

POST-WEBINAR REPORT

Biosecurity Threats in Agriculture: *Prevention and Mitigation of Avian Flu*



PREVENTION AND MITIGATION OF AVIAN FLU

INTRODUCTION

The Philippines Partnership for Sustainable Agriculture (PPSA) is a multi-stakeholder partnership platform initiated by Grow Asia, a regional platform for inclusive and sustainable agriculture development in Southeast Asia catalyzed by the World Economic Forum and the ASEAN Secretariat. Grow Asia's goal is to reach smallholder farmers in ASEAN through its Country Partnerships like the PPSA to improve farmer incomes, farm productivity, and environmental sustainability. PPSA was formally launched by Grow Asia together with the Philippine Department of Agriculture and through the collective efforts of various stakeholders.

Today, PPSA has brought together more than 70 organizations, reaching more than 100,000 smallholders through commodity Working Groups focused on Coconut, Coffee, Corn, Vegetables, and Fisheries as well as cross-cutting/thematic Working Group on Agri-financing and the Grow Asia Learning Alliance (GALA) program.

The GALA program aims to connect research institutes to agribusinesses in our network with the objective of increasing the application of valuable research findings in agriculture value chains, to scale their development impact. Under the GALA program, PPSA is holding its Biosecurity Threats in Agriculture Webinar Series, a four-part webinar series that runs from May to June 2020. This webinar series aims to tackle three of biosecurity threats currently present and is affecting our country's smallholder growers, namely – Fall Armyworm, African Swine Fever, and the Avian Flu.

SITUATIONER

In 2017, the Philippines recorded its first avian flu outbreak in Central Luzon which made the authorities to cull at least 600,000 birds that includes ducks and chickens. Avian Flu is a highly pathogenic virus that targets birds and poultry but can also affects humans through close contact with infected live or dead birds. In September of that year, the government announced the ending of the bird flu crisis. However, the crisis left the poultry and livestock industry to lose Php179 million a day, including the slumping of farm gate prices of the poultry commodities from Php70 per kilo to Php10-15 per kilo. In March 2020, the Department of Agriculture detected the reemergence of avian flu outbreak in the same region at the height of COVID-19 pandemic.

ABOUT THE WEBINAR

The last webinar in the Biosecurity Threats in Agriculture Webinar Series presented how the government was able to detect the reemergence of avian flu in a farm community in Central Luzon and its immediate response to address further infection of the disease. Measures and recommendations from the invited private sector representatives were also shared and discussed during a panel discussion.

SPEAKERS' PROFILE

We invited experts from diverse sectors to achieve the expected outcome of the webinar.



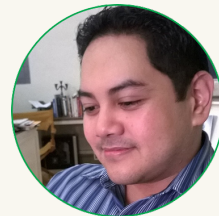
Dr. Anthony Bucad is a Doctor of Veterinary Medicine (DVM) graduate of the University of the Philippines - Los Banos. Currently, he is a Veterinarian II and the Head of the Animal Disease Control Section of the Department of Agriculture - Bureau of Animal Industry.



Dr. Reynaldo Ortega is a Doctor of Veterinary Science and Medicine (DVM) graduate of the Central Luzon State University, and is also graduate of the University of Asia and the Pacific - Agribusiness Executive's Program. He is currently the Senior Vice President and General Manager of the Poultry and Foods Division of Vitarich Corporation, the first commercial feed company in the Philippines and has been producing poultry and livestock feeds that adhere to world quality standards since 1950.



Emerson Siscar is a graduate of Computer Science in Adamson University, Master in Computer Science in De La Salle University, and is an Information Security Officer of De La Salle - College of Saint Benilde. He is the owner of Batangas Free Range Chicken, a farm in Sta. Teresita, Batangas, with 10 years in operation focused on free range chicken egg and meat production. The company also works closely with partner community farmers and supplies and focuses on niche market.



Anton Simon Palo is a Value Chain Development Expert and General Manager of FoodLink Advocacy Co-operative. He facilitated the panel discussion during the open forum.

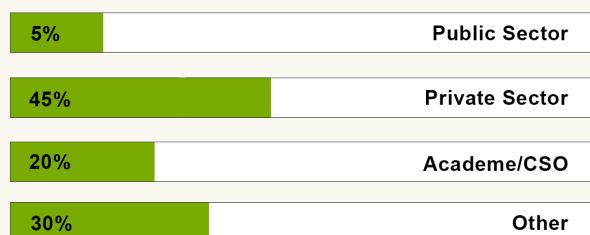


ATTENDEES' PROFILE

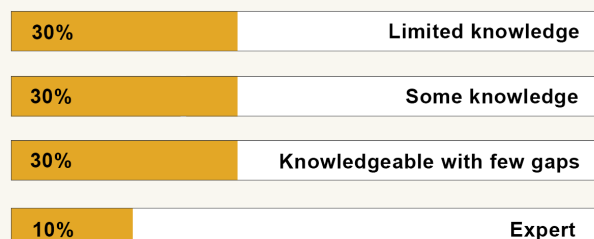
The webinar on the Prevention and Mitigation of Avian Flu was attended by more than 20 individuals representing different sectors. Majority of these attendees were from the private sector while public sector, academe, non-government organizations were well-represented as well.

Attendees of the webinar have varying level of knowledge about the animal disease which made for an interactive, vivid discussion and Q&A session.

Representation



Attendees' Knowledge



PANEL DISCUSSION

In the panel discussion, we invited Anton Palo to facilitate the open forum of the webinar. Presented in this section are the comments and insights made by the speakers and the facilitator.

• Vitarich essentially has a very impressive operation from end to end, from inputs all the way through production, and then, perhaps even marketing. If there was a lesson from African Swine Fever, lack of collaboration between commercial growers and backyard growers posed a very big problem. How can Vitarich, and perhaps, the rest of the private sector and commercial growers ensure a collaboration or come up with the collaboration with the backyard growers against avian flu?

Dr. Ortega, Vitarich Corporation

Vitarich has two business model. One model is that we have a Contract Growing Department that caters to all big customers with a volume starting from 10,000 up to 400-500,000. Our contract growing scheme is we provide them with chicks, feeds, medicines and vaccines, and technical services. On the other side of our business is that we sell chicks and feeds to smallholder farmers and we have people who attend their needs to teach them poultry management and biosecurity. With this, we take the collaboration with the two farms, big and small.

• For Batangas Free Range Chicken, Emerson mentioned that you have a very good collaboration with the barangay. What are your tips to have that same level collaboration for the other free range and other poultry growers in general? How do you generate buy in?



Siscar, Batangas Free Range Chicken

I think, one has to step up because to date, there are many people who are already into free-range chicken farming. With what we have setup for biosecurity in our town, one has to step up, and take good consideration of biosecurity, because we don't know when threats are going to happen. In commercial companies, there are so many strong control points already, because they have all the resources that they can dispose of. While in backyard operation, there are different models being followed by every free-range chicken farms. But in our case, since we developed a market or a community, it is imperative for us to really consolidate everybody and make everybody have the same mindset and understanding of what we are doing and what we are trying to achieve. It is important as well that we are not certain when diseases are going to happen and we do not want to get surprised all the time.

I think biosecurity is one of the cheapest that we can do, implement and introduced to the free-range farmer, considering that free range farming has higher risk compared to cage system. Those in the cage are getting sick, how much more to the chickens that are left in the open?

So, as we believe on the natural system, as long as the environment and the ecosystem are really clean, we can develop a good resistance for our chickens. From day one, that is our focus.

- **It has been presented that biosecurity takes a lot of investment. What are the top activities or products that can be used in order to address biosecurity among the low-income backyard farmers?**

Dr. Ortega:

We have several programs for our small or backyard customers. For example, those growers with 2,000 to 3000 heads of old chicks, we always provide them with technical services. We also make sure that if there is a thick population of animals in the area, we arranged them in such a way that they are close to each other. For example, if farmer 1 has 1,000 while farmer 2 has 2,000, we will place their farm together. If a disease gets infect the animals and the younger ones close the older ones, probability it is that the younger ones will get infected. All animals develop strong resistance to the disease. In broilers, the common problem we encountered is respiratory tract infection. Whenever the broilers switch into marketable ties, more often that not, they are infected with respiratory tract infection. This is our program – place all farms closer to each other.

Palo:

By putting them together, we are actually addressing the issues much easier, from a more Vitarich perspective.

Siscar:

I think, for us, and the one I normally look is whatever that is available first. We have the government; we have the BAI and other government agencies who have been the expert in developing all sorts of guidelines. These things are already available. So, it is very important for every farmer, who are into free range chicken farming, to get information available from the BAI, for example. Because, I for myself is an IT professional, but I know a lot how things are happening. Second, we also have to invest in educating these farmers. On our end, we educate them by making use of resources

from the government that we don't have to spend amount of money to develop. We just need to download it. That should be continuous process. Like for us, if we have group of farmers, we don't stop in a week or month in sending information or meet them to give them updates. It has to be on a regular basis. Sometimes, if people don't follow, they will realize the cause and effect of what they have done. For example, a written guideline was not followed and a certain incident happened, more or less they know the effect already.

So, I think, the important tip is to make use of available materials and even personnel from the government who are always willing to visit and devote time to give orientations and educate the farmers. They just need to approach the government. They don't have to wait. Sometimes, these bodies are busy and cannot go to your farm from time to time, but they are always there whenever you need them.

Palo:

It seems that protocols and guidelines from the government plus knowledge, know-how and maybe even collaboration with existing farms can help with biosecurity without necessarily having to invest in something fancy.

OFFLINE QUESTIONS RESPONSES

We asked our speakers to respond to the questions raised during the webinar that were not answered during the panel discussion. The succeeding pages presents their answers.

Dr. Anthony Bucad, Bureau of Animal Industry

- **The proximity of growers to each other is a risk factor for the spread of avian flu. How worried should we be based on the locations of the various growers?**

There are areas, especially with dense poultry populations, where farms, may it be backyard or commercial, are located just within each other's vicinity or a few meters apart. There is also the issue of raising different kinds of poultry within the same farm. This poultry raising system raises the risk of spread of the virus, especially when strict biosecurity measures are not in place. The government addresses this concern through various information campaigns to increase farmers' awareness on the importance of biosecurity and provide guidance in its implementation.

- **Did you put lime before completion of the burying procedure of the stamped out birds?**

Yes, lime was applied on top of the stamped-out birds before the pit was covered with soil.

- **Could you provide us information on the characteristics of the H5N6 virus?**

Avian influenza is a contagious disease of poultry and other avian species which may manifest different clinical signs, most alarming of which is sudden death. The virus has several subtypes, one of which is H5N6 which affected the Philippines. It was first reported in China in 2013, followed by cases in Vietnam, Laos, Korea, Japan, Taiwan and Greece. Though AI is considered



a zoonotic disease, very few human infections were attributed to this subtype. Other descriptions are available in circulating technical references.

- **If the possible source of avian influenza was improperly cleaned recycled sacks, do you mean to say that the virus can survive for 3 years?**

Through trace back investigation, one of the possible sources of infection considered was the feeds sourced from Imbunia which was one of the barangays affected during the 2017 outbreak. This does not mean though that this was due to the virus which affected us then. All of the affected farms were thoroughly cleaned and had a series of disinfection and had been loaded with sentinel birds after a 21-day rest period. They were raised for 35 days with weekly collection of samples. All the laboratory results were negative and the farm had been issued an AI-free certificate. There had also been a series of surveillance activities among the poultry population within the 1-kilometer quarantine area and 7 kilometers control area and all of the samples yielded negative results.

This is a reincursion of another H5N6 virus. It could be that poultry farm/farms Imbunia had been infected again but had not been reported to government veterinary authorities.

- **With your continuous IEC about AI, how will you now assess the current level of awareness of the stakeholders in terms of monitoring and reporting of AI in their respective areas?**

With the continuous IEC on AI and the experience we had last 2017, we can say that there is a high level of awareness regarding AI among our poultry stakeholders. There has been an improvement and a significant level of cooperation in monitoring and reporting of suspect AI cases, especially unusual poultry mortalities. However, in the absence of a policy for indemnification/compensation, there is a challenge in getting the absolute cooperation in the early reporting of suspect cases from poultry raisers themselves. As mentioned in the presentation, we have already prepared a policy for cash assistance to affected poultry raisers for approval of Secretary William Dar and subsequent endorsement to DBM.

- **Are there recent or ongoing outbreaks in the country or in neighboring countries?**

At present, there are no other reported cases of AI in the country. Several suspect cases had been reported but upon diseases investigation and sample collection for laboratory confirmation, they have been found negative for the AI virus.

Recent or on-going outbreaks of AI in other countries may be checked in the AI portal of the OIE (www.oie.int).

Dr. Reynaldo Ortega, Vitarich Corporation

- **ASF has shown that lack of proper collaboration between commercial growers and backyard growers was a source of concern. How can such a collaboration between**



commercial and backyard poultry growers be realized?

In the case of Vitarich, we are sure that there is really collaboration between our customer backyard growers and commercial farms. Our Field Veterinarians in the fields are always discussing all concerns of backyard farmers and commercial farmers specifically on the disease prevalence in the area, placement schedule of farms close to each other, vaccination and medication programs that are being used in the area. They are almost using the same approach to handle problems. If there are disease that hit one farm, either big or small, our veterinarian in the fields would notify each other to tighten biosecurity of farms with no diseases and modify medication programs based on the needs or in relation to diseases present in the area.

• What solution do you use for foot bath ? For foot bath is the ratio of chlorine and H2O? For disinfectant use as foot bath, we usually use disinfectant like Tektrol, this phenolic base with the rate of 15ml/10 liter of water.

For Water Chlorination to sanitize drinking water, we use 5 ppm. We usually dissolved 5 grams of chlorine per liter of water and make a stock solutions. Right after, we then use 5 ml from stock solution per liter of drinking water for the flocks.

• Can you share your reference for the 48 hours downtime rule?

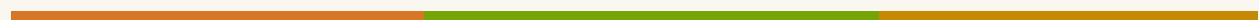
For the 48 down time rule, our poultry farm guests have to undergo a 24 hour-quarantine of our facilities inside the dirty area. Before they enter the premises, they will undergo disinfection procedure like taking a bath with hot water, passing thru UV lights, crossing the deep ramp with disinfectant, and using disinfected uniforms intended for production area. Then another 24 hours again of spending their time in the facility outside the production area. After the completion of this 48-hour process, they can now enter the production area.

Emerson Siscar, Batangas Free Range Chicken

• Proper free-range growing, from the face of it, makes it seem like it has a higher risk of exposure to avian flu. How are you able to mitigate risks of avian flu spread while at the same time ensuring that the farm practice remains natural and true to free-range standards?

Free range chicken farming poses a higher risk of exposure to AI and other diseases as they have more access to possible contaminants. This is why every farmer should have their own biosecurity measures to preclude introduction of virus and others. Part of our program as well is the hardening of every flock and giving much attention of their health and nutrition from day 1 to build better resistance and greater immune system especially the gut. We provide also natural supplements.

• With your experience at the community level, what do you think are the recurring concerns or issues when it comes to ability of backyard farmers in sustaining the implementation of biosafety safety protocols?



Every farmer must learn and be conscious about biosecurity and safety. This is something we need to teach them repeatedly until they get used to it. We provide them tools such logs in tagalog that we monitor

• **How do you dispose chicken manure? Do you partner with farms/plantations which could use the manure as organic fertilizer?**

We have our vermiculture to collect and feed the manure to the worms and later on become our fertilizer. With this, we may also produce our own vermitea spray.

CHANNELS

Different channels are available to make the resources from the webinar accessible to the attendees and the general public.



Watch the full webinar on Youtube here:

<https://bit.ly/PPSAYTBavianFlu>

Subscribe our channel for future content



Listen the webinar on Spotify podcast here:

<https://bit.ly/PPSAAvianFluPodcast>

Follow our account or future content



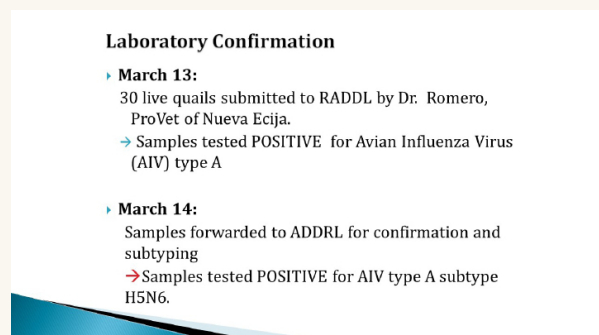
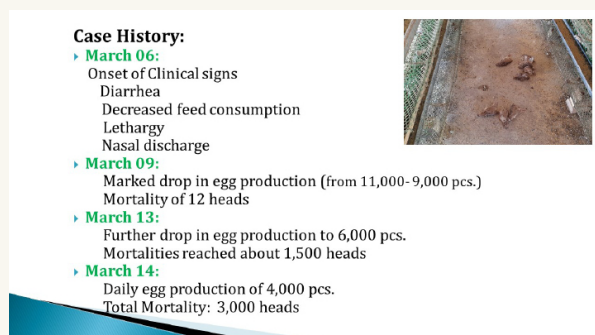
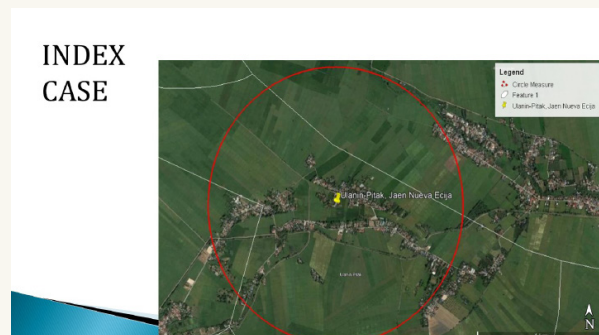
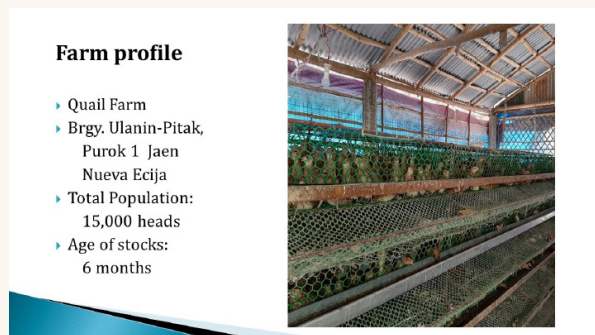
PRESENTATION DECK

Presentation of the speakers can be downloaded through: <https://bit.ly/PPSAAvianFluDeck>.



Agenda

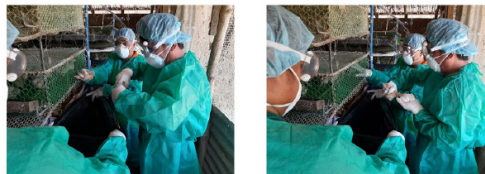
1. Avian Flu Philippine Situationer and Government Interventions
Dr. Anthony Bucad, Head of BAI Animal Disease Control Section, DA-BAI
2. Sharing of best practices: Private Sector perspective
Dr. Reynaldo Ortega, DVM
Senior Vice President & General Manager, Poultry and Foods Division
Vitarich Corporation
Mr. Emerson Siscar
Owner
Batangas Free-Range Chicken
1. Q & A and Open Forum
Moderated by
Mr. Anton Palo, General Manager, Foodlink Advocacy Co-Operative



Immediate Actions taken (3/14/2020):

- ▶ Notification of the local chief executives of the occurrence of Bird Flu in their jurisdiction
- ▶ Immediate visit to the infected farm to inform the owner and discuss the protocol
- ▶ Surgical stamping out and proper disposal of the remaining birds by the DA-RFO team and PVO staff
- ▶ Initial disinfection of the premises

Culling by cervical dislocation



Disposal by burying



FOLLOW-UP ACTIVITIES

In the INFECTED PREMISES:

- ▶ Cleaning and disinfection of the farm premises, cages, and equipment
- ▶ Daily monitoring of the health of farm workers for 10 days.

TRACEBACK INVESTIGATION

No migratory birds, duck farms nor body of water near the infected farm.

Possible source of infection: **Feeds**
purchased from Imbunia, Nueva Ecija

- One of the two H5N6 outbreaks in N.E. in 2017 was in Imbunia.
- Recycled feed sacks were used.

TRACEBACK INVESTIGATION

- ▶ Total of 90 oropharyngeal samples were collected from 3 quail farms in Imbunia.
*All results were **NEGATIVE**.*
- ▶ Two feed samples were also collected and tested through RT-PCR.
*Results were **Negative**.*

SURVEILLANCE in 1 KM. QUARANTINE AREA

Barangay	Type of Animal	No. of Farms Collected	Inventory of Population	No. of Samples collected
1.ULANIN-PITAK	QUAIL	7 FARMS	56,000	60 samples
2.PINANGGAAN	QUAIL	12 FARMS	68,500	60 samples
3. HILERA	QUAIL	4 FARMS	18,000	30 samples

All results were NEGATIVE.

QUARANTINE MEASURES

Establishment of Quarantine Checkpoints:

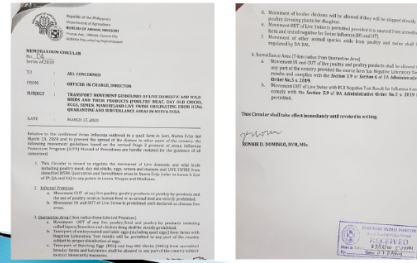


Pinanggaan-Ulanin-Pitak Boundary

Hilera - Ulanin-Pitak Boundary

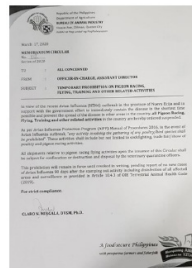
QUARANTINE MEASURES

Issuance of Memo Circulars



QUARANTINE MEASURES

Issuance of Memo Circulars

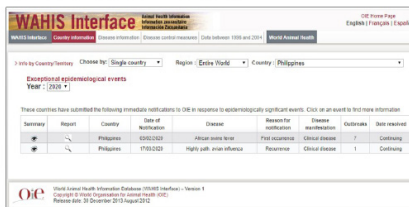


DISEASE INVESTIGATION

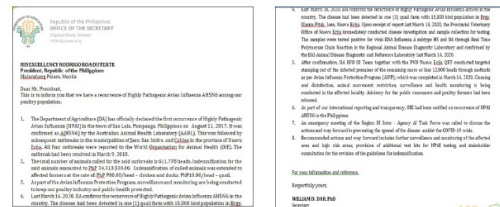
- ▶ Suspect cases are coordinated by BAI with and responded to by LGU and DA-RFO counterparts.
- ▶ No new confirmed cases to date.

INFORMATION & EDUCATION

▶ OIE Notification on 3/17/20



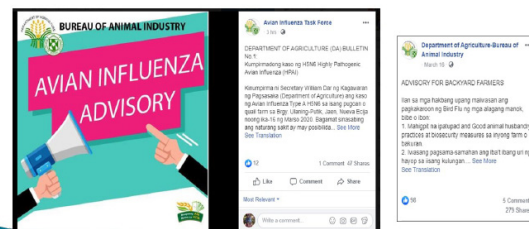
▶ Memo for the President



▶ Letter for the DOH Secretary



▶ Posting of AI Advisories at the DA-BAI FB page



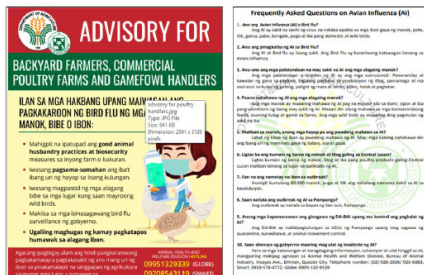
Posting of AI Advisories at the DA-BAI FB page



IEC on Biosecurity



Printing of Brochures



COORDINATION/COLLABORATION

Regional AI Inter-Agency Meeting
- March 17, 2020 San Fernando, Pampanga



COORDINATION/COLLABORATION

Meeting of BAI Task Force with private stakeholders on 20 March 2020



OTHER ACTIVITIES

- ▶ Policy on the GUIDELINES FOR GRANTING CASH ASSISTANCE TO HPAI-AFFECTED POULTRY FARMS drafted and submitted to BAI Director for review.
- ▶ In lieu of a public consultation, final draft of the revised AIPP-Manual of Procedures sent to concerned stakeholders for comments and review.

- ▶ Cleaning and disinfection in the affected farm have been completed.
- ▶ Proposed assistance to affected quail farmers in Jaen, Nueva Ecija is being drafted for approval of the Secretary
 - Goat/Sheep dispersal
 - Supply of day-old quails
 - PLANT PLANT Program

- ▶ Surveillance of all duck and quail farms in the 7 km. quarantine area in N.E. (i.e. San Antonio, Sta. Rosa, Cabanatuan) → June
- ▶ Surveillance of poultry population in all provinces in Region III → June

- ▶ Printing of the revised AIPP-MOPs once finalized
- ▶ Finalization of policy on the grant of cash assistance
- ▶ Declaration of Restoration of AI-free status



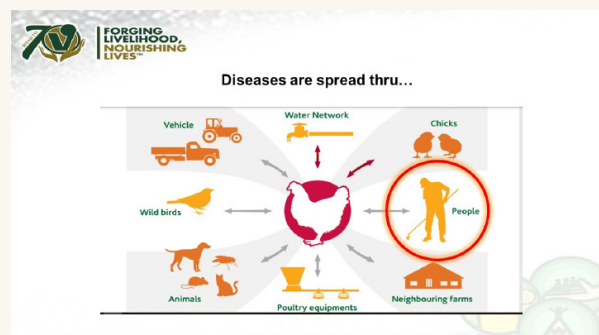
DR. REYNALDO ORTEGA, DVM
Senior Vice President and General
Manager, Poultry and Foods Division
Vitarich Corporation



BIOSECURITY

'bio' = life
'security' = protection from harm

It is a set of measures designed to prevent the entry and spread of pests and diseases.



70 FORGING LIVELIHOOD, NOURISHING LIVES

PEOPLE going in and out of the farm have the highest risk of carrying pathogens into the farm!

- flockmen
- technical assistants
- veterinarian
- visitors
- delivery personnel
- farm owner



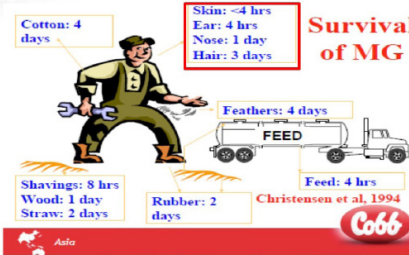
70 FORGING LIVELIHOOD, NOURISHING LIVES

Survival of MG

- Skin: ~4 hrs
- Ear: 4 hrs
- Nose: 1 day
- Hair: 3 days
- Cotton: 4 days
- Feathers: 4 days
- Shavings: 8 hrs
- Wood: 1 day
- Straw: 2 days
- Rubber: 2 days
- Feed: 4 hrs

Christensen et al. 1994

Co66



70 FORGING LIVELIHOOD, NOURISHING LIVES

LEVELS OF BIOSECURITY

- 1. Conceptual**
- PHYSICAL ISOLATION OF THE FARM (eg distance from road and other farms)
- isolation also involves limiting entry of vehicles and personnel; and controlling entry of vermin and wild animals; and breaking the direction of wind
- 2. Structural**
- TANGIBLE FACTORS eg farm layout, perimeter fence, dirty and clean area, drainage, house design
- 3. Procedural**
- STANDARD ROUTINE of activities which involves:
 = biocontamination
 = bioexclusion

70 FORGING LIVELIHOOD, NOURISHING LIVES

BASIC BIOSECURITY PRACTICE

- ✓ Proper biosecurity signage
- ✓ Farm gate
- ✓ Perimeter fence



ADC FARM

70 FORGING LIVELIHOOD, NOURISHING LIVES

BASIC BIOSECURITY PRACTICE

- ✓ Proper biosecurity signage
- ✓ Farm gate
- ✓ Perimeter fence



METRO-DAVAO FARM

70 FORGING LIVELIHOOD, NOURISHING LIVES

BASIC BIOSECURITY PRACTICE

- ✓ Vehicle spray




ADC FARM

70 FORGING LIVELIHOOD, NOURISHING LIVES

BASIC BIOSECURITY PRACTICE

- ✓ Foot bath upon entering premises




MZ FARM

70 FORGING LIVELIHOOD, NOURISHING LIVES


BASIC BIOSECURITY PRACTICE

- ✓ Foot bath upon entering premises



LAGOC FARM

70 FORGING LIVELIHOOD, NOURISHING LIVES




BASIC BIOSECURITY PRACTICE

- ✓ Log book

ADC FARM

70 FORGING LIVELIHOOD, NOURISHING LIVES



BASIC BIOSECURITY PRACTICE

- ✓ Shower room

ADC FARM

70 FORGING LIVELIHOOD, NOURISHING LIVES



BASIC BIOSECURITY PRACTICE

- ✓ Fumigation box

ADC FARM

70 FORGING LIVELIHOOD, NOURISHING LIVES



BASIC BIOSECURITY PRACTICE

- ✓ Personal Protective Equipment/PPE

ADC FARM

70 FORGING LIVELIHOOD, NOURISHING LIVES



BASIC BIOSECURITY PRACTICE

- ✓ Personal Protective Equipment/PPE

DBF HATCHERY

70 FORGING LIVELIHOOD, NOURISHING LIVES



BASIC BIOSECURITY PRACTICE

- ✓ Foot bath before entering the building

ADC FARM


70 FORGING LIVELIHOOD, NOURISHING LIVES




BASIC BIOSECURITY PRACTICE

- ✓ Foot bath before entering the building
- ✓ Use a different set of footwear inside the building

70 FORGING LIVELIHOOD, NOURISHING LIVES




BASIC BIOSECURITY PRACTICE

- ✓ Water quality (fresh supply; regular flushing)
- ✓ Feeds (storage condition)
- ✓ Medication and vaccination program
- ✓ Proper mortality disposal

FORGING LIVELIHOOD, NOURISHING LIVES

BASIC BIOSECURITY PRACTICE

- ✓ Proper waste disposal (chicken dung, used litter, used vaccine vials)
- ✓ Pest control (insects and vermin; fly control program)
- ✓ Control of other animals (bird proofing, etc)
- ✓ Cleanliness of the vicinity




METRO-DAVAO FARM

FORGING LIVELIHOOD, NOURISHING LIVES

BASIC BIOSECURITY PRACTICE

- ✓ Cleanliness of the vicinity



MZ FARM

FORGING LIVELIHOOD, NOURISHING LIVES

Traffic control measures for people

What is the importance of downtime?

To prevent the transfer of disease from one farm to another.

Why two days down time?

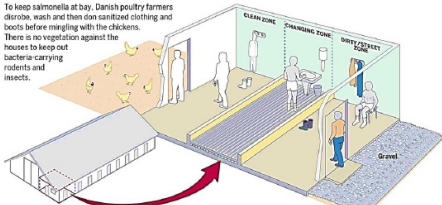
The "48 hours" rule
Bacteria was isolated from one person after 28 hours but was not isolated after 48 hours.

FORGING LIVELIHOOD, NOURISHING LIVES

STANDARD BIOSECURITY PRACTICE


- ✓ Personnel traffic

To keep salmonella at bay, Danish poultry farmers disrobe, wash and then don sanitized clothing and boots before mingling with the chickens. There is no vegetation against the houses to keep out bacteria-carrying rodents and insects.



FORGING LIVELIHOOD, NOURISHING LIVES

Traffic flow



FORGING LIVELIHOOD, NOURISHING LIVES

VISITING MATRIX

	Young	Old	Red	Breeder	Other Farms
Young	12 hours	12 hours	0	3 days	24 hours
Old	24 hours	12 hours	0	3 days	24 hours
Red	48 hours	48 hours	0*	3 days	3 days
Breeder	24 hours	24 hours	0	-	-
Other Farms	48 hours	48 hours	-	-	-

FORGING LIVELIHOOD, NOURISHING LIVES

Points to remember:

- ✓ Start from the cleanest to the dirtiest area; from youngest to the oldest
- ✓ Change footwear; better have separate shoes for brooding and for growing flock
- ✓ If possible, limit farm visit to 3 farms per day.
- ✓ Have a sanitizing gel and a set of clean clothes ready on your kit.







FORGING LIVELIHOOD, NOURISHING LIVES

Points to remember:

- ✓ Self quarantine after handling challenged farms; or after administering vaccine on one farm.
- ✓ Shower-in when going to farms especially after a meeting.
- ✓ Be well-groomed and presentable when visiting the farm.




MR. EMERSON SISCAR
Owner
Batangas Free Range Chicken



Biosecurity Threats in Agriculture: Prevention and Mitigation of Avian Flu (Free Range Chicken Farms)

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



AGENDA:

- A. Free Range Chicken Farming Background
- B. Farming Principles of Batangas Free Range Chicken Farm
- C. Prevention of Avian Flu in Free Range Chicken Farm: BFRC System

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



A. Free Range Chicken Farming Background

- ☐ A method of farming husbandry where animals, can roam freely outdoors, forage naturally, rather than being confined in an enclosure for 24 hours each day
- ☐ LOW INFRASTRUCTURE COST BUT CAN BE LABORIOUS
- ☐ Higher risk but promising market
- ☐ Needs more attention than conventional poultry farming
- ☐ Does not mean "Organically Grown"
- ☐ A healthy alternative
- ☐ Offers a [Blue Ocean Market](#)

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



FREE RANGE CHICKEN FARMING VS FACTORY

FREE RANGE CHICKEN FARMING	FACTORY SYSTEM
BIRDS ENJOY THE OUTDOORS	IN CONFINED SPACE
HAVE ACCESS TO NATURAL DIET	100% COMMERCIAL INPUTS
POSSIBLY LESS INFRASTRUCTURE COST	COSTLY INFRASTRUCTURE
HIGHER RISK OF SICKNESS THAN CAGED	LESS RISK DUE TO ITS CONTROLLED ENVIRONMENT
BOTH HAVE DIFFERENT MARKET SEGMENTS	

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



B. Farming Principles of BFRC

1. ANIMAL WELFARE (HUSBANDRY)

Refers to

- ☐ Provision of adequate ventilation to the animals to prevent or control ammonia, heat stress, etc
- ☐ Ensure proper light program
- ☐ Proper equipment maintenance
- ☐ Ensure sufficient, clean feed and water access

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



2. ANIMAL HEALTH

Refers to

☐ STRONG BIOSECURITY

- ☐ Correct vaccination program
- ☐ Correct medications
- ☐ Good hygiene

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



3. ANIMAL NUTRITION

Refers to

- ☐ Balanced nutrition
- ☐ Feed hygiene
- ☐ Proper equipment maintenance
- ☐ Ensure sufficient, clean feed and water access

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



C. Prevention of Avian Flu in Free Range Chicken Farm: BFRC System

- A Focus on Biosecurity (Barangay or Community Level)
1. Standard Biosecurity Protocol for backyard farms: the cheapest and most effective means of disease control
 2. Continuous farmer education about biosecurity and different vectors of diseases
 3. Strong collaboration with Local Government Unit
 4. Regular backyard farm audit and process improvement

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



C. Prevention of Avian Flu in Free Range Chicken Farm: BFRC System

Basic Plan focuses on 3 main components to preclude introduction and possible spread of disease, such as:

1. Isolation
2. Traffic Control
3. Sanitation

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



THE PROCESS

Farm Inventory and Registration

TASKS	RESPONSIBLE
Develops biosecurity plan and roll out to backyard farms	BFRC
Conducts baseline inventory of chicken farmers and updates database (farmers fill up the backyard farmer registration credentials)	BARANGAY / BFRC
Issues backyard farm number, tag or ID	BARANGAY / BFRC
Register number of flocks and other details	NEW BACKYARD FARMER OR OWNER
Records all inbound and outbound inventory, mortality for inventory reporting (maybe monthly or other frequency)	BACKYARD FARM OWNER / BFRC

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



THE PROCESS

CASE REPORTING and MANAGEMENT

TASKS	RESPONSIBLE
Immediately reports suspicious or possible flock concern	BACKYARD FARM OWNER / BARANGAY / BFRC
Documents and investigates concern (take necessary photos)	BFRC Vet / Municipal Vet / Backyard Farm Owner
Follow isolation and treatment procedure for confirmed case of infection or problem	Backyard farm owner / BFRC / Vets
Report to the municipal veterinarian any abnormal deaths or mortalities due to disease to prevent an outbreak	BFRC / BARANGAY

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



THE PROCESS

AUDIT and CONTINUOUS IMPROVEMENT

TASKS	RESPONSIBLE
Prepares a basic audit plan	BFRC
Conduct random audit of process, documents and procedures	BFRC / BARANGAY
Prepares audit report findings and recommendations	BFRC / Vet
Implements recommendations and monitor	BFRC / BACKYARD FARMER

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



BFRC Sample Farms and Products

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



BFRC FARM



BACKYARD PRODUCE, QUALITY YOU CHOOSE.



Backyard Farm



BACKYARD PRODUCE, QUALITY YOU CHOOSE.



BACKYARD PRODUCE, QUALITY YOU CHOOSE.



FREE RANGE CHICKEN

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



BACKYARD PRODUCE, QUALITY YOU CHOOSE.



BACKYARD PRODUCE, QUALITY YOU CHOOSE.



BACKYARD PRODUCE, QUALITY YOU CHOOSE.



BACKYARD PRODUCE, QUALITY YOU CHOOSE.

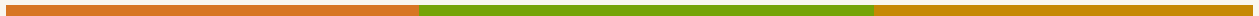


BACKYARD PRODUCE, QUALITY YOU CHOOSE.



BFRC Products

BACKYARD PRODUCE, QUALITY YOU CHOOSE.





BACKYARD PRODUCE, QUALITY YOU CHOOSE.



BACKYARD PRODUCE, QUALITY YOU CHOOSE.



BACKYARD PRODUCE, QUALITY YOU CHOOSE.



batangasfreerangechicken@gmail.com

Contact Numbers
09289739648 / 09066722157

BACKYARD PRODUCE, QUALITY YOU CHOOSE.



BACKYARD PRODUCE, QUALITY YOU CHOOSE.



BACKYARD PRODUCE, QUALITY YOU CHOOSE.

PANEL DISCUSSION and Q&A



Mr. Anton Palo
Foodlink Advocacy Co-operative
Moderator



Dr. Rey Ortega
Vitarich Corporation



Mr. Emerson Siscar
Batangas Free-Range
Chicken



Thank You



Dr. Anthony Bucad, DVM
Senior Vice President & General
Head, Animal Health and Welfare
Division, Bureau of Animal Industry
da.bai.ahwd@gmail.com

Dr. Reynaldo Ortega, DVM
Senior Vice President & General
Manager, Poultry and Foods
Division, Vitarich Corporation
rortega@vitarich.com

Mr. Emerson Siscar
Owner, Batangas Free-
Range Chicken
batangasfreerangechicken@
gmail.com

www.ppsa-ph.org

Joyce Gomez,
Country Director, PPSA
joyce@ppsa-ph.org

Veejay Calutan,
Communications
Manager
veejay@ppsa-ph.org