## AVIAN INFLUENZA PROTECTION PROGRAM Philippines

Regional workshop on avian disease prevention and control in Asia and the Pacific 2024



#### Anthony C. Bucad, DVM

27 – 29 August 2024

Officer-in-Charge, Chief Animal Health and Welfare Division DA-Bureau of Animal Industry

Seoul, Republic of Korea



World Organisation for Animal Health Founded as OIE

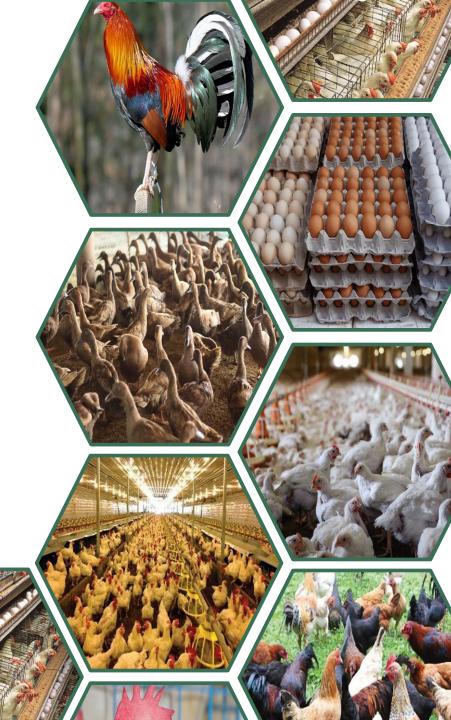


Ministry of Agriculture, Food and Rural Affairs



## **Outline of Presentation**

- I. Overview: Philippine Poultry Industry
- II. History and Current Status of the HPAI Cases in the Philippines
- III. The Philippines' Avian Influenza Protection Program
- IV. Challenges and Ways forward



## **The PHILIPPINES**

## **3 Major Island Groups**

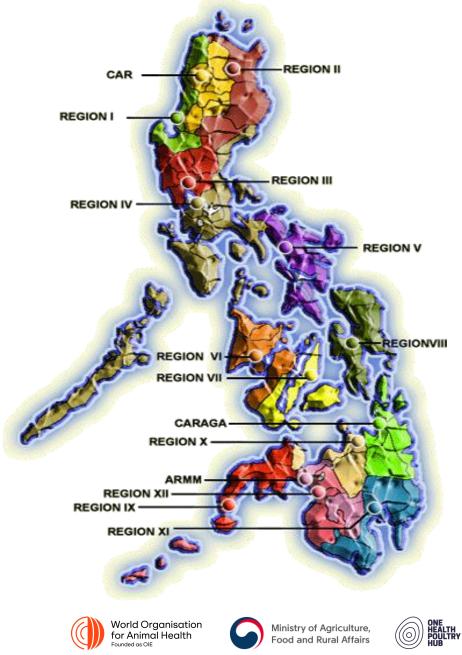
- Luzon (North)
- Visayas (Central)
- Mindanao (South)

## **16 Administrative Regions**

No. of Provinces	81
No. of Cities	146
No of Municipalities	1,488
No. of Barangays	42,046

Source: Philippine Atlas, 2022

Overview of the Philippine Poultry Industry



## According to the Philippine Statistics Authority (PSA) Report

- The value of the Philippine Poultry production at current prices is **Php 68.76 Billion** based on the PSA Chicken Situation Report.
- Inventory as of 31 March 2024 Poultry inventory:



### Chicken: 207.28M birds

Source: PSA Livestock and Poultry Quarterly Bulletin



#### Ducks: 14.43M birds Source: PSA Livestock and Poultry Quarterly Bulletin

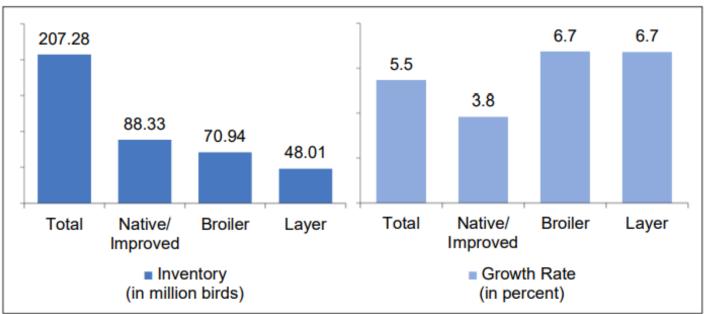


Ministry of Agriculture Food and Rural Affairs



### Overview of the Philippine Poultry Industry

### Inventory and Annual Growth Rate of Chicken by Type, as of 31 March 2024



<sup>p</sup> – preliminary

Sources: Philippine Statistics Authority, BLPS and CLPS

The poultry inventory is mainly accounted to native and improved chicken production (42.6%) followed by broiler chicken (34.2%) and layer chicken (23.2%).

Overview of the Philippine Poultry Industry

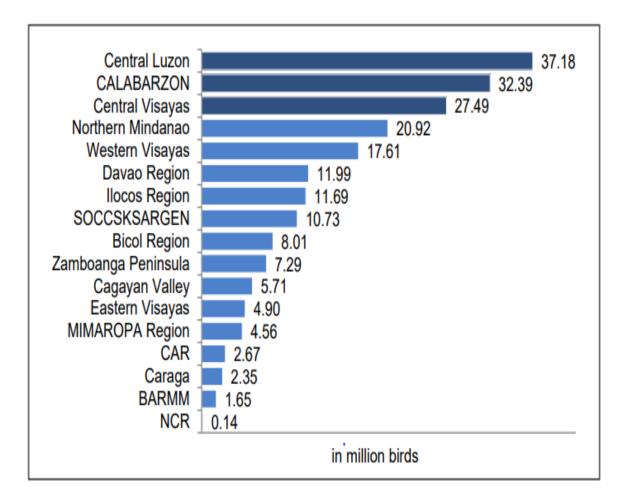




Ministry of Agriculture, Food and Rural Affairs



### Distribution of Total Chicken Inventory by Region as of 31 March 2024



Native/improved chicken highest inventory from Western Visayas 12.88 million birds

Broiler Chicken production highest in Central Luzon at 20.65 million birds

Layer Chicken production highest in CALABARZON at 16.46 million birds



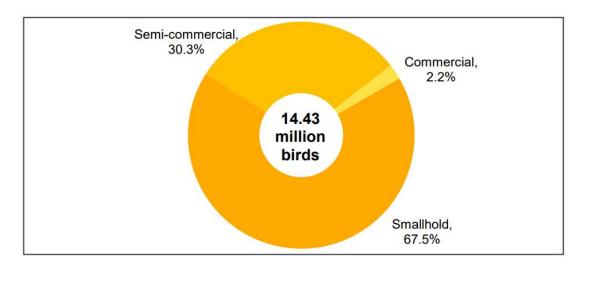


Ministry of Agriculture, Food and Rural Affairs

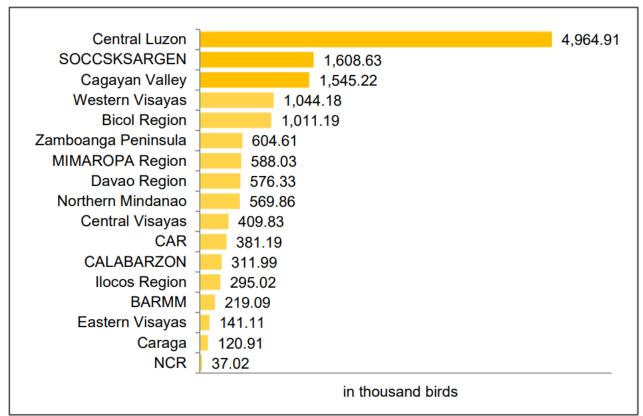


### Overview of the Philippine Poultry Industry

#### Distribution of Duck Inventory by Classification, as of 31 March 2024



### Distribution of Total Duck Inventory by Region as of 31 March 2024



Central Luzon recorded the highest duck population of 4.96 million birds

Overview of the Philippine Poultry Industry

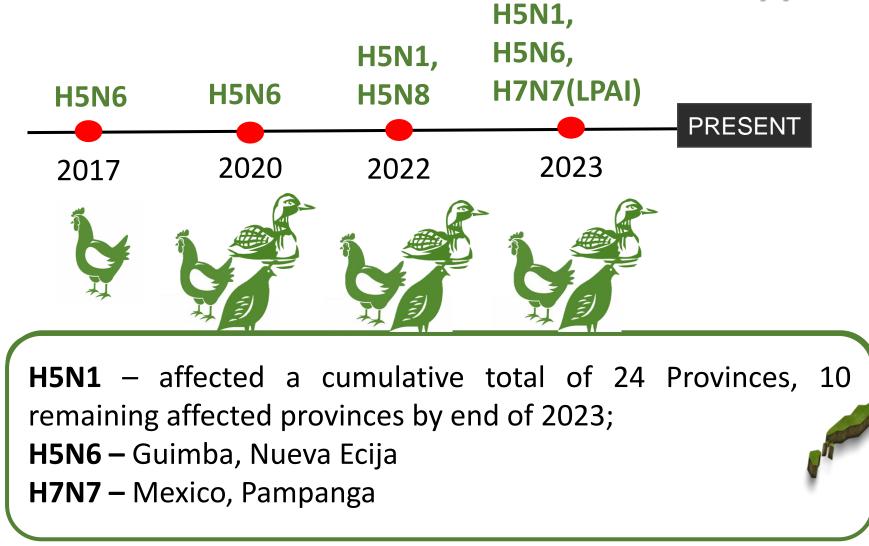


Ministry of Agriculture, Food and Rural Affairs



Regional workshop on avian disease prevention and control in Asia and the Pacific 2024, Seoul, ROK, 27 – 29 August 2024

**TIMELINE of HPAI Outbreaks in the Philippines** 



Summary of the HPAI Cases in the Philippines

## **AVIAN INFLUENZA**



**SPOT MAP OF AVIAN INFLUENZA CASES** as of 16 August 2024

**STATUS:** 

● On-going△ Resolved

#### Avian Influenza Status Update as of 16 August 2024

Number of Remaining Affected Areas as of 16 August 2024         REGION       PROVINCE       MUNICIPALITY       BARANGA         Areas with On-going Cases as of 16 August 2024       134         REGION       PROVINCE       CITY/MUNICIPALITY       BARANGA         REGION       PROVINCE       CITY/MUNICIPALITY       BARANGA         REGION       PROVINCE       CITY/MUNICIPALITY       BARANGA         REGION       PROVINCE       CITY/MUNICIPALITY       SPECIES AFFECTED       No. OF FARMER/S AFFECTED       AVIAN INI SUBT         III       Pampanga       Mexico       Quail, Duck, Chicken       2       H51         III       Pampanga       Mexico       Quail, Duck, Chicken       2       H51         III       Pampanga       Mexico       Quail, Duck, Chicken       1       H51         III       Pampanga       Mexico       Quail, Duck, Chicken       1       H51         III       Nueva Ecija       San Antonio       Free-range Chicken       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         III       Region       PROVINCE       MUNICIPALITY       San Antonio       Free-range Chicken       1       H51 </th <th>ŀ</th>	ŀ	
6953134Areas with On-going Cases as of 16 August 2024REGIONPROVINCECITY/MUNICIPALITYBARANGA2444RegionPROVINCECITY/MUNICIPALITYBARANGARegionPROVINCECITY/MUNICIPALITYSPECIES AFFECTEDNo. OF FARMER/S AFFECTEDAVIAN INI SUBTIIIPampangaMexicoQuail, Duck, Chicken2H51IIIPampangaMexicoQuail, Duck, Chicken2H51IIINueva EcijaSan AntonioFree-range Chicken1H51IIITarlacCity of TarlacDuck, Chicken, Turkey1H51IIIITarlacKaranaH51IIIITarlacH51IIIITarlacH51IIIITarlacH51IIIITarlacH51IIIIH51IIIIH51IIIIH51IIIIH51IIIIH51IIIIH51IIIIH51III <td>ŀ</td>	ŀ	
Areas with On-going Cases as of 16 August 2024         REGION       PROVINCE       CITY/MUNICIPALITY       BARANGA         2       4       4       4       4         REGION       PROVINCE       CITY/MUNICIPALITY       SPECIES AFFECTED       No. OF FARMER/S AFFECTED       AVIAN INFORMATION         III       Pampanga       Mexico       Quail, Duck, Chicken       2       H51         III       Pampanga       Mexico       Quail, Duck, Chicken       2       H51         III       Pampanga       Mexico       Quail, Duck, Chicken       1       H51         III       Nueva Ecija       San Antonio       Free-range Chicken       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         I		
Areas with On-going Cases as of 16 August 2024         REGION       PROVINCE       CITY/MUNICIPALITY       BARANGA         2       4       4       4       4         REGION       PROVINCE       CITY/MUNICIPALITY       SPECIES AFFECTED       NO. OF FARMER/S AFFECTED       AVIAN IN SUBT         III       Pampanga       Mexico       Quail, Duck, Chicken       2       H51         III       Pampanga       Mexico       Quail, Duck, Chicken       2       H51         III       Nueva Ecija       San Antonio       Free-range Chicken       1       H51         III       Nueva Ecija       San Antonio       Free-range Chicken, Turkey       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         H51       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         H51       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         H51       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         H51       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51		
Areas with On-going Cases as of 16 August 2024         REGION       PROVINCE       CITY/MUNICIPALITY       BARANGA         2       4       4       4       4         REGION       PROVINCE       CITY/MUNICIPALITY       SPECIES AFFECTED       No. OF FARMER/S AFFECTED       AVIAN INFORMATION         III       Pampanga       Mexico       Quail, Duck, Chicken       2       H51         III       Pampanga       Mexico       Quail, Duck, Chicken       2       H51         III       Pampanga       Mexico       Quail, Duck, Chicken       1       H51         III       Nueva Ecija       San Antonio       Free-range Chicken       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         I		
REGION       PROVINCE       CITY/MUNICIPALITY       BARANGA         2       4       4       4         REGION       PROVINCE       CITY/MUNICIPALITY       BARANGA         REGION       PROVINCE       CITY/MUNICIPALITY       AVIAN INTRACT         III       Pampanga       Mexico       Quail, Duck, Chicken       2       H51         III       Pampanga       Mexico       Quail, Duck, Chicken       2       H51         III       Nueva Ecija       San Antonio       Free-range Chicken       1       H51         III       Nueva Ecija       San Antonio       Free-range Chicken, Turkey       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         III       Tarlac       City of Tarlac       Duck, Chicken, Turkey       1       H51         III       Areas that Recovered Freedom from Avian Influenza       I       I       I       I       I       I       I       I       I       I       I	Y	
ZAAREGIONPROVINCECITY/MUNICIPALITYSPECIES AFFECTEDNO. OF FARMER/S AFFECTEDAVIAN INI SUBTIIIPampangaMexicoQuail, Duck, Chicken2H51CARBenguetLa TrinidadChicken Layer Culls1H51IIINueva EcijaSan AntonioFree-range Chicken1H51IIITarlacCity of TarlacDuck, Chicken, Turkey1H51HS1HS1HS1HS1Chicken Layer CullsIIITarlacCity of TarlacDuck, Chicken, Turkey1HS1 <th c<="" td=""><td>Y</td></th>	<td>Y</td>	Y
REGIONPROVINCECITY/ MUNICIPALITYSPECIES AFFECTEDNO. OF FARMER/S AFFECTEDAVIAN INI SUBTIIIPampangaMexicoQuail, Duck, Chicken2H51CARBenguetLa TrinidadChicken Layer Culls1H51IIINueva EcijaSan AntonioFree-range Chicken1H51IIITarlacCity of TarlacDuck, Chicken, Turkey1H51HTTAreas that Recovered Freedom from Avian Influenza		
REGIONPROVINCECITY/ MUNICIPALITYSPECIES AFFECTEDNO. OF FARMER/S AFFECTEDAVIAN INI SUBTIIIPampangaMexicoQuail, Duck, Chicken2H51CARBenguetLa TrinidadChicken Layer Culls1H51IIINueva EcijaSan AntonioFree-range Chicken1H51IIITarlacCity of TarlacDuck, Chicken, Turkey1H51Areas that Recovered Freedom from Avian Influenza		
RegionPROVINCECHTY/MONICIPALITYSPECIES AFFECTEDAFFECTEDSUBTIIIPampangaMexicoQuail, Duck, Chicken2H51CARBenguetLa TrinidadChicken Layer Culls1H51IIINueva EcijaSan AntonioFree-range Chicken1H51IIITarlacCity of TarlacDuck, Chicken, Turkey1H51Areas that Recovered Freedom from Avian Influenza		
RedionPROVINCECHTY/MUNICIPALITYSPECIES AFFECTEDAFFECTEDSUBTIIIPampangaMexicoQuail, Duck, Chicken2H51CARBenguetLa TrinidadChicken Layer Culls1H51IIINueva EcijaSan AntonioFree-range Chicken1H51IIITarlacCity of TarlacDuck, Chicken, Turkey1H51Areas that Recovered Freedom from Avian Influenza	LUFN74	
CARBenguetLa TrinidadChicken Layer Culls1H51IIINueva EcijaSan AntonioFree-range Chicken1H51IIITarlacCity of TarlacDuck, Chicken, Turkey1H51Areas that Recovered Freedom from Avian Influenza		
CARBenguetLa TrinidadChicken Layer Culls1H51IIINueva EcijaSan AntonioFree-range Chicken1H51IIITarlacCity of TarlacDuck, Chicken, Turkey1H51Areas that Recovered Freedom from Avian Influenza	V1	
IIINueva EcijaSan AntonioFree-range Chicken1H51IIITarlacCity of TarlacDuck, Chicken, Turkey1H51Areas that Recovered Freedom from Avian Influenza	J1	
Areas that Recovered Freedom from Avian Influenza	V1	
	11	
V Camarines Sur Baao, Balatan, Bula, Goa, Libmanan, Nabua, Sipocot DA MC No. 30 Se	eries of 2022	
XI Davao del Sur Magsaysay DA MC No. 30 Se	eries of 2022	
IV-A Rizal Rodriguez DA MC No. 1, Se		
XIISouth CotabatoSanto Niño, TantanganDA MC No. 10, S		
I Ilocos Sur Santa Maria DA MC No. 18, S		
IV-A Batangas Ibaan DA MC No. 23, S		
VI Capiz Roxas City DA MC No. 27, S		
IV-A Quezon Candelaria, Tiaong DA MC No. 38, S		
III Aurora Maria Aurora DA MC No. 39, S		
I Ilocos Norte Laoag City, Bacarra, Sarat, Pasuquin DA MC No. 45, S		
I Pangasinan San Carlos City DA MC No. 46, S		
XIICotabatoMlang, Tulunan, CarmenDA MC No. 51, S		
II Isabela Cauayan City, Alicia, Gamu DA MC No. 55, S		
BARMM Maguindanao del Sur Ampatuan DA MC No. 56, S	riccof 2022	
CAR Benguet <sup>a</sup> Atok, Buguias, Itogon, <i>La Trinidad<sup>b</sup></i> , Sablan, Tublay Baguio City DA MC No. 3, Se	2025	
XIISultan KudaratPresident Quirino, Tacurong City, Lutayan, Lebak, IsulanDA MC No. 11, S	ries of 2024	
IIIBulacanBaliuag, San Rafael, San Ildefonso, San Miguel, Santa Maria, PulilanDA MC No. 14, S	ries of 2024 eries of 2024	
Total Recovered Areas 16 46	ries of 2024 eries of 2024	

a and b Due to the recent HPAI H5N1 case, recorded in a live bird market located in the Municipality of La Trinidad, Benguet, the Avian Influenza-Free Status of the Province of Benguet, issued by virtue of DA MC No. 3, Series of 2024, is hereby revoked.

No. of Mortalities = 429, 955

No. of Culled = 2,034,260

## **IPHAI H5N1 Cases recorded in 2024**

REGION	PROVINCE	MUNICIPALITIES	FARM/S AFFECTED	STATUS
		Candaba	Duck (3); Quail (3) <b>= 6</b>	✤ ALL cases were RESOLVED
	Pampanga	San Simon	Quail (2); Mixed (4) and Duck (1) = 7	ALL cases were RESOLVED
		Mexico	Duck (1); Mixed (1) = <b>2</b>	2 cases ONGOING, pending negative laboratory result of the surveillance within 1-km radius
III		Santa Rosa	Quail (1) and Gamefowl (1) = $2$	ALL cases were RESOLVED
	Nueva Ecija	San Antonio	Free-range Chicken (1) = 1	<ul> <li>ONGOING, pending negative laboratory result of the surveillance within 1-km radius</li> </ul>
		Talavera	Duck (2) = <b>2</b>	ALL cases were RESOLVED
	Bataan	Hermosa	Quail (1) =1	* RESOLVED
	Tarlac Tarlac City		Mixed (1) = <b>1</b>	<ul> <li>ONGOING, pending negative laboratory result of the surveillance within 1-km radius</li> </ul>
CAD	Kalinga	Tabuk City	Native Chicken (1) =1	* RESOLVED
CAR	Benguet	La Trinidad	Layer Chicken Culls (1) = 1	<ul> <li>ONGOING, pending negative laboratory result of the surveillance within 1-km radius</li> </ul>
VIII	Leyte	Kananga	Broiler Breeder Chicken (1) = 1	* RESOLVED
			25	







\*Cases are considered RESOLVED upon completion of depopulation, initial cleaning and disinfection and surveillance within 1-km zone

### **LPAI Detected in 2024**

REGION	PROVINCE	MUNICIPALITIES	FARM/S AFFECTED	DATE OF CONFIRMATION	SUBTYPE*
III	Bulacan	San Rafael	Commercial Duck	8 February 2024	H9N2
X	Bukidnon	Lantapan	Commercial Broiler Breeder Chicken	8 March 2024	N8
V	Camarines Sur	Cabusao	Backyard Duck	25 March 2024	N1
III	Bataan	Hermosa	Backyard Duck	18 June 2024	H9N2
III	Pampanga	San Luis	Commercial Duck	27 June 2024	N8

\*ALL cases were NEGATIVE for Subtype H5 and H7





**25** bai.gov.ph/stakeholders?Rep=Avian%20Influenza



 ✓ Weekly Avian Influenza Data Dashboard are being uploaded through the BAI Website <u>https://www.bai.gov.ph/stakehol</u> <u>ders?Rep=Avian%20Influenza</u>

AVIAN INFLUENZA Avian Influenza Status Update as of 19 April 2024							
		Number of Remain				24	
	REGION	PROVIN	CE	MUNICIP			BARANGAY
	6	9		56	5		135
		Areas with Or	-going Ca	ses as of 19 A	pril 2024		
	REGION	PROVIN		CITY/MUNI			BARANGAY
	2	3		4			4
EGION	PROVINCE	CITY/ MUNICIPALITY	SPECI	ES AFFECTED	NO. OF FARM		AVIAN INFLUENZA SUBTYPE
ш	Pampanga	Candaba		Quail	1		H5N1
ш	Pampanga	San Simon		ive chicken, Duck	2		H5N1
ш	Nueva Ecija	Santa Rosa		l, Gamefowl	2		H5N1
VIII	Leyte	Kananga		Breeder Chicken	1		H5N1
_	A	reas that Recover	rea Free	dom from A	vian influe	<u>inza</u>	
RI	GION	PROVINCE	MUNICIPALITY		1		
	v	Camarines Sur	Baao, Balatan	, Bula, Goa, Libmanan,	Nabua, Sipocot		MC No. 30 Series of 2022
	XI	Davao del Sur	Magsaysay			MC No. 30 Series of 2022	
	IV-A	Rizal	Rodriguez				MC No. 1, Series of 2023
	XII	South Cotabato	Santo Niño, Tantangan Santa Maria		n		MC No. 10, Series of 2023
	1	llocos Sur				MC No. 18, Series of 2023	
	IV-A	Batangas	Ibaan				MC No. 23, Series of 2023
	VI IV-A	Capiz	Rosas City			MC No. 27, Series of 2023 MC No. 38, Series of 2023	
	IV-A III	Quezon Aurora		Candelaria, Tiaong Maria Aurora			MC No. 38, Series of 2023 MC No. 39, Series of 2023
	1	Ilocos Norte	Lacar	City, Bacarra, Sarat, Pi	esuauin		MC No. 45. Series of 2023
	E	Pangasinan		San Carlos City		DA MC No. 46, Serie	
XII		Cotabato		Mlang, Tulunan, Carme			MC No. 51, Series of 2023
1		lsabela		auayan City, Alicia, Ga		DA MC No. 55. Series o	
72		Maguindanao del Sur		Ampatuan		DA	MC No. 56, Series of 2023
CAR		Benguet	Atok, Buguia	s, Itogon, La Trinidad, Baguio City	Sablan, Tublay,		
XII		Sultan Kudarat	President Quirino, Tacurong City. Lutayan, Lebak. Isulan		Lebak. DA MC No. 11, Series o		
Total Rec	overed Areas	16		41			





#### CSIRO

#### Australian Centre for Disease Preparedness (ACDP)

5 Portarlington Road, Geelong VIC 3220 Postal Address: Private Bag 24 Geelong, VIC 3220 Australia acdp.csiro.au ABN 41 687 119 230 Diagnostic Testing Report

Bureau of Animal Industry Attn: Dr Edna Felipe Department of Agriculture Republic of the Philippines Visayas Avenue DILIMAN QUEZON CITY PHILIPPINES

Sender: Dr Edna Felipe

Bureau of Animal Industry

Owner: Bureau of Animal Industry - Dr Edna Philipe Visayas Ave, Diliman

**Ouezon City PHILIPPINES** 

Examination Requested: AI/NDV testing

Sample Information provided: Swabs, tissues, saliva, feed for AI and NDV characterisation.



Accredited for compliance with ISO/IEC 17025 - Testing

**Final Report** 

CSIRC

SAN: 22-01193

Collection Date:	Various dates
Received at AAHL:	22-Mar-2022
Report Date:	01-Nov-2022
Report Version:	22-01193-F-V1
No. Pages:	18

Ref:

#### <u>Table 1</u>. 22-01193 H5 positive samples subjected to whole genome sequencing and analysis.

Location	ACDP SAN#	Host	Submitter Lab Id	Subtype	Cleavage site	Clade <sup>#</sup>
Barangka, Baliuag, Bulacan	22-01193- 0075	Chicken	22-0074-5	H5N1	(PLRERRRKR*GLF)	2.3.4.4b
Dalayap, Candaba, Pampanga	22-01193- 0080	Quail	22-0161-3	H5N1	(PLRERRRKR*GLF)	2.3.4.4b
San Antonio, Mexico,	22-01193- 0091	Quail	22-0349-2	H5N1	(PLRERRRKR*GLF)	2.3.4.4b
Pampanga	22-01193- 0096	Quail	22-0349-15	H5N1	(PLRERRRKR*GLF)	n.d.
Sta. Catalina Minalin, Pampanga	22-01193- 0118	Duck	22-0524-1	H5N1	(PLRERRRKR*GLF)	2.3.4.4b
TagtagumbaoC uy apo Nueva Ecija	22-01193- 0122	Quail	22-0544-2	H5N1	(PLRERRRKR*GLF)	2.3.4.4b
San Felipe Matanda Aliaga, Nueva Ecija	22-01193- 0151	Chicken	22-0733-1	H5N1	(PLRERRRKR*GLF)	2.3.4.4b
BarasTacurong City Sultan Kudarat	22-01193- 0164	Chicken	22-0739-3	H5N1	(PLRERRRKR*GLF)	2.3.4.4b

#### **CSIRO**

#### Australian Centre for Disease Preparedness (ACDP)

Department of Agriculture Republic of the Philippines

5 Portarlington Road, Geelong VIC 3220 Postal Address: Private Bag 24 Geelong, VIC 3220 Australia acdp.csiro.au ABN 41 687 119 230 Diagnostic Testing Report

DILIMAN QUEZON CITY PHILIPPINES

**Bureau of Animal Industry** 

Attn: Dr Edna Felipe

**Visayas Avenue** 



Accredited for compliance with ISO/IEC 17025 - Testing. Samples are tested as received and the results provided in this report relate only to the items tested.



Tel: +61 3 5227 5000

#### **Interim Report**

SAN: 23-03668

Collection Date:	Jun-2022-May-2023
Received at AAHL:	18-Sep-2023
	24-Jan-2024
<b>Report Version:</b>	23-03668-I-V2
No. Pages:	6

-				no. rayes. 0
Sender:	: Dr Edna Felipe Bureau of Animal Industry		Ref: BAI-ECX2023	
Owner:	Edna Felipe			
	Bureau of Animal Indu	istry		
	Quezon City PHILIP	PINES		
Examina	tion Requested:	Avian Influenza Testing		
Sample Information provided: 26 x Avian Samples		26 x Avian Samples		

LOCATION	ACDP SAN no.	Host	Submitter Lab Id	Cleavage site	Subtype	Clade <sup>#</sup>
Mexico, Pampanga	23-03668-0001	Duck	23-3154 P1	PEIPKGR*GLF	H7N7	
Lumban, Laguna	23-03668-0002	Duck	23-2750 P1	PLREKRRKR*GLF	H5N1	2.3.4.4b
Rizal, Kalinga	23-03668-0003	Chicken	23-2710 P2	PLRERRRKR*GLF	H5N1	2.3.4.4b
Pilar, Bataan	23-03668-0004	Duck	23-2424 P1	PLREKRRKR*GLF	H5N1	2.3.4.4b
Tiaong, Quezon	23-03668-0006	Duck	23-2204 P22 M- trachea M-lung	PLREKRRKR*GLF	H5N1	2.3.4.4b
San Simon, Pampanga	23-03668-0009	Quail	23-1789 P5	PLREKRRKR*GLF	H5N1	2.3.4.4b
Pulilan, Bulacan	23-03668-0010	Duck	23-1125 P5	PLREKRRKR*GLF	H5N1	2.3.4.4b
Solana, Cagayan	23-03668-0011	Chicken	23-0429 P2	PLRERRRKR*GLF	H5N1	2.3.4.4b
Santa Maria, Bulacan	23-03668-0012	Chicken	23-0424 P7, C1- brain	PLRERRRKR*GLF	H5N1	2.3.4.4b
San Ildefonso, Bulacan	23-03668-0014	Quail	22-4488 P5	PLRERRRKR*GLF	H5N1	2.3.4.4b
Gamu, Isabela	23-03668-0015	Chicken	22-4219 P2	PLRERRRKR*GLF	H5N1	2.3.4.4b
Laog, llocos Norte	23-03668-0016	Chicken	22-4081 P1	PLRERRRKR*GLF	H5N1	2.3.4.4b
Santa Maria, Ilocos Sur	23-03668-0017	Chicken	22-4080 P1	PLRERRRKR*GLF	H5N1	2.3.4.4b
Maria Aurora, Aurora	23-03668-0018	Chicken	22-4053 P1	n.r.	H5N1	n.r.
Gapan, Nueva Ecija	23-03668-0020	Duck	22-3028 P1	PLRERRRKR*GLF	H5N1	2.3.4.4b
Magalang, Pampanga	23-03668-0021	Quail	22-2910 P1	PLRERRRKR*GLF	H5N1	2.3.4.4b
Atok, Benguet	23-03668-0022	Chicken	22-2823 P1	PLRERRRKR*GLF	H5N1	2.3.4.4b
San Carlos, Pangasinan	23-03668-0023	Chicken	22-2627 P4	PLRERRRKR*GLF	H5N1	2.3.4.4b
Lebak, Sultan Kudarat	23-03668-0024	Chicken	22-2234 P1	PLRERRRKR*GLF	H5N1	2.3.4.4b

<sup>#</sup> full-length H5-HA sequence obtained

.

n.r.= no result

#### Avian Influenza Protection Program

#### AVIAN INFLUENZA PROTECTION PROGRAM MANUAL OF PROCEDURES (2020)





Influenza

Protection



Department of Agriculture -Bureau of Animal Industry PHILIPPINES





Adopted on 20 April 2005 thru Joint DA-DOH Administrative Order No. 001 PH Response to the Global Pandemic Threat

#### **Avian Influenza Protection Program**

Ρ

R E V

E N

0

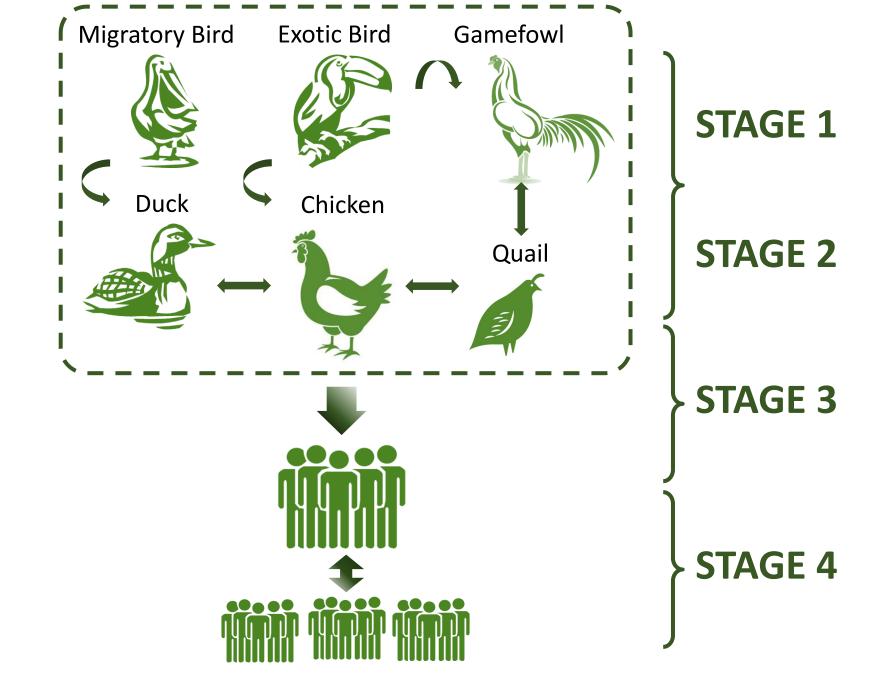
Ν

P R E P A R E D

Ν

E S S





### AVIAN INFLUENZA PROTECTION PROGRAM

MANUAL OF PROCEDURES (2020)



Department of Agriculture -Bureau of Animal Industry PHILIPPINES



Cross-border Management

#### Biosecurity and IEC

#### **Diagnostic Capability**

Disease Monitoring and Surveillance

Culling and Disposal



Regulation and Management of Local Transport of Live Poultry and Non-poultry and Poultry Products and By-Products

**Recovery and Repopulation** 

# QUARANTINE MEASURES

**Cross-border Management** 

## **65 countries**

with on-going temporary bans as of 12 August 2024

## LGU COORDINATION AND AWARENESS CAMPAIGN

REDMI NOTE 10 | GRBB16

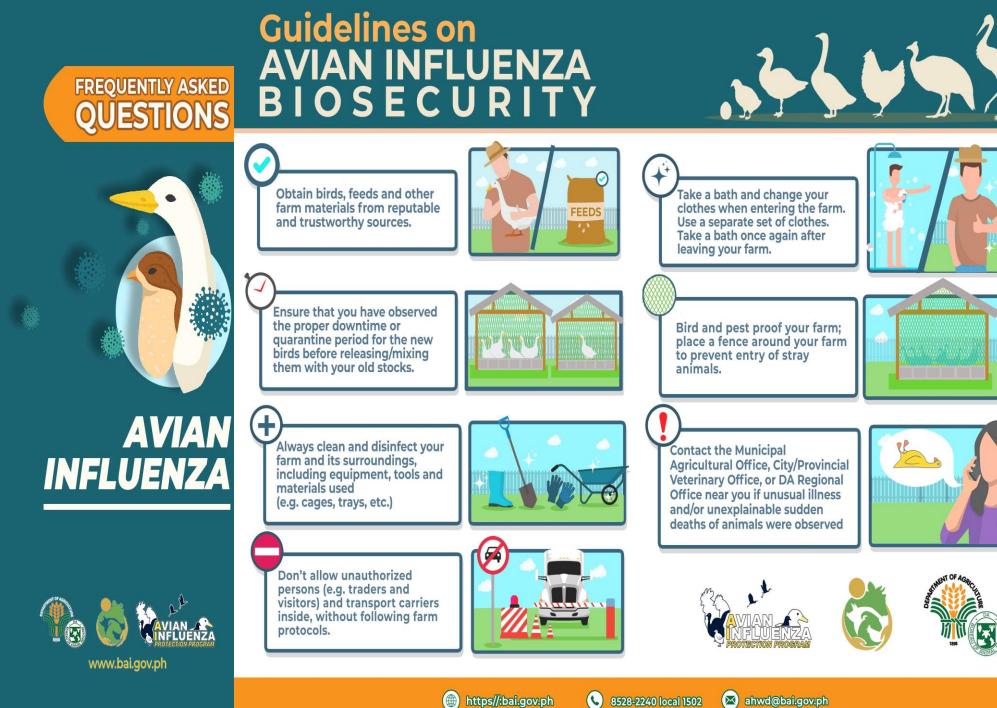
### Anong ginagawa ng DA-BAI upang makontrol ang AI?

Ang DA-BAI ay nakikipag-ugnayan at nakikipagtulungan sa mga DA - Regional Field Office (DA-RFO) at Lokal na Pamahalaan ng mga apektadong syudad at munisipyo. Nagsasagawa ng depopulation, quarantine, surveillance at animal movement control sa mga lugar na nagpositibo sa Al Virus.

#### Para sa mga katanungan at iba pang impormasyon:

- https//:bai.gov.ph 🊱 (8)528-2240 local 1501-1506 📞 ahwd@bai.gov.ph 🖂
- www.facebook.com/AvianFluPH





# **CAPACITY BUILDING**

# **CULLING AND DISPOSAL**

## DISEASE INVESTIGATION AND SURVEILLANCE

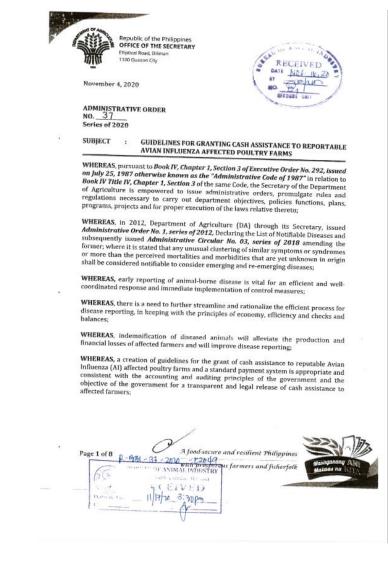
### REGULATION AND MANAGEMENT OF LOCAL TRANSPORT OF LIVE POULTRY AND NON-POULTRY AND POULTRY PRODUCTS AND BY-PRODUCTS



DA MC No. 43, Series of 2022: Updated Guidelines on the Movement of Live Poultry and Non-Poultry and Poultry Products and By-Products during the Avian Influenza Outbreak

- □ Issued last December 09, 2022
- □ Succeeded DA MC 27 series of 2022
- Geographical basis shifted from REGIONAL to CITY/MUNICIPAL level
- Adjusted period of validity for transport documents (CFS-AI) of different commodities

## CASH ASSISTANCE TO FARMERS AFFECTED BY HPAI OUTBREAK



**DA Administrative Order No. 43, Series of 2020:** "Guidelines for Granting Cash Assistance to Reportable Avian Influenza Affected Poultry Farms"

Poultry Species	Amount (Ph Peso) per head	Amount (US Dollar) per head
Layers/ducks/breeders (age:10wks and above only)	100	1.77
Broiler (age: 2wks and above only)	60	1.06
Gamefowl	150	2.66
Qual/Pigeons	15	0.27

To date, a total of **Php 146,740,260 (2.6Million USD)** were provided by the government as indemnification to farmers who were affected by Avian Influenza since the start of HPAI H5N1 Outbreak in 2022.



Ministry of Agriculture, Food and Rural Affairs



## **AI Vaccination in the Philippines**



MEMORANDUM CIRCULAR No: <u>49</u> Series of 2023

#### SUBJECT : GUIDELINES ON TARGETED VACCINATION AS A COMPLEMENTARY TOOL FOR THE CONTROL OF AVIAN INFLUENZA

WHEREAS, High Pathogenicity Avian Influenza (HPAI) is a highly contagious viral disease that can cause severe clinical signs and possible high mortality rates to both domestic and wild birds, and has been also recorded to affect humans. To date, HPAI has been detected in more than fifty (50) countries and territories in the world and has resulted in the death and mass slaughter of more than three hundred sixteen (316) million poultry worldwide;

WHEREAS, as of 31 July 2023 the provinces with confirmed cases of Avian Influenza and have not yet recovered their Al-free status are the provinces of Bulacan, Pampanga, Nueva Ecija, Tariac, Laguna, Sultan Kudarat, Benguet, North Cotabato, Maguindanao, Isabela, Pangasinan, Kalinga, Aurora, Ilocos Norte, Cagayan, Quezon and Bataan;

WHEREAS, the first case of HPAI H5N1 in the province of Bulacan affecting a commercial duck farm was detected last January 2022 and has since been continuously affecting the Philippine poultry industry;

WHEREAS, reported cases of HPAI to date have affected avian species such as ducks, chickens (breeders, layers, broilers, gamefowls, free range and native), quails, pigeons, geese, pet birds and turkeys;

WHEREAS, the outbreak of HPAI in the country has been causing significant economic impact on the poultry industry due to high mortalities, large-scale culling of the infected birds as well as the impediment of local and international trade, and movement restrictions on poultry products and by-products. Such have caused disruptions in the supply chain that contributed to rising cost of poultry products and by-products;

WHEREAS, under Section 3 of Act 3639, the Bureau of Animal Industry shall promote the development of the livestock industry through the control and eradication of dangerous communicable diseases of domestic animals;

WHEREAS, in order to effectively control HPAI, a combination of proactive efforts must be continuously implemented such as a strong surveillance and monitoring program, active participative reporting of stakeholders in cases of suspected disease outbreaks, and adherence to strict biosecurity protocols. Vaccination is also a valuable complementary tool to control HPAI outbreaks through designing a strategic vaccination program using quality, effective and safe vaccines in accordance with the World Organisation for Animal Health (WOAH) Terrestrial Code;



- The Bureau of Animal Industry (BAI) had started considering the use of AI vaccines when it had received a position from the Philippine College of Poultry Practitioners (PCPP) last 10 October2022. In the said position, they had reiterated that vaccination could be employed as a complement to existing prevention and control measures against the pathogen.
- A public consultation on the matter was held last 1 February 2023, which bore several workshops and engagements with concerned stakeholders, then culminating into the signed Department of Agriculture (DA) Memorandum Circular (MC) No. 49, Series of 2023 entitled, "Guidelines on Targeted Vaccination as a Complementary Tool for the Control of Avian Influenza."
- To date, the BAI has assisted in the assessment of the local safety and efficacy trial protocols for five (5) AI vaccines and endorsed these five (5) vaccines and their respective importers to the Philippine Food and Drug Administration (FDA) for the issuance of relevant import permits/clearances.







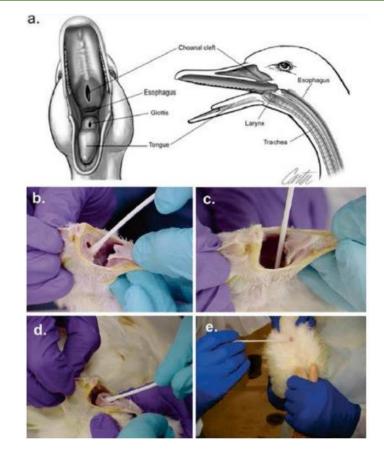
## Surveillance

		Al High Risk Areas in the Philippines	<ul> <li>Bi-annual surveillance (before and after migration period i.e. September &amp; March)</li> <li>min. 6 barangay; min. of 6 farms; min. of 5 paired serum and OP/Cloacal swab</li> </ul>
Stage 1 (Peace Time) –		Live Bird Markets	<ul> <li>Sample collection in identified LBMs in the Philippines</li> <li>A minimum of thirty (30) blood and oropharyngeal swab samples shall be collected per market</li> </ul>
		Unusual Poultry Mortalities	<ul> <li>Unusual poultry mortalities in the locality captured through farmers' report, laboratory report and event-based surveillance shall be included as a trigger for active surveillance</li> </ul>
		Local Transport Requirement	<ul> <li>Collection and testing of sample for AI as a requirement prior to issuance of Animal Disease Monitoring Compliance Certificate and/or Certificate of Free Status on Avian Influenza (c/o BAI-AHWD) which is one of the requirement prior to issuance of Shipping permit (c/o BAI- NVQSD/RVQS)</li> </ul>
Stage 2 (During Outbreak)	-	Within 1-km and 7-km Zones	<ul> <li>Targeted surveillance among poultry farms within the 1-km and 7-km zone surrounding an affected poultry facility</li> </ul>
			for Animal Health

Source: AIPP-MOP, 2020

## What are the samples to be collected?





#### **Oropharyngeal and/or cloacal swab**



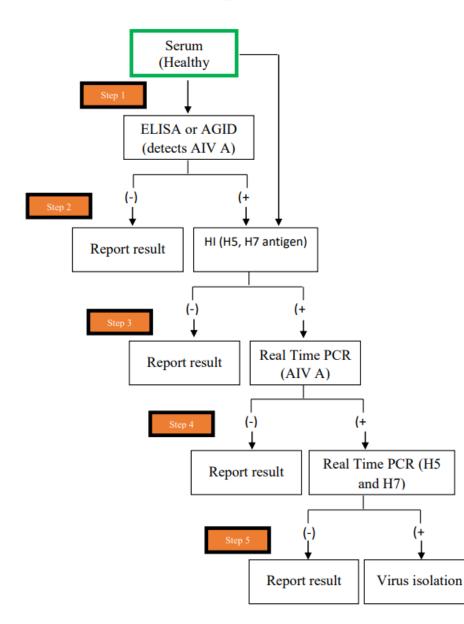


Ministry of Agriculture, Food and Rural Affairs



**Blood Samples** 

#### Avian Influenza Surveillance Laboratory Algorithm



AI Laboratory Algorithm

(Surveillance in apparently healthy animals)

- Regular/Bi-annual Surveillance
- Live bird markets
- Local transport Requirements
- Surveillance within 7-km zone

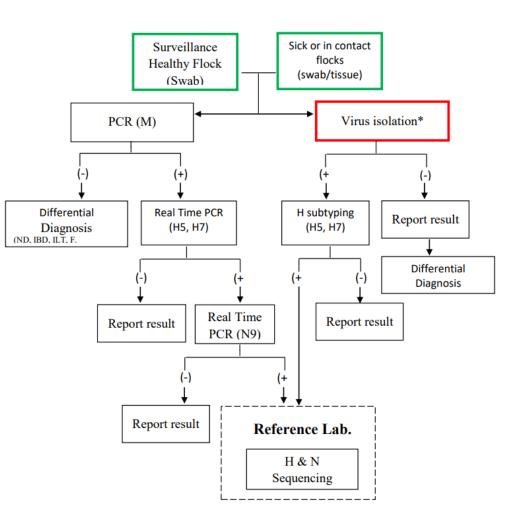




## Al Laboratory Algorithm (Case investigation)

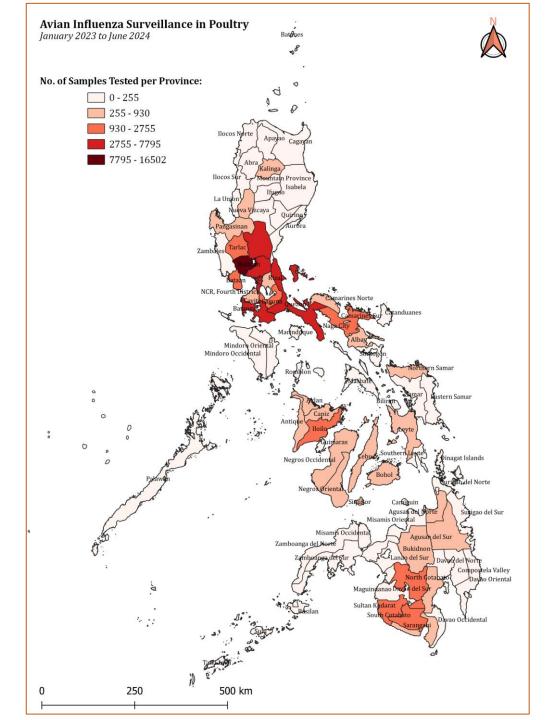
- Disease investigation: Unusual Poultry mortalities
- Surveillance within 1-km zone

#### Avian Influenza Investigation Laboratory Algorithm



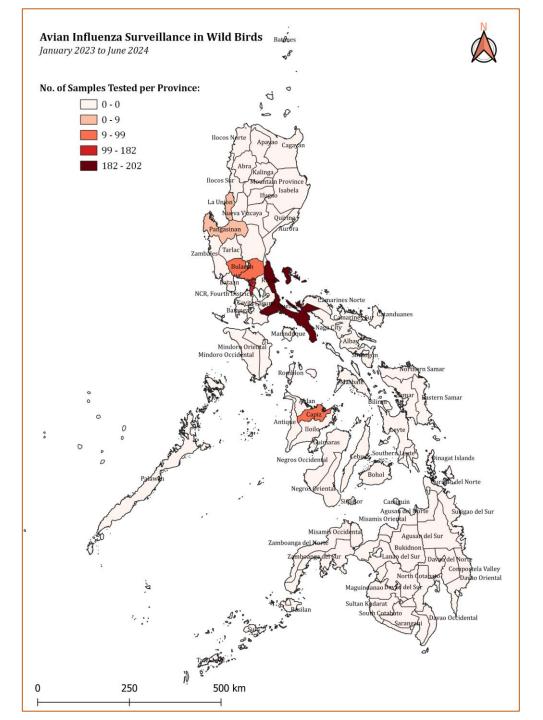






- Include samples tested at the BAI Animal Disease Diagnosis and Reference Laboratory (ADDRL) and various Regional Animal Disease Diagnostic Laboratories (RADLLs) in the country;
- A total of **70,533 samples** were collected from January 2023 to June 2024 as part of AI surveillance;
- Below is the list of Provinces where most of the samples were collected:

Province	No. of Samples Tested
Pampanga	16502
Bulacan	7795
Quezon	5409
Batangas	3720
Nueva Ecija	3403
Laguna	2755
Bataan	2051
Iloilo	2015
South Cotabato	1975
Tarlac	1881
Camarines Sur	1735
North Cotabato	1554
Sultan Kudarat	1505

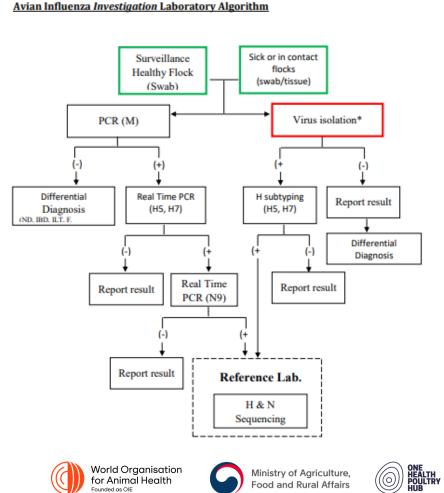


- Conduct of surveillance activities in wild birds are being headed by the Department of Natural Resources – Biodiversity Management Bureau (DENR- BMB);
- A total of 445 samples were collected in 2023 from the provinces of La Union, Pampanga and Quezon and in Metro Manila;
- While as of June 2024, a total of 129 samples were collected from the provinces of Bulacan, Capiz and Pangasinan as well as in Metro Manila

## **Laboratory Capability**

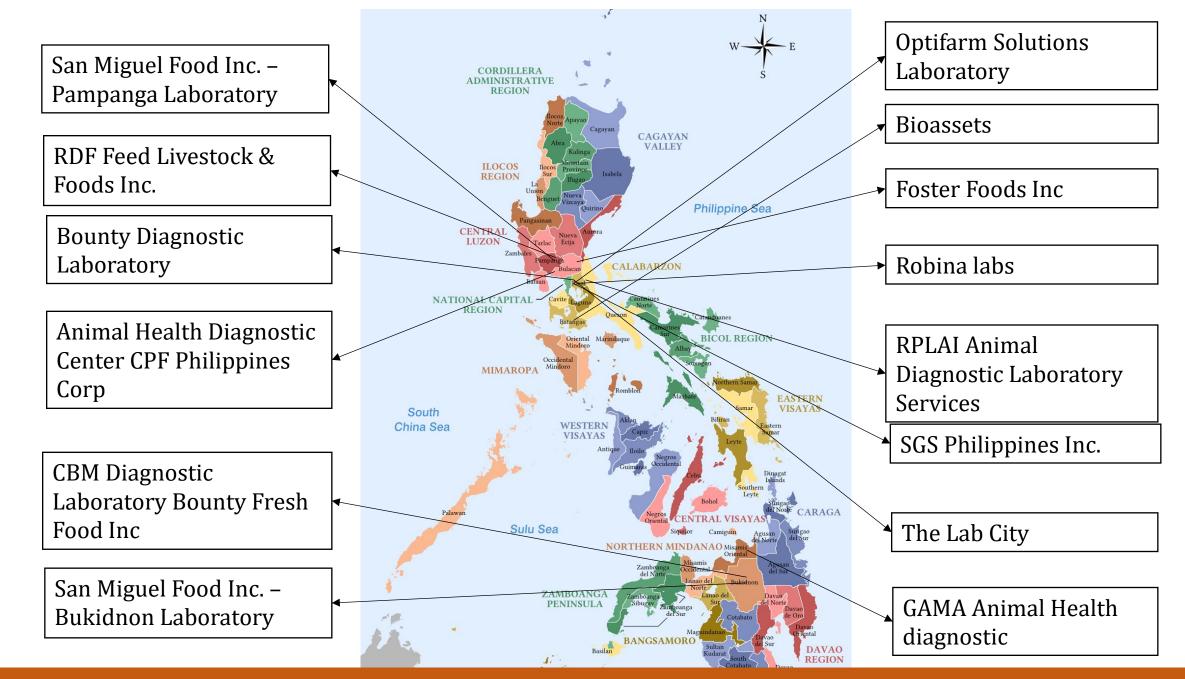
1. <u>Department of Agriculture – Bureau of Animal Industry Animal Disease Diagnosis and Reference</u> <u>Laboratory (ADDRL)</u>

Test	Specimen	Detects
Enzyme-linked Immunosorbent Assay (ELISA)	serum	antibody
Agar Gel Immunodiffusion test (AGID)	serum	antibody
Hemagglutination Inhibition (HI) test	serum	antibody
Real Time Polymerase Chain Reaction (qRT-PCR): Matrix (AIV A), H5, H7, H9, N1, N2, N6, N8, N9	swab, tissue	antigen (Southeast Asian H5 subtypes, H7 subtypes viruses (Australian), H9, N1, N2 N6, N8, N9 (China H7N9 strain)
Virus isolation in Embryonated egg	Swab, tissue	Antigen



#### **2. Regional AI Diagnostic Laboratories**

Laboratory	Test	
CAR	ELISA,	
Region I (Pangasinan)	ELISA, HI	
Region II (Tuguegarao)	ELISA, AGID, HI, Real Time PCR for Influenza Virus Type A	
Region III (Tarlac)	ELISA, AGID, HI, Real Time PCR for Influenza Virus Type A	
Region IV-A (Lipa City, Batangas)	ELISA, HI	
Region IV-B (Mindoro Oriental)	ELISA	
Region V (Albay)	ELISA, HI	
Region VI (Iloilo)	ELISA	
Region VII (Cebu)	ELISA, AGID, HI, Real Time PCR for Influenza Virus Type A	
Region VIII (Leyte)	ELISA	
Region IX (Zamboanga City)	ELISA, AGID, HI, Real Time PCR for Influenza Virus Type A	
Region X (Cagayan de Oro)	ELISA, AGID, HI, Real Time PCR for Influenza Virus Type A	
Region XI (Davao City)	ELISA, AGID, HI, Real Time PCR for Influenza Virus Type A	
Region XII (General Santos)	ELISA, AGID, HI, Real Time PCR for Influenza Virus Type A	
CARAGA (Agusan Del Norte)	ELISA	
BARMM (Cotabato City)	World Organisation for Animal Health	



(BAI MC No. 28, S. 2022) Authorization of private labs. to conduct AI testing during outbreak

## III AIPP Manual of Procedure: Review and Revision

• To update the stipulations and provisions based on the learning, experiences and best practices from the current situation -- *including adoption of targeted vaccination as a complementary strategy against Avian Influenza, guidelines for indemnification, SOPs/guidelines upon detection of LPAI, etc.* 



#### AIPP-MOP Writeshop (April and May 2024):

- With the member of AIPP Technical Working Group:
  - ✓ Philippine College of Poultry Practitioner (PCPP);
  - ✓ DA Bureau of Animal Industry (National) and DA Regional Field Office (Sub-national)
  - ✓ Department of Environment and Natural Resources (Biodiversity Management Bureau)
  - ✓ Department of Health (Epidemiology Bureau & Disease Prevention and Control Bureau)
  - ✓ Provincial, City, Municipal Veterinarian's League of the Philippines (PCMVLP)

#### Public Consultation Meeting (July 2024):

- Attended by the:
  - ✓ National and Local Veterinary Authorities;
  - ✓ Department of Health;
  - ✓ Department of Environment and Natural Resources;
  - ✓ Local Government Units;
  - ✓ Collegial Bodies (PCPP, PCMVLP, PCVPH, etc.)
  - ✓ Private Stakeholders and Poultry Groups

## Challenges and solutions in implementing national plan

	Challenges	<b>Solutions (</b> A brief description of how your country overcome the challenges <b>)</b>
*	Limited capacity of regional laboratories	<ul> <li>-Continuous capacitation of both the national and regional laboratories;</li> <li>- Collaboration with partners/institution in strengthening laboratory capacity and network</li> </ul>
*	Resistance of farmers and/or LGUs against depopulation and other disease control measures	- Increase awareness of the farmers through IEC campaign, etc.;
*	Delayed reporting of suspected cases from field personnel	- Increase rate of indemnification to encourage reporting;
*	Deviation and non-compliance to national policies/guidelines (e.g. movement regulation)	- Dialogue with local government implementers on how to better implement movement regulations to protect local poultry industry





Regional workshop on avian disease prevention and control in Asia and the Pacific 2024

# Thank you

Anthony C. Bucad, DVM Officer-in-Charge, Chief Animal Health and Welfare Division Bureau of Animal Industry DEPARTMENT OF AGRICULTURE

anthony.bucad@bai.gov.ph



World Organisation for Animal Health Founded as OIE



Ministry of Agriculture, Food and Rural Affairs



