OFFLU updates and Global HPAI strategy

Dr Gounalan Pavade
World Organisation for Animal health (WOAH)

22 - 25 September 2025
1st GF-TADs Regional Conference of Standing Groups of Experts on priority transboundary animal diseases in the European region
Belgrade, Serbia

OFFLU updates

What is OFFLU?

- Established in 2005
- Joint FAO/WOAH initiative
- Global expertise on avian, swine, and equine influenza
- Strong collaborations with WHO and international partners

Volume 12, Number 8—August 2006

Dispatch

OFFLU Network on Avian Influenza

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Cite This Article

Food and Agriculture Organization of the United Nations

World Organisation for Animal Health

OFFLU's Core Objectives

1. To share and offer technical advice, training and veterinary expertise to international organisations and Member Countries to assist in the prevention, diagnosis, surveillance, and control of animal influenza.
2. To exchange scientific data and biological materials (including virus strains) within the network, analyse such data, and share information with the wider scientific community.
3. To collaborate with the WHO on issues relating to the animal-human interface, including pandemic preparedness for early preparation of human vaccines.
4. To highlight influenza surveillance and research needs, promote their development and coordination.

How does OFFLU operate?

FAO and WOAH Reference laboratories collaborating with national experts

OFFLU's work covers several themes through its technical working groups

- Avian influenza
- Equine Influenza
- Swine influenza
- Wildlife
- Applied epidemiology
- Human animal Interface
- Socio - economic

Objective 1. To share and offer technical advice, training and veterinary expertise to international organisations and Member Countries to assist in the prevention, diagnosis, surveillance and control of animal influenza

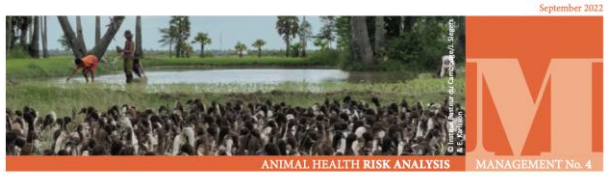
- Contributed to >167 publications and guidance documents (OFFLU documents & reviewing of FAO/WOAH outputs)

Avian Influenza Matching – advise countries on the need to update poultry vaccines

Equine influenza vaccine updates

Internationally harmonised proficiency testing for influenzas

Expert support and advise to countries on diagnostics



GUIDING PRINCIPLES FOR THE DESIGN OF AVIAN INFLUENZA ACTIVE SURVEILLANCE IN ASIA

Designing active, comprehensive, risk-based avian influenza surveillance

Influenza A Cleavage Sites version 4th January 2022

Background:

empres-animal health 360 | NO. 48/2022

Diagnostic guidance: HPAI dairy cattle

May 13, 2024

read more

Joint FAO/WHO/WOAH preliminary assessment of recent influenza A(H5N1) viruses

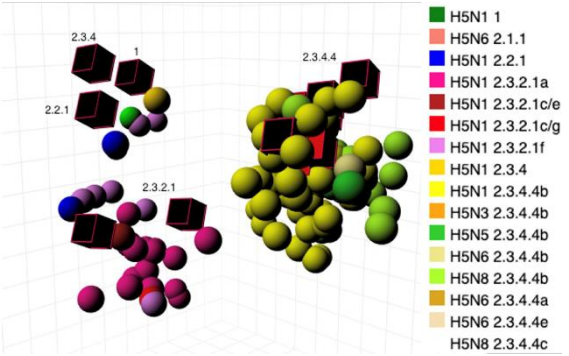
May 6, 2024

read more

OFFLU annual report 2023

Feb 26, 2024

read more



OFFLU Avian Influenza Matching (AIM) project

To provide up-to date information to the poultry sector, governments, and poultry vaccine manufacturers on antigenic characteristics of circulating avian influenza viruses including comparisons with vaccine antigens. This information will facilitate selection of appropriate vaccines for poultry and updating of poultry vaccine antigens in places where vaccines are being used.

- ❑ AIM pilot study started in December 2022
- ❑ AIM pilot report published in October 2023 (https://www.offlu.org/wp-content/uploads/2023/11/OFFLU-AIM-REPORT-2023.pdf)
- ❑ AIM webinar (https://www.youtube.com/watch?v=CPdiaY4tf_k)
- ❑ AIM 2nd technical report published in July 2024 (https://www.offlu.org/wp-content/uploads/2024/07/OFFLU-AIM-Technical-report_Final-1.pdf)
- ❑ Aim Webinar – FAQs (https://www.offlu.org/wp-content/uploads/2024/11/AIM-Webinar-summary-and-FAQs.pdf)
- ❑ AIM Executive summary published in October 2024 (https://www.offlu.org/wp-content/uploads/2024/11/OFFLU-Avian-Influenza-Vaccine-Matching-final-clean.pdf)
- ❑ AIM 2025 report to be released soon

offlu
WOAH FAO
network of expertise on animal influenza

New hosts (2021-2024)

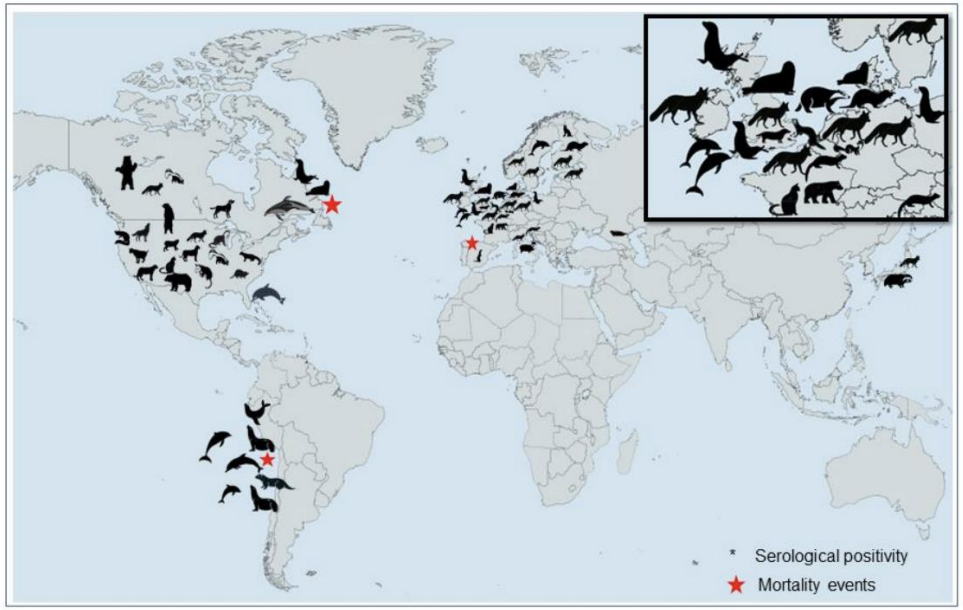
Mammals

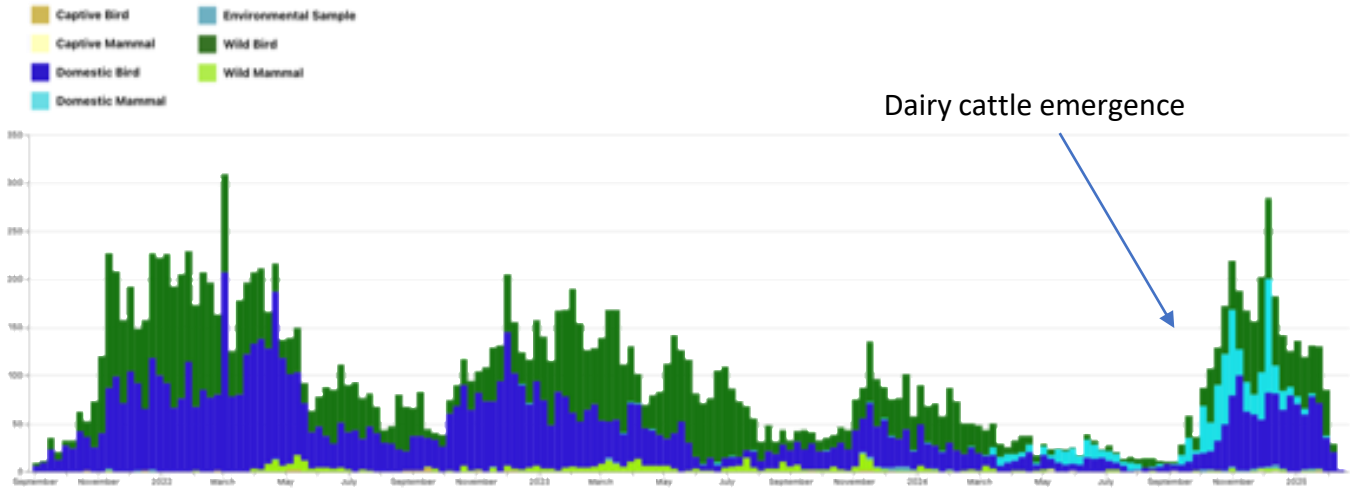
- *OFFLU statement on infections with AIV in cats in Poland* ***(2023)***
- *OFFLU call to discuss Avian Influenza events in mammals* ***(2023)***

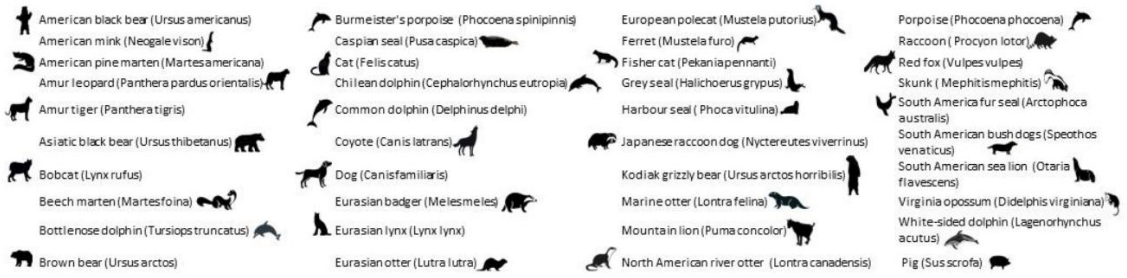
Dairy cows

- *OFFLU statement on high pathogenicity avian influenza in dairy cows* ***(2024)***
- *Updated OFFLU statement on high pathogenicity avian influenza in dairy cows* ***(2024)***
- *Diagnostic guidance: HPAI dairy cattle* ***(2024)***
- *Updated joint FAO/WHO/WOAH public health assessment of recent influenza A(H5) virus events in animals and people* ***(2024, 2025)***
- *FAO: Recommendations for the surveillance of influenza A(H5N1) in cattle* ***(2024)***

  WOAH: Case definition for notification of HPAI in cows as emerging disease ***(2025)***







Coming soon - OFFLU Guidelines For High Pathogenicity Avian Influenza Virus Risk Mitigation in Cattle

New regions and virus lineages (2021-2024)

Wildlife and Antarctic regions

- *Continued expansion of high pathogenicity avian influenza H5 in wildlife in South America and incursion into the Antarctic region* ***(2024)***
- *'Unprecedented': How bird flu became an animal pandemic* ***(2024)***
- *Emergence, spread, and impact of high pathogenicity avian influenza H5 in wild birds and mammals of South America and Antarctica, October 2022 to March 2024* ***(2024)***
- *Southward expansion of high pathogenicity avian influenza H5 in wildlife in South America: estimated impact on wildlife populations, and risk of incursion into Antarctica* ***(2023)***
- *Continued expansion of high pathogenicity avian influenza H5 in wildlife in South America and incursion into the Antarctic region* ***(2023)***

Latin America and Carribbean region

- *Public health resource pack for countries experiencing influenzas in animals* ***(2023)***
- *OFFLU call to discuss AI in the Latin America and Caribbean region* ***(2023)***

Emerging virus lineages

- *OFFLU technical statement on H3N8* ***(2022)***
- *Tripartite preliminary rapid risk assessment on H3N8* ***(2022)***
- *OFFLU contribution to a rapid risk assessment of recent H5N1 clade 2.3.4.4b viruses* ***(2022)***

Objective 2. To exchange scientific data and biological materials (including virus strains) within the network, to analyse such data, and to share such information with the wider scientific community

- Large gaps in data availability around the world
- Confidentiality agreements and MTAs enable countries to share data with OFFLU for assessment

TCs on genetics and epidemiology of current influenza situation

Virus exchange among network labs

Sharing up to date scientific information with the community

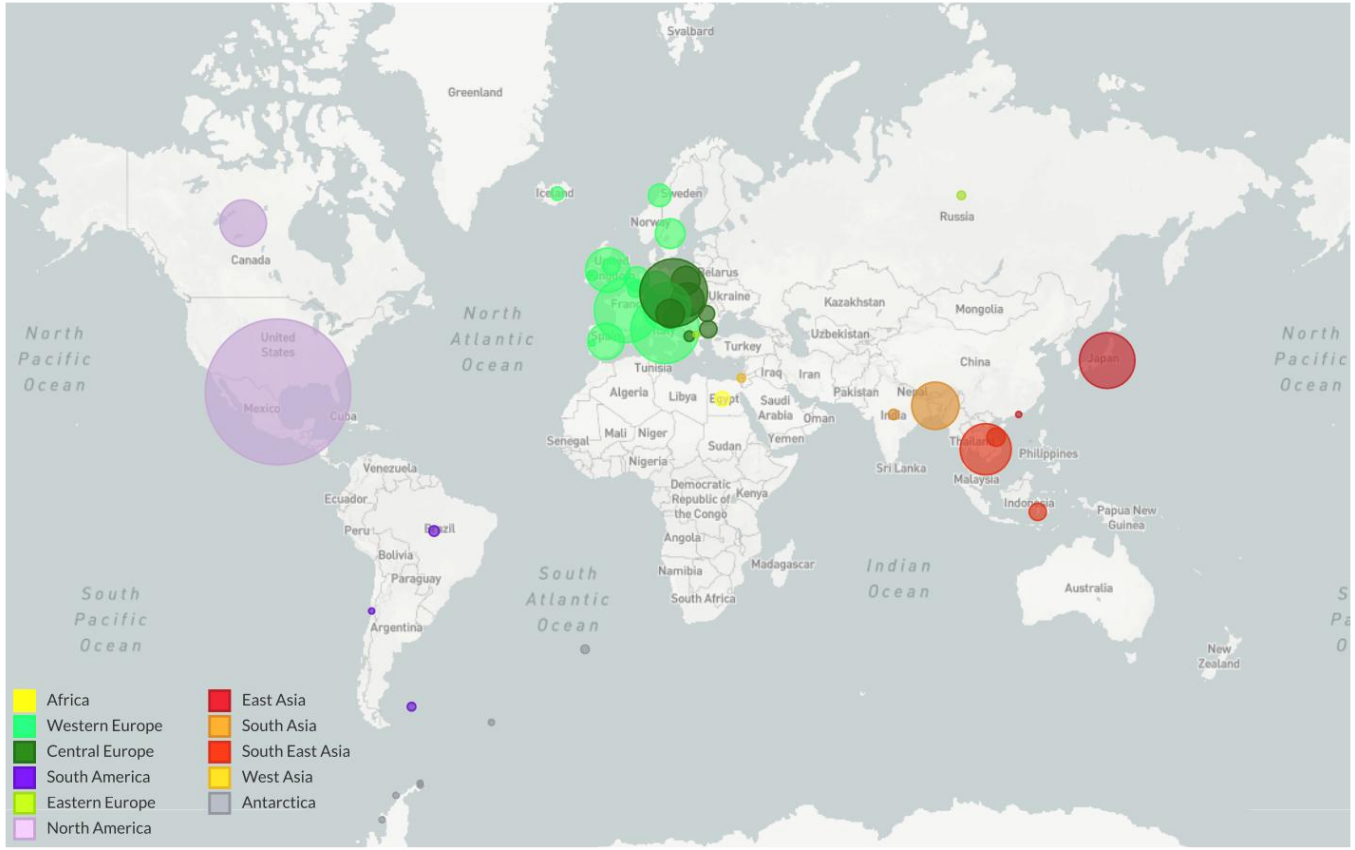


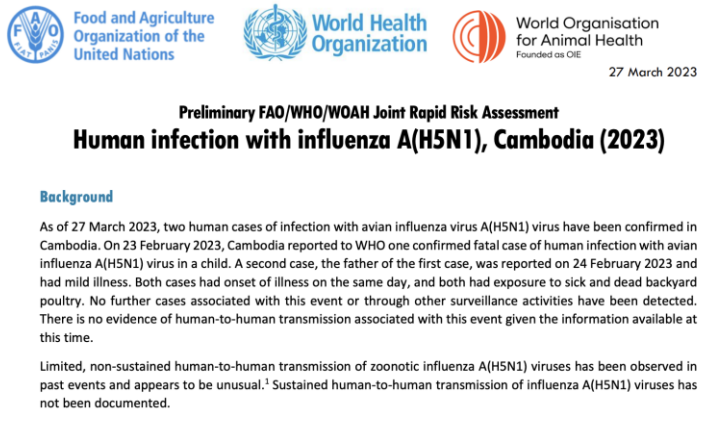
Figure. Map detailing geographic origin of virus sequences submitted to OFFLU for the February VCM 2025

Objective 3. To collaborate with the WHO on issues relating to the animal-human interface, including pandemic preparedness for early preparation of human vaccine

Vaccine Composition Meeting – supporting pre-pandemic preparedness for updating candidate vaccines for zoonotic influenza

Contribution to WHO TIPRA exercises (swine and avian viruses)

Joint risk assessments for zoonotic threats (e.g., H5N1, H9N2, H3N8)


Food and Agriculture Organization of the United Nations
World Health Organization
World Organisation for Animal Health
Founded as OIE

27 March 2023

Preliminary FAO/WHO/WOAH Joint Rapid Risk Assessment

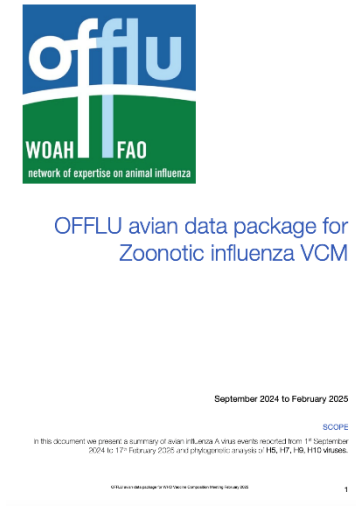
Human infection with influenza A(H5N1), Cambodia (2023)

Background

As of 27 March 2023, two human cases of infection with avian influenza virus A(H5N1) virus have been confirmed in Cambodia. On 23 February 2023, Cambodia reported to WHO one confirmed fatal case of human infection with avian influenza A(H5N1) virus in a child. A second case, the father of the first case, was reported on 24 February 2023 and had mild illness. Both cases had onset of illness on the same day, and both had exposure to sick and dead backyard poultry. No further cases associated with this event or through other surveillance activities have been detected. There is no evidence of human-to-human transmission associated with this event given the information available at this time.

Limited, non-sustained human-to-human transmission of zoonotic influenza A(H5N1) viruses has been observed in past events and appears to be unusual.[1] Sustained human-to-human transmission of influenza A(H5N1) viruses has not been documented.

World Health Organization


OFFLU avian data package for Zoonotic influenza VCM

September 2024 to February 2025

SCOPE

In this document we present a summary of avian influenza A virus events reported from 1st September 2024 to 17th February 2025 and phylogenetic analysis of H5, H7, H9, H10 viruses.

1

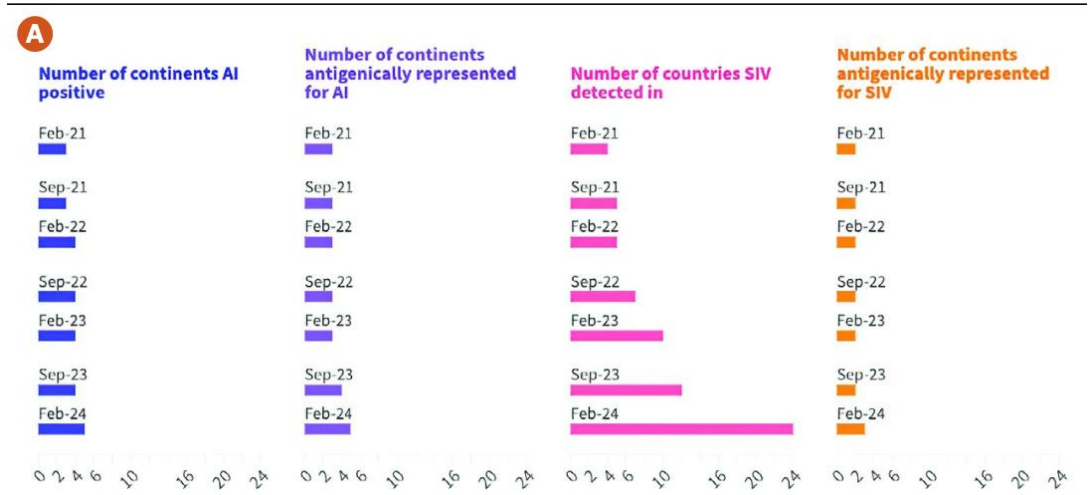


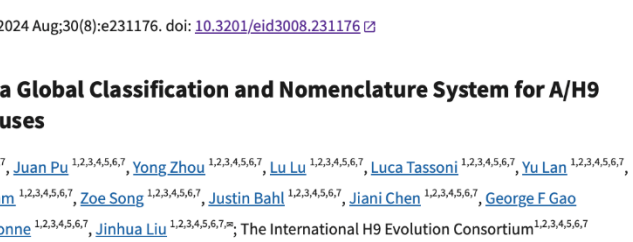
Figure. OFFLU VCM contributions over a four-year period

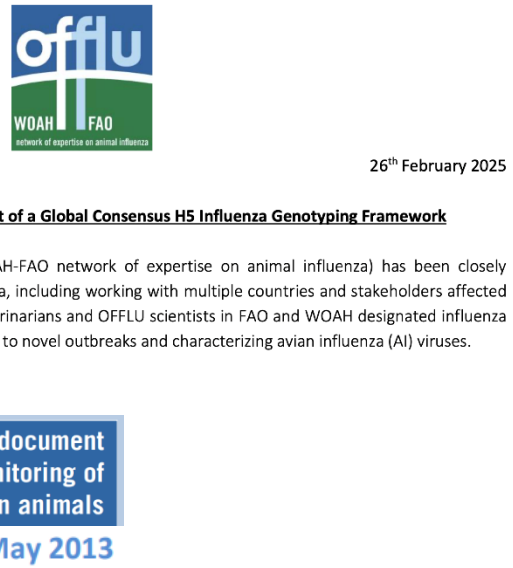
Objective 4. To highlight influenza surveillance and research needs, promote their development and coordination

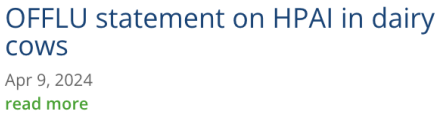
Updating internationally harmonised nomenclature for influenza viruses

Highlight influenza surveillance and research needs, promote their development and coordination

Sharing up to date scientific information with the community

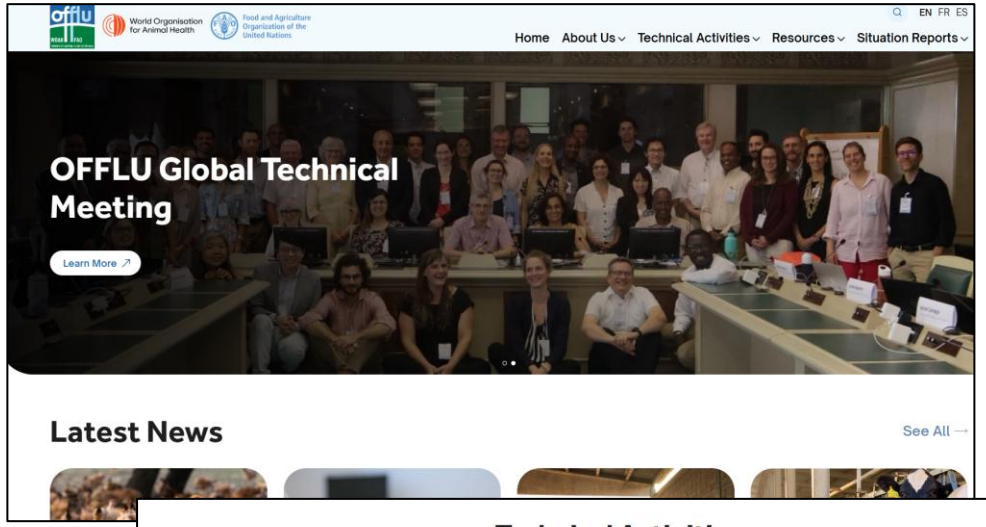


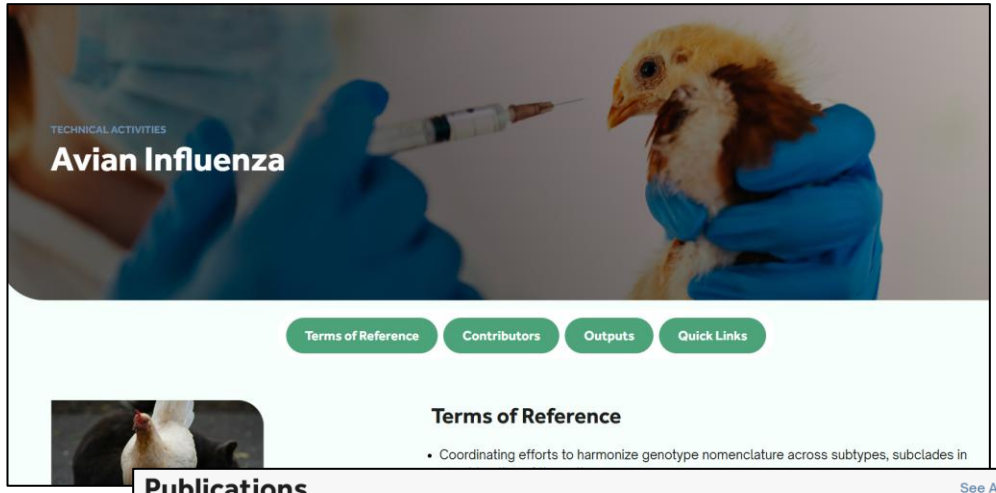


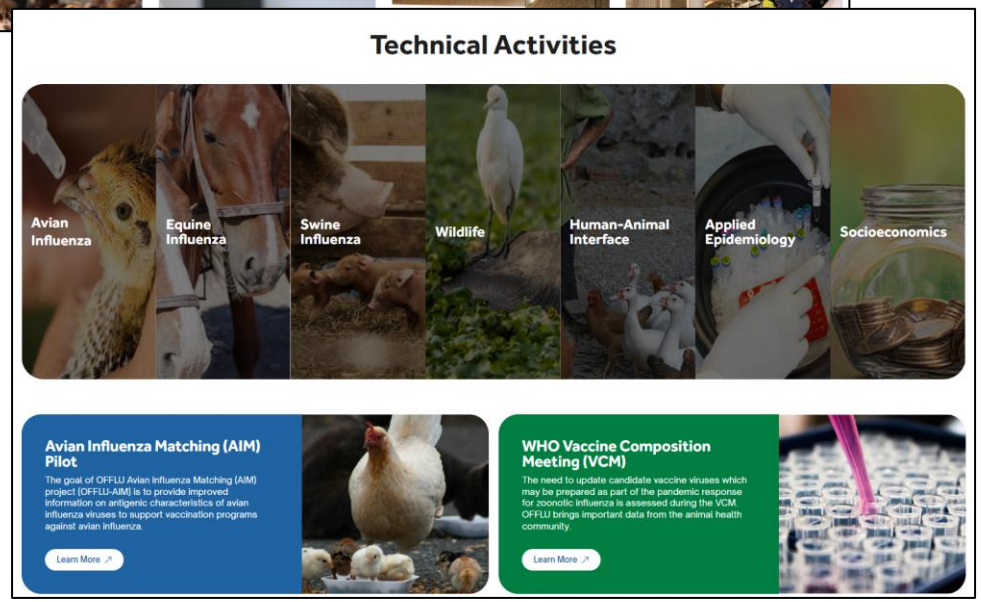


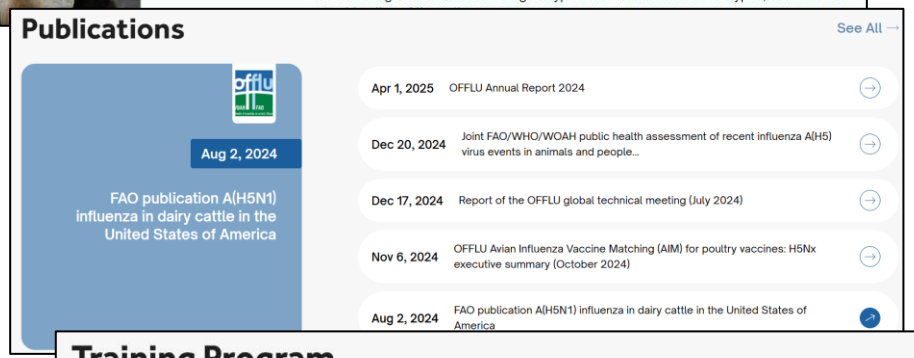
New OFFLU website is live!

www.offlu.org









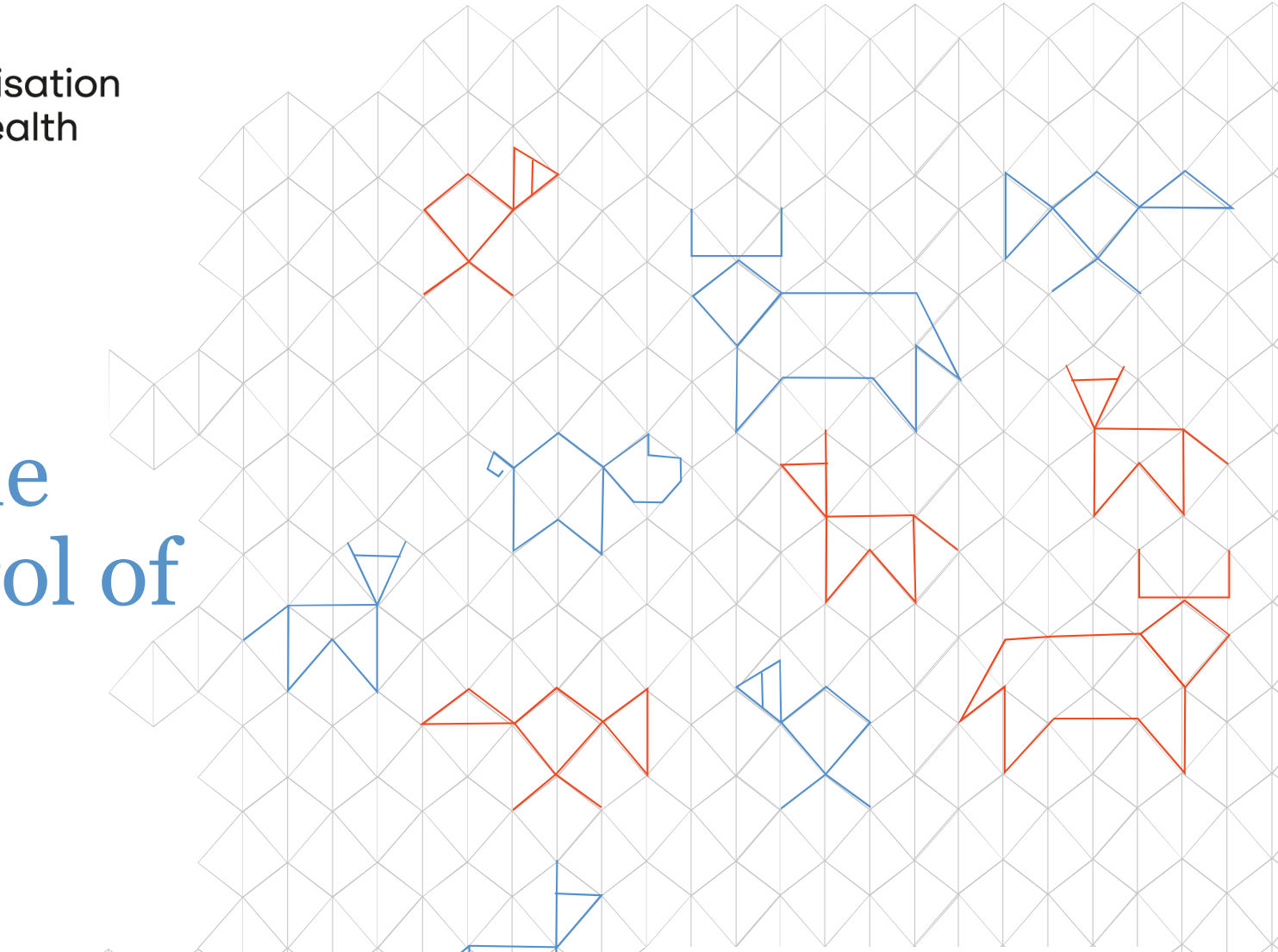
Looking to the next 20 years…

OFFLU will continue to evolve—expanding partnerships, embracing new technologies, and strengthening our role in global animal and human health security

Food and Agriculture Organization of the United Nations

World Organisation for Animal Health

Global strategy for the prevention and control of HPAI (2024 – 2033)



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

Food and Agriculture Organization of the United Nations

World Organisation for Animal Health

Inputs for the revision of the HPAI Global Strategy

Key discussions

Regional surveys, stakeholder mapping and regional discussions

Recommendations from the Regional Standing Group of AI Experts (SGE) for the Americas and Europe and Regional workshops Asia-Pacific

Recommendations from FAO Global Consultation on HPAI (May 2023)

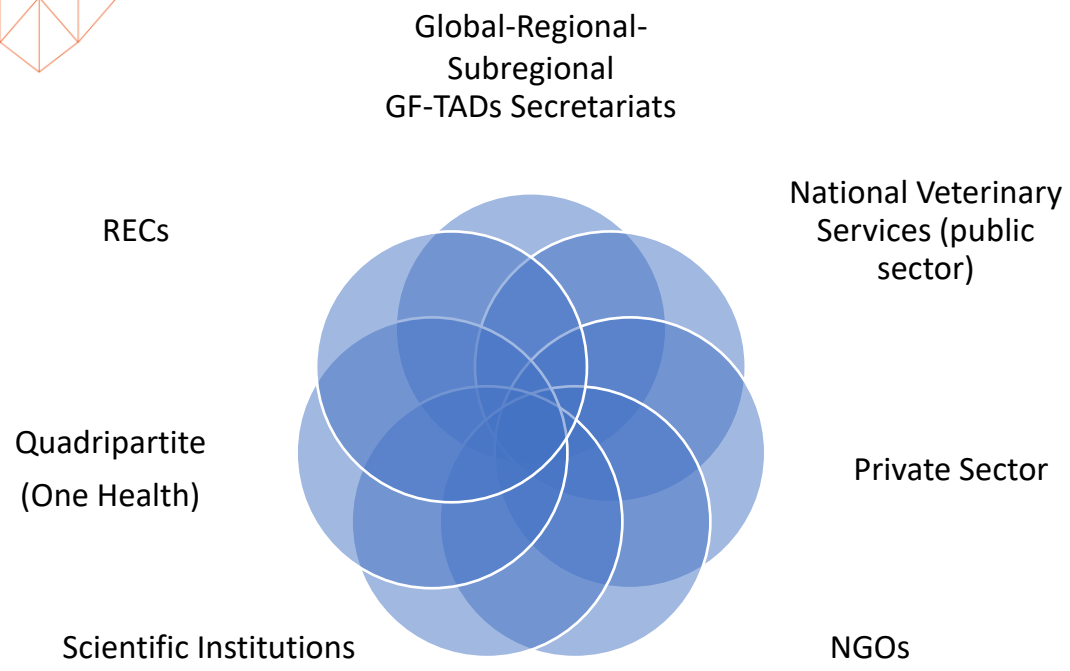
Recommendations from the HPAI Animal Health Forum during the 90th WOAH General Session (May 2023)

- Resolution 28 requested WOAH, with FAO, update the Global Strategy on HPAI

Recommendations from Scientific Task Force on Avian Influenza and Wild Birds (July 2023)

Revision of the HPAI GS was guided by the evolving science and strategic discussions regarding tactical tools, approaches and collaborations needed at local, national, regional and interregional levels.

Inputs for the revision of the HPAI Global Strategy



Internal consultation within FAO /WOAH headquarters and regional offices - December 2023

External consultation involving global organisations and experts, regional partners, WOAH Members and FAO national officers in April 2024

Input received from 67 organizations:

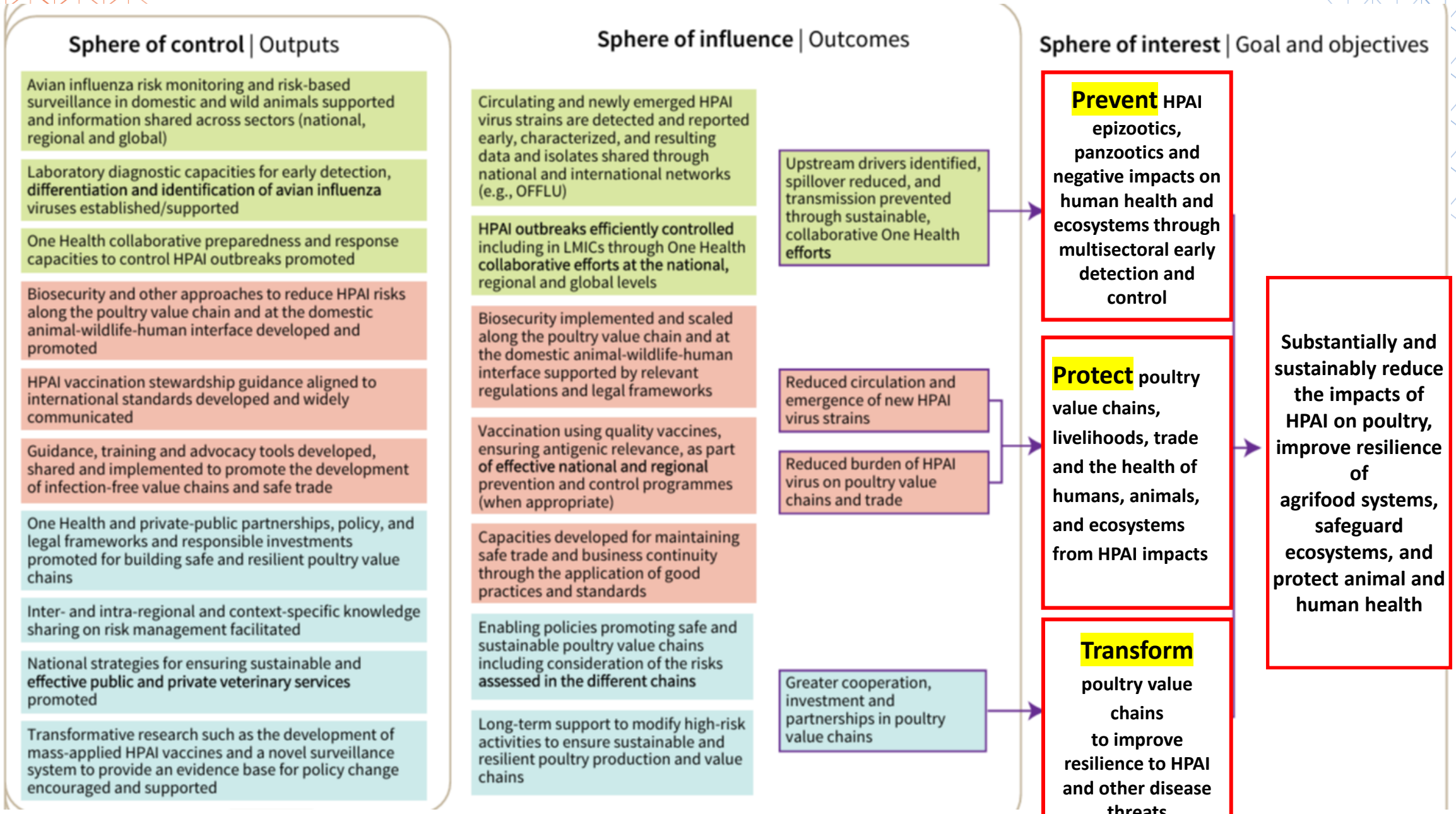
- 82% from national level
- 57% from governmental organizations
- 16% from scientific organizations
- 33% Asia Pacific, 16% Americas, 28% Europe, 15% Africa, 1% Middle East

Objectives

1. **Prevent** HPAI epidemics, panzootics and negative impacts on biodiversity through multisectoral early detection and control

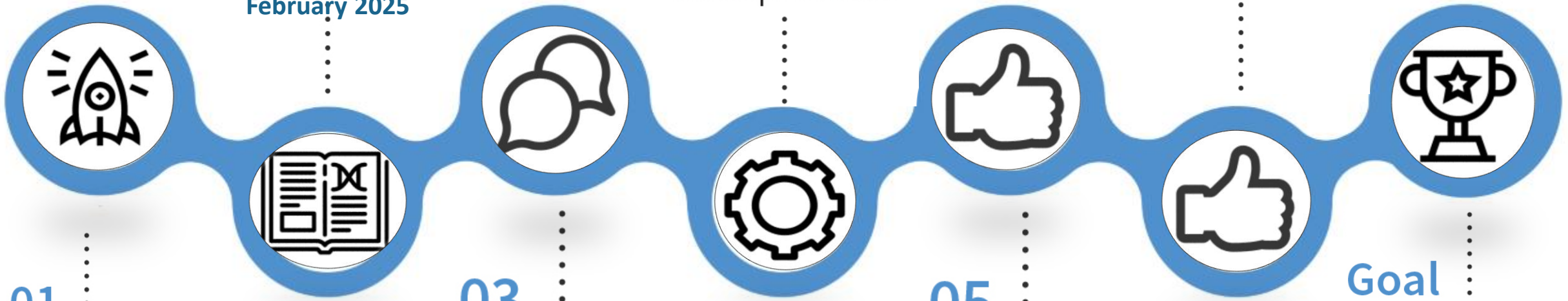
2. **Protect** poultry value chains, livelihoods, trade, and the health of humans, ecosystems, and other animals from avian influenza impacts

3. **Transform** poultry value chains to improve resilience to avian influenza and other disease threats.



Assumption 1: Countries prioritize HPAI prevention and response capacity within national poultry health programmes.
Assumption 2: Countries are actively adopting a One Health approach as part of health security.
Assumption 3: Effective public-private relationships exist to enable livestock system transformation.

Next Step: Implementation Process of the HPAI Global Strategy



01
Global HPAI strategy launched
May 2024

02
Strategy published
February 2025

03
Regional engagement and consultation to operationalize the strategy

04
National HPAI plans developed/revised and implemented

05
Strategy mid-term review

06
Strategy end-term review and next steps

Goal
Effective HPAI prevention and control supports protection of humans, domestic animals, wildlife and the environment

Yearly monitoring of the impact of the strategy implementation

Global level - What actions are needed to achieve the objectives

Establish Governance Structure: Utilize existing mechanisms under the GF-TADS

Engage Partners: Collaborate with international public and private entities.

Communication Plan: Develop and launch a strategy awareness campaign.

Support OFFLU: Encourage countries to share HPAI data.

Develop Guidance and Standards: Facilitate the creation of control strategies and HPAI vaccination programs.

One Health Approach: Work with Quadripartite partners to operationalize One Health for HPAI prevention and control.

Sustainable Livestock Initiative: Support regions and countries to strengthen poultry value chains and enhance resilience to HPAI and other diseases.

Regional level - What actions are needed to achieve the objectives

Implement Strategy: Assist Members in implementing the strategy.

Strategy Communication: Facilitate the dissemination of the strategy and the development of HPAI action plans.

Engage Regional Committees: Work with GF-TADS Regional Steering Committees and other networks for cross-border collaboration.

One Health Platforms: Encourage collaboration with regional Quadripartite partners.

Promote Reporting and Information Sharing: Ensure timely, transparent reporting of HPAI and LPAI outbreaks, including genomic data, to WOAH, FAO, OFFLU, and other partners

Develop Laboratory Networks: Facilitate the enhancement of laboratory capacities.

Identify Key Areas: Engage stakeholders to pinpoint crucial areas for poultry value chain transformation.

Implementation of the strategy – identify activities at regional level for each outputs

Objective 1: Prevent HPAI epizootics, panzootics and negative impacts on human health

Output 1.1: Avian influenza risk monitoring and risk-based surveillance in domestic and wild animals supported and information shared across sectors at the national, regional and global levels

Output 1.2: Laboratory diagnostic capacities for early detection, differentiation and identification of avian influenza viruses established and supported

Output 1.3: One Health collaborative preparedness and response capacities to control HPAI outbreaks promoted

Implementation of the strategy – identify activities at regional level for each outputs

Objective 2: Protect poultry value chains, livelihoods, trade and the health of humans, animals and ecosystems

Output 2.1: Biosecurity and other approaches to reduce HPAI risks along the poultry value chain and at the domestic animal–wildlife–human interface developed and promoted

Output 2.2: HPAI vaccination stewardship guidance aligned to international standards developed and widely communicated

Output 2.3: Guidance, training and advocacy tools are developed, shared and implemented to promote the development of infection-free value chains and safe trade

Implementation of the strategy – identify activities at regional level for each outputs

Objective 3: Transform poultry value chains to improve resilience to HPAI and other disease threats

Output 3.1: One Health and private–public partnerships, policy and legal frameworks and responsible investments promoted for building safe, resilient and sustainable poultry value chains

Output 3.2: Inter- and intraregional and context-specific knowledge sharing on risk management facilitated

Output 3.3: National strategies for ensuring sustainable, effective public and private veterinary services promoted

Output 3.4: Transformative research such as the development of mass-applied HPAI vaccines and a novel surveillance system to provide an evidence base for policy change encouraged and supported

Thank you

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

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