

PHILIPPINE NATIONAL STANDARD

PNS/BAFS

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Good Animal Husbandry Practices for Ducks



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Good Animal Husbandry Practices (GAHP) for Ducks

*Working Draft
For public consultation*

1 Scope

This code sets out the general principles of good practice and minimum requirements for the production, handling, transportation and storage of ducks and its products within the farm, in the commercial or backyard rearing/farming of broiler and layer ducks for food use. Industry specific requirements for the different types of ducks and different types of production system may be developed provided that it satisfies the minimum requirements set out in this Code.

2 References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments applies).

ASEAN Biosecurity Management Manual for Commercial Poultry Farming

Food and Agriculture Organization (FAO), Guide to Good Farming Practices for Animal Production Food Safety. 2010. Rome.

Philippine National Standard (PNS) Code of Hygienic Practice for Table Eggs.

3 Objective

The purpose of this Code is to ensure that the farming practices of the establishment provide greater confidence in consumers' expectations that the final products are safe and fit for human consumption, while improving farmers' viability, ensuring health safety and comfort to both the farm workers and ducks, and sustaining the least damage to the environment.

4 Definition of terms

For the purpose of this Code, the definitions specified in the documents of the Codex Alimentarius shall apply. Other relevant definitions are as follows:

4.1**abnormal behavior**

any changes developed as a response to poor or wrong management practice causing stress to the ducks

4.2**authorized**

that which has been permitted by the competent authority

4.3**backyard farm**

any farm or household raising at least one head of animal or bird and does not qualify as a commercial farm

4.4**commercial farm**

any farm which, for poultry ducks, satisfies at least one of the following conditions: a) 500 layers or 1,000 broilers, or b) 100 layers and 100 broilers if raised in combination

commercial duck farm

farm having at least 100 ducks regardless of age. *(PSA)*

4.5**competent authority**

an entity/agency who has the knowledge, expertise and authority as designated by law

4.6**culled animals**

undesirable animals eliminated from the herd or flock; these include non-performers, old, and injured ducks.

4.7**farm owner****operator**

legal or juridical entity who is responsible for the management and general operation of the farm; the term maybe used interchangeably

4.8**farm worker****personnel**

personnel responsible for the rearing of ducks / persons engaged by the business on a full time, part-time or casual basis

4.9**foot wear**

outer coverings for the feet, such as shoes or boots that protect the wearer and can be disinfected to prevent the spread of infection

4.10**good health status**

free from illness, injury or pain

4.11**potable drinking water**

drinking water that is free from diseases producing organisms and chemical substances deleterious to health

4.12**protected clothing**

clothing especially designed, fabricated, or treated to protect personnel against contamination and dangerous working conditions

4.13**qualified laboratories**

laboratories that are registered with the competent authority

4.14**ration**

daily feed/diet of the ducks

4.15**rearing**

the act of raising of ducks. The term is used interchangeably with farming throughout the text

4.16**vehicle**

any means of transporting ducks, including but not limited to trucks, tractors, trailers, trains, ferries, ships and aircrafts

5 Minimum requirements**5.1 Species of ducks**

The following duck species shall be considered:

- a. Mallard (*Anas platyrhynchos*) – is the largest and the most abundant duck in the world. They can be larger than normal or much smaller, darker or lighter, all white or all black. Male has a curled feathers on the back. Pekin ducks are the most common domestic duck.

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- b. Muscovy (*Cairina moschata*) – are wild tropical duck species native to Mexico as well as Central and South Americas. The most obvious character of Muscovy is the red facial skin. There are two subspecies of this species: a. *Cairina moschata sylvestris* (wild subspecies), commonly known as pato real (Spanish) or royal duck and *Cairina moschata domestica* (domestic subspecies) commonly known as pato criollo (Spanish) or creolo duck.

5.2 Farm Components**5.2.1 Farm Location/ Site Selection**

The farm should:

- i. Be within the approved land use plan of the local government and should be compliant with national regulations, e.g. DENR, etc., and other regulatory bodies.
- ii. Have a continuous supply of adequate power, potable drinking water and good access road.
- iii. Not be prone to flooding. Perimeter canals that drain to a closed lagoon may be constructed to prevent runoff from contaminating bodies of water and/or adjacent farms.
- iv. Not be near slaughterhouse facilities and other facilities such as dressing plants and processing plants.
- v. Not be on a site that could be a possible source of physical, chemical and microbiological hazards.
- vi. Existing farms that are not in compliance with numbers i to vi should have full control of the risks and ensure that there are mitigation measures in place.
- vii. Be accessible to major facilities of production (i.e. feed mill, water system).

5.2.2 Site history

If there is available data/information from relevant government agencies or organizations on the prior land use, then it should be used to establish that the site is not a possible source of physical, chemical and microbiological hazards. However, when these data are not available and uncertainty exists as to the suitability of the land for agricultural use, it is recommended to have the soil analyzed for heavy metal contamination, etc.

5.2.3 Farm layout

The farm should:

- i. Have a suitable area set aside for storage of feed, carcass disposal, waste management, workers area including toilets and washrooms.
- ii. Have a design that incorporates ventilation and ease of cleaning.
- iii. Have buildings and perimeter fences constructed to prevent contact between farm animals and potential disease carriers such as wild animals and stray animals like game fowls and pets.
- iv. Electrical conduits should be properly installed and covered to prevent possible electrocution.
- v. Layout and emergency procedures shall be placed in the most conspicuous place.

5.2.4 Animal housing

5.2.4.1 Indoor management (Housing and equipment)

- i. precautions must be taken to secure the site and buildings at all times in order to protect the health and welfare of the ducks.
- ii. ducks sheds must be designed, constructed and maintained to:
 - Provide insulation, ventilation, heating, lighting, sanitation and hygiene requirements;
 - Allow ready access for handling and inspection of the ducks;
 - Have sufficient height, width and space and entrance size to allow for catching methods that minimize stress on the ducks; and
 - Allow the distribution of ducks in the shed to be controlled to keep ducklings within the heated area and prevent crowding of older ducks.
- iii. all surfaces in the duck sheds and enclosures must be designed, constructed and maintained to:
 - Minimize the risk of injury and disease to the ducks; and
 - facilitate cleaning and disinfection of the shed surfaces.
- iv. all equipment used for rearing the ducks must be inspected as necessary to ensure correct operational functions, and if required appropriate remedial action must be undertaken.
- v. the duck sheds must be subject to control plan of predators (e.g. wild birds, rodents)
- vi. all ducks sheds must be sited to minimize risks of natural and environmental hazards, such as storm water drainage, extreme winds, and to allow for appropriate

management of dust.

- vii. controlled environment housing must have systems that warn of power failure and/or significant temperature variance.

i.2.4.2 Outdoor management (Shelter for ducks raised outdoors)

- i. all ducks must have access to shelter from adverse weather that is likely to cause heat stress, and to reduce the risk of predation.
- ii. shed openings provided for ducks to access an outside area must be wide enough to enable them to freely move to and from the outdoors at all times without the risk of smothering or injury.
- iii. where access to outside areas is provided it must be managed to prevent the development around the housing of muddy, dusty or contaminated conditions to an extent that could be harmful to the ducks' health.
- iv. precautions must be taken to protect ducks from pests, including predators.

5.2.4.3 Open water facilities

- i. all open water facilities must be:
- fit for the purpose;
 - constructed from a material that is not likely to harm the birds, for example, by breaking or forming rough or sharp edges;
 - designed and managed so as not to cause harm to the birds;
 - presented in a good state of repair;
 - designed to minimize water spillage; and
 - managed to minimize water spillage.
- ii. open water facilities must be designed and managed to ensure all ducks can freely and fully submerge their heads in the water, and take water up by the bill, when standing around the outside of the facility.
- iii. ducks must have access to open water facilities that allow full body access as early as possible and, in any case, from no later than 21 days of age.
- iv. From day old, the open water facilities must allow water to cover the head fully and be taken up by the bill so the duck can shake water over its body without difficulty and, in any case, have:
- a water channel width of at least 4.5cm, and
 - a water depth of at least 4.5cm.

- v. where necessary, for facilities that allow full body access, ramps can be placed within the facility to help young birds exit the water. Where used, such ramps must:
- only be provided where the birds have difficulty exiting the water facility. This is likely to depend on the flock, and must therefore not be provided routinely.
 - Be removed at no later than 28 days of age.
 - Only be placed at the narrow end/s of the facility.
- vi. open water facilities that permit full body access must:
- Ensure that any ball cocks are covered, to prevent birds becoming stuck under them.
 - Ensure that any ball cocks are mounted at the side of the facility only.
 - With the exception of any ball cock, allow the birds to use the whole area of the facility unhindered.
 - Be designed and managed to enable the birds to enter and exit the water freely and easily.
- vii. the height of open water facilities that permit full body access must not hinder the ability of birds to freely and easily enter the water.
- viii. when ducks are provided with open water facilities that permit full body access, bell drinkers and/or nipple drinkers must also be provided to supply a separate source of drinking water.
- ix. open water facilities that allow birds full body access must be emptied and cleaned regularly.

5.2.5 Storage facilities

- i. The farm should have facilities for proper storage.
- ii. The storage facilities should be kept clean at all time.
- iii. The storage facilities should have adequate ventilation, adequate protection from moisture and should be vermin proof.
- iv. If applicable, First in First out (FIFO) should be practiced.

5.2.6 Holding pen for culled ducks

- i. Sufficient pens and floor space should be provided to prevent overcrowding and permit necessary segregation of ducks.

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- ii. The holding pen should be constructed in such a way that it will adequately protect the ducks from adverse weather conditions and will provide sufficient ventilation.
- iii. The holding pen should have proper facilities for ducks to feed and drink.

5.3 Feed, Veterinary inputs, and Drinking water

5.3.1 Feeds and Veterinary inputs

- i. The farm operator should provide the ducks with adequate, safe and clean feed and that would allow them to meet their optimum nutrition level.
- ii. The farm operator should provide a daily feeding schedule or routine.
- iii. Owners or managers of ducks should acquire feed from suppliers who follow recognized good manufacturing practices and/or good hygiene practices and that meet quality and standards set by the country regulations or government directives, e.g. Animal Feeds, Veterinary Drugs, and Biologics Control Division (AFVDBCD) of the Bureau of Animal Industry (BAI).
- iv. Where on-farm manufacture of feeds is practiced, procedures designed to minimize contamination and prevent the inclusion of undesirable feed components should be followed. Farm operators should only use ingredients from authorized and traceable suppliers. Records of purchases should be kept. Where necessary, an expert assistance should be sought.
- v. The feed mixing equipment should be kept clean at all times and have regular preventive maintenance schedule.
- vi. The feed chain (transport, storage, and feeding) should be managed in such a way as to protect feed from contamination (biological, chemical, and physical hazards) and minimize deterioration.
- vii. Feeds and veterinary inputs should be used in accordance with label instructions, paying special attention to the withdrawal period of each specific drug being administered before the ducks and/or eggs are sent to market.
- viii. Feeds and veterinary inputs should be kept in a designated area under good ventilation.
- ix. The farm should record and keep documents, these include but is not limited to the following:
 - supplier or source of feed concentrate and its registration number;

- type of feed and supplements;
- quantity;
- declaration of ingredients;
- document of feed analysis;
- date of delivery; and
- date of manufacturing and batch number

5.3.2 List of banned chemicals and veterinary products

- i. The farm should have a list of veterinary products registered/approved by the competent authority available for viewing.
- ii. The farm should have a list of chemicals that are regulated and banned by the competent authority available for viewing.
- iii. Feeds should not contain banned ingredients, chemicals and veterinary drugs, including those disallowed by the authorities of importing countries.

5.3.3 Drinking water quality and treatment of water

- i. Potable drinking water should be used.
- ii. Ensure that only drinking water of known and acceptable biological and mineralogical quality (i.e. fit for ducks consumption) is used for watering stock.
- iii. Non-potable drinking water should be treated to comply with standards.
- iv. The water sanitizing system is checked regularly and at least once for every batch of ducks.
- v. Water treatment systems are checked daily and the appropriate parameters are recorded. Record sheet is retained with batch records at end of batch.
- vi. Treated water may be used for drinking water for ducks cooling systems and shed wash downs.
- vii. Pathogen levels should be checked regularly (*E.coli* and faecal coliforms as indicators of efficacy of sanitation).
- viii. ASEAN Biosecurity Management Manual for Commercial Poultry Farming may be used when it is applicable.

5.4 Farm Management

5.4.1 Farm Manual

- i. The farm should have a policy statement that covers commitment and emergency procedures.
- ii. A farm management system should be documented and available for inspection.
- iii. The farm should have an organizational chart.

5.4.2 Farm operators and workers/ Farm personnel

- i. The farm owner should conform to existing animal farming legislation. This covers the management of environment issues, farm location, animal welfare requirements, disease control, production of wholesome food and occupational hazard associated with animal farming.
- ii. The farm owner should observe the International Labor Organization (ILO) Conventions and Recommendations on Child Labour.
- iii. The farm owner should ensure that all farm operators and farm workers are in good health and undergo annual routine health check up.
- iv. The farm owner should always promote a safe and healthy working condition in the farm. The farm workers should be equipped with suitable protective gears and tools while working in the farm. Accident and emergency management procedures should be available with clear instructions for all workers. First aid kits and fire extinguishers should be easily available and accessible at all times.
- v. The farm worker should be insured against accidents in the conduct of his/her farm work.
- vi. The farm owner should report to relevant authorities any occurrence of accident in the farm which may result to serious physical injuries of workers.
- vii. The farm owner should encourage the promotion of gender equality in the work place.
- viii. The farm operator/worker should be responsible for the welfare of the ducks by giving adequate provisions so that they are able to perform at their optimum levels.
- ix. Appropriate working uniform/attire and footwear should be provided to farm

operators or visitors who need to be at the production area.

5.4.3 Competency

- i. Workers should be trained for the tasks that they are required to do. In addition workers should be trained in the following procedures: farm sanitation, personal hygiene, animal handling and welfare, breeding program, medicine dispensing and quarantine.
- ii. Workers should be competent in the tasks that they are required to do and the competency should be reviewed on a regular basis.
- iii. The farm should have sufficient workers/personnel/staff to perform the required work load including the services of a farm supervisor and veterinarian.

5.4.4 Hygiene and Sanitation

It is recommended that commercial poultry farms should refer to the ASEAN Biosecurity Management Manual for Commercial Poultry Farming for other hygiene and sanitation requirements.

5.4.4.1 Personal Hygiene

- i. Workers should wear appropriate protective clothing, if necessary with masks, and foot wear at all times that can be sanitised.
- ii. Workers' movement in the farm should be controlled to avoid cross contamination between different age groups of ducks. Workers should enter clean areas first then move to dirty areas. Workers should not move from dirty areas to clean areas.
- iii. Workers should ensure that no unnecessary accessories and personal effects that may pose hazards may be brought in the production area.
- iv. Downtime/quarantine should be observed before entering the production area for workers coming from outside the farm.

5.4.4.2 General Farm Hygiene

- i. The farm should have a cleaning and disinfection procedure in place. Farm premises should be kept clean and free of potential conditions conducive to breeding of pests, ducks parasites and disease outbreak. This is to avoid negative effects on the landscape, environment and ducks welfare.
- ii. Organic materials should be regularly removed from all livestock contact

surfaces (i.e. floors, pen partitions). Where bedding is used, it should be regularly changed and/or topped up.

- iii. The farm should have a proper and functional drainage system.
- iv. Only approved chemicals by competent authorities in the country should be used for cleaning and sanitation.
- v. The farm should have appropriate equipment and tools for effective and functional hygiene and sanitation operation.

5.4.4.3 Waste management and Environment Management

- i. The farm operator should take necessary measures to ensure that activities related to livestock farming do not contribute to the degradation of the environment (i.e. land, water, air) and cause destruction to bio-diversity.
- ii. Litter, solid (including biohazard waste) and liquid waste should be managed and disposed according to the country's regulations.
- iii. The farm operator should maintain and display clear instructions on procedure for disposal of farm solid wastes and farm chemical wastes (e.g. expired pesticide/herbicide and containers, paint, etc.).
- iv. Dead ducks should be buried properly or disposed in a manner that complies with country regulations, e.g. mortality pits.
- v. Compost stations should be positioned away from the activities of the farm, waterways and also be protected from rain to avoid leaching.
- vi. Toilet septic tanks should be maintained so that potential overflows will be avoided.
- vii. Effluent ponds should be located away from farming operations and should not overflow.
- viii. Waste water from farms shall be treated before discharging into public water resources.
- ix. Any waste water treatment process should be properly functional.
- x. Measures should be in place to keep out noise that could potentially affect growth

and productive performance of ducks, specifically around poultry brooder house

- xi. The farm should regularly monitor the air quality and maintain it at acceptable levels.
- xii. The farm should take appropriate measures to minimize excessive odor coming from the farm and that which may be associated with waste decomposition.

5.4.4.4 Pest Control

- i. Farm premises should be maintained in a good condition to prevent possible vermin infestation.
- ii. The farm should have pest control programs to reduce or eliminate pests including rodents and insects.
- iii. Only approved chemicals and baits should be used in pest control programs.

5.5 Ducks Health Management

5.5.1 Introduction of new stock

- i. Acquire ducks only from sources with known good health status, certified by a qualified veterinarian and/or competent authority.
- ii. Keep newly arrived ducks separate from resident stock for an appropriate period, to prevent possible disease transmission.
- iii. Each batch of ducks purchased or hatched should have batch identification for traceability purposes.

5.5.2 Surveillance and control of diseases

- i. There should be a written ducks health program in place, including a vaccination and deworming program, if required, that is updated regularly and supervised by a licensed veterinarian, in accordance with the requirements of the competent authorities.
- ii. The vaccination program should be adopted against the diseases as required by competent authorities and it should be in a written form. Only vaccines approved by a competent authority in the country should be used.
- iii. The health status of ducks should be monitored and recorded regularly, and

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veterinary assessment of the establishment should be carried out annually by a licensed veterinarian and/or by a competent authority.

- iv. Separate diseased from healthy ducks such that transmission of infection does not occur, and where necessary, cull diseased ducks humanely.
- v. Identified isolation area/pen for “suspected diseased birds” should be provided.
- vi. The use of drugs, medicines, vaccines, and medicated feeds for disease control should be in accordance with the instructions of a licensed veterinarian following country regulations.
- vii. Drugs or medicines should only be used for prophylactic and treatment reasons.
- viii. Keep all treated ducks on the farm and ensure that these ducks and/or their products are not used for human consumption until the drug withdrawal period is completed and certified fit for human consumption by licensed veterinarians.

5.5.3 Bio-security measures

- i. The farm should have a written protocol of bio-security measures. Proper warning signage should be provided.
- ii. Bio-security procedures should be well implemented to prevent introduction of disease into the farm and/or to control its spread within the farm.

Example:

For ducks that are in coops/poultry houses/buildings, the cages should be netted to prevent entry of migratory birds. In the cases of free-range ducks, control measures that include putting them in cages while there are cases of avian influenza outbreak to prevent them co-mingling with migratory species.

- iii. The implementation of bio-security measures should be continuously monitored to assess the effectiveness of the program.
- iv. The farm should have the appropriate and functional lay-out and infrastructure to ensure effective implementation of the bio-security measures. This should include facilities:
 - For changing, washing and shower; and
 - For disinfection at entry/exit point of the farm and the building.
- v. It is recommended that commercial poultry farms should refer to the ASEAN Biosecurity Management Manual for Commercial Poultry Farming for other

biosecurity requirements.

5.5.4 Laboratory testing

- i. Routine testing should be carried out in qualified laboratories for surveillance and/or monitoring of notifiable diseases.
- ii. In case of reportable disease outbreak, testing should be conducted in an approved/accredited laboratory and should continue until it can be shown that the disease has been controlled.

5.5.5 Protocols when disease is suspected

- i. If there is an outbreak or suspicion of epidemic disease, the farm should follow the requirements of the laws and regulations on ducks epidemic disease control of the country and OIE guidelines.
- ii. Emergency biosecurity procedures should be followed (refer to ASEAN biosecurity management manual for commercial poultry farming and biosecurity protocols for poultry).
- iii. The farm operator should report immediately or within 24 hours to relevant authorities any incidence of abnormal behavioral changes, health conditions and mortalities in the farm or any characteristic of a disease outbreak (e.g. Highly Pathogenic Avian Influenza (HPAI), New Castle's Disease).

5.5.6 Prevention and Treatment

- i. The use of medicines and biologics should be under the supervision of a licensed veterinarian or competent authority. Medicines and biologics used should be registered with the competent authority.
- ii. The farm should maintain updated records of medicine purchase and administration that should be readily available for inspection.
- iii. Drugs, medicines, and vaccines should be stored and identified properly; proper disposal of these items should be followed to prevent contamination to the environment.
- iv. The farm operator should keep and maintain complete records of farm operations, management routines, and animal health records like disease monitoring and medication. These records should be easily retrievable.
- v. Records include, but are not limited to, the following:
 - Vaccination program;

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- Deworming;
 - Disease condition;
 - Diagnosis;
 - Intervention or treatment done;
 - Control measures;
 - Post-mortem findings;
 - Surveillance; and
 - Disposal.
- vi. The farm should maintain updated records of medicine purchase and administration that should be readily available for inspection.
- vii. The procurement records should have:
- Date of purchase;
 - Name of the product (generic compound);
 - Quantity purchased;
 - Batch number;
 - Expiry date; and
 - Name of supplier.
- viii. Administration records should consist of the following:
- Type of drugs or medication used;
 - Batch number;
 - Quantity of medicine used;
 - Date administered;
 - Route of administration;
 - Identification of ducks/group treated;
 - Number of ducks treated;
 - Date of completion of treatment;
 - Withdrawal period; and
 - Name of the person who administered the medicine.

5.5.7 Animal welfare

- i. Care shall be taken to preserve the welfare of ducks. In case of injury, sickness or deformity, ducks shall be appropriately treated to avoid suffering.
- ii. All ducks should have access to and are sufficiently provided with feed, water and space (refer to OIE guidelines on Animal Welfare).
- iii. The farm operators and personnel should not cause cruelty to ducks, which includes but is not limited to:
- Maltreatment of ducks under his/her care and attention.

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- Neglect of ducks, such that it experiences pain, suffering or distress.
 - Failure to provide adequate resources to maintain the live weight of the ducks within the normal physiological range for the species type, age and sex.
 - Removal of any part of the anatomy without adequate anesthesia, whenever applicable.
 - Putting to sleep (euthanasia, e.g. cervical dislocation), confine, handle or transport any ducks in a manner causing deliberate pain, suffering or distress.
 - Keeping a ducks alive, especially that which is pronounced physically or physiologically incapacitated, unless it is under the direct care of a licensed and registered veterinarian.
- iv. The farm operator and personnel should not neglect ducks according to the following criteria;
- Freedom from hunger and thirst and malnutrition. Feed withdrawal of ducks should not be more than eight (8) hours before slaughter;
 - Freedom from physical discomfort and pain;
 - Freedom from injury and disease;
 - With due consideration to the differences in the production system (confined and free-range), ducks should be given enough freedom to conform to essential behaviour patterns, (i.e. specific growing stage of poultry); and
 - Freedom from fear and distress.
- v. Handling and restraining of ducks
- Ducks, including ducklings in boxes, must be moved and handled at all times in a manner that minimizes the risk of falls, pain and distress and avoids injury.
 - Ducks, including day old ducklings, must not be carried by one or both wings, or by the neck without supporting the body weight.
 - Stress induced by handling must be minimized by appropriate design of facilities, use of suitable tools and equipment and training of personnel.

5.6 Transportation and Storage

- i. The transport of ducks from point of origin to final destination should follow a planned route and be in a manner that does not cause stress throughout the journey and does not predispose them to injury and disease.
- ii. Transport should follow the regulations of the competent authority.
- iii. Appropriate space allowance and ventilation should be provided during transportation.

- iv. Only clean and disinfected vehicles should be used to transport ducks.
- v. Vehicles used to transport ducks should be exclusively used for ducks transport only.
- vi. Vehicles used for the transport of animals should be according to the following specifications:
 - Allow easy loading and unloading;
 - Has communication equipment and first aid kit;
 - Ensure safety of the ducks and personnel during transport;
 - Clean and sanitized;
 - Equipped with floors that provide secure footing;
 - Have proper provision for collecting manure; and
 - Have a decal/label “live animal on board” at the sides and front/back.
 - Registered with the competent authority.
- vii. Transportation should be carried out at the coldest time of the day in order to avoid heat stress to ducks.
- viii. The transport of ducks from point of origin to final destination should be through the most direct and appropriate route that should be completed without unnecessary delay.
- ix. The transporter should be fully responsible for the care and welfare of the ducks as well as ensure the cleanliness of the vehicle during the entire process of transporting. Disposal of the waste should be done in an environment friendly manner.
- x. Day old chicks should be packed in appropriate packaging or restraining containers as required by the country regulations.
- xi. Where appropriate, ducks should be segregated according to species, size, sex, and age or according to customer requirements.
- xii. Short duration feeding regimes aimed at reducing shedding of harmful bacteria during slaughtering should be applied for ducks destined for slaughter. Ducks destined for slaughter should be rested upon arrival at the slaughterhouse.
- xiii. Ducks being transported should be in a good state of health.
- xiv. A transport or movement permit should be obtained prior to shipping

ducks as required by the country regulations with animal health certificate signed by a licensed veterinarian.

- xv. In cases wherein the establishment seeks the services of a second (2nd) party to ship the live ducks, the shipper should be properly informed of the recommendations stated in i to xiii.

5.7 Record-keeping

- i. When a problem arises, be it a disease, a chemical hazard issue or a physical safety matter, record keeping is central to any effort to trace the source of the problem and eliminate it. The *OIE Guide to Good Farming Practices for Animal Production* recommends the ability to trace animals at least one step forward and at least one step backward from the current holding. Hence, as far as is practicable, farmers should keep records of:

- Animal identification;
- Animal source, especially import animals;
- Feed
- Animal Health (Treatment and Vaccination);
- Animal movement
- Laboratory;
- Sanitation and Hygiene;
- Pest control;
- Personnel Health and Training;
- Waste management;
- Production;
- Procurement;
- Storage;
- Visitor;
- Transportation;
- Traceability (e.g. animal/lot/batch ID, customer record, etc.).

- ii. Records should be kept for a minimum of 3 years or a time specified by Government directives.

5.8 Egg management

5.8.1 Egg collection, handling, storage and transport of eggs

Eggs should be collected, handled, stored and transported in compliance with the requirements stated in section 5.3 of Philippine National Standard (PNS) Code of

Hygienic Practice for Table Eggs.

5.8.2 Egg for balut production

- i. Eggs should:
 - be thick-shelled and crack-free;
 - not be older than 5 days from the time these are laid by ducks;
 - be fertile.
- ii. eggs should be placed in an iron vat or cauldron with appropriate temperature to maintain the embryo.
- iii. candling should be done on the 11th and 17th day after eggs are placed in iron vat or cauldron. Separate eggs with dead embryos (penoy) and those that are ready to be sold as balut.

5.9 Review and Evaluation of Practices

Practices should be checked for compliance and evaluation for effectiveness and do-ability on a regular basis. In cases where provisions are no longer applicable, they may be amended.

References

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