2009)
2. To generate **two completely separate six-monthly reports** one for terrestrial and one **for aquatic animals**: reason better management: Members can provide available information without blocking the submission process (starting from 2011).
3. Improvement of the **management of periodicity of reporting diseases** within the six-monthly period (for an ongoing six-month period): send monthly information for a selected number of diseases that are known to be present, which could be validated and made public on monthly basis, without submitting the whole report. The rest of the report will be completed at the end of the period (starting from 2011)

Among the new functionalities

4. For wildlife, WAHIS will offer a **list of known susceptible species for terrestrial animals** in order to report the correct host animal (starting from 2011);
   - by family name;
   - by scientific name (*Latin name*);
   - by common name (in English, French and Spanish).
5. The system will allow the possibility **to add in a box free text**, another species (if it is not on the list) (starting from 2011);
6. There will be a **different interface than WAHID in the OIE web site** to display data on non-OIE listed disease in wildlife (starting from 2011).

Regional Information Systems: the OIE strategy for regional networking

WAHIS Regional Core: first option of networking among countries

- For disease control purposes, the OIE offers the possibility for groups of Members/Regional Organisation, and for priority endemic diseases covered by a regional control programme

… to provide and share more information than the minimal information required by the OIE for these endemic diseases (six-monthly reports)
(e.g. outbreak by outbreak)

WAHIS Regional Core: first option of networking among countries

- A regional core enables members to enter data for different purposes: meet the objectives of the regional control programme while respecting their reporting obligations of notification towards the OIE

- This approach avoids discrepancies between processed data posted on the OIE website and data used by the regional control programme (and its regional website) and avoid them a lost of time in completing several reports

WAHIS Regional Core: first option of networking among countries

- Non-confirmed information (rumours or suspicions of disease outbreaks) could be shared between participating Members only
- Only confirmed information will be transferred to the OIE and –through the OIE- to the rest of the world
- Such regional databases can be hosted free of charge by the OIE central servers (ensure sustainability)

WAHIS Regional Core: second option of networking among countries

- If the OIE collected data as part of the six-monthly reporting procedure (by monthly breakdown), is sufficient for a region, then an agreement could be signed between the regional organisation and the OIE
- The OIE will provide data on these priority diseases for Members of the region to be analysed, displayed on the regional web site or be provided in different types of publications such a bulletin to be published inside the region

WAHIS Regional Cores in Action

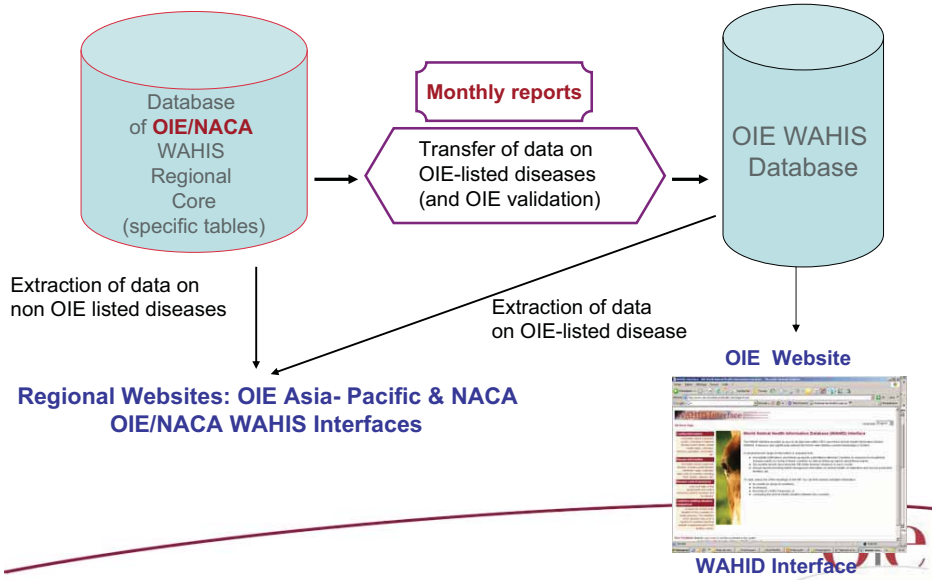
Regional Agreement signed between the OIE and:

- Network of Aquaculture Centres in Asia-Pacific (NACA)
- Organismo internacional regional de sanidad agropecuaria (OIRSA)
- Secretariat of the Pacific Community (SPC)
- Others are in the pipeline

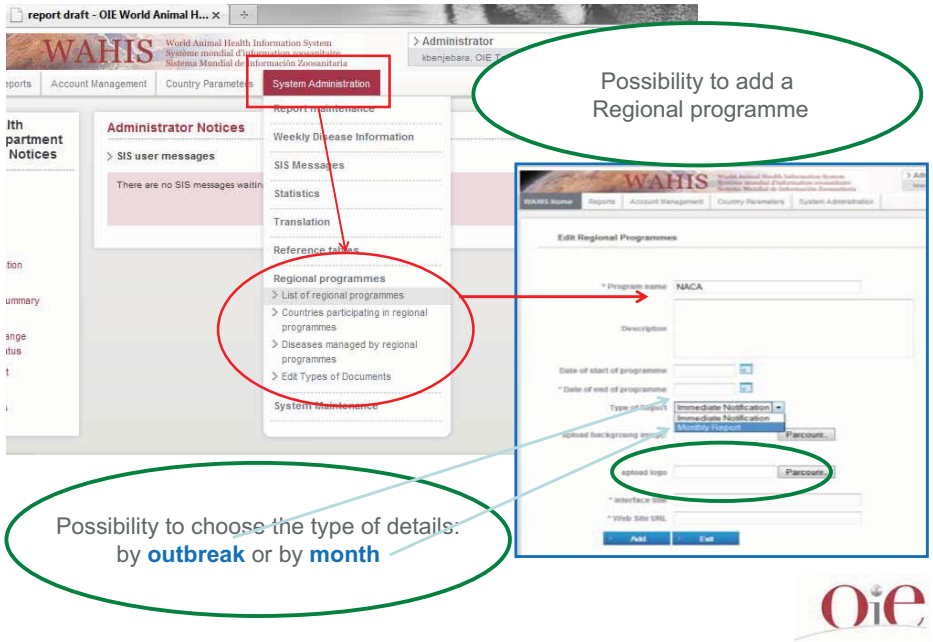
OIE/NACA WAHIS Regional Core

- Concept note project was designed then discussed during the OIE/NACA Regional Workshop on Aquatic Animal Health held in Bangkok, Thailand, late March 2008
- Official agreement designed then signed by the DGs of OIE and NACA in April 2008
- The development of this Regional Core has been included as a component of the Development of WAHIS 2 that started in May 2009 and is now being tested

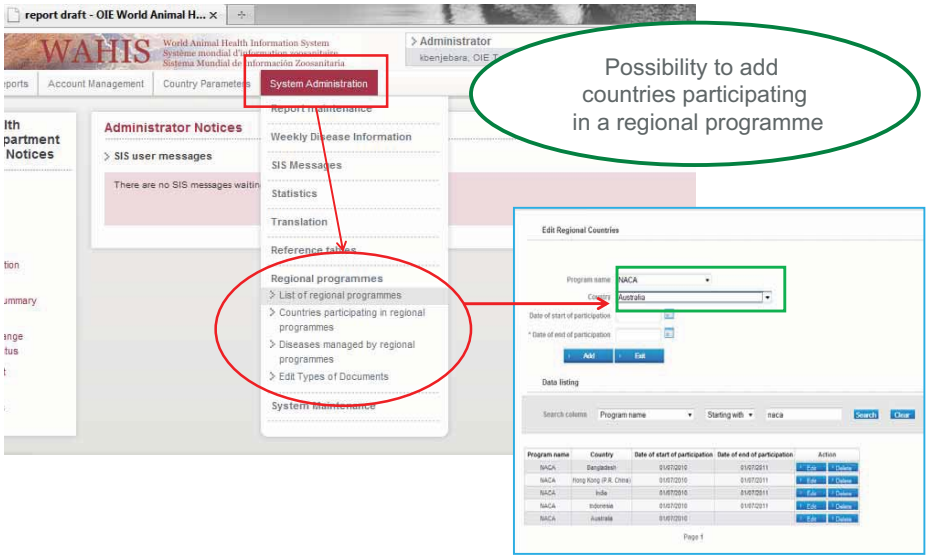
Data Transfer for OIE/NACA WAHIS Regional Core



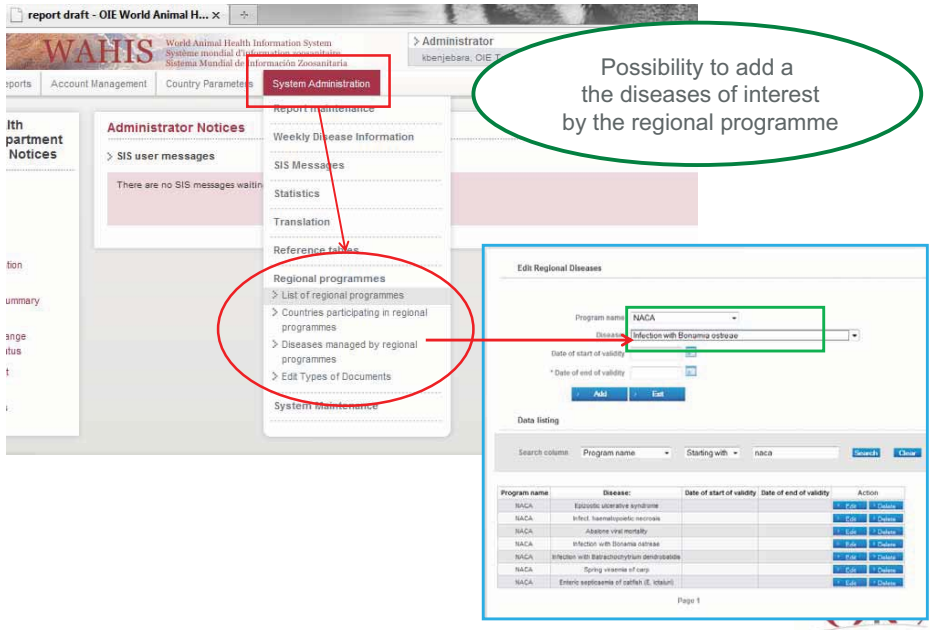
WAHIS 2- Regional Core- Regional programmes creation



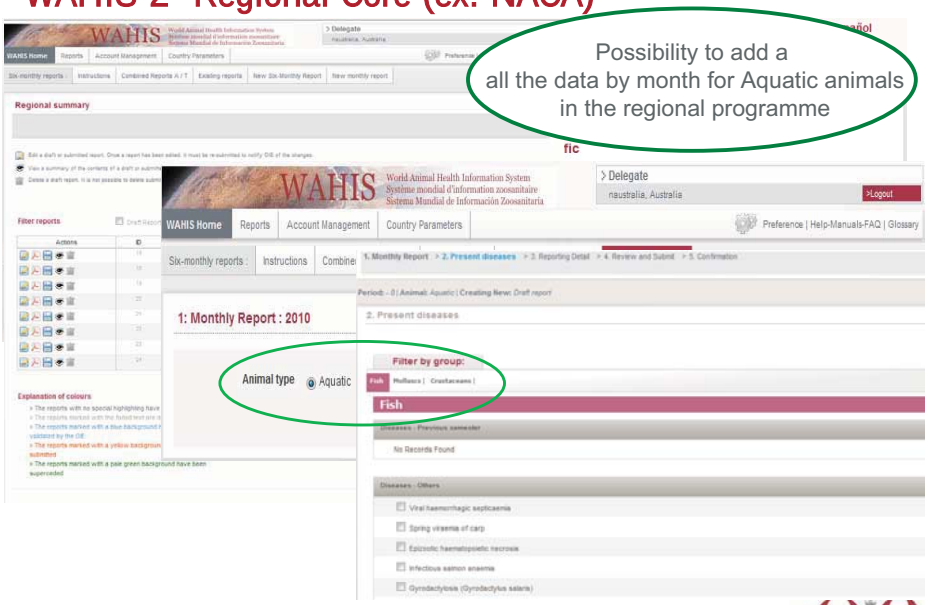
WAHIS 2- Regional Core- countries participating



WAHIS 2- Regional Core- diseases of interest



WAHIS 2- Regional Core (ex: NACA)



OIE Global Initiative for strengthening veterinary legislation

Outline

- **Guidelines on veterinary legislation**
- **OIE PVS Tool**
- **Veterinary Legislation global programme**

Guidelines on veterinary legislation

At the request of Members OIE has developed Guidelines on all essential elements to be covered in veterinary legislation

Model versus guideline approach

	Models	Guidelines
Disadvantages	• Used without conversation • Rigid, difficult to fragment • Not adapted to local context	• Very general • Major work of conversationn • No ready-made solution • Mastery of all the technical, legal and drafting principles required
Advantages	• Easy to use	• **Relevant and durable texts, adapted to the legal system** • **Acquisition of autonomy**

OIE Guidelines on veterinary legislation

http://www.oie.int/eng/oie/organisation/A_Guidelines_Vet%20Leg.pdf

Part I: General recommendations

Part II: Technical recommendations

Utilisation of the Guidelines

Strategic aspects

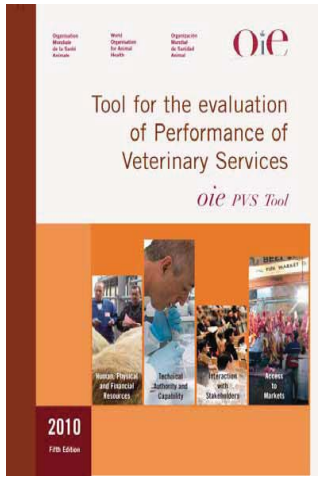
- Political decision at a suitably high level
- Development of a strategy
- Development of a realistic timetable

Utilisation of the Guidelines

Tactical aspects

- Adequate, mandated human resources (multiple disciplines)
- Legal and statistical resources

OIE PVS tool and legislation



- legislation is an element of most critical competences (CC)
- Specific references to legislation are in CC IV-1 & IV-2

Critical competency IV-1

IV-1 Preparation of legislation and regulations, and implementation of regulations

The authority and capability of the Veterinary Services to actively participate in the preparation of national legislation and regulations, and to implement animal health and food safety regulations for animals, animal products and processes under their mandate.

Critical competency IV-2

IV-2 Stakeholder compliance with legislation and regulations
The authority and capability of the Veterinary Services to ensure that stakeholders are in compliance with animal health and food safety regulations under the Veterinary Services' mandate.

This competency is based on:

Administrative and legal powers of enforcement

The capacity to establish inspection programmes based on risk analysis

Systems to evaluate relevance and progress re: the aims of the legislation.

A State function

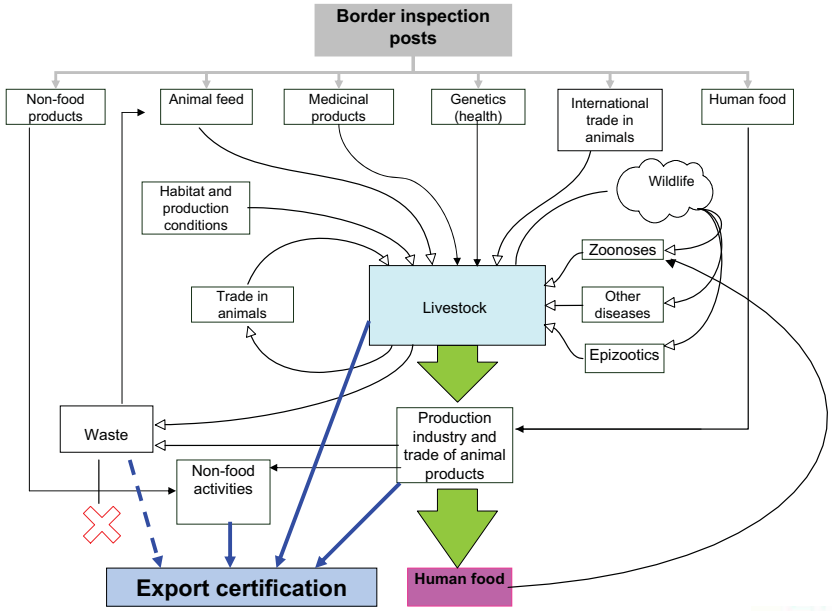
Veterinary legislation plays an important role in relation to:

- Food security
- Food safety (food products, zoonoses)
- Animal Health
- Animal production (GDP);
- International trade (economic security)

OIE Guidelines: General section

A definition of the veterinary domain:

"All actions directly or indirectly related to animals, their products and by-products, whenever such actions help to protect, maintain and improve human health, namely the physical, moral and social welfare of humans"



The veterinary domain

OIE PVS Tool and Legislation

Lessons learned from nearly 100 PVS evaluations of OIE Members

Many countries urgently need to update their veterinary legislation to meet current and future challenges.

OIE Veterinary Legislation mission

Lessons learned:

- Members have real but variable needs
- Practical aspects prevail over strategic aspects
- Main work concerns improving conformity in the short-term, as well as sustainable development
- Emergencies challenge strucured decision-making

OIE Veterinary Legislation mission

Lessons learned:

- Many VS do not have appropriate legal services or effective external support
- Lack of awareness of procedures / mechanisms for creation of legal and regulatory instruments
- Lack of organised participation by stakeholders
- Few management tools
- Policy and decision makers do not consider VS a priority

Solutions

- Veterinary legislation is a matter for the State.
- Real, strong, long-term political support at the highest level (Ministerial at least) is key
- There is no unique 'correct model' – rather, guidelines and adaptation on a case-by-case basis
- Collaboration between Ministries
- Meaningful involvement of stakeholders
- There is no quick solution!

Solutions

The Veterinary Services must have:

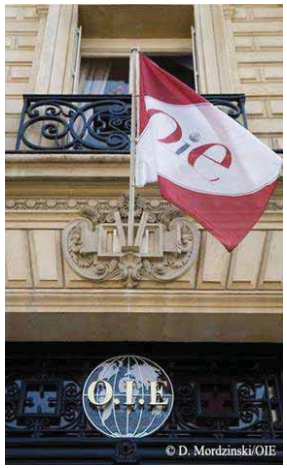
- a strategic vision (an overall long-term approach)
- Stable and sustainable organisation and legislative base
- human and material resources allocated to fulfil their missions

Solutions

In view of:

- The importance of high quality veterinary legislation and that improvement of veterinary legislation is a prerequisite to improving performance, the OIE makes a commitment to support Members wishing, to follow the PVS Pathway, including through the global Veterinary Legislation initiative.

Thank you for your attention



Organisation mondiale
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