Code of Good Animal Husbandry Practice for Goats
Foreword

This Philippine National Standard on Code of Good Animal Husbandry Practices for Goats was developed by the Bureau of Agriculture and Fisheries Standards in collaboration with a multi-stakeholder Technical Working Group created as per Department of Agriculture Special Order No. 146 series of 2016.

The objective of this PNS was to revise the generic, multi-species PNS 60:2008 Code of Good Animal Husbandry Practices (GAHP) to species-specific GAHP in consideration of the directional thrust of the ASEAN towards species-specific GAHP. This revision is in accordance with the BAFS mission to ensure harmonization of local standards with that of international and regional standards.
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1  Scope

This code sets out the general principle and good practice and minimum requirements in the rearing of goat for food use. Industry specific requirements for dairy and meat type of goat production system may be developed provided that it satisfies the minimum requirements set out in this Code.

2  Normative 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.

- Animal Welfare Act (Republic Act 8485) and its amendment (Republic Act 10631)
- PNS/PAES 404:2003 Agricultural Structure – Housing for Goat and Sheep

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 ensuring health safety and comfort to both the farm workers and goat, without any degradation to the environment.

4  Definition of terms

For the purpose of this document, the following terms and definitions apply:

4.1  abnormal behavior
any behavioral change developed as a response to disease or poor management practice causing stress to the animal

4.2  animal
goats conventionally raised or reared for food and non-food (e.g. animal by-products such as leather, etc.) purposes

4.3  authorized
that which has been permitted by the competent authority

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

4.5
dam
female animal used for breeding and having given birth at least once

4.6
dehorning
removal of horns after they have already formed

4.7
disbudding
removal or destruction of horn buds, done in young animals whose horns have not yet formed

4.8
establishment
given due permission, a firm authorized to operate

4.9
farm operator
farm owner
legal entity who is responsible for the management and general operation of the farm; the term maybe used interchangeably

4.10
farm technician
a certified trained personnel who is technically skilled and knowledgeable in the various aspects of specialized farm operation

4.11
farm worker
trained personnel directly responsible for the rearing of animals

4.12
feeds
any single or multiple materials, whether processed, semi-processed or raw, which is intended to be fed directly to domesticated animals to meet the nutrient requirements in order to maintain life, promote growth, production and reproduction

4.13
feed supplement
refers to a feed ingredient or mixture of feed ingredients intended to supply the deficiencies in a ration or improve the nutritive balance or performance of the total mixture

4.14
forage
anything grown on the ground intended for use as animal feed, whether for grazing, cut-and-carry, ensiling, or haying

4.15
gait
way of walking or pace of the animals

4.16
ration
total amount of feed given for one day

4.17
rearing
farming
the act of raising of animals

4.18
vehicle
any means of transporting animals, including but not limited to trucks, tractors, trailers, trains, ferries, ships and aircrafts

4.19
weaning
a process of complete withdrawal from the dam and withdrawal of milk feeding

5 Minimum Requirements

5.1 Responsibilities of the Farm Operators and Workers

5.1.1 General Skills and Responsibilities

a. The farm owner/operator and farm workers should undergo training on the necessary knowledge and skills about basic procedures of farm management including the correct handling of animal, pasture development, forage
development, feeding management, animal health management and, other routine management practices and usage of farm tools or equipment.

b. The farm operator/worker should be responsible for the welfare of the goats by giving adequate provisions so that they are able to perform at their optimum levels.

c. The farm operator/owner should provide farm workers with appropriate attire and footwear for protective measures

d. Appropriate working uniform/attire and footwear, as prescribed by the farm management, should be provided to visitors who need to be at the production area.

e. In cases of housed staff, the farm owner/operator should provide comfortable accommodation for the workers.

f. The farm operator/worker should always promote a safe and healthy working condition in the farm. Accident and emergency procedures should be available with clear instructions for all workers. First aid kits, fire extinguishing equipment, and information on hotline numbers should be easily available at all times, and placed conspicuously in strategic locations.

g. The owner/operator should ensure that all farm operators and farm workers undergo annual routine health check-up/medical examination.

h. The farm operator should report immediately or within 24 hours to relevant authorities any incidence of abnormal behavioural changes, health conditions and mortalities in the farm or any characteristic of a reportable/notifiable disease outbreak (e.g. Caprine Arthritis Encephalitis, Hemorrhagic Septicemia, Bluetongue).

5.1.2 Legal Responsibilities of the Farm Operator/Owner

a. The farm owner should conform to existing animal farming and welfare legislation. This covers the management of environment issues, farm location, animal welfare requirements, disease control and reporting, dead animal disposal, production of wholesome food and occupational hazards associated with animal farming.

b. The farm operator should conform to existing labor legislation.

5.1.3 Animal Welfare Responsibilities
5.1.3.1 The farm workers should not cause cruelty to animals, in accordance with the Animal Welfare Act (Republic Act 8485) and its amendments (Republic Act 10631):

a. Maltreatment of animals under his/her care and attention.

b. Neglect of animal, such that it experiences pain, suffering or distress.

c. Failure to implement the proper feeding program to maintain the live weight of the animal within the normal physiological range for the species type, age and sex.

d. Removal of any part of the anatomy without adequate anesthesia, whenever applicable.

e. Putting to sleep (euthanasia), confine, handle or transport any animal in a manner causing deliberate pain, suffering or distress.

f. Keeping an animal alive, especially that which is pronounced physically or physiologically incapacitated, unless it is under the direct care of a licensed and registered veterinarian.

5.1.3.2 The farm technicians and workers should not neglect animals according to the following criteria:

a. Freedom from hunger and thirst and malnutrition. Feed withdrawal of animals destined for slaughter should follow the guidelines set by the National Meat Inspection Service;

b. Freedom from physical discomfort and pain;

c. Freedom from injury and disease;

d. With due consideration to the differences in the production system (confined and free-range/grazing), animals should be given enough freedom to conform to essential behavior patterns; and

e. Freedom from fear and distress.

5.2 Farm Location

5.2.1 Site Selection

The farm should:
a. Be strategically located within the approved land use plan of the local government and should be compliant with the DENR regulations and other regulations as prescribed by law (e.g., Laguna Lake Development Authority).

b. Have a continuous supply of adequate power, potable water and good access road.

c. 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.

d. Be accessible to major facilities of production (i.e. feed mill, water system, forage area).

e. With exception for those practicing integrated farming with their own post-harvest facilities, the farm should not be near service/public slaughterhouses.

f. Existing farms should have full control of the risks and ensure that there are mitigation measures in place. New farms should comply with the above provisions.

5.2.2 Site history

If there are 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.

5.3 Animal housing and facilities

Farm owners/operators when building animal housing facilities may refer to PNS/PAES 404:2003 Agricultural Structure – Housing for Goat and Sheep or to the Philippine Recommends for Goat Farming or other animal housing standards.

5.3.1 Housing

a. The farm building should be designed and constructed appropriately for the intended purpose, should provide proper ventilation and should be well maintained.
b. The building intended for keeping animals should be constructed in the orientation that minimizes the adverse effects on animal performance and eliminates possible hazards to its surroundings.

c. The building should be designed and constructed using materials that:
   - should not cause any injury or impart hazard to the welfare of the animal;
   - provide comfort;
   - can be easily cleaned and disinfected;
   - can be easily replaced when damaged;
   - create efficient stock management; and
   - enhance biosecurity.

d. There should be an effective drainage system in place at the building.

e. Animals should be provided with sufficient floor space/size suitable for their age, body weight and size to allow animals to feed and drink comfortably.

f. The feeding and drinking equipment and facilities should conform with the standards/requirements for each species and should be constructed and conspicuously placed such that:
   - animals are able to eat and drink freely, allowing them to behave normally; and
   - contamination with animal feces and urine is prevented.

g. Pens and pathways should:
   - be designed and constructed to prevent animals from escaping;
   - be free from protruding objects or structures (e.g. nails and bolts) that may cause injury to the animals and farm operators and farm workers.

h. Housing design (particularly roof height and sides) should provide proper ventilation (whether natural or artificial) to maintain a comfortable environment.

i. Animal buildings should have adequate lighting to ensure that animals can be thoroughly inspected as required.

j. Electrical installations and wirings should be protected and should not be accessible to the animals.

k. Floors and pathway used by the animals should be elevated and made from non-slippery materials, safe, stable and well-lighted to prevent injury or abnormal gait to the animals.

l. The design of alleys and chutes should allow effective management of the animals
• Floors of alleys and chutes should be properly built to provide good footing, preventing slippage and injuries.
• Alleys and chutes should have sides of sufficient height to prevent animals from jumping off or falling.

m. The farm should provide effective and appropriate facilities to restrain or handle animals without causing undue stress and injury to both animals and farm workers.

n. The premises should be kept clean at all times to prevent disease occurrence, establishment of breeding ground for pests and avoid environmental degradation.

5.3.2 Facilities

5.3.2.1 Holding yard

a. Sufficient pens and floor space should be provided to prevent overcrowding and permit necessary segregation of animals.

b. Pen floors should be, rough finished for cemented flooring, grass finished or sandy flooring and well-drained to provide good footing and prevent slipping or tripping.

c. The holding yard should be constructed in such a way that it will adequately protect the animals from adverse weather conditions and will provide sufficient ventilation.

d. The holding yard should have proper facilities for animals to feed and drink.

5.3.2.2 Pasture area and Paddocks

5.3.2.2.1 Grazing Animals

a. There should be enough space for the animals.

b. Shade or shelter within the pasture area should be provided.

c. Pasture area must be properly maintained and managed to avoid being over grazed and polluted or heavily infested by parasites. Rotational grazing may be practiced, i.e. the herd is moved after one pasture lot has been grazed for some time.

5.3.2.2.2 Confined Animals
Those practicing cut-and-carry should establish their own forage or obtain a steady supply of forages.

5.3.2.3 Storage facilities

a. The farm should have a facility for proper storage of all feeds and forage materials; for machinery and equipment and other toxic chemicals.

b. The storage facilities should be kept clean at all times.

c. The storage should have adequate ventilation, adequate protection from moisture to prevent acquisition of molds, and should be vermin-proof.

d. Effective stock rotation should be practiced, i.e. “First in – first out” rule.

5.3.2.4 Breeding facilities

The breeding facility and equipment should be properly designed to provide the animals a comfortable and conducive environment for reproduction.

5.3.2.5 Isolation area

There should be a separate area intended for sick, injured and disabled animals which require necessary veterinary attention.

5.3.2.6 Condemnation/Disposal Facility

There should be a separate area for disposal of mortalities that is enclosed and isolated, and should conform to existing environmental waste management regulations.

5.3.2.7 Fencing

a. The fence, including its posts (e.g. concrete, iron, hardwood and live posts) and gates, should be effectively designed to prevent entry of stray animals, and escape or injury of the farm animals.

b. If electric fence is used, it should be operated as per manufacturer’s instructions.

5.4 Farm Management

5.4.1 Breeding, lactation and weaning
a. Only sexually mature animals of appropriate age and weight, and free from any disease or probable inherited abnormality should be bred.

b. In natural mating, appropriate ratio of male to female animals should be practiced; general recommendation is 1 male for 25 females.

c. Only duly trained certified personnel should perform assisted breeding techniques (e.g. artificial insemination, embryo transfer and ovum pickup) on the animals.

d. The kids should be weaned only at a recommended body weight and age.

e. Weaning should be conducted with minimum stress to both the dam and its young.

f. The farm operator should provide the basic facilities for the newly weaned animals.

g. The farm operator should maintain individual animal records that contain their lactation, breeding and reproductive performance.

h. Breeding programs and activities should be properly recorded, maintained, monitored and evaluated.

5.4.2 Animal sourcing, identification and traceability

a. Animal identification should be routinely done (ear tagging and other forms of identification that are compliant with animal welfare regulations) and the records of identification for the animals should be kept properly.

b. If the establishment imports animals, records of pertinent documents should be kept.

c. The farm operator should record all movement of animals in and out of the farm. This includes records of veterinary protocols as prescribed by the concerned authority.

5.4.3 Feeds and Nutrition

a. Animals should be provided with optimum level of nutrition at all times, as required for their respective functions and well-being.

b. There should be adequate and continuous access to clean and safe water.

c. Safe, clean, and adequate rations or feeding materials (silage, grasses, legumes and concentrates) suited for goats should be provided.
d. When giving commercial feed, farm operators should use those that have been officially registered with the competent authority, e.g., Animal Feeds, Veterinary Drugs and Biologicals Control Division (AFVDBCD) of the Bureau of Animal Industry (BAI).

e. In case of farm-mixed feed formulation, farm operators should only use ingredients from authorized and traceable suppliers. Records of purchases should be kept.

f. The farm may also keep a record of available forage.

g. Banned chemicals, feed additives, supplements and any form of medication in the diet of the animals, including those disallowed by the authorities or importing countries, should not be used.

h. Instructions of medication of each specific drug being administered should be strictly followed, particularly the withdrawal period before animals are sent to market.

i. The feed mixing equipment should be kept clean at all times and have regular preventive maintenance schedule.

j. The farm operator should provide a daily feeding schedule or routine.

k. Procurement documents of feed concentrates and ingredients should be kept and updated properly to include:
   • 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

l. The type and quantity of ration being fed to the animals should be recorded.

5.4.4 Milk production for dairy goats

a. Proper and appropriate equipment and tools for milking should be provided.

b. The milking equipment and tools should be kept clean and sanitized before and after use.

c. Proper training should be provided to all milkers.
d. There should be chilling and storage facilities for the immediate post-harvest handling of milk, and maintained at the proper temperature requirement.

e. Milk should be drawn from animals that do not show any evidence (signs or analytical results) of infectious diseases caused by human pathogens that are transmissible to humans through milk including but not limited to such disease governed by the OIE Terrestrial Animal Health Code. The animals must be officially free of brucellosis, tuberculosis, and leptospirosis, as evidenced by annual testing. If not officially free, then milk should originate from herds or animals that are under official control and eradication programmes for brucellosis and tuberculosis.

5.4.5 Other management practices

a. The farm personnel, when performing the management practices listed below, should use the appropriate tools and equipment, observe proper procedure (including provisions for restraint and pain management), and should keep records of such activities:
   - Hoof trimming
   - Disbudding/dehorning
   - Castration
   - Other routine management practices

b. Guard dogs, when used, should be caged. Herding dogs should be properly trained.

5.5 Animal health management

a. The farm operator should be responsible for maintaining good health of the animals at all times, through proper management practices that include prevention, treatment and disease control and containment measures of the disease affecting the animals.

b. There must be a written animal health program in place that is updated regularly and supervised by a licensed veterinarian, in accordance with the requirements of the competent authorities.

c. The health status of the animals in the farm should be monitored and recorded regularly by the farm, and veterinary assessment of the establishment should be carried out annually by a licensed veterinarian and/or by a competent authority.

d. The vaccination program should be adopted against the diseases as required by competent authorities.
e. Drugs, medicines, and vaccines should be administered by a licensed veterinarian or trained personnel under the supervision of a licensed veterinarian.

f. Drugs or medicines should only be used for prophylactic and treatment reasons.

g. The use of illegal and banned medication and vaccines should be prohibited (use vaccines accredited by BAI; the same with controlled drugs.)

h. Drugs, medicines, and vaccines should be stored and identified properly; proper disposal of these items should be followed to prevent contamination to the environment.

i. 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.

j. Records include, but are not limited to, the following:
   • Vaccination program;
   • Deworming;
   • Disease condition;
   • Diagnosis;
   • Intervention or treatment done;
   • Control measures;
   • Post-mortem findings;
   • Surveillance; and
   • Disposal.

k. The farm should maintain updated records of medicine purchase and administration that should be readily available for inspection.

l. The procurement records should have:
   • Date of purchase;
   • Name of the product (generic compound);
   • Quantity purchased;
   • Batch number;
   • Expiry date; and
   • Name of supplier.

m. Administration records should consist of the following:
   • Type of drugs or medication used;
   • Batch number;
5.6 Animal welfare management

a. Proper techniques should be applied to handle and restrain animals. Animals should always be handled and restrained in such a way to protect them from fear, stress, pain and injury.

b. Appropriate and functional facilities, equipment, and tools should be used for effective animal handling and restraint, in order to minimize stress and injury against animals. The operators should acquire the skills and techniques to use the tools properly.

c. Sick, injured or disabled animals should be separated from healthy animals and should be given the necessary veterinary attention, including euthanasia if required and following the rules and regulations in euthanasia.

d. Sticks or canes should not be used to restrain the farm animals.

5.7 Animal Transportation

In accordance with the Animal Welfare Act, the following measures should be observed during the transport of animals:

a. Soiling and cross-contamination with fecal material should be minimized;

b. Records that include animal identification and place of origin should be carried during transport;

c. Undue stress and/or risk from injury during loading, transport and unloading should be avoided;

d. Whenever necessary, separate each animals to avoid injury during transport;

e. Whenever necessary, underloaded vehicles should contain partitions to avoid injury of animals during transport;
f. If the transport vehicle has more than one deck, animals should be protected from cross-contamination;

g. Adequate ventilation of the animals should be maintained throughout the journey;

h. Transport vehicles and crates should be cleaned and sanitised as soon the animals have been unloaded.

i. To mitigate the abrupt changes in weather condition, the transport vehicle should be fitted with supplies, including but not limited to containers with water, truck blanket or cover, and other tools to include water hose, sprinklers, pail, and shovel, whichever is needed.

j. Transport vehicles should be provided with supplies necessary for emergencies such as tools, spare tires, etc.;

k. Transport vehicles should comply with the requirements of the competent authorities, e.g. registration with the Animal Health and Welfare Division of the Bureau of Animal Industry and accompanied by registered livestock handlers.

l. Prior to slaughter, resting period of animals should follow the National Meat Inspection Service guidelines for resting.

5.8 Biosecurity measures

a. The farm should have a written protocol of biosecurity measures. Proper warning signage should be provided

b. Biosecurity procedures should be well implemented and continuously monitored to prevent introduction of disease into the farm and/or to control its spread within the farm.

c. The biosecurity measures should take into consideration the relevant diseases identified by local regulations/authority.

d. The farm should have the appropriate and functional lay-out and infrastructure to ensure effective implementation of the biosecurity measures. These should include facilities for disinfection, with appropriate concentration of disinfectant, at entry (e.g. wheel bath or spraying, shower for visitors, handwashing facility, etc.)/exit point of the farm and the building (footbath).

e. All incoming animals should undergo the appropriate quarantine measures.

f. Stray animals should not be allowed within the premises.
5.9 Farm Sanitation Program and Environmental Management

a. Farm premises should be kept clean and free of potential conditions conducive to breeding of pests, animal parasites and disease outbreak. This is to avoid negative effects on the landscape, environment and animal welfare.

b. Organic materials should be regularly removed from all livestock contact surfaces (i.e. floors, pen partitions). Where bedding is used, it should be regularly replaced.

c. The farm should have a proper and functional drainage system towards a water treatment facility. Solid and liquid waste should be managed and disposed according to existing relevant guidelines imposed by competent authorities.

d. The farm should have proper handling and disposal system for sick, injured and dead animals, and should be in accordance to existing regulations of the authority.

e. The farm should have a written sanitation program that includes integrated pest management, e.g. fly control, rodent control, etc.

f. The farm operator should take necessary measures to ensure that activities related to goat farming do not contribute to the degradation of the environment (i.e. land, water, air) and cause destruction to bio-diversity.

g. The farm operator should maintain and display clear instructions on procedure for disposal of farm solid wastes and farm chemical wastes (e.g. paint, expired pesticide/ herbicide and containers, etc.)

h. The farm operator should be familiar with the proper procedure for disposal and schedule of actions to be taken, especially at times of emergency.

i. Regular waste removal would discourage ammonia buildup and promote better air quality within buildings.

j. The farm should take appropriate measures to minimize excessive odor coming from the farm, especially those that may be associated with waste decomposition.
6 Review and Evaluation of Practices

a. Practices should be checked for compliance and evaluation for effectiveness and do-ability on a regular basis.

b. In cases where provisions are no longer applicable, they should be amended.
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