

PNS/BAFS 60:2008

GOOD ANIMAL HUSBANDRY PRACTICES (GAHP)

(Illustrative Guide)



Republic of the Philippines
Department of Agriculture
BUREAU OF AGRICULTURE AND FISHERIES STANDARDS
BPI Compound, Visayas Avenue, Diliman Quezon City
2019



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What is Good Animal Husbandry Practices?

*It is a set of principles of good practices and minimum requirements for the commercial/backyard rearing/farming of animals for food use. The purpose of the 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 ensuring **health safety and comfort to both the farm workers and the animals**, without any degradation to the environment.*

Why should I follow the Code of Good Animal Husbandry Practices?

To ensure food safety and quality

- 1** It helps to reduce physical, biological and chemical hazards in farm production that pose health risks. There is an assurance that food will not cause harm to the consumer when it is prepared or eaten according to its intended use.

To protect and promote the welfare of animals

- 2** It provides safe standards for feeding, health care, prevention and treatment of disease and the assurance of freedoms of animals as well as avoidance of cruelty, maltreatment or neglect to animals.

To promote health and safety of farm workers

- 3** It provides a safe and healthy working condition on the farm by identifying the hazards and minimize potential risks.

To support environmental management

- 4** It helps minimizes adverse effect on the environment like harmful greenhouse gases emissions such as methane, carbon dioxide and other GHG, pollution of land and water resources.

Why should I follow Code of Good Animal Husbandry Practices?

GAHP CONFORMANT



Good Biosecurity

Biosecurity protocols are followed. Farm is appropriately fenced, not allowing stray animals in.



Protected Farm Workers

Farm workers are protected by wearing appropriate farm attire ensuring food safety.



Proper Transportation

Usage of appropriate transport vehicle and proper spacing requirements in transferring animal will result to animal's good condition and will not suffer stress.

GAHP NON-CONFORMANT



Poor Biosecurity

Presence of stray animals inside the farm pose health and safety threat to farm animals.



Exposed Farm Workers

Appropriate farm attire is not practiced may expose farm workers and animal products to hazard (e.g. milk production).



Improper Transportation

Animals suffer stress due to improper transport vehicle and spacing requirements.

Why should I follow Code of Good Animal Husbandry Practices?

GAHP CONFORMANT



Healthy Farm Animals

Healthy animals will not be susceptible to infections.

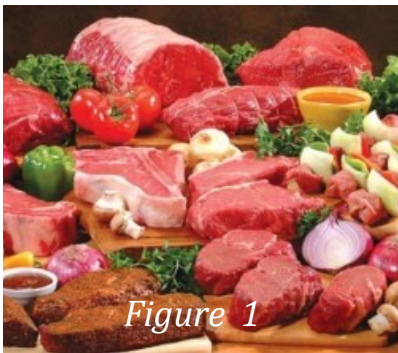


Figure 1

Safe Animal Product

Animal products (e.g. milk, eggs and meat) are safe for consumption as banned chemicals are not administered and withdrawal period is properly observed.



High Quality Product

Quality and safe animal products from healthy animals.

GAHP NON-CONFORMANT



Unhealthy Farm Animals

Animals susceptible to diseases affect the quality of animal products.



Figure 2

Unsafe Animal Product

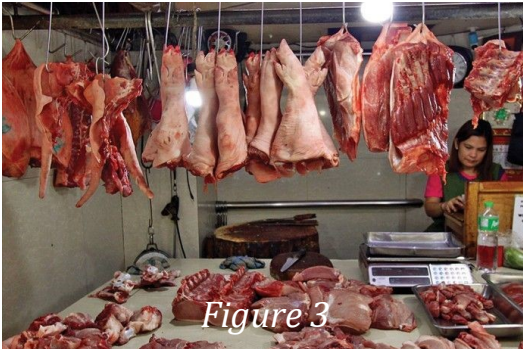
Animal products may pose threat to consumer if usage of banned chemicals is practiced leading to food hazard.



Low Quality Product

Short-term stress results in pale, soft and exudative meat (PSE).

Who can benefit from Good Animal Husbandry Practices (GAHP)?



Producer

Producers cultivate safe and quality animal products gaining competitive advantage in accessing the market.

Consumer

Consumers have access to safe and quality animal products, reducing the risk of becoming infected with food-borne illnesses.



Farm operators/workers

Protected farm workers/operators experience healthy working conditions.

Society

Protected farm workers/operators experience healthy working conditions.



What are the minimum requirements of GAHP?

A. Promotion of a Safe and Healthy Working Condition for the Farm Operators



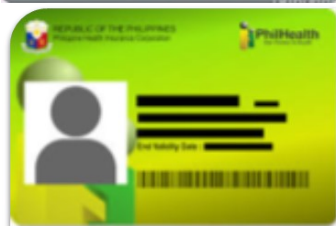
ATTIRE

Farm operators or visitors must wear appropriate attire and footwear to minimize possible introduction of pathogens and contaminants onto the farm, and to protect farm operators and visitors from possible pathogens.



TRAINING

Farm operators/workers should be trained with basic procedures of farm management including correct handling of animal, routine management practices and usage of farm tools.



INSURANCE

Farm operators should be insured.



EMERGENCY FACILITIES

First aid kit and fire extinguisher should be easily available at all times, and placed conspicuously in strategic locations.

B. Consideration/Observance of Animal Welfare

Farm operators should take into consideration the five (5) basic freedoms for animals conforming to Republic Act 8485:

| BASIC FREEDOMS | DETAILS |
|-------------------------------------------|-------------------------------------------------------------------------------|
| 1. Freedom From Fear and Distress | Ensure conditions and treatments that are not provoking mental suffering. |
| 2. Freedom From Hunger and Thirst | Provide readily accessible freshwater and diet. |
| 3. Freedom From Unnecessary Discomfort | Provide a proper environment, such as shelter and comfortable resting area. |
| 4. Freedom From Pain, Injury, or Diseases | Prevent suffering through quick diagnosis and treatment. |
| 5. Freedom to express Normal Behavior | Provide enough space, proper facilities and the company of animal's own kind. |

C. Choosing Site Location



Farm History

History of the land or the prior land use is not a possible source of hazard.



Adequate supply of potable water

Water for drinking shall be clean and free from contamination.



The farm has good access road if:

- Road is passable in all-weather conditions.
- Animals can be transferred/transported to the slaughterhouse.
- Purchasing of inputs from the market is convenient.



Generator

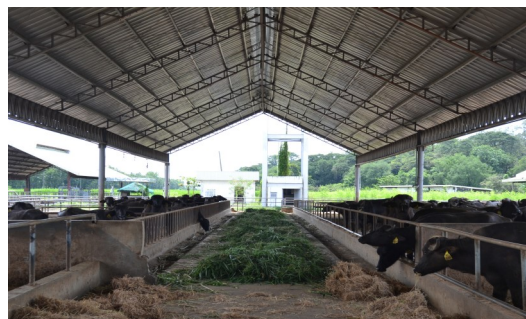
Ensure continuous supply of electrical power

There should be a power back-up source (e.g. generator).

D. Building Consideration for Animals

Proper Ventilation and Lighting

Facility with proper ventilation and adequate lighting will provide comfort to animals.



Food and drinking facilities

Available food and drinking facilities that are easily accessible to animals.



D. Building Consideration for Animals

Non-slippery materials, safe, stable and well - lighted floors and pathways

- The materials used shall ensure the well-being and safety of animals inside the pen or house. It will result in good conditions of the animals.
- It also ensures the safety of farm workers who navigate and operates inside the building house or pen of the animals.



Hazards that may cause injury to animals



Protruding Objects

Objects that protrude may cause injury to animals and workers who operates inside the pen/facility.



Damaged Floor

Ruined floors may cause injury or wound to animals inside the pen or to workers who operate inside.

Example of building and facilities for different species

D.1. Swine

Pre-gestation Area

Sow for breeding are stationed in this area.



Boar Unit

Individual pens for each boar to avoid injuries and infighting.



Breeding Room (Gestation)

Individual pens allotted to house pregnant sows.



Growing - Finishing Pens

Allocated for pigs in the growth stage and finishing stage.



Nursery Homes

Pens assigned for weaned pigs.



Farrowing Room

Farrow stalls confine the sow so that it would not accidentally lie or stand on its piglet.



D.2. Chicken



Individual Nest Poultry - Layer

Presented above are examples of suitable housing for a layer type chicken. One crate or box can cater about four to five layers.

The site shall be far from the hustle of unwanted noise because excess noise inhibits egg production.



Dropped ceiling

Poultry - Broiler

The housing construction for broiler-type of chicken shall be in clear span structures and the floor shall be covered in various bedding materials. In order to reduce heat and improve ventilation, a dropped ceiling is built.

D.3. Cattle/Water Buffalo

Lactating Carabao/Cattle Barn

Cow sheds shall be arranged in a single row if the number is low. In double row housing, stables should be arranged either face out (tail to tail system) or face in (head to head system). Wide middle alley is an advantage in terms of cleaning and milking cows.



Milking Parlor

Part of a dairy farm where cows are milked.



Individual Calf Pen

It is a type of shed allotted for calves, from the weaning stage to five months of age. It is open at the front and back and has a partition between calves. A feed and water pail can be at front. It has excellent ventilation and is easier to clean.



D.4. Goat

Shed-type housing

Single-story roofed housing.



Stall barn/Confined housing

Designed for accommodating a large number of goats.

E. Proper Storage of Feed Materials



Storage Facility

Feed materials shall be stored or placed in a designated area or facility where:

- A. Feeds shall be placed on top of pallets and vermin-proof
- B. Storage facilities should also be bird - proof.
- C. Feeds should have proper distance from the wall to prevent mold growth.



A.



B.



C.

F. Animal Identification for Traceability

1. Large animals



Branding



Radio Frequency Identification tags (RFID)

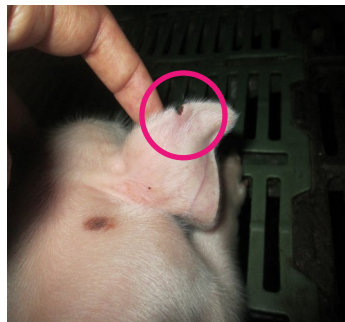


Ear tag

2. Swine



Ear Tattooing



Ear Notching

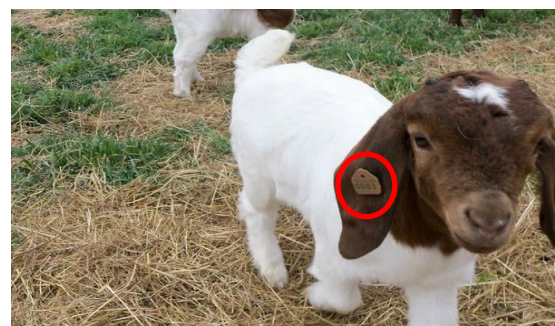


Ear Tagging

3. Goat



Ear Tagging



Radio Frequency Identification tags (RFID)

G. Proper Administration of Veterinary Drugs



- Veterinary drugs should only be used for prophylactic and treatment reasons.
- Under the supervision of a licensed veterinarian, the vaccination, medication, and treatment shall be administered properly.
- Proper observation on withdrawal period.

Banned medications shall not be administered.



- i. Chloramphenicol
- ii. Olaquinox
- iii. Carbadox
- iv. Nitrofurans
- v. Beta-Agonist Drugs

H. Proper Storage of Veterinary Drugs

Storage of Veterinary Drugs

The drugs shall be kept in a safe place with proper labels for identification.



Appropriate Temperature

Veterinary drugs are necessarily separated from the food items and properly stored based on the manufacturer's recommended temperature.



I. Proper Handling and Restraining of Animals

Usage of tools and equipment

The usage of tools or equipment in handling and restraining animals should not cause pain, injury or stress to the animal.



Usage of tool/s or equipment

The farm worker, using an equipment, guides the piglet to their pen.



Usage of Alternative Material

The worker used an alternative tool—a stick covered with a plastic bottle at the end as to not inflict pain or injury to the animal.



Proper Restraining

The cow is properly restrained by the farm worker performing Artificial Insemination without causing undue stress or pain.

J. Proper Transportation of Animals



Appropriate vehicles

Appropriate vehicles should:

- allow easy loading and unloading;
- have communication equipment and first aid kit;
- ensure the safety of the animals and personnel during transport;
- be clean and sanitized;
- be equipped with floors that provide a secure footing;
- have proper drainage which also allows the collection of urine; and
- have a decal/label "live animal on board" at the sides and front/back.

Malpractices during transporting of animals



Animals are hanging around the tricycle



Vehicle crowded with animals and people

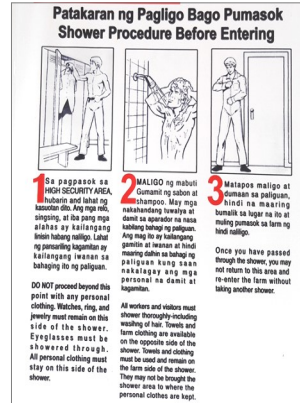


Ducks were hung around the vehicle

K. Biosecurity Measures or Protocols



K.1. Bio-exclusion



K.1.1. Fence

Establishment of fence around the farm to prevent the entry of stray animals.

K.1.2. Protocol

A written biosecurity protocol on the farm shall exist.



K.1.3. Farm Entry Log

The farm logbook keeps track of the number and name of visitors who visited the farm.

K.1.4. Wash, Shower & Change

The farm operators, workers, guests or visitors should undergo washing, shower and changing of attire upon entry in the farm.



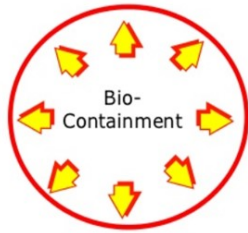
K.1.5. Spray/Bath

The vehicles should undergo biosecurity protocols before entrance such as vehicle spray/vehicle bath.

K.1.6. Handwashing

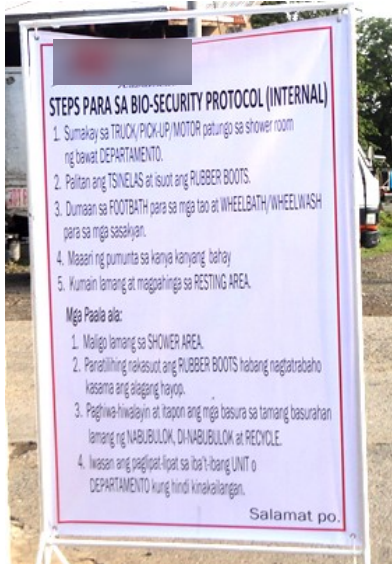
Washing of hands shall be practiced all the time to prevent the spread of disease or pathogens.

K. Biosecurity Measures or Protocols



K.2. Biocontainment

It is the control of disease within the farm to other farms.



K.2.1. Implementation of Protocol

Strict implementation of biosecurity protocol shall be maintained on the farm (without exception).



K.2.2. Entry and Exit Point

Foot bath at the entry/exit point of the farm and building is important to conduct to avoid probable infections.



K.2.3. Attire

Proper farm uniform or attire shall be worn at all times within the farm premises.

L. Proper Handling of Sick, Injured and Disabled Animals

Sick Bay/Hospital Pen

The area where animals with injury, illness or disability can be found.



Sick bay or Hospital Pen Protocol

- Establish a barrier between sick, injured or disabled and healthy animals to avoid spreading of infections/diseases.
- Monitoring shall be done.

Where should I bury dead animals?



Burial

Dead animals shall be buried properly and shall be located away from the production area and bodies of water to avoid contamination.

M. Environment Management

M.1. Cleaning

Regular cleaning of the farm and premises.



M.2. Segregation

Proper segregation of wastes to its proper designation.



M.3. Drainage

Proper and functional drainage canals.



M.4. Disposal

Used bottles, syringes and vials shall be disposed of based on the manufacturer's recommendation or instruction.



M. Environment Management

M.5. Animal Waste Treatment Methods:



M.5.1. Anaerobic digester/Biogas

Biogas or biofertilizer is produced through breaking down of organic matter.



M.5.2. Solid and Liquid Separator

Removal of organic and inorganic solids from animal manure. It is used for composting or generating biogas.



M.5.3. Composting

Natural process of recycling organic matter into rich soil amendment.



M.5.4. Tubular Polyethylene Digester (TPED)

A kind of bio digester which can be seen in some piggery farm used to produce biogas.



M.5.5. Scalable Polyethylene Drum Digester (SPEDD)

A low-cost bio digester designed for the micro user to produce biogas.



M.5.6. High Density Polyethylene Digester

A bio-digester used to produce biogas. Its durability and resiliency are high thus low in maintenance and downtime occurrences.

N. Record Keeping



Records

Records shall be easily accessible to the farm workers, personnel and assessors. It encompasses data about everything about the farm.

- ☞ Helps in overall better supervision and management of animals.
- ☞ Keep track of all animals (Identification records).
- ☞ Evaluation of livestock for selection breeding records, financial records, production records).
- ☞ Aids in disease management; recordkeeping about treatment (disease records).

Types of Records

| Animal Health Management | | | Feeds and Nutrition |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Animal health programme :</p> <ul style="list-style-type: none"> • Vaccination programme; • Deworming; • Disease condition; • Diagnosis and treatment | <p>Procurement records of veterinary medicines :</p> <ul style="list-style-type: none"> • date of purchase; • name of the product (generic compound); • quantity purchased; • batch number; • expiry date; and • name of supplier | <p>Administration records:</p> <ul style="list-style-type: none"> • type of drugs or medication used; • batch number; • quantity of medicine used; • date administered; • route of administration; • identification of animals/ group treated; • number of animals treated; • date of completion of treatment; • withdrawal period; and • name of the person who administered the medicine | <p>Procurement documents of feed :</p> <ul style="list-style-type: none"> • Supplier or source of feed 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 |

References

- Bureau of Animal Industry—Administrative Order 12 Series of 2007—Revised Implementing Rules and Regulations on the Registration of Feed Establishments and Feed Products (04 January 2007)
- Department of Agriculture—Administrative Order No. 33 Series of 1991— Rules and Regulations on Registration of Veterinary Drugs and Products
- Department of Agriculture—Administrative Order No. 04 Series of 2004—Regulating the Distance Between Poultry and Livestock Farms in the Philippines (23 February 2004)
- Department of Agriculture—Administrative Order No. 19 Series of 2005—Rules and Regulations on the Transport of Live Animals by Land (08 December 2006)
- Department of Health—Administrative Order No. 111-A Series of 1991—Rules and Regulations on Registration of Veterinary Drugs and Products
- Philippines. (1998). Republic Act No. 8485 (as amended by RA 10631): An Act to Promote Animal Welfare in the Philippines , otherwise known as “The Animal Welfare Act of 1998”.
- Philippine Agricultural Engineering Standard (PAES) 401.2001—Agricultural Structure—Housing for Swine Productions
- Philippine Agricultural Engineering Standard (PAES) 402.2001— Agricultural Structure—Housing fro Broiler Production
- Philippine Agricultural Engineering Standard (PAES) 403.2001—Agricultural Structure—Housing fro Layer Production
- Philippine Agricultural Engineering Standard (PAES) 404.2003— Agricultural Structures— Housing fro Goat and Sheep
- Philippine Agricultural Engineering Standard (PAES) 405.2001—Agricultural Structures— Cattle Feedlot
- Philippine Agricultural Engineering Standard (PAES) 406.2003—Agricultural Structures—Cattle Ranch
- Philippine Agricultural Engineering Standard (PAES) 407.2003— Agricultural Structures—Housing for Dairy Cattle
- Philippine Agricultural Engineering Standard (PAES) 408.2001 — Agricultural Structures— Carabao Feedlot
- Philippine Animal Welfare Society (PAWS) - FREQUENTLY ASKED QUESTIONS (FAQS). (n.d.). *5 Freedoms*. [online] Available at: <http://pawsphilippines.weebly.com/5-freedoms.html> [Accessed 27 May 2019].
- The 1999 Livestock Feed Formulation Committee. The Philippines recommends for livestock feed formulation. Los Baños, Laguna: PCAARRD-DOST, 2000. 208p.—(Philippines Recommends Series No.64- A)
- The 2003 Duck Egg Production Committee. The Philippines Recommends for duck egg production. Los Baños, Laguna: DOST-PCAARRD, 2015. 50p.—(Philippines Recommends Series No. 90-D; Reprint).
- The 2003 Goat Farming Committee. The Philippines recommends for goat farming. Los Baños, Laguna: PCAARRD-DOST, PARRFI, and DA-LDC, 2004. 137p.—(Philippines Recommends Series No. 24-D)
- The Broiler Production Committee 2004. The Philippines Recommends for broiler production. Los Baños, Laguna: DOST-PCAARRD and DA-BAR, 2006. 74p.—(Philippines Recommends Series No. 10- C).
- The Pork Production Committee 2004. The Philippines recommends for pork production. Los Baños, Laguna: PCAARRD/DOST-PFIZER, Inc., 2005. 131 p. —(Philippines Recommends Series No. B).

Photo References

Cover page (Left to Right)

- Household Chicken Production [Online image]. (2013). Retrieved November 21, 2019 from <http://www.mdukatshani.com/resources/Household%20Chicken%20Production%20WEB%2015-03-13.pdf>
- [Untitled image of goat cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
- Hemme, T. and Otte, J. (2010). Pro-Poor Livestock Policy Initiative: Status and Prospects for Smallholder Milk Production a Global Perspective (pg. 122) [Online image]. Retrieved November 21, 2019 from <http://www.fao.org/3/i1522e/i1522e00.pdf>

[Untitled image of pig cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Conformant: Left Side (Top to Bottom)

[Untitled image of fence cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

[Untitled image of protected farm workers cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

[Untitled image of proper transportation cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Non-conformant Right Side (Top to Bottom)

[Untitled image of stray animal inside the farm cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

[Untitled image of exposed farm workers cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

[Untitled image of improper transportation cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Conformant: Left Side (Top to Bottom)

[Untitled image of healthy farm animal cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Food Philippines offer healthy and halal-certified food products [Online image]. (2018). Retrieved November 21, 2019, from <http://foodstuff-africa.com/philippines-halal-food/>

[Untitled quality meat of goat cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Non-conformant Right Side (Top to Bottom)

[Untitled image of unhealthy farm animals cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

500 kilos of 'botcha' seized in Divisoria [Online image]. (2012). Retrieved October 10, 2019 from <https://news.abs-cbn.com/nation/metro-manila/05/05/12/500-kilos-botcha-seized-divisoria>

Untitled image of low quality meat cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Left Side Photos

Zapata Jr. A. (2019). US trade group cautions against blanket ban on pork products [Online image]. Retrieved October 10, 2019 from <https://www.philstar.com/business/2019/09/18/1952911/us-trade-group-cautions-against-blanket-ban-pork-products>

[Untitled image of farm operators/workers cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Right Side Photos

Simeon, L.M. (2019). Local meat processors assure safety of processed meat products [Online image]. Retrieved October 10, 2019 from <https://www.philstar.com/business/2019/06/03/1923066/local-meat-processors-assure-safety-processed-meat-products>

Filipino Family Portrait [Online image]. (2010). Retrieved October 10, 2019 from http://insocioproj.blogspot.com/2010/04/filipino-family_portrait.html

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Left Side Photos

[Untitled image of farm operators/workers attire cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Adrian, M. (2018). How to get a Philhealth ID Card? [Online image]. Retrieved March 20, 2019 from <https://www.imoney.ph/articles/philhealth-id-card-application/>

Llego, M.A. (2017). How Do I Apply for a Social Security System in the Philippines? [Online image]. Retrieved March 20, 2019 from <https://toughnickel.com/business/How-do-I-apply-for-a-SSS-Social-Security-System-Number>

Right Side Photos

[Untitled image of training cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

[Untitled image of first aid kit and fire extinguisher cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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[Untitled image of farm land cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

[Untitled image of swine drinking cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

[Untitled image of passable road cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

[Untitled image of generator cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Proper Ventilation and Lighting (Top Photos: Left to Right)

[Untitled image of swine in pens cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

[Untitled image of cattle in pens cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Bottom photo

[Untitled image of goats cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Food and drinking facilities (Top Photos: Left to Right)

[Untitled image of cattle eating forages cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
[Untitled image of swine drinking water cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Bottom Photo

[Untitled image of goats eating cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Non-slippery materials, safe, stable and well- lighted floors and pathways (Top Photos: Left to Right)

[Untitled image of clean pathway cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
[Untitled image of goats inside their pens cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Bottom Photo

[Untitled image of cattle's in their pens eating cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Hazards that may cause injury to animals (Top Photos: Left to Right)

[Untitled image of protruding nail inside the pen cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

[Untitled image of protruding material on the wall of nursery pen cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Bottom Photo

[Untitled image of damaged floor cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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[Untitled image of pre-gestation area cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
[Untitled image of boar unit cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
[Untitled image of breeding room cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
[Untitled image of growing-finishing pens cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
[Untitled image of nursery homes cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
[Untitled image of farrowing room cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Individual Nest Poultry-Layer (Top Photos: Left to Right)

[Untitled image of inside the housing facility of poultry-layer cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

[Untitled image of crates housing the layers cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Poultry-Broiler (Bottom Photos: Left to Right)

[Untitled image of broilers inside the facility cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
[Untitled image of dropped ceiling must be included inside the housing of broilers cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Lactating Carabao/Cattle Barn Left Side Photos (Top - Bottom)

[Untitled image of cow sheds cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
[Untitled image of wide alley inside the cow shed cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Milking Parlor (Top Right Photo)

[Untitled image of milking parlor cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Individual Calf Pen (Bottom Right Photo)

[Untitled image of individual calf pen cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Shed-type housing: Right Side Photos (Top to Bottom)

[Untitled image single-story roofed house cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

[Untitled image of inside the single-story house cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Stall barn/Confined housing: Left Side Photos (Top to Bottom)

[Untitled image of confined housing cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
[Untitled image of goats eating inside the confined housing cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Top Photo

[Untitled image of storage facility for feeds cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Bottom Photos: (Left, Right, Bottom)

- [A] [Untitled image of feeds placed on pallets cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
- [B] [Untitled image of storage facility should have bird – proof cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
- [C] [Untitled image of distance of feeds to wall cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Large animals (Left to Right)

- Brody, S. (2018). Cattle Branding: how to get it right every time [Online image]. Retrieved June 5, 2019 from <https://www.farmersweekly.co.za/farm-basics/cattle-branding-get-right-every-time/>
- RFID in Livestock [Online image]. (n.d.). Retrieved June 5, 2019 from <http://www.skutechnologies.com/rfid-solutions-3/rfid-in-livestock/>
- [Untitled image of ear tagged large animal cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Swine (Left to Right)

- [Untitled image of ear tattooed pig cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
- [Untitled image of ear notched pig cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
- [Untitled image of ear tagged pig cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Goat (Left to Right)

- [Untitled image of ear tagged goats cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
- [Untitled image of RFID goat cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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- [Untitled image of veterinary drugs storage cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Storage of Veterinary Drugs (Left to Right)

- [Untitled image of veterinary drugs stored in cabinet cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
- [Untitled image of veterinary drugs stored and labeled cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Appropriate Temperature (Left to Right)

- [Untitled image of veterinary drugs stored inside temperature controlled storage cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
- [Untitled image of veterinary drugs stored inside temperature controlled storage cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Page 19 (Top to Bottom)

- [Untitled image of farm worker guiding the piglets in their pen cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
- [Untitled image of farm worker using an alternative tool cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
- [Untitled image of a large animal properly restrained while the worker is performing AI cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Appropriate vehicles (Top Left Photos: Top to Bottom)

- [Untitled image of side view of transportation vehicle cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
- [Untitled image of back view of transportation vehicle cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Malpractices during transporting of animals (Bottom Photos: Left, Right, Bottom)

- [Untitled image of poultry hanging around the motorcycle cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
- [Untitled image of crowded vehicle of animals and people cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards
- [Untitled image of ducks hanged around the vehicle cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Page 21 (Left to Right)

K.1.1:

- [Untitled image of fence cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

K.1.2:

- [Untitled image of protocol cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

K.1.3:

- [Untitled image of visitor writing on log book cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

K.1.4:

- [Untitled image of changing room cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

K.1.5:

[Untitled image of vehicle spray bath cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

K.1.6:

[Untitled image of handwashing area cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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K.2.1 (Left Photo):

[Untitled image of biosecurity protocol cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

K.2.2 (Right Photo):

[Untitled image of entry/exit point of farm cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

K.2.3 (Bottom Photo):

[Untitled image of farm attire/uniform cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Top Photo

[Untitled image of pens with barrier cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Burial (Bottom Photos: Left to Right)

[Untitled image of burial/mortality area cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

[Untitled image of mortality pit cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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M.1:

[Untitled image of cleaning the large animal area cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

M.2:

[Untitled image of labeled trash bins cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

M.3:

[Untitled image of drainage canal cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

M.4:

[Untitled image of disposal bin for used bottles cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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Left Side: Top to Bottom

M.5.1:

[Untitled image of anaerobic digester cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

M.5.2:

[Untitled image of compost cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

M.5.3:

[Untitled image scalable polyethylene drum digester cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

Right Side: Top to Bottom

M.5.4:

[Untitled image of solid and liquid separator cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

M.5.5:

[Untitled image of tubular polyethylene digester cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

M.5.6:

[Untitled image of high density polyethylene digester cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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[Untitled image of record books cited]. (2017). Retrieved from Bureau of Agriculture and Fisheries Standards

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