

POST-WEBINAR REPORT

Biosecurity Threats in Agriculture:

How do we recover from the impacts of African Swine Fever?











HOW DO WE RECOVER FROM THE IMPACTS OF AFRICAN SWINE FEVER?

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, with the support from the IDRC, 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

The hog and livestock industry in the Philippines have been affected with the arrival of African Swine Flu (ASF) in the country in 2019. Most affected areas are in Luzon but early in 2020, ASF has reached Mindanao. Economic losses to the industry have already been pegged at Php80 million as of the first quarter of 2020. Quarantine inspection and disinfection of ports were some of the preventive measures the government has undertaken since the outbreak. Culling of hogs which is estimated at 20,000 hogs per month is also one of the steps done by the government. The Department of Agriculture released Php32 million last month to assist ASF-affected hog raisers, on top of the Php5,000 aid for each culled pig. Information campaigns were also intensified to at least lessen the economic losses of the country due to ASF.

ABOUT THE WEBINAR

The third webinar in the Biosecurity Threats in Agriculture Webinar Series presented the current situation of the African Swine Fever in the Philippines and the interventions of the government in addressing further spread of the disease as discussed by the Department of Agriculture-Bureau of Animal Industry. Industry insights and recommendations from the invited private sector representatives were also shared and discussed during a panel discussion.

SPEAKERS' PROFILE

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



Dr. Samuel Joseph M. Castro, is a Doctor of Veterinary Medicine (DVM) graduate of the University of the Philippines, Los Banos. He began working with the Department of Agriculture Bureau of Animal Industry, under the successful AusAID-funded FAO-implemented National Foot and Mouth Disease Eradication Project in the Philippines. Dr. Castro is currently Veterinarian III under the National Veterinary Quarantine Services Division of the BAI. He is the Bureau's focal person for ASF.



Fermin Diaz is a Filipino veteran agricultural journalist with over 30 years work experience. He also worked for the UN FAO Program on Integrated Pest Management in South and Southeast Asia. Currently, he is the editor and publisher of Livestock and Meat Business Philippines Magazine, a trade journal.



Danilo Venida is the General Manager of Infarmco Management Corporation, a onestop shop total systems and solutions company serving the Filipino pig farmer and is the leading producer and supplier of competition-proven, Philippine-bread landrace, large white, and FI Gilt pigs; he is also an occasional columnist in the Philippine Daily Inquirer, and a director of Foodlink Advocacy Co-Operative



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.

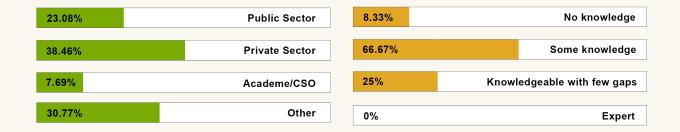
ATTENDEES' PROFILE

The webinar on How do we recover from the impacts of African Swine Fever? was attended by more than 30 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.

More than half of the attendees of the webinar are knowledgeable about the pest that made for an interactive, vivid discussion and Q&A session.

Representation

Attendees' Knowledge



PANEL DISCUSSION

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

• The Bureau of Animal Industry mentioned that one of the primary vectors for the ASF was swill feeding, especially among our backyard pig farmers. One of the stated reasons for its usage is its relatively lower cost compared with feeds. What is your recommendation, from your experience and views, to make the feeds accessible so that farmers will not rely on swill too much?

Diaz, Philippine Agricultural Journalists, Inc.:

Some countries have various strategies with regards to the swill. In some southeast European countries, those with very little commercial farms, most of them are in backyard, swill feeding is not totally banned our outlawed, even in the concept of ASF prevention. The science behind there is on the right cooking of swill. Swill is an excess food being fed in the pigs. Small backyard families would gather "kaning baboy" as a cultural practice in the barangay. Carelessly, people would just mix that with milled rice and that's it. There is indeed a risk to promote swill feeding in so far as ASF in concern. But in remote areas, they still practice that. Now, how do we manage the problem? We have to tell the farmers that even they cannot prevent from using swill, it has to be at least cooked it for 20 minutes at the most in 60-70 degrees. That would kill the virus.

Palo:

You are saying that if we cannot strip away from swill usage, we can at least pre-process it and

hopefully eliminate any viruses or bacteria, including ASF.

Venida, Infarmco Management Corporation:

I think the challenge is to begin organizing or institutionalizing backyard pig farming. It has been said for so many years that the industry is 60-70% backyard. For food security, that should not make us comfortable because backyard can go in and out very quickly depending on the market situation. They have to be organized or put up within a cooperative system. These backyard setups have to be linked to some bigger organization which will handle the breeding to the mating stage which is a very sensitive and delicate part in the pig production process. Hopefully, they can achieve efficiencies so that the cost becomes secondary element. Swill usage might be lessened.

Palo:

In your case, you are suggesting that by aggregating backyard smallholder farmers, we would be able to gain the benefits of economies of scale, the cheaper price of feeds, hopefully, because of the larger volume from feed millers.

Venida:

Allowing backyard to use technologies.

Palo:

And I suppose, there are other things that we can throw in there such as professional management through cooperatives and etc.

If we are looking at 6-12 months for the recovery phase as presented by Diaz while by the fourth quarter of 2021 for Venida, in your view, how do we now address the gap in terms of volume that we are going to produce between now and then without necessarily sacrificing the swine industry?

Venida:

The COVID-19 effect on the market is to dampen demand. What I meant about the 4th quarter of 2021 would be commercial pig farms which were hit by ASF last year, if they began repopulating for the next quarter, it takes about 15-18 months to produce market hog. So, there is that lag from starting to produce and having the market hog available. Hopefully, the demand-supply gap will not be too big to let the price spikes too high. Importation right now is not an option once they become available because prices of pork globally is high because of what happened in China.

Palo:

Essentially this is to remind everyone that ASF is not just in the Philippines but also globally. And one of the biggest producers of pork meat is China which was hit by ASF badly.

Diaz:

This is to clarify that, whether you are a small or commercial farm, if you have plans to recover or restock, for instance, between now and the end of the year or in 3-6 months, that would be wishful thinking. There would still be virus infections along the way. If you are milled by neighboring farms that is ASF-free, you will never know. Restocking as an option would be very risky. If you are an

investor putting in millions again, that would be very risky decision on your part. Also, as you see, the current situation now is that the pork demand now has been depressed. The purchasing power of people is down. As much as we are having problems because of ASF, the demand side is also not moving.

The government is experiencing a lot of pressure left and right as well as the LGUs due to the pandemic. It seems that we have to rely every much to private sector push for ASF recovery and intervention. What are your thoughts about that? What should the private sector do about biosecurity, considering that there might be no support from the government at the moment?

Venida:

Biosecurity for all farms is imperative. We can be sure that those farms in Luzon who have not been affected by ASF have very strict biosecurity measures. In fact, this has been enhanced by the need for greater biosecurity because of COVID-19. We knew farms having their workers locked down within the farm over the Enhanced Community Quarantine period. I think, it helped in controlling ASF as well. The private sector has to have their own biosecurity protocols. It is their responsibility, within the farm protocols, and around the farm. But they will have to coordinate with barangays so that their efforts will not be put into waste, especially if there are a lot of irresponsible operations around. As far as control and prevention is concerned, it is in the best interest of companies to do it. It is in the easing of disruptions in logistics that needs to be addressed where farms must be given the benefit for their investment in biosecurity. They should be allowed to move their pigs to whatever destinations these pigs are supposed to go so their business will not be upset. No pig farm now is earning money. Commercial pig farms have lost a lot of money over the last 10 months.

Diaz:

In so far as backyard and hog raisers are concerned, they are quite aware of the threats of ASF and they are aware that lack of practice of biosecurity will threaten their farms. In this part, there is a need for the government to equip them and to stick with their mind the value of biosecurity. Provision of simple things like PPEs is important. The frontliners here are the hog raisers that has immediate exposure to the pigs. Sad to say, even at the local provincial level, these small farmers are not given proper equipment or even footwear. They do not even know what foot bathing is. What I am saying is, with all these things about COVID-19, the way the DOH is putting too much emphasis on protocols, that mindset from the government should also be translated down to small barangays or small hog raisers. They have to be educated and equip as well for them to have a fighting chance, to really practice biosecurity.

Another problem is, how do you confirm if the virus is ASF or not? You need a lot of contact tracing. You need confirmatory test. Before COVID-19, we have shortage in PCRs and laboratories. Now, the whole government is investing on these diagnostic labs. The same laboratory equipment could probably even just a portion of that could be used also to submit specimens on ASF virus so that the chances of early reporting early detection will be there. Then somehow the government could draw up the preventive measures to really control the spread of ASF So that's my take. I don't know if COVID-19 is bringing some positive development in the control of ASF.

Palo:

Mainly because it is suspending activities in general.

Diaz:

The business side is really down. If I may add, there are ASF-free areas in Mindanao such as General Santos City and South Cotabato where they have surplus production there. In fact, pork is so cheap. But here in Metro Manila where the demand is still strong, they have problems with logistics disruptions, there are problems with shipping and cold storage so they could not bring even a bulk of their produce to Manila and sell it at the affordable prices here. Again, because of the logistical problems and the lockdowns.

To Diaz, you mentioned about the government's COVID-19 response, especially about laboratories. What aspects are critical in strengthening ASF diagnostic laboratories? Is it mainly focused on RT PCR (Reverse Transcription-Polymerase Chain Reaction) facilities?

Diaz:

The diagnostic labs should be strengthened. You have to develop a network or infrastructure of diagnostic labs. What we have now is most regional centers have their own labs operated by BAI or DA. But there is a need to strengthen or accredit even private laboratories with PCR capabilities. Because, the more samples are being brought there and faster delivery of results, then, the early detection, early prevention aspect of ASF can really be addressed. This is really a problem.

If you just expect some opinions or some observations but without scientific basis to prove that indeed this thing in swine is probably ASF. You need confirmatory test. That could now justify why you need to cull. Because the culling itself is already the end result of your solution. You have to cull because indeed, the swine is positive with ASF. Then you will have to spend 5000 per head spent for nothing. You may be able to compensate all those farmers but you did not solve the problem. You were not able to prevent it. The aspect of early detection and prevention is critical.

Palo:

I suppose this is also the priorities of our very own Secretary, William Dar, where everything must be science-based, evidence-based approaches

What do you think should the government do to restart the livelihood of the load of the hog farmers as a result of ASF and COVID-19?

Venida:

The government is loaded right now with the COVID-19 situation. We do not know yet if we are in economic recession or depression. The swine industry and the backyard farmers have started lose livelihood earlier because of ASF effect and the other sectors followed COVID-19. So I think that many of the solutions we discussed earlier about organizing pig farmers, maybe with cooperatives, and then with commercial farms and pig millers, this is a time for all industry players to really work out and work together. We have a depressed market. We have an existing threat.

So, this cannot be done by one sector. It has to be a coordinated, collaborative effort.

Palo:

I hope, perhaps, Grow Asia would be able to help the swine industry on that.

Diaz:

The basic way to manage ASF is prevention. In this case, biosecurity is still the prime way to do it. You have to empower the farmers; give them the tools, the knowledge, the skills on how to do it. It is not just about instructing them through lectures, through seminars. In needs some intensive training about the value of biosecurity. They have to invest also in providing some PPEs, like we what we provide to our health workers. Because without those equipment as well, the farmers are vulnerable. They could be themselves, farmers, transmitting ASF from one farm to another. There is of course, the viajeros. There is a role here of the viajeros. It's not just the farms. If viajeros are careless, they have to be educated and informed as well about the risks. That requires also training. But that's the other side.

From the consumer side, I think we have to be very clear that ASF not indeed a public health issue. Even if you eat pork with ASF by mistake, it does not do anything to your body. It will not create any discomfort or any allergy on your body. But there is still that stigma of eating pork, especially in the wake of ASF, that it is bad. We have to educate consumers as well. Because without them, the demand and appetite for pork may not be stimulated at all. So, they keep on having those anxiety to eat, or not to eat pork at all. There is a lot of education.

From the technical side, you have to improve the diagnostic capability. And then of course, informing all the stakeholders about the factual science-based information on the disease.

Palo:

Maybe to emphasize on the last statement for viewers who are very sort of consumers, that is not to suggest that we should all eat ASF-infected meat. But the idea that we should not eliminate the pork consumption in total, just because there is that possibility. Hopefully, everyone is doing their jobs anyway from the producer to the markets.

So, in a sense, we are looking at a lot of handholding. This is not just about, you know, providing materials, learned a new protocol, etc. But actually, a process of handholding the backyard growers and all other stakeholders to follow protocol which is appropriate for ASF.

And I suppose, again, one of the opportunities provided by COVID-19 is that one, because now it is relevant to us, we start to understand biosecurity in a very personal way and it is the same kind of protocols that are necessary for ASF. At the same time, because there COVID-19, the usage of PPE and all of these are actually going to be in place and it looks like it is going to provide that benefit.

WAYS FORWARD FROM THE BUREAU OF ANIMAL INDUSTRY

 Proactive evolution of disease control strategies to sustain necessary technical assistance and logistic support to overall efforts of the Regional Quick Response Teams (RQRTs) and Local Government Units (LGUs).

- Coordinated action on cross-cutting issues with relevant DA agencies and departments (i.e. with the National Task Force on Animal-Born Diseases (NTFAD)
- On-going review and revision of the ASF Emergency Management Plan and other relevant issuances
- Continued consultation and collaboration with government and industry stakeholders

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/PPSAYTBASF

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PRESENTATION DECK

Presentation of the speakers can be downloaded through: https://bit.ly/PPSAASFDeck.



Agenda 1. African Swine Fever Philippine Situationer and Government Interventions Dr. Samuel Joseph Castro, BAI Focal Person for ASF, DA-BAI 2. Private Sector perspective: ASF Impacts and Recommendations Mr. Fermin Diaz Editor, Livestock and Meat Magazine President, Philippine Agricultural Journalists Mr. Danilo Venida General Manager, Infarmco Management Corporation 3. Q & A and Open Forum Moderated by Mr. Anton Palo, General Manager, Foodlink Advocacy Co-Operative





Background: Swine Sector

- Still prevalently small-scale, but remains a vital source of economic growth.
- An important source of animal protein and demand for pork has historically been increasing with an annual per capita consumption of 15.07

 To
- Social inclusion 65% of the 12.7 million swine inventories in 2016 were produced by backyard or smallholder producers
- A 260 B industry (including allied industriesestimate can be as high as 400 B)
- Main contributor to the total agricultural production (livestock 17.74%) swine is a main commodity (PSA. Oct-Dec 2018)





Modes of Transmission Direct contact with infected animals

Indirect contact through:

Vectors such as soft tick and stable flies

- Slurr
- Swill feeding (with infected tissues including meat)
- Vehicles and other fomites, clothing, footwear, surgical equipment
- · Genetic material

Cross-cutting Issues

- 1. Social issue anchored on poverty
 - a. hog raising using **SWILL** as feed cost is prohibitive
 - Consumer will buy cheap pork and pork products from "talipapa" even without any documents of inspection (community market where seller knows the consumers)

2. Economic

- Farmers selling sick pigs- to recover investment (backyard and commercial)
- b. "Predators" are always present (lowest farm gate prices-same retail price (or negligible decrease in market price



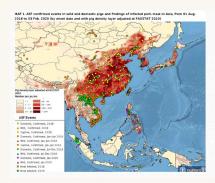
GrowAsia PPSA

Cost to Control the Disease (Indemnification)

Backyard Swine Population Affected	Cost of Control
1%	412,750,000
5%	2,063,750,000
10%	4,127,500,000
20%	8,255,000,000
50%	20,637,500,000
70%	28,892,500,000
80%	33,020,000,000
90%	37,147,500,000
100%	41,275,000,000

Assumptions:

- Total swine population: 12.7M heads; Swine population under backyard farming: 65% or 8.255M heads Cost to control disease
- Cost to control disease per animal: **Php5000** (updated per Cabinet Meeting agreement)



China: First outbreak on 3 August 2018, 165 outbreaks detected in 32 Provinces / Autonomous Regions / Municipalities / Special Administrative Region, about 1,133,000 pigs have been culled [As of March 2018, China have 440.6 million heads-estimate - 25% production- USDA Livestock and Poultry: World Markets and Trade 2019]

Viet Nam: First ASF outbreak on 19 February 2019, all 63 provinces/cities reported outbreaks, about **5,960,000** pigs have been culled.

South Korea: First ASF outbreak on September 2019, about 400,000 pigs have been culled as of Jan 2020

ASF Situation in the Philippines







National Government Support for Affected Farmers

Laboratory ASF Testing	 Laboratory testing for ASF for disease monitoring and surveillance by DA ADDRL and RADDLs; Accreditation of private sector laboratories
Indemnification fund of 5000/culled animal/farmer	President's Contingent Fund for indemnification and operations – PhP800M out of PhP1B released PhP500M DA Quick Response Fund (QRF) – on standby for indemnification of affected farmers
Technical and manpower assistance for surveillance and depopulation	Conduct of disease monitoring and surveillance activities and disease control activities by BAI, DA Regional Quick Response Teams, LGU ASF Task Forces
DA SURE Aid Programme	PhP30,000 for each affected hog raisers; Zero-interest and payable in three years
Post-outbreak animal recovery packages	 Region III – procurement of animals (worth PhP200M) for distribution to affected farmers; Cattle, Carabao, Goats, Range chicken, Layers, Broilers Region INA – Provision of alternative livelihood to affected farmers (Beef Cattle, Goat, Quail, Broiler Chicken, Free Range Chicken, Mushroom and Urban Vegetable Garden) PhF150,828,000.00

Roles of Government Agencies

Agencies	Roles and Functions
Department of Agriculture (BAI, NMIS, DARFOs)	Overall lead in disease control, disease monitoring and surveillance, early warning and response Indemnification of affected farmers Provision of support for alternative livelihood National quarantine measures (seaports and airports)
Local Government Units (PLGU, MLGU, CLGU) – R.A. 7160 Local Government Code of 1991	 Management and implementation of 1 – 7 – 10 Protocol Local quarantine measures including checkpoints Negotiation with affected farmers Provision of logistics and manpower in conduct of culling Provisions of alternative livelihood

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BAI ASF Control Task Force (BAI ASFCTF)

Activities

 Technical and logistic support for disease control and elimination activities of DA Regional Quick Response Teams (RQRTs) and Local Government Unit ASF Task Forces







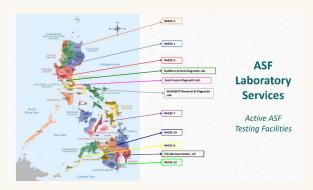
BAI ASF Control Task Force (BAI ASFCTF)

Activities

- Disease investigation; disease monitoring and surveillance
- Manage epidemiological database on ASF
- Assist in the development of relevant strategies to control and prevention of ASF
 - Regional ASF Action Plans
 Conduct of ASF Tabletop Simulation Exercises







Recent ASF Related Activities





- Meeting of the National Task Force on Animal-Borne Diseases (NTFAD), 19 March 2020
- Various teleconferences with BAI, DARFOs, RQRTs and LGU Task Forces for clarification of various issues on indemnification, local movement in consideration of the ECQ
- Presentation of national and regional ASF updates during the virtual meeting of the BAI ASF Control Task Force with Regional ASF Coordinators, 12 May 2020

Recent ASF Related Activities

(International Engagements)

- Participation in Standing Group of Experts on ASF (SGE-ASF) Virtual Meeting organized by OIE, 21 April 2020
- Participation of Regional ASF Coordinators, BAI ASFCTF and other technical staff in the African Swine Fever Online Preparedness Course for Asia and the Pacific, organized by the FAO Regional Office for Asia and the Pacific (RAP) and European Commission for the Control of Footand-Mouth Disease (EuFMD-FAO) — May to June 2020





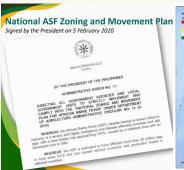


Recent ASF Related Activities (International Engagements)

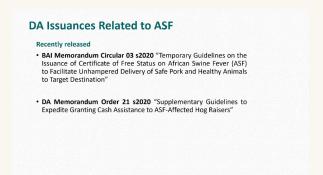
- Biosafety and Biosecurity Project: Enhancement of the Biosafety and Biosecurity Capabilities at the Veterinary Diagnostic Laboratories funded by US Defense Threat Reduction Agency (DTRA) with its Biological Threat Reduction Program (BTRP)
- Reduction Program (BTRP)
 Trainings conducted: PCR Technical Training ASF TaqMan Assay (Run 1 and 2)
- Provision of test kits and reagents
- OIE Laboratory Twinning Project between The Pirbright Institute (UK) and Bureau of Animal Industry (VLD-ADDRL)

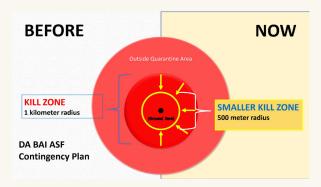
DA Issuances Related to ASF

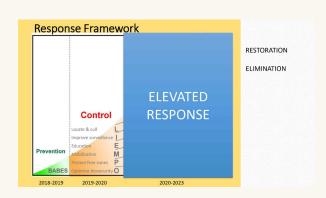
- DA AO No. 6 s2019 "Guidelines in Securing the Certificate of Farm Disease Free Status in Disease Outbreaks"
- DA AO No. 7 s2019 "Veterinary Quarantine Movement Protocol during Animal Disease Outbreaks/Emergencies"
- DA AO No. 8 s2019 "Revised Guidelines on the Local Movement of Swine, Pork, Pork Products and Pork by-Products outside Disease Outbreak Areas"
- DA AO No. 14 s2019 "Guidelines for Granting Cash Assistance to ASF-Affected Swine Farms"
- DA AO No. 31 s2019 "Emergency Guidelines to Manage, Contain and Control the Increased Swine Mortalities"
- DA AO No. 32 s2019 "Enhancing Animal Disease Reporting and Control through Provision of Compensation for Swine Culled during Government-organized Depopulation"
- DA AC No. 12 s2019 "National Zoning and Movement Plan for the Prevention and Control of

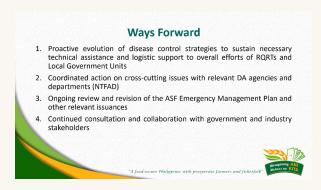




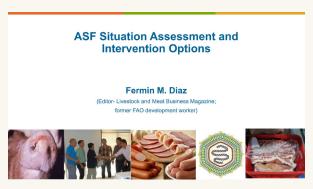












Presentation Outline

- 1. ASF socio-economic impact
- 2. 2020 Livestock/Agri outlook in wake of ASF
- 3. What ails the PH ASF Contingency Plan
- 4. Ways to beat the odds and move forward



Socio-economic impact of ASF in Ph

- 1. Ave. hog farm-gate price fell 13.9% y-o-y to P98.7/kg in Q4 2019 but improved 3% in Q1 2020
- 2. P80 billion loss by pig farmers in Luzon due to outbreaks, culling, and trade movement restrictions since Aug 2019. (PSF estimate)
- 3. P18 billion revenue loss in Q4 2019 by feed millers due to 22% drop in swine feed sales. (industry estimate)





Map showing spread of ASF virus (as of May 15, 2020)

No of provinces with ASF cases - 21 No of infected/culled pigs-251,450 (official report); Over 500,000 (industry estimate)





- 9. ASF and perceived govt mishandling of the virus persisted, causing:
- Dampened farmers motivation to produce more
- Reignited discord between producers & meat importers /processors and between hog raisers & DA/ BAI/ LGU regulators.

This created an environment not conducive for a constructive dialog, thus, effective ASF management could not gain traction in the ground.







10. The absence of a harmonized, LGU-acceptable and locally implementable ASF control &prevention strategy fostered virus transmission jumps, disrupted normal market flow of swine and meat products, resulting in billions in opportunity losses.





11. Overall, deep market anxiety brought by heavy loss of farmers income and ASF-related health fears dampen consumer appetite for pork.









2020 Outlook/ Expectations for livestock and agriculture in wake of ASF









- 1. ASF virus, introduced in Ph around Aug. 2019, will eventually become endemic even if a vaccine becomes available. Thus, prevention and control remain the viable option, if implemented properly.
- 2. Restocking by breeders and hog-for-slaughter producers will remain highly risky due to slow-spreading, persistent character of the virus and site fidelity. Any recovery program is wishful thinking - may only be a waste of time and money in the next 6-12 months.







3. Growing trend of some ASF-hit commercial hog farms in Central Luzon and Calabarzon shifting to layer farming and/or other agribusiness projects by purchasing relatively bio-secured properties.

They are taking advantage of cheap rice lands offered for sale by farmers hit by Rice Tarrification Act. Many farmers gone broke due to recent plunge in palay prices are selling their sizeable farm lands at bargain just to pay back old loans and meet their family needs.





- 4. Meat processors relying on local pork raw mats hit hard by meat trade bans will reformulate products by using little or no pork ingredients to remain in business. This will trigger decline in demand for manufacturing grade local pork and surge in ASF-cleared imported pork , hurting local hog farmers even more.
- 5. Consumer shift to poultry (chicken, chicken and duck eggs) and fish to trigger abnormal price hikes on these products, adding inflationary pressure on food price index.





6. Allied industries in the pork supply chain (corn, cassava, coconut, sugar, feed milling, animal health/ nutrition, slaughtering, meat processing, cold chain and logistics all face weaker demand. This will result to work slowdown and job cuts leading to unemployment and poverty.



If current set-up stays, producers and stakeholders see bleak industry outlook and meat trade ahead. High risk in restocking will halt production or lead to severe production cuts; others to restructure their operation or pursue other business opportunities away from swine.





What ails the current ASF Control/Prevention

Strategy?





- 1. Mandatory, pre-emptive culling is enforced and forcibly justified by inspecting vets' mere field assessment of the backyard pens or holdings - even before subjecting suspect animals to confirmatory lab test to prove positive ASF infection.
- *Preventive culling is generally applied and enforced on backyards, but more lenient on commercials - a biased and double-standard practice contrary to the equal protection clause of the law.



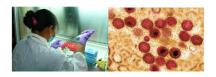






1-7-10 Protocol and AO 10 s. 2019

* European ASF strategy prescribes confirmatory testing first before culling, largely because of the slow-spreading nature of virus and early reporting mechanism that works well over there but not so here in Ph.







2. Issue on animal indemnity

*Early reporting by farmers is crucial to early detection and early prevention. But indemnity issue are discouraging farmers to report



Any delay in detection of an incursion of ASF into a free area, and so a delay in implementation of control measures, will increase the probability for further spread of the disease.





2 ways to motivate farmers to voluntarily notify suspected ASF occurrence in their

- 1. Assure prompt release of blood test results.
- 2. Offer them incentives, lest they go by their sayang mentality

This includes fair and just compensation at a reasonable payment period when mandatory culling is done on their animals.





Anything less results to:

- 1. Non-reporting/delayed reporting of suspect animals to vet authorities, thus aggravating situation.
- 2. Secret /illegal trade of pigs to live animal traders or viajeros who can offer better buying price than government.
- Haste in animal consolidation by *viajeros*. This results to improper handling and transport of live hogs for slaughter. Such practice speeds up viral spread and transmission jumps from one area to another.





Key actions to consider in managing ASF

1. Invest and hasten the establishment of an animal disease diagnostic laboratory network in key animal producing provinces and cities, not just at the regional centers and at BAI.





Key actions for consideration:

2. Review compensation policy of P5,000/head and payment limit to only 20 heads regardless of actual number of pigs stamped out.

(Suggested fair pricing: Based on actual number of culled animals of farmer; according to weight, stage of production, and whether breeder (sow or boar) or slaughter hogs.)







Country	Hog inventory Jan 1 2019	Compensation level (% of the value of animals killed)	Terms (time interval from culling to compensation)
Albania	180,090	?	?
Boznia and Herzegovia	548,000	100% or more	30-60 days
Bulgaria	654,550		
Croatia*	1,049,000	Up to 100%	60 days
Greece	758,000	100% or more	60 days
Kosovo	60,500	From 75 to 100%	30 days
Montenegro	27,000	100% or more	30 days
North Macedonia	196,000	100% or more	30 days
Serbia	2,792,000	100% or more	30 days
Slovenia*	259,130	100% or more	Not specified
Romania	4,023,800	Up to 100%	30 - 60 days
PHILIPPINES	12,800,000 (1 Jan 2020)	30-60%; w/ quota	?

* Currently ASF-free but face high risks due proximity with ASF-stricken countries

Source: EFSA Journa 2019;17 (11):5861



ASF-hit Southeast European Countries vs Philippines

GrowAsia PPSA

Ways to Beat the Odds and Move Forward:

Some Key Points of ASF Strategy needing review/consideration



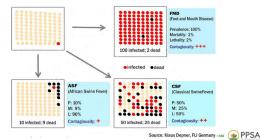
1. Provide clearer understanding of the virus to obtain a rational, calibrated and more effective response to control its spread.

Very lethal yes, but ASF virus, by itself, is not highly contagious based on updated scientific studies. In fact, it is slow-spreading and has site-fidelity characteristic. But human factors like poor observance of on-farm biosecurity measures by farmers and viajeros significantly helps speed up infection and contributes to transmission jumps and long distance spread.





EPIDEMIOLOGICAL COMPARISON OF 3 MAJOR SWINE DISEASES



2. Upgrade animal diagnostic lab capabilities to achieve early $\underline{\text{detection goals}}.$ Invest more in regional diagnostic labs $\underline{\text{and}}$ in key livestock producing provinces to reduce backlogs. Also accredit and deputize private labs in key livestock producing provinces which can do RT-PCR, C-PCR, ELIZA, and similar tests.







3. Conduct biosecurity training for farmers & live animal traders or viajeros as infection comes from direct contact with previously contaminated materials like swill, boots, clothes, water, feeds and livestock transport trucks of viajeros.

*Wrong notion it is highly contagious as FMD led DA/BAI to copy the 1-7-10 protocol on FMD from15 years back and applied almost same protocol on ASF.

* Overreaction & misinformation prompt LGUs to needlessly impose lockdown policy and irrationally impose total meat trade bans to protect swine-farmer constituents, leading to serious economic disruption.





4. In solving the AFS problem, socio-economic circumstances of various stakeholders must be considered not just addressing it largely from a veterinary perspective.

a. Make viajeros, not just farmers, equally accountable. Enforce on them restrictive, even punitive measures, but in the same breath, enhance farmers' and viajeros' capability to practice biosecurity at all times









c. Recurrent info campaign among consumers and the general public on proper meat/pork handling and disposal including engagements with vets, slaughterhouse operators, meat traders and importers and travelers and transporters of feed and food







A better understanding and acknowledging the weaknesses of the current system open opportunities for improvement.









Presentation outline

- · Pig farming in the age of ASF
- · Expectations under GCQ: Commercial and Backyard Pig Farms
- · Recommendations



Pig Farming in the Age of ASF

- Until an ASF vaccine is commercially available, the virus will be a given for the pig industry. Luckily, there are specific islands spared; everything will have to be done to keep these places ASF-free; for the rest, sound and strictly implemented BIO-SECURITY protocols are imperative.
- Lessons from Covid-19: lockdown can slowdown viral spread but businesses can collapse; a balanced strategy, barangay level must be deliberate and made operational, where testing and monitoring are key - virus controlled, pig farms open.



Pig Farming in the Age of ASF









Expectations Under GCQ Commercial and Backyard Pig Farms

- Extreme live pigs and pork products supply shortages are anticipated during the 2nd half of the year
 Some commercial pig farms hit by ASF will re-populate driven by higher prices and can be back in the supply chain by 4th quarter 2021
- nighter prices and call be beautiff the supply statute, yet and early 2022

 Backyard pig farming will have to be regulated at the barangay level to make sure swill feeding is not done
 Backyard pig farms, vulnerable to the ASF virus for possibly inadequate bio-security protocols, are better off in grow-out operations; cooperatives can play a critical role in "institutionalizing" backyard pig farming



Pro-active Barangay For COVID-19, GCQ Status simply means Monitoring on **ASF Outbreaks**

ror COVID-19, GCQ Status simply means site specific monitoring where the virus may be striking; not putting the guard down. The same can be said for ASF. Monitoring of where the problems may be must be specific at the barangay level. DA-BAI will have to mobilize at this level.



There will have to be a detailed assessment of hard hit areas where commercial pig farms may be ready to re-populate: that these areas are already clean and safe to re-start pig farming.



Industry Recovery Plan

 The global pork market and the national supply situation can remain very tight in the next two years; once the COVID-19 demand squeeze eases, prices of pork products will spike, bigger scale commercial production will have to be mobilized if quicker response time is desired; DA-BAI must be an interested party in making this happen - a pig industry recovery task force may be



Backyard grow-out pig farming in the nature of pig dispersal will have to be planned in selected areas where this has been an organized initiative in the past, are ASE.



More Detailed Colored Zones



- The zoning plan with color codes will have to be more specific and precise. Micro will be better than macro. It will have to take into account the kind of bio-security protocols installed in specific farms, in the barangays and municipalities.
- Movements of pigs from different sources to their destinations may have to be monitored like a delivery tracing system. Potential virus spread will have to be tracked.







Against an Unseen Foe

- ASF, like COVID-19, has disrupted the way things have been done in the past. And both have global dimensions. Managing the presence of these unseen enemies can only be effective if done collaboratively.
 - The market system cannot be allowed to operate freely under the present conditions. The viral infection can get more wild. Yet the supply chain must continue to serve producers and consumers. Pig farming structures must transform for the benefit of all stakeholders.





PANEL DISCUSSION and Q&A



Foodlink Advocacy Co-operative Moderator



Mr. Fermin Diaz Livestock and Meat Magazine Philippine Agricultural Journalists



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About PPSA



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.

About Grow Asia



Grow Asia was established by the World Economic Forum in collaboration with the ASEAN Secretariat, to convene, facilitate and help scale action-focused partnerships in Southeast Asia. Our goal is to lift smallholder productivity, profitability and environmental sustainability.