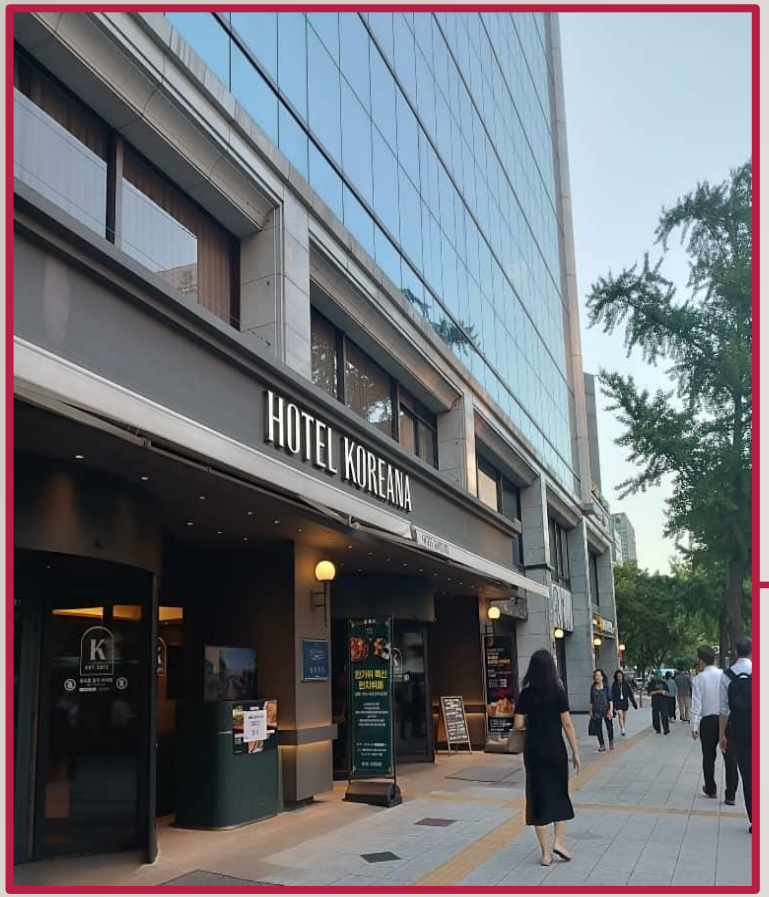

WOAH REGIONAL WORKSHOP ON AVIAN DISEASE PREVENTION AND CONTROL IN ASIA AND THE PACIFIC 2024 (27 – 29 AUGUST 2024)

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UNIT UNGGAS

SEKSYEN BUKAN RUMINAN

BAHAGIAN PEMBANGUNAN INDUSTRI TERNAKAN

INTRODUCTION

- In the Asia Pacific region, annual regional workshops have been organised to **review progress in preventing and controlling** various animal diseases and define how to strengthen multi-sectoral and international coordination and collaboration.
- Experts working on avian diseases in Asia-Pacific have recommended that more opportunities are required to **collaborate and share surveillance data** and details on viral information.

INTRODUCTION

World Organisation for Animal Health
Founded as OIE

ONE HEALTH POULTRY HUB

Last regional workshop in Qingdao, China, August 2023, participants discussed on ;

- continuing disease surveillance and monitoring activities in domestic and wild birds,
- improving information sharing, diagnostic capacity and early warning system and
- strengthening regional collaborations

The experts recommended that the regional expert network on Avian diseases continues to meet physically once a year.

Hence the workshop was organized on 27 -29 August 2024 in Seoul, South Korea

OBJECTIVES

- to share information on the global strategy for the prevention and control of HPAI (2024-2033)
- to provide updates on recent outbreaks, surveillance data, and the impact of avian diseases over the past year
- to provide an update on OFFLU and other activities, following the recommendations from the previous meetings
- to update on diagnostic techniques and sampling for AI in both domestic and wild birds
- to discuss effective prevention and control of AI and other avian diseases in the region

WHAT IS OFFLU ?

- OFFLU is the name of the network of AI expertise
- WOAH and FAO agreed in 2005 to establish a network of expertise to support international efforts to monitor and control this disease in poultry and other bird species
- The current priorities of OFFLU are to promote the collection, exchange, and characterization of animal influenza viruses, including the deposition of sequence data in genome banks

World Organisation for Animal Health
Founded as OIE

Ministry of Agriculture, Food and Rural Affairs

ONE HEALTH POULTRY HUB

Provisional Agenda

Regional Workshop on Avian Disease Prevention and Control in Asia and the Pacific 2024

Seoul, Republic of Korea

August 27 – 29, 2024

Day 1: August 27, 2024		
Time	**Session**	**Speaker/Facilitator***
08:30 – 09:00	Registration	
Welcoming session		
09:00 – 09:15	Welcoming and opening remarks: - Dr Jung-Rok Choi, Chief Veterinary Officer and WOAH Delegate of ROK - Dr Fiona Tomley, Director of One Health Poultry Hub - Dr Hirofumi Kugita, WOAH RRAP	
09:15 – 09:30	Introduction and objectives of the workshop	H. Kugita
09:30 – 10:00	Self-introduction Group photo	
10:00 – 10:30	Coffee break	
Session 1: Situational analysis and updates		
10:30 – 10:50	An Update on Avian Influenza: Challenges and opportunities	N. Lewis
10:50 – 11:05	Global updates on other avian diseases and Avian diseases reporting performance of Members	G. Pavade
11:05 – 11:20	Regional updates on avian disease-related activities	T. Patanasatienkul
11:20 – 11:35	GF-TADs AI Strategy and WOAH AI Resolution updates	G. Pavade
11.35 – 11.50	OFFLU updates	G. Pavade
11:50 – 12:00	Q&A	
12:00 – 13:00	Lunch	
00 – 13:00	Lunch	
00 – 15:00	National action plan Member's presentation 1. Bhutan 2. Chinese Taipei 3. India 4. Philippines 5. Nepal 6. Japan 7. Republic of Korea 8. New Zealand 9. Singapore	 C. Norbu L. Chen B. Biswakarma A. Bucad R. Yadav R. Nakao B. Lee N. Brangenberg Z.P. Heng
00 – 15:20	Coffee break	
20 – 17:20	Member's presentation continued 10. China 11. Vietnam 12. Mongolia 13. Myanmar 14. Malaysia 15. Pakistan 16. Bangladesh 17. Indonesia 18. Laos 19. Sri Lanka 20. Thailand	 X. Zhao D. Nguyen Kim E. Tseren-Ochir S. Hla Win S. Omar Hisham M. Atif M. Faruqe L. Angeliya C. Senaphanh K. Annet Viveka T. Luengyosluechakul
00 – 20:00	Welcoming dinner hosted by WOAH and Korea	

Day 2: August 28, 2024		
Time	**Session**	**Speaker/Facilitator***
Session 2: Surveillance, prevention and control for avian diseases		
09:00 – 10:20	Activities update by laboratory experts HPAI - *CSIRO, Australia* - *ICAR, India* - *Hokkaido University, Japan* - *APQA, ROK* - *HVRI, China* - *Pasteur Institute Cambodia*	 M. Neave N. Shanmuga Sundaram T. Hiono E. Lee H. Chen E. Karlsson
10:20 – 10:50	Coffee break	
10:50 – 11:30	Activities update by laboratory experts Newcastle disease - *CAHEC, China* - *APQA, ROK* Other diseases - *APQA, ROK (Avian Bacteriology Lab)* - *HVRI, China (Gumboro disease)*	 H. Liu J. Kim M. Kang Y. Gao
11:30 – 12:00	HPAI outbreak responses, an integrated One Health approach - *Australia* - *Cambodia*	 K. Porter P. Pich
12:00 – 13:00	Lunch	
Session 3: One Health Poultry Hub - Research dissemination		
13:00 – 13:20	Poultry intensification, pathogen transmission and zoonotic risk	F. Tomley
13:20 – 13:40	Impact of poultry intensification and antimicrobial exposure on bacterial risks to human health	D. Blake
13:40 – 14:00	Achieving policy frameworks that deliver for poultry and people	R. Alders
14:00 – 14:40	Presentations by OHPH's national representatives - *Avian Influenza in Bangladesh: One Health Poultry Hub Bangladesh Expedition* - *The One Health 'policyscape' in India* - *Networking to reach new heights in Sri Lankan poultry industry; formulation of a national policy for the poultry sector* - *Avian influenza and main findings from the OHPH in Vietnam*	 Md A. Samad R. Dasgupta R. Kalupahana P.T. Ngoc
14:40 – 15:00	Coffee break	
15:00 – 16:00	Participatory panel on "*How do we overcome the challenges of developing, revising and implementing national action plans for HPAI prevention and control*"	F. Tomley* Panellists (tba)
Session 4: Laboratory network		
16:00 – 17:00	Networking and information sharing - *Avian influenza* - *Other avian diseases* - *Regional collaborative effort on disease surveillance*	 Y. Sakoda*
18:00 – 20:00	Dinner hosted by One Health Poultry Hub	

Day 3: August 29, 2024		
Time	**Session**	**Speaker/Facilitator***
Session 5: Recommendations and way forward		
09:00 – 10:40	Recommendations and plan of action for 2025 – 2026 in reference to GF-TAD global strategy for prevention and control of HPAI and WOAH AI Resolution *Group discussion* - *Country (3 groups)* - *Expert (1 group)* *Presentation by rapporteur* - *Country groups* - *Q&A*	
10:40 – 11:00	Coffee break	
11:00 – 11:20	*Presentation by rapporteur* (continued) - *Expert group* - *Q&A*	
11:20 – 11:50	Draft recommendations for 2025 – 2026	
Closing session		
11:50 – 12:00	Closing remarks - Mr Choul Kim, Director General, Department of Animal and Plant Health Research, APQA, ROK - Dr Fiona Tomley, Director of One Health Poultry Hub - Dr Hirofumi Kugita, WOAH RRAP	
12:00 – 13:00	Lunch	
13:00 – 18:00	Field trip (2 groups)	APQA*

DAY 1 – MEMBERS PRESENTATION ON NATIONAL ACTION PLAN

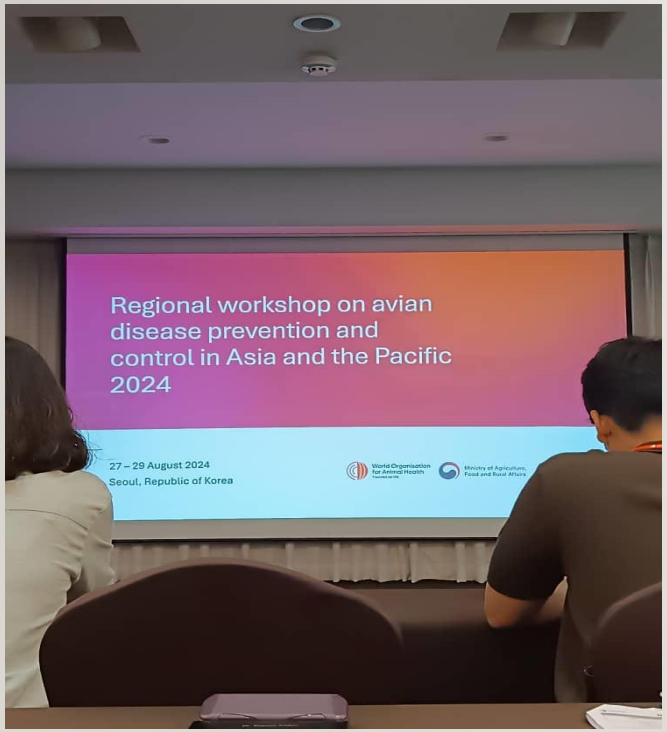
1. Bangladesh
2. Bhutan
3. China
4. Chinese-Taipei
5. India
6. Indonesia
7. Japan

8. Laos
9. Malaysia
10. Mongolia
11. Myanmar
12. Nepal
13. New Zealand
14. Pakistan

DAY 1 – MEMBERS PRESENTATION ON NATIONAL ACTION PLAN

16. Philipines
17. Republic of Korea (ROK)
18. Singapore
19. Sri Lanka
20. Thailand
21. Vietnam

DAY 1 – HIGHLIGHTS



- BANGLADESH – 22 Avian diseases are reported every month
- First AIV reported in 2007 in chickens, later in 2008 human case was detected. To date a total of 11 human cases (8 H5N1) and (3 H9N2)
- BHUTAN – experienced 17 H5N1 outbreaks since 2010 (most recent in July 2024)
- Detected in wild birds like Red jungle fowl, oriental pied, hornbill, Blue whistling thrush and laughing thrush

DAY 1 – HIGHLIGHTS

- CHINA – No outbreak in poultry since 2021, 3 outbreaks were confirmed in wild birds in 2024
- HPAI viruses are actively circulating in nature globally, the well vaccinated poultry in China can be well protected
- CHINESE- TAIPEI – Current status of H5N1 in 2024 (as of August 5th) = 27 land fowl farms, 3 duck farms, 3 goose farms

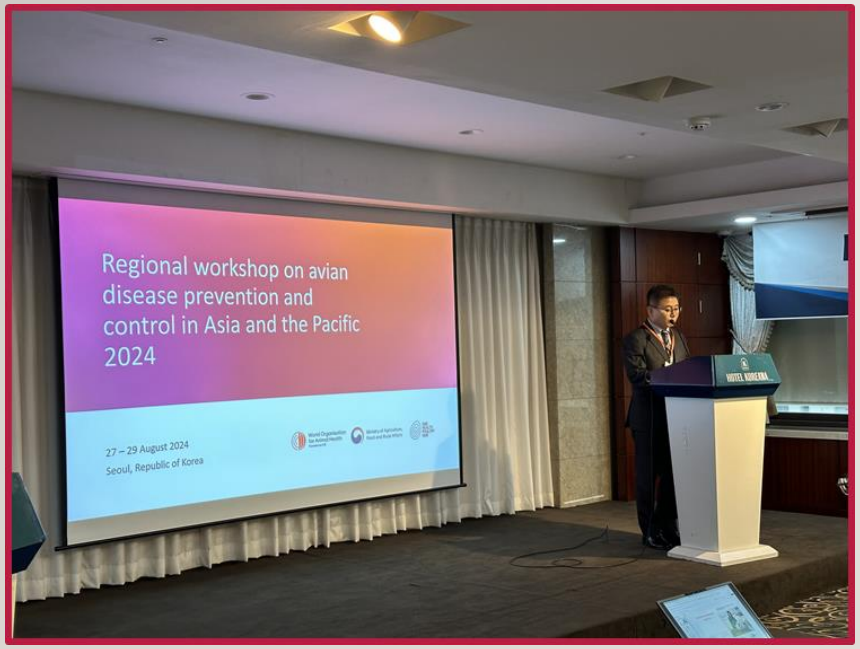
DAY 1 – HIGHLIGHTS

- INDIA – First outbreak of H5N1 in 2006
- H5N8 reported in 2016, isolated from wild birds and poultry, and last detected in 2021
- More than 400 of HPAI outbreaks been reported to date
- Human infection – 2021
- INDONESIA – Endemic for AI with 110,812 cases reported for the last 10 years
- Risk of introduction - One stopover site is on the west coast of South Kalimantan, where 23 migratory bird species have been identified and observed (Riefani et al, 2021).

DAY 1 – HIGHLIGHTS

- LAOS - Poultry population in 2023 is around 45 millions with most of the production is smallholder (80%)
- First outbreak of HPAI (H5N1) occurred in 2004
- Since 2007 to 2010, the outbreak cases of H5N1 have reported 11 cases
- MALAYSIA - HPAI free country through self declaration sent to OIE on 17 December 2018
- National Animal Disease Surveillance Program for all types of livestocks including in poultry (AI, ND and Salmonella)

DAY 1 – HIGHLIGHTS

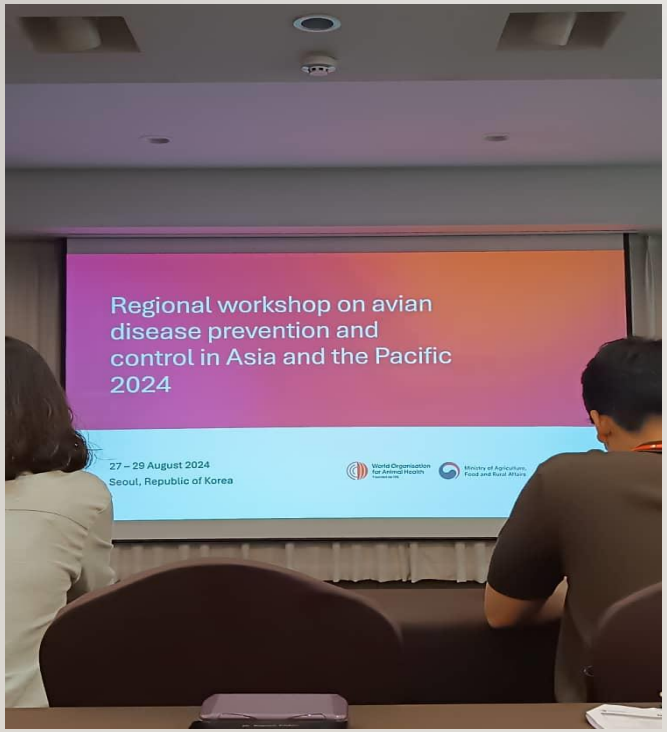


- MONGOLIA – Mongolia has an ideal location for understanding the epidemiology of AIV in wild birds
- HPAI and LPAI reporting in wild birds (not domestic birds)
- HPAI Vaccination 2005-2010 (stopped)
- MYANMAR - 9 Waves of HPAI (H5N1) outbreaks from 2006 – 2017

DAY 1 – HIGHLIGHTS

- NEPAL – HPAI outbreaks 2016 - 2023
- AI (Bio surveillance) started after 2012 in collaboration with FAO
- NEW ZEALAND – Historical Freedom from HPAI based on WOAH Article 10.4.3 and chapter 1.4.6 2b of the Code
- Free of Infectious Bursal Disease virus (IBDV-1) (Surveillance 50 (1) 2023)

DAY 1 – HIGHLIGHTS



- PHILIPINES – First AI (H5N6) outbreak in 2017, later 2020
- First AI (H5N1) outbreak in 2022 along with H5N8
- Last outbreak in 2023 – H5N1, H5N6, H7N7 (LPAI)

DAY 1 – HIGHLIGHTS

- REPUBLIC OF KOREA (ROK) – HPAI viruses are introduced from wild migratory birds almost every year.
- In order to prevent the introduction of HPAI from overseas, quarantine detector dogs are being used at borders to search for prohibited items such as poultry meat
- Newcastle disease - No outbreak since June 2010

DAY 1 – HIGHLIGHTS

- SINGAPORE – HPAI and H5H7 (LPAI) have never been reported
- Newcastle disease - Present, sporadic detections
- SRI LANKA - Free from AI
- Active and passive surveillance throughout the year

DAY 1 – HIGHLIGHTS

- THAILAND – Over 15 years with no HPAI outbreaks occur in Thailand. Last outbreak (H5N1) in November 2008.
- Human cases - Total number of patients was 25, with 17 deaths (2004-2006). The last patient was found in 2006.
- VIETNAM – In 2023, 21 outbreaks of HPAI (H5N1) occurred
- First 3 months of 2024, 6 outbreaks of HPAI (H5N1)

MEMBERS

- National Programs to control or eradicate avian diseases
- Emergency preparedness and response plans
- Disease surveillance and reporting
- Detection and management of cases
- Measures to prevent introduction or spread of disease
- Measures to protect public health
- Communication and collaboration among all competent authorities
- Awareness programme for relevant stakeholders
- Vaccination not practise

DAY 2 - ACTIVITIES UPDATE BY LABORATORY EXPERTS

- **HPAI in Australia**

- Tracking AIV at the Commonwealth Scientific and Industrial Research Organisation (CSIRO) Australian Centre for Disease Preparedness
- National Avian Influenza Wild Bird Surveillance Program (NAIWB)

DAY 2 - ACTIVITIES UPDATE BY LABORATORY EXPERTS

- **HPAI in India**

- Indian Council of Agriculture Research (ICAR) - National Institute of High Security Animal Diseases
- Both active and passive surveillance are continuous process
- Include poultry and migratory/ wild birds using clinical, virological and serological methods
- Surveillance of wild birds for avian influenza viruses in the wetlands of India, live bird market surveillance, surveillance in non-poultry species (cattles, buffaloes and goats)

DAY 2 - ACTIVITIES UPDATE BY LABORATORY EXPERTS

- **HPAI**

- University of Hokaido in Japan
- Animal and Plant Quarantine Agency (APQA) in ROK
- Harbin Veterinary Research Institute, Chinese Academy of Agriculture Sciences (CAAS) in China

DAY 2 - ACTIVITIES UPDATE BY LABORATORY EXPERTS

- **New Castle Disease in China**

- WOAH Reference Laboratory for Newcastle Disease - China Animal Health and Epidemiology Center (CAHEC)
- The outbreaks of ND in the region declined significantly since 2022
- Prevention and Control Strategies of ND in China include enhancing bio-security (large scale), comprehensive vaccination (Genotype-matched vaccines), compartmentalization (vaccination-free),

DAY 2 - ACTIVITIES UPDATE BY LABORATORY EXPERTS

- **New Castle Disease in ROK**

- Since early 2000s reduced outbreaks time by time (no report since June 2010)
- Control policy for ND – vaccination
- Supported by central : regional government (50:50)

DAY 2 - ACTIVITIES UPDATE BY LABORATORY EXPERTS

Republic of Korea

- ➢ The Current Status of Pullorum-Typhoid Control
- ➢ National control program for pullorum disease and fowl typhoid
- ❑ Chicken breeding flocks
  - Monitoring of Pullorum & Gallinarum at 16, 36, and 56 weeks of age and
  - Elimination of positive chicken breeding flocks
- ❑ Fowl typhoid vaccines for layer chickens

DAY 2 - ACTIVITIES UPDATE BY LABORATORY EXPERTS

- **Gumboro in China**

- The emerging nVarIBDV and persistently circulating vvIBDV are two predominant strains endangering the poultry industry in China
- Since 2021, nVarIBDV has also been reported in Korea, Malaysia, and Japan
- The antigenicity of nVarIBDV is significantly different from that of vvIBDV
- The candidate vaccines, such as reverse genetic vaccine, sub-unite vaccine, and live viral vector vaccine, were developed and provide complete protection against both nVarIBDV and vvIBDV.

DAY 2 - ACTIVITIES UPDATE BY LABORATORY EXPERTS – SHARING SESSION

HPAI OUTBREAK RESPONSES, AN INTEGRATED ONE HEALTH APPROACH

- Australia
- Cambodia

RESEARCH DISSEMINATION

- Avian Influenza in **Bangladesh**: One Health Poultry Hub Bangladesh Expedition
- The One Health 'policyscape' in **India**
- Networking to reach new heights in **Sri Lankan** poultry industry; formulation of a national policy for the poultry sector
- AI: Main findings from One Health Poultry Hub in **Vietnam**

DAY 3 : DISCUSSIONS ON THE DRAFT OF WOAH RECOMMENDATION

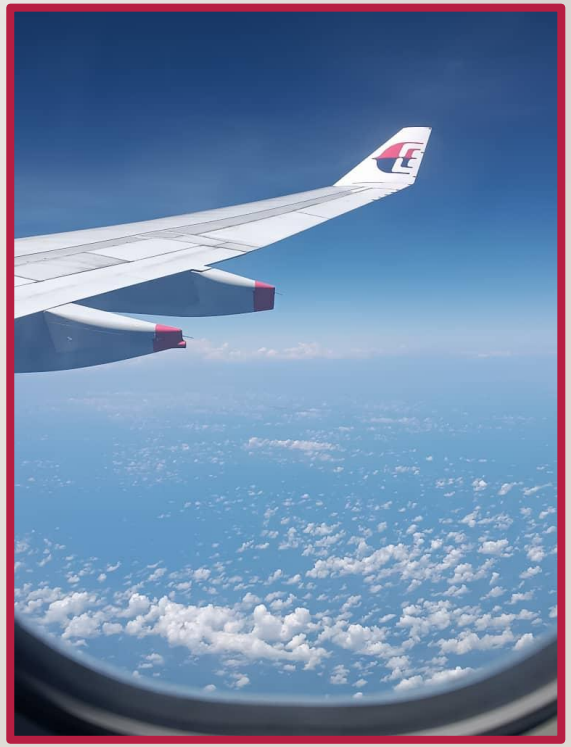
DAY 3 – STUDY VISIT TO KONKUK UNIVERSITY (KU)

KU is a private university located in Seoul
National leader for agricultural and life science research

KU Laboratory Animal Research Center

KU Animal Cancer Center

WAY FORWARD



WOAH RECOMMENDATIONS TO MEMBERS

- ✓ To ensure transparency by promptly reporting AI events to WOAH and sharing detailed virus information within networks.
- ✓ To strengthen regional control of avian diseases by promoting information sharing on all bacterial and viral avian diseases.
- ✓ To conduct risk-based, systematic monitoring and surveillance of domestic and wild birds as well as mammals to support early warning and risk management at the human-animal-environment interface.
- ✓ To support the OFFLU AI Matching programme and WHO Vaccine Composition Meeting through provision of genetic data and genetic materials from new isolates.

WOAH RECOMMENDATIONS TO MEMBERS

- ✓ To develop more concrete plan for exchanging relevant information and coordinating with public health, wildlife, and other relevant authorities.
- ✓ In consultation with the poultry sector, may consider the implementation of vaccination as a complementary disease control tool that is based on sound surveillance and takes into account local factors such as circulating virus strains, risk assessment and vaccination implementation conditions with an exit strategy.
- ✓ To use the Global AI Strategy to update and implement the regional and national action plan for prevention and control of avian diseases

WOAH RECOMMENDATIONS TO MEMBERS

- ✓ To take responsibility for the continued participation in appropriate accredited proficiency testing programmes for the purpose of external quality assurance of their diagnostic assays.
- ✓ To share the success stories of disease-free status, national and international collaborations, laboratory capacity, animal movement and border control measures, risk assessment, zoning and compartmentalization, and farm management practices in the Regional Workshop for Avian Disease Prevention and Control in Asia and the Pacific.

WOAH RECOMMENDATIONS TO REGIONAL EXPERT GROUP FOR AVIAN DISEASES

- ✓ To evaluate and pilot potential novel diagnostics for the rapid detection of avian disease pathogens.
- ✓ With the support of its Reference Laboratories and OFFLU, to provide up-to-date information to Members, the poultry sector and vaccine manufacturers on the genetic and antigenic characterisation of circulating virus strains, including comparison with existing vaccines, to infer levels of protection.
- ✓ To support members for strengthening diagnostic capacity and early warning systems, including promoting active surveillance.

WOAH RECOMMENDATIONS TO REGIONAL EXPERT GROUP FOR AVIAN DISEASES

- ✓ To support fostering collaboration, communication, and coordination between laboratories and multisectoral partners, including public health, animal health, and environmental sectors.
- ✓ To continue to meet physically at least once a year and hold a virtual meeting between and maintain regular digital communications between physical meetings.
- ✓ To strengthen collaborations, communication, and coordination among laboratories in each sub-region to support prevention and control of avian diseases and provide updates on activities occurred in the sub-region at the annual regional meeting.

WOAH RECOMMENDATIONS

- ✓ To follow the changes in LPAI and HPAI virus ecology, epidemiology, validated sampling and diagnostic methods, to ensure the WOAH Terrestrial Animal Health Code and Manual of Diagnostic Tests and Vaccines for Terrestrial Animals are up to date with the latest science and feedback from implementation
- ✓ To continue working with the Quadripartite partners to assess and address barriers to intersectoral collaboration and promote the One Health Approach to mitigate the risks of avian influenza.
- ✓ To coordinate with funding institutions, the private sector, resource partners and development agencies in support of strengthening the human resource capacity and sustainable infrastructure of Veterinary Services, including diagnostic capacity and early warning systems.

CONCLUSION

- The global rise in HPAI among domestic, wild birds, and some mammals poses threats to animal and public health, food security, and biodiversity.
- Indicating changes in the virus's epidemiology, and need for reviewing of poultry production systems.
- Members are exploring additional prevention and control measures beyond stamping out policies, which could influence national and regional disease surveillance strategies
- Public-private partnerships can enhance prevention, preparedness, and control of poultry diseases.

THANK YOU FOR YOUR ATTENTION

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