

GOOD FARMING PRACTICE OF QUAIL

(Regulation of the Minister of Agriculture Number 05/Permentan/OT/140/1/2008
dated January 23, 2008)

BY THE GRACE OF GOD ALMIGHTY
THE MINISTER OF AGRICULTURE,

Considering:

- a. that quail is any of the birds producing egg and meat, and as animal protein, which is cheap and easy to get;
- b. that having regards letter a and in order to implement Government Regulation Number 28 Year 2004 regarding Food Security, Quality and Nutrition, it is necessary to stipulate Good Farming Practice of Quail by a regulation of the Minister of Agriculture;

In view of:

1. Law Number 6 Year 1967 regarding Main Animal husbandry and Veterinary Provision (Statute Book of Republic of Indonesia Year 1967 Number 10, Supplement to Statute Book Number 2824);
2. Law Number 16 Year 1992 (*BN No. 5300 pages 17A-19A and so on*) regarding Quarantine on Animal, Fish, and Plantation (Statute Book of Republic of Indonesia Year 1992 Number 56, Supplement to Statute Book Number 3482);

3. Law Number 7 Year 1996 regarding Food (Statute Book of Republic of Indonesia Year 1996 Number 99, Supplement to Statute Book Number 3656);
4. Law Number 23 Year 1997 (*BN No. 6092 pages 19A-21A and so on*) regarding Main Provisions for Life Environment Management (Statute Book of Republic of Indonesia Year 1997 Number 68, Supplement to Statute Book Number 3966);
5. Law Number 32 Year 2004 (*BN No. 7183 pages 1A-11A and so on*) regarding Regional Administration (Statute Book of Republic of Indonesia Year 2004 Number 125, Supplement to Statute Book Number 4437), juncto Law Number 8 Year 2005 regarding Stipulation of Government Regulation in Lieu of Law Number 3 Year 2005 (*BN No. 7210 pages 20A-21A*) regarding the Amendment to Law Number 32 Year 2004 regarding Regional Administration to become a law (Statute Book of Republic of Indonesia Year 2005 Number 108, Supplement to Statute Book Number 4548);
6. Government Regulation Number 15 Year 1977 regarding Rejection, Prevention, Elimination, and Recovery of Animal Disease (Statute Book of Republic of Indonesia Year 1977 Number 21, Supplement to Statute Book Number 3102);
7. Regulation of the Government Number 16 Year 1977 regarding Animal husbandry Business (Statute Book of Republic of Indonesia Year 1977 Number 21, Supplement to Statute Book Number 3102);
8. Government Regulation Number 22 Year 1983 regarding Healthy of Veterinary Society (Statute Book of Republic of Indonesia Year 1983 Number 28, Supplement to Statute Book Number 3253);
9. Government Regulation Number 78 Year 1992 regarding Animal Medicine (Statute Book of Republic of Indonesia Year 1992 Number 129, Supplement to Statute Book Number 3509);
10. Government Regulation Number 27 Year 1999 (BN Number 6442 pages 10A-12A and so on) regarding *Environmental Impact Analysis* (Statute Book of Republic of Indonesia Year 1999 Number 59, Supplement to Statute Book Number 3838);
11. Government Regulation Number 82 Year 2000 regarding Animal Quarantine (Statute Book of Republic of Indonesia Year 2000 Number 161, Supplement to Statute Book Number 4002);
12. Government Regulation Number 28 Year 2004 regarding Food Security, Quality, and Nutrition (Statute Book of Republic of Indonesia Year 2004 Number 107, Supplement to Statute Book Number 4424);
13. Government Regulation Number 38 Year 2007 regarding Sharing of Public Administration Affairs between the Government, Provincial and Regental/Municipal Governments (Statute Book of Republic of Indonesia Year 2007 Number 82, Supplement to Statute Book Number 4737);
14. Presidential Decree Number 187/M Year 2004 (*BN No. 7128 pages 30A-31A*) regarding the Establishment of the United Indonesia Cabinet;
15. Presidential Regulation Number 9 Year 2005 (*BN No. 7182*) regarding Position, Duty, Function, Organizational Structure and Working Procedures of State Ministries of the Republic of Indonesia juncto Regulation of the President Number 62 Year 2005;
16. Presidential Regulation Number 10 Year 2005 regarding First-Echelon Organizational Units and Tasks of State Ministries of the Republic of Indonesia;

17. Regulation of the Minister of Agriculture Number 299/Kpts/OT.140/7/2005 regarding Organization and Working Procedure of the Department of Agriculture juncto Regulation of the Minister of Agriculture Number 11/Permentan/OT.140/2/2007;
18. Regulation of the Minister of Agriculture Number 341/Kpts/OT.140/9/2005 regarding Completeness of Organization and Working Procedure of the Department of Agriculture, juncto Regulation of the Minister of Agriculture Number 12/Permentan/OT.140/2/2007;
19. Regulation of the Minister of Agriculture Number 50/Permentan/OT.140/10/2006 regarding Guidance for Bird Maintenance at the Living Environment;

Observing:

Presidential Instruction Number 1 Year 2007 regarding Handling and Controlling of Avian Influenza;

DECIDES:

To stipulate:

FIRST:

Good Farming Practice of quail as mentioned at the Enclosure as part inseparable from this Regulation.

SECOND:

Good Farming Practice for quail as referred to in FIRST Dictum as the basis for providing service, execution, fostering and cultivation of good farming practice of quail.

THIRD:

This Regulation shall take effect on the stipulated date.

Stipulated in Jakarta

On January 23, 2008

THE MINISTER OF AGRICULTURE,

sgd.

ANTON APRIYANTONO

GOOD FARMING PRACTICE OF QUAIL

CHAPTER I

INTRODUCTION

A. Background

Quail is any of the birds having role and bright prospects as an egg producer. Quail also gives a profit and meat as one of alternative to support the readiness of animal protein, which is cheap and easy to get. Apart from that, the feather and even its droppings also could be used. Quail is categorized as bird having special quality as a breed animal. The special quality of quail is: (1) at age of 41 days the female quail could produce egg, (2) the bird also could produce 250 until 300 eggs in one year with the average weight 10 gram/egg, (3) the breeding does not need wide land/or space, (4) the bird is more adaptive to environment condition (disease and temperature), (5) it does not require big investment, (6) it could be developed with start-up investment and variety business scale, (7) egg and unproductive quail have a high trade value and easy to be marketed, (8) egg and meat of quail have high nutrition, (9) value of organic substance of quail droppings as a fertilizer is higher than other breed droppings, (10) capital return is fast, (11) more tolerant to food with high rough fiber, compared to purebred chicken. The special quality shall increase income and prosperity of quail breeders.

In relation with the matters mentioned above, it is necessary to compile good farming practice of quail as a reference for the breeders to execute the cultivation business and for the technical officer to execute the guidance and monitoring.

B. Mean and Purpose

1. Mean

The practice is stipulated with the following goals:

- a. for the breeder as a practice in executing good quail breeding;
- b. for the Department handling the function of animal husbandry and veterinary in region as the practice in executing the fostering and monitoring in good quail breeding business.

2. Purpose

The stipulation of this practice aims at:

- a. Increasing the population, production and productivity of livestock;
- b. Increasing the quality of livestock production;
- c. Supporting the readiness of original food of quail in the country and driving up the export of livestock commodity especially quail's egg;
- d. Creating environmentally sound breeding business;
- e. Creating job opportunity;
- f. Increasing breeder income.

C. Scope

Scope regulated in this Practice covers the tool and infrastructure, worker, production process, environment conservation, monitoring and reporting.

D. Definition

In this Practice, the meaning of:

1. Cultivation is all the process of production activity that was executed to produce the livestock products.
2. Good cultivation of quail is all process of production activity that was executed to produce the production of quail livestock according to its purpose.
3. DOQ (Day Out Quail) is day-old quail.
4. Seed of quail is a candidate of parent and stud selected from the superior leading quail producing egg (4-8 months) as the oldest candidate.
5. Quail Starter is a quail with the age starting from the hatching to 3 weeks.
6. Quail Grower is a quail with the age above 3 weeks until 7 weeks.
7. Quail Layer is a quail producing egg as from the age of 7 weeks until unproductive.
8. Food is mixture of food raw materials either completed or requiring completion, which is specially compiled for food according with the type of its livestock.
9. Food raw material is materials from the production of farming, fishery, animal husbandry or other material that were deserved to be used as food, either that has been processed or has not been processed.
10. Concentrate is a food that was rich with protein and/or energy, also shall contain the complement of food and or food supplement.
11. Disinfectant is all pest-controlling materials already registered.
12. Disinfection is an activity of disinfection to decrease or loss the microorganism.
13. Sanitation is a cleaning activity that was having a purpose to increase or maintain a health condition for animal/livestock either in a cage or building, complex of animal husbandry/hatching or its environment.

14. Vaccine is a disease breed already weakened or decimated by certain procedure, which is used to stimulate the establishment of the body immunity so that the body shall be immune to disease attack.
15. Vaccination is a giving of immune to animal by using a vaccine.
16. Stress is a decreasing body condition to animal that was happened because of some cause.
17. Isolation place is a place that was specially used for quail suffering from disease or allegedly suffering from disease.
18. Cage density is comfortable lots of quail comfort should be put in the cage of floor space.
19. Business area is a place where a person, a group of breeder/associated business board to execute the business activity of animal husbandry.
20. Health and hygienist is a condition of environment healthy that shall be responsible free from the bacterial pollution and residue of chemical.
21. Bio-security is all action that was a first defense to control the epidemic and executed to prevent all possibility of contact/spreading with infected animal husbandry and disease spread.

CHAPTER II

TOOL AND INFRASTRUCTURE

A. Tool

1. Building

Breeding of quail shall have a building adjusted with the needs, as follow:

a) Type of building:

- 1) Cage of quail, consisting of Housing or outside cage that was each having:
 - a. cage for day-old quail of starter or grower period;

- b. cage for parent stock;
- c. cage for quail layer;
- d. isolation cage for ill quail.

- 2) warehouse for the storage of food, equipment, place of medicine storage, place of egg storage and closed warehouse where the storage of droppings sack;
- 3) place for elimination/burnt for dead quail;
- 4) installation of bio gas, basin and canal for waste dump;
- 5) office building for administration matter.

b) Building construction

- 1) building and cage base are made from economic material, strong and guarantee the easiness for maintenance, cleaning and cage disinfection;
- 2) building construction for food warehouse was better made in order the food still healthy and hygienic also not easily broken;
- 3) material and construction of cage guaranteeing that the quail is prevented from the accident and physique destruction;
- 4) optimal temperature of cage between 21-26,5° C with the maximum humidity 70-80%;
- 5) cage construction was supposedly completed with canal of waste water dump;
- 6) cage construction was having ventilation design that was easily to enter and out the air.

c) Building Layout

Management of building layout for cage and other building in the location of animal husbandry business of quail pays attention to the following matters:

- 1) office room and living space for the staff/board of animal husbandry business was supposedly separated from the area of cage and bordered with closed fence;
- 2) cage of day old quail, cage of growing and cage of parent stock to lay egg as well as room for hatching, separated each other;
- 3) space between each cage minimal 1 time of wide from the cage was calculated from the cage edge;
- 4) the closest space between cage with other building was minimal 25 meter;
- 5) cage building, isolation cage and other building are managed so that the water flow, canal of waste dump, air and other conductor do not cause the disease and environment pollution; and
- 6) width of cage is directed from north to south to prevent direct sunlight, and length of cage is directed from west to east.

2. Lighting Tool

Each of animal husbandry business of quail providing the lighting tool that was sufficient each time according to the needs and its allocation.

3. Tool and Animal husbandry Equipment

Animal husbandry basis of quail should have maintenance equipment adjusted with the capacity/quantity of quail, which is bred, easy to be used and cleaned also not easy to face corrosion, like:

- a) heater tool
- b) feeder for some type of age;
- c) waterer for some type of age;
- d) equipment for pest controller;

- e) tool for cage cleaner;
- f) weighing;
- g) equipment for the food mixer material;
- h) droppings shelf.

4. Breed of quail

- a) breed of priority quail comes from the breeding business of quail with the parent stock that in daily production is high and superior/persistent;
- b) breed of selected quail is the same quail from the color of feather and weight standard also heavy according to age;
- c) breed of quail which is cultivated shall be free from the bird disease, such as Avian Influenza (AI), Newcastle Disease (ND), Fowl Cholera, Fowl typhoid, Para typhoid, Arizona, Infectious Bursal Disease (IBD), Pullorum Avian Encephalomyelitis, Aspergilosis, Coccidiosis, Infectious Coryza, Ophthalmitis, E. Coli, Laringo tracheitis, Afidiosis.

5. Food

- a) food shall be enough to fulfill the medical and hygienic requirement as well as having quality adjusted to the needs;
- b) supply of biologic, premix, pharmaceutical and supply of natural medicine shall be used as food supplement or food suggestion in cultivation business of quail and shall obtain the Registration Number of Animal Medicine;
- c) food obtains Food Registration Number adjusted to regulation and law.

6. Animal Medicine

- a) animal medicine used for vaccination, medicine and other needs which is adjusted to its allocation is animal medicine already registered and having the Registration Number;

- b) the usage of animal medicine shall be adjusted to the effective provision at animal medicine field.

B. Infrastructure

1. Location

Location for animal husbandry business of quail shall fulfill the provision as follow:

- a) does not contrary with the *General Layout Plan (RUTR)* and *Detailed Layout Plan (RTDR)* of the related region;
- b) location, width and topography of location to local area, paying attention to the environment health, so that the droppings and liquid waste which are produced shall not pollute the environment;
- c) is not located in the downtown area
Animal husbandry business of quail shall be located at a distance of 25 meters from the resettlement area at the minimum.

2. Land

Animal husbandry land of quail for commercial scale clears its ownership status and width, according to its allocation to regulation and law;

Land for family poultry was far from the living to prevent the spread of disease and environment pollution.

3. Water supply

Water used for the drink of quail and equipment washing shall fulfill the requirement of water quality according to its allocation.

CHAPTER II

WORKER

Worker involved in the cultivation business of quail shall fulfill the requirement as follow:

1. Healthy;
2. Already following the training of production technique and training of veterinary (proven with certificate or its type);
3. Using the working cloth, special worker suit, mask, glove and boot.

CHAPTER IV

PRODUCTION PROCESS

A. Breed Choice

1. The breed quail is (DOQ) or grower already ready to produce egg.
2. The breed comes from relatively potential parent stock, 300-310 piece/head/year with the following criteria:
 - a) weight of DOQ 7-8 gram per head;
 - b) physically healthy, normal feed and standing tall, fresh and active, not dehydrating, not shaping disorder and not physically defect, anus and central is dry and cleaned;
 - c) color of feather is the same as the strain color and condition of drain feather and unfurl.
3. Selection to increase the quality.
4. Hatched egg with fertility and high hatching capacity comes from the parent stock with the sufficient production period (4-8 months).
5. Comparison between the male : female – 1:6.
6. Proper breed candidate (parent) having the genetic characters as follows:
 - a) Coming from the quail of descent having relatively high capability of producing egg;
 - b) Coming from the parent stock producing quite big egg with the standard weight 10-12 gram/egg;

B. Cage

Technical requirement of cage location was as follow:

1. Paying attention to layout of cage, drainage and system of water transfer, sufficient to obtain the sunlight.
2. Cage location was near with water resource, not noisy and fresh.
3. Paying attention to transportation tools and close with food resource.
4. Density and cage capacity was adjusted with the age of quail.

Age (week)	Cage Width (cm ² /tail)
0-1	160-180
1-4	180-200
4-7	180-200
7-12	180-200

To grow day-old quail, a closed box is used with its front side opened for air ventilation with 1 m² measurement and filled by 100 heads of just hatching quail.

5. Cage shall be filled according to the capacity was cage with middle measurement with length x width x height(100 x 45 x 27) shall put 20-25 tail of mature quail.
6. Cage equipment:
 - a) feeder and waterer are made from the material not easy to corrode like bamboo, paralon, plastic or other material adjusted to the age of quail, either the measurement or its shape. The

placement of feeder and waterer was practically made, easy to be reached by livestock, transferable, exchangeable or added its fill and cleanable.

- b) tool to clean the cage shall be complete, and the cleaner that came from the isolation cage do not allow to be used at other cage.
- c) the heater functions to give a warm to day old quail, the header shall come from the heat of oil lamp or from other heat resource, like electricity, the usage of heater usually was limited to day old quail from a day age until 1,5 month.
- d) other heater functions as the water heater and corpse burning;
- e) tool for hand sprayer that completed with mask.
- f) the beak cutter functions to cut the beak executed to quail with age 1 week and shall use the cutting nail or solder.

C. Food

1. Food given to quail comes from self-produced, or registered and labeled food, adjusted with the amount or its quality with age or growth period of quail.
2. Food quality shall be suitable with the effective provision was SNI 01-3905-2006 for Food of Quail Starter; SNI 01-3906-2006 for Food of Quail Grower; and SNI 01-3907-2006 for Quail Layer. From the SNI the requirement of food standard quality shall be looked after at the table:

No.	Ingredients	SNI of Quail Food		
		Starter (1-3 weeks) %	Grower (4-7 weeks) %	Layer (>7 weeks) %
1.	Water content (max)	14,0	14,0	14,0
2.	Rough Protein (min)	15,0	17,0	17,0
3.	Raw fat (min)	7,0	7,0	7,0
4.	Raw fiber (max)	6,5	7,0	7,0
5.	Dust (max)	8,0	8,0	14,0
6.	Calcium/Ca (min)	0,9-1,2	0,9-1,2	2,5-3,5
7.	Total fosfor (min)	0,6-1,00	0,6-1,00	0,6-1,00
8.	Provided fosfor	0,4	0,4	0,4
9.	Energy termetabolis/ME (min)/Kkal/kg	2.800	2.600	2.700
10.	Aflatoxin (max)/ppb	40	40	40
11.	Amino Acid			
	- Lysin (min)	1,10	0,8	0,9
	- Metionin (min)	0,4	0,35	0,4
	- Methionin + sistin (min)	0,6	0,50	0,60

D. Veterinary

1. Disease Situation of Quail

Animal husbandry business of quail shall be freed from the dangerous and infected diseases, like Avian Influenza (AI), Newcastle disease (ND), Fowl cholera, Fowl typhoid, Para typhoid, Arizona, Infectious Bursal Disease (IBD), Pullorum, Avian encephalomyelitis, Aspergillois, Coccosis, Infectus Coryza, Omphalitis, E. Coli, Laringo trachetis, Aflatoxosis.

2. Disease Prevention

- a. location of animal husbandry business is not easy to access by other animals bring diseases, for example rat, bird, cat;

- b. Disinfecting cage and equipment, spraying insect, fly and eliminating pest by using environmentally sound and registered disinfectant;
- c. cleaning cage after the cage is emptied and let for 2 weeks before entering new livestock into the cage;
- d. cleaning and sanitizing the entire location complex of animal husbandry so as to fulfill the hygienic requirement that shall be responsible;
- e. having a good pest controlling system, which is good for the vehicle traffic, person and equipment, outside the animal husbandry complex or at the entrance door of cage, food warehouse and others;
- f. employees are suggested to use the work suit and do not execute the action potential to spread disease from one group of livestock to other group of livestock;
- g. In the case of incident occurring, not allowing people to come in and out of the cage complex, which may infect a disease excluding the officer;
- h. Quail suffering from infected disease or corpse of quail and material coming from the related cage may not be brought to outside of the animal husbandry complex but immediately should be destroyed by burning or buried;
- i. Executing preventive action (vaccination) to the diseases of quail according to regulation and law in the veterinary field;
- j. when the disease case specially that taken/suspected a infect disease, breeder, employee/worker immediately shall report to the Institution/Department, namely the head of animal husbandry and veterinary section;

- k. the public shall assist the regional government to prevent and eliminate infected animal disease.

E. Production handling

To obtain a good quality production, egg needs to be handled before marketing. The matters needing to gain attention and be executed are as follows:

1. egg is collected in a fresh condition and storage at a fresh accommodation place, protected from the destruction as well as secure from the disturbance.
2. egg is chosen according to the measurement that was big/small and its weight.
3. Before the egg is traded, it shall be packed in a place or package specially designated to egg, in order to protect egg from bad impact during the transportation.

CHAPTER V

ENVIRONMENT CONSERVATION

Anybody undertaking quail breeding is obliged to fulfill the AMDAL requirement as follow:

1. *Efforts to prevent environment pollution needing special attention to some matters like:*
 - a. preventing the cause of erosion as well as assisting reforestation in the area of animal husbandry business;
 - b. preventing the cause of pollution and other disturbance that shall disturb the environment in the form of stink, insect, rat also the river water pollution/well water and others;
 - c. having and operating incinerator as well as waste treatment (solid and liquid) to produce fertilizer and bio gas according to capacity of waste production;

- d. each animal husbandry business of quail has a place for droppings dumps, buried and corpse burning;
 - e. corpse of quail is removed from the cage each day, collected and put in a plastic sack, burnt and buried.
2. Hole for corpse buried shall have a depth minimal 1,5 meter and put with chalk before the hole is closed tightly by land.
 3. If the burning was executed, as possible as it should be executed in the hole that was prepared or using the incinerator.

CHAPTER VI

MONITORING AND REPORTING

A. Monitoring

1. Monitoring System

Monitoring system consists of internal and external monitoring.

- a) in the internal monitoring, the animal husbandry business of quail stipulates a proper monitoring system in the critical points in the production process to monitor and know the possibility of disease;
- b) in the external monitoring, Department of Sub-District/Town that was heading the animal husbandry function and animal healthy, executed the monitoring to the management execution that was executed by animal husbandry business of quail.

2. Certification

- a) animal husbandry business of quail used for domestic production and export purpose is completed by certificate;

b) certificate

b) certificate is published by an authorized functionary.

3. Monitoring and Evaluation

- a. monitoring and evaluation are executed by authorized institution at the sector of animal husbandry and animal healthy at sub-district/town.
- b. evaluation is executed by the department of animal husbandry or the one that handled the function of animal husbandry at the Province, Sub-District/Town on each year according to the data recording and information, which is collected as well as checking/visited to the animal husbandry business of quail.

4. Recording

Animal husbandry business of quail undertakes data recording that anytime needed by the officer or related institution, either for the founding or for the improvement of self breeder.

Data that needs to be recorded as follow:

- a. data about population;
- b. data about production record;
- c. data about food consumption;
- d. data about livestock corpse;
- e. data about veterinary:
 - 1) schedule for vaccination;
 - 2) data of the medicine usage; and
 - 3) data of disease.
- f. data of price (breed, food, sell);
- g. original place of livestock that was bought/maintained;

h. state for export purpose of egg production that was produced, if the animal husbandry executing the export;

i. data of put in and removal of livestock; and

j. result of laboratory testing for food quality and disease.

B. Reporting

Each actor of animal husbandry business of quail submits a written report periodically (semester or annually) to the Department heading the function of animal husbandry and veterinary at sub-district/town with carbon copy made available the Provincial Animal Husbandry Service.

CHAPTER VII

CLOSING

This guidance shall have dynamic character and shall be re adjusted if there is a change according with the needs and the development of knowledge and technology.

THE MINISTER OF AGRICULTURE

sgd.

ANTON APRIYANTONO

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