

AGROFOOD PRODUCTIVE: MODERN POULTRY PROCESSING IN MALAYSIA

| 9 DECEMBER 2020 | 11.00AM – 1.00PM | ZOOM WEBINAR |


Safura Abdul Malek
Pengurus AFPN/PGD

AGROFOOD PRODUCTIVE:

MODERN POULTRY PROCESSING

IN MALAYSIA



9 DECEMBER 2020 (WEDNESDAY)

11.00 AM - 1.00 PM

Mr Terry Tan
President of FLFAM

Mr Ong Chai Kin
Plant Manager
Dindings Poultry Processing Sdn. Bhd

Dr Rohaizan bt Mohd Anuar
Veterinary Officer
Veterinary Regulation Division
Department of Veterinary Services (DVS)

Dr Yap Teow Chong
Technical Consultant of FLFAM

Objectives:

- To discuss the key points in poultry processing for good, safe and wholesome poultry products
- To explore the marketing opportunities for processed poultry products

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Moderator: Mr Terry Tan, President, FLFAM

Panel 1: Mr Ong Chai Kin, Plant Manager, Dindings Poultry Processing Sdn Bhd

Panel 2: Dr Rohaizan Mohd Anuar, Veterinary Officer, Veterinary Regulation Division, Department of Veterinary Services

Panel 3: Dr Yap Teow Chong, Technical Consultant, FLFAM

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EXECUTIVE SUMMARY

- This webinar highlights on modern plant design, management system that complies to government regulations and standards, and market segment for poultry products.
- This session presented to audience how plant design and HACCP system complements one another in ensuring highest operation standards are met tackling key operation issues and eventually lead to improve operation productivity.
- Participants were enlightened on software and equipment essentials to modern processing plant operations and introduction to HACCP and how it is implemented in processing facilities.

A. **OPENING REMARKS**

- This webinar will be discussing on poultry processing for good, safe and wholesome products and marketing opportunities for processed poultry products.
- As consumers' awareness increased, poultry producers are improving their processes to meet consumers' demand and expectation.
- Agricultural industry has undergone significant evolution and changes in recent years contributed by advancement of technology, innovation and technical development in poultry production.
- The objectives are:
 - To discuss the key points in poultry processing for good, safe and wholesome poultry products
 - To explore the marketing opportunities for processed poultry products

B. **PAPER PRESENTATION**

Panel 1: Mr Ong Chai Kin, Plant Manager, Dindings Poultry Processing Sdn Bhd

Highlights from the presentation

- Designing processing plant should take into consideration the capacity of birds that will be processed at one time. Apart from this, consideration should also be given to process requirement, quality management standards that met the requirement for target market and product specifications i.e. type of cuts required.
- Plant fundamental design basis should comply to Malaysian and global exports standards on people flow, process flow, material flow and processed water flow. These elements flow must be designed to ensure smooth operation, safe working environment and avoid cross contamination of both air and water at processing plant.

- Each area should be equipped with suitable equipment and system to ensure welfare of birds and improved productivity of operations. These equipment's are used for different purposes, able to produce output meeting customers' demands with better hygiene.
- Big data and Internet of Things (IoT) are also used at modern processing plant. Production control software are capable to provide instant input on production and product tracking. Storing processed poultries at temporary storage area are done through automated system that reduces manpower required to perform the loading and sorting of products. Automated Storage & Retrieval system is capable of tracking inventory real-time with higher accuracy and product security. It is also capable of saving up floor space and provides highest possible storage density.

Key challenges

- n/a

Recommendation

- n/a

Panel 2: Dr Rohaizan Mohd Anuar, Veterinary Officer, Veterinary Regulation Division, Department of Veterinary Services

Highlights from the presentation

- Hazard Analysis Critical Control Points (HACCP) is a management system that prevent, reduce and eliminate and threats on food safety assurance.
- Poultry products are sensitive to contamination that may be caused by micro-organism, physical and chemical residue at any point in the supply chain. HACCP improve product safety by identifying any risk proactively and outlines corrective and verification measures.
- HACCP improves operation efficiency. This means compliance to regulatory demands and other associated benefits such as better reputation and cost reduction ultimately leading to increased profit.
- 7 Principle of HACCP:
 - Identification of hazard & determination of control measures. This stage involve identification of all raw materials/ ingredients and process on 4 elements (Biological, chemical, physical and allergen) before establishing the control measures for each identified risk.

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- Determination of critical control point (CCP). Each raw material and process categorisation as CCP will be done through decision tree.
 - Establish critical limit for Each CCP. A specific critical limit (CL) needs to be established, able to prevent, reduce and eliminate respective hazard. CL can be both qualitative or quantitative and must be verified to comply to standards and regulations.
 - Establishing monitoring system for each CCP is key to detect deviation and prevent any potential deviation from happening. Industry players need to understand what, how, when and who should be monitoring the product during operation. Monitoring can be done by employees that were trained in conducting CCP monitoring to adhere to monitoring standards and requirement.
 - Establish corrective action for deviation that may occur. Corrective action needs to be identified and documented to stop any hazards from reaching consumers. Corrective actions cover measures to products and processes.
 - Establish verification procedures involves verification on both CCP and CL to ensure effectiveness of HACCP plan, operation compliance on HACCP and demonstrated on-going effectiveness of HACCP System. Verification can be done through internal audit, management review and product testing to verify whether the product achieved the desired quality.
 - Establish record keeping and documentation entails record keeping for all activities related to identification of hazard, CCP and CL, monitoring CL and corrective actions.
- Failure on HACCP implementation at processing plant are caused by failure or confusion in understanding the operation and methods outlined in HACCP system. Wrong perception and misunderstanding on CL concept, inadequate monitoring and lackluster record keeping also contribute to failure of HACCP implementation.
 - HACCP is best complimented with other relevant system such as Quality Management System (QMS) and adequate SOPs. However, this success of this system demands commitment from every personnel in a company, competent workforce and right behaviour and attitude.

Key challenges

- n/a

Recommendations

- n/a

Panel 3: Dr Yap Teow Chong, Technical Consultant, FLFAM

Highlights from the presentation

- Malaysia has over 3000 farms in the country with average growth rate of 5% p.a. Malaysian individual on average consumed more than 50kg of chicken meat and 338 eggs yearly.
- Malaysian industry players can be categorised into integrator and non- integrator. Produced birds will be sold as live/ slaughtered whole bird or further processed into products. These products are sold at traditional wet/ dry market, HORECA, Modern Trade, Quick Serve Restaurant (QSR) and export market.
- Market Segments for poultry products:
 - Traditional wet market is historical legacy since centuries ago undergoing evolution from wet market to dry market suiting relevant needs. Wet market poses some concerns on environmental pollution, hygienic and sanitation, and food safety issues. Dry market is one way of reducing these hazards caused by wet market. Wet/ dry market typically sells whole chicken and/ or parts and portions of the chicken.
 - Modern trade is a growing trend nowadays where poutries are sold at hypermarket, supermarket and/or mini marts. Chickens are sold by whole chicken (super), portions, or parts and other variations such as antibiotic free, organic or branded chicken. Buying chicken from modern trade market is more prominent among the younger generation due to the assurance and convenience it provides.
 - HORECA is a wide spectrum of food operators selling various type of food ranging from international brand to local independent brands. It is a term originating from European countries denoting Hotel, Restaurant, Cafe (HORECA). In Malaysian context, some wholesalers' targets chicken rice operators to market their chickens.
 - Quick Serve Restaurant; typically, fast food chain such as KFC, McDonalds, Subway, Texas Chicken & Burger King
 - Manufacturers are producers of processed products derived from chicken such as sausages, nuggets, meat balls and breaded chicken wings. Some manufacturers also produce ready-to-eat meal which are sold to HORECA or consumers. Manufacturers may be in-house poultry integrators that venture in food processing.
 - E-Commerce is a trend that started few years back with prominent players such as Foodpanda and Grabfood. This segment is increasing in popularity among Malaysian due to recent imposition of MCO. While most of the products sold are cooked/ prepared food, there are options for consumers to purchase processed chicken and/or eggs through this platform as well.

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- Export market mainly involves local poultry farmers/ manufacturers selling live broiler and eggs to Singapore apart from export of processed poultry products.

Key challenges

- n/a

Recommendations

- Most of traditional markets sourced their supply from non-VHM slaughter facilities. This poses threats on food safety, hygiene and sanitation aspects. Sanitation and hygienic practice for traditional markets need to be improved.

C. PANEL DISCUSSION

- Panel 2 says that intestinal rupture damage that is within the CL depends on the evisceration machine. Producers need to check on the specification and efficiency of the eviscerator before percentage of the rupture to be identified as CL could be obtained. Common practice is 3% or 5% subject to the efficiency of the machine.
- Panel 2 advise that for CCP inside and outside of washer water volume is subject to the CL set by the establishment. They need to validate the water volume used to clean carcass inside and outside the washer.
- Panel 2 says that now only plants obtaining VHM certification are under DVS supervision. DVS is working on Animal Act revision to expand all poultry farms will be under DVS supervision. DVS personnel from time to time will reach out to small and medium farms to provide advisory and consultancy to farmers.
- Panel 2 remarks that compliance to exporting countries is the issue; certain countries requires HACCP System adoption for access to their respective market. Producers could opt to export to market that does not require HACCP certification.
- Panel 3 highlights that there are plenty of things that could be done to transform the industry and gain access to bigger market beyond Malaysian border. Compliance to myGAP and relevant standards are key in accessing export market. Government agencies should also work together to enforce standards, explore opportunities and support Malaysian industry players penetrating foreign market.
- Panel 3 says that Malaysian consumers are very careful; purchase was done after self-inspection at product shelves. Cell- cultured meat which were produced in laboratories is a revolution that is different than conventional poultry, eliminating the opportunity for consumers to choose. He believes that it won't be a rival to conventional poultry at this juncture. OCK opine

that this cell-cultured has not been accepted well by consumers. However, in the coming decade, we would not be able to predict what will happen.

- Panel 3 mentions that smuggling activities will persist due to various reasons. Importing poultries involves processes and procedures under DVS and other government agencies' purview. Cutting corners on regulations' compliance to create easy profit may be a motivation behind this activity.
- Panel 2 mentions that the local council has set a ban on slaughtering live birds at the wet market. However, enforcement remains an issue and there are still cases where slaughtering happened at wet market.
- Panel 3 says that there are 2 types of slaughter facilities in the country; VHM certified facilities under DVS and those not under DVS supervision. Local councils have not made it mandatory for every farm to be VHM certified. Unless municipal impose on this requirement, DVS authority are not applicable in these farms. Moving forward, various aspect needs to be taken into consideration to ensure that expanding DVS jurisdiction to every farm in the country is effective and feasible.

D. SUMMARY OF THE SESSION

- This session exposes participants to the modern way of building and operating processing facilities for poultry. Design of the plant should take into consideration efficiency of operation, and preventive measure to improve operation, food and workers safety apart from minimising contamination risk in the facilities or the surrounding areas.
- HACCP is a holistic management system aiming to identify and prevent hazards that are caused by materials and process in the facilities and in cases where deviation exceeds the acceptable limit, provides operators with corrective measures.
- Poultry producers and farmers are presented with poultry market segments that could be explored and opportunity in each of the segment.

