DUS DARS 1858

DRAFT UGANDA STANDARD

First Edition
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Farm Animal Welfare — Egg Laying Chickens

Reference number
DUS DARS 1858: 2024

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The committee responsible for this document is Technical Committee UNBS/TC 213, *Live animals, meat and meat products*.

Wherever the words, “African Standard" appear, they should be replaced by "Uganda Standard".

AFRICAN STANDARD

DARS 1858

First Edition 2024

Farm Animal Welfare – Egg Laying Chickens

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Foreword

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This African Standard was prepared by ARSO TC23, Live Animals

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Introduction

The domestication of animals for food was an integral part of the development of agriculture as well as humankind, and along the years in which humans have interacted with animals since their domestication, changes have been made in both animals and their husbandry. Ensuring animal welfare is a human responsibility that includes consideration for all aspects of animal well-being, including proper housing, management, nutrition, disease prevention and treatment, responsible care, humane handling, and, when necessary, humane euthanasia.

There is need for chickens to be in good state of welfare ie good health, comfortable, well-nourished, safe, is not suffering from unpleasant states such as pain, fear and distress, and is able to express behaviours that are important for its physical and mental state. Also, animal welfare should ensure disease prevention, appropriate veterinary care, shelter, management and nutrition, a stimulating and safe environment, humane handling and humane slaughter or killing.

This standard determined Animal welfare- and the state of the chicken, the treatment that the chickens receive is covered by other terms such as animal care, animal husbandry, and humane treatment. Protecting chickens' welfare means providing for its physical and mental needs and good animal welfare has therefore had a direct and indirect beneficial financial impact, it helps to reduce poverty.

Farm Animal Welfare – Egg Laying Chickens

1 Scope

This draft African Standard specifies the requirements for egg laying chickens includes laying hens kept for commercial egg production for human consumption, and pullets from hatch until sexual maturity. It covers welfare aspect of commercial laying hens, production systems in caged and non-cage systems, in doors and out doors systems.

2 Normative references

There are no normative references to this document

3 Terms and definitions

For the purposes of this standard, the following terms and definitions apply

3.1
Laying chickens
birds (*Gallus gallus*) reared, kept, and managed for egg production, but do not include birds being reared and managed for purposes of breeding laying chickens.

3.2
Layer
a female in lay. Usually used to refer to females kept solely for egg production for human consumption.

3.3
Lux
unit of illumination equal to one lumen per square metre. Used to measure the brightness or intensity of light.

3.4
Egg-production phase
period between the point of lay and the cessation of egg laying. This may be seasonal.

3.5
Feeder
recommended feeding vessel used to hold and provide feed for birds

3.6 Drinker
rrecommended drinking vessel used to hold and provide water for birds

3.7
Beak trimming
removal of part of the beak of poultry.

3.8
Induced moulting
process of causing a flock to cease and resume egg production, usually through feed restriction. Shedding and renewing feathers occurs simultaneously

3.10
Strain
families or breeding populations possessing common traits

3.11
Biosecurity
measures aimed at preventing the introduction and/or spread of harmful organisms to chickens in order to minimize the risk of transmission of infectious disease

3.12
Stock-keeper
person looking after egg laying chickens

3.13
Range area
extensive area of land that is occupied by native herbaceous or shrubby vegetation which is grazed by domestic or wild herbivores.

3.14
Perches
object on which a bird alights or roosts, typically a branch or horizontal bar

3.15
Environmental Enrichment
changing a captive animal's environment in a way that improves the animal's quality of life.

3.16
Stocking density
number of birds that are kept on a given unit of area

3.17
Litter
mix of bedding material, manure and feathers that result from intensive poultry production.

4 Specific provisions for egg laying chickens

1.1. Prior to the placement of egg laying chickens, the stockholder should ensure the minimum height of all cages is 55 cm over the usable space.

1.2. ensure that if multi-level housing systems are used:

a) each level is easily accessible to the hens
b) headroom between the levels is a minimum height of 45 cm
c) all levels are accessible to stock workers to observe and reach birds which are sick or Injured.

1.3. feeding and watering facilities are distributed to provide ready access to all hens. Prior to the placement of egg laying chickens, all houses must be thoroughly cleansed, disinfected and tested free from infectious agents as specified in the Veterinary Health and Welfare Plan.

1.4. ensure that from 16 weeks, where hens are housed under artificial light, lighting schedules provide a minimum of 4 hours of continuous darkness and at least 6 hours total darkness in each 24-hour period.

1.5. ensure that laying chickens are not lifted or carried by the head, neck, wings, feathers or tail feathers unless otherwise supported by the breast, except if lifted and carried by the base of both wings.

1.6. Where a veranda is provided, it must be designed, constructed and maintained to encourage birds to access the veranda area and to provide:

a) adequate shade and shelter
b) adequate air exchange to manage airflow, temperature, humidity and dust
c) suitable substrate.

1.7. provide layer hens with access to nest areas from point of lay.

1.8. provide a minimum of one single nest area for every 7 birds or 1 m2 nesting area for every 120 birds from point of lay.

1.9. provide hens access to perches or platforms.

1.10. ensure perch or platform space for hens is a minimum of 15 cm per laying hen.

1.11. provide hens with access to a scratch area and/or claw- shortening device as well as appropriate substrate for pecking, foraging and scratching, unless the birds have access to an outdoor area.

1.12. Prior to the placement of chicks, all houses must be thoroughly cleansed, disinfected and tested free from infectious agents as specified in the Veterinary Health and Welfare Plan

1.13. Great care must be taken to avoid heat/cold stress.

1.14. Where it is permitted to move birds from one building to another during the rearing cycle the following standards must be met:
a) birds must only be moved once

b) feeders and drinkers used on the finishing unit must be included within the initial rearing stages
c) any changes to the diet must be managed to prevent any digestive-related issues arising
d) birds must be caught and transported in accordance with relevant standards
e) the rearing site and finishing site must each be managed as ‘all-in / all-out.’

4.15 Ventilation

4.15.1 Adequate ventilation should be provided in order to prevent the build up of heat, humidity, dust, and noxious gases to levels that are harmful or can cause pain or distress to the hens.

4.15.2 Immediate and appropriate action should be taken to reduce ammonia levels if it exceeds 20 ppm at layers’ head height.

4.15.3 In case of ventilation system failure, an immediate and appropriate action should be undertaken to restore the system and mitigate the situation.

4.15.4 Dust levels should be kept to a minimum by maintaining appropriate ventilation, and humidity levels and appropriate litter management.

5 Feeding

5.1 Feed supply for poultry should minimise harmful metabolic and nutritional conditions and be based on:

a) age, body weight and/or fat/body condition score
b) extra demands associated with growth and exercise
c) prevailing and predicted weather conditions.

5.2 Egg laying Chickens must be fed a wholesome diet which:

a) is appropriate to their strain
b) maintains them in good health
c) satisfies their nutritional needs

5.3 Producers must have a written record of the nutrient content of the feed, as declared by the feed manufacturer.

5.4 Feed stuffs containing mammalian or avian-derived protein are not permitted

5.5 Feed must be safely and hygienically transported, stored and delivered to stock to prevent:
a) infestation
b) contamination
c) wetting

5.6 Egg laying Chickens must not have to travel more than 4 metres anywhere in the house to reach food.

5.7 All feeding equipment must be hygienically managed.

5.8 Flock body weight and egg production (where appropriate) should be monitored regularly.

5.9 Feeding and watering facilities should be appropriately spaced throughout the housing area. Their design, position and height should allow sufficient space for birds to access feed and water with minimal effort and using normal posture.

5.10 Major changes in diet should be introduced over an appropriate length of time and be closely monitored.

6 Water

6.1 Chickens must have access to water:

a) that is clean and fresh
b) at all times, except when required by the attending veterinary surgeon.

6.2 The drinking quality of water must be:
a) tested every 6 months
b) tested at the source

6.3 The water quality test records relating to 6.2 must:
a) clearly indicate whether the water tested is considered an acceptable source of drinking water for chickens
b) be kept for at least 2 years

Note: It is important to stress that water quality may change over time and therefore one should not rely on past analysis. Although water testing should be conducted routinely under normal circumstances, any unusual situation such as changes in water smell, clarity, taste or changes in animals eating or drinking habits, loss of performance or health problems should immediately trigger the need for re-testing.

6.4 A water storage tank (with fitted lid) must be installed on-site which is capable of providing water to the flock of all ages for a period of at least 24 hours when mains water supply is not available

6.5 The minimum number of drinkers which must be provided are as follows:
Bell 1 per 100 chickens
Nipple 1 per 10 chickens
Cup 1 per 28 chickens

6.6 Drinkers must be:
a) of a design that reduces water wastage
b) of an appropriate design to enable the birds to drink freely
c) approximately evenly distributed about the house
d) placed at optimum height for the size and age of the birds

6.7 egg laying chickens must not have to travel more than 3 metres anywhere in the house to reach water

6.8 All drinking equipment must be hygienically managed. (eg Water within drinker lines should be regularly flushed and monitored).

7 Environment and Houses for Egg laying chickens

7.1 The environment in which livestock are kept needs to take into account their welfare needs, be designed to protect them from physical and thermal discomfort, fear and distress, and allow them to perform their natural behavior

7.2 Bird welfare must not be compromised/or likely to be compromised by outside environmental factors, such as noise, atmospheric pollution, adverse weather conditions, and other animals and, in the case of free-range systems, soil conditions.

7.3 It is essential that buildings are of a size and design to ensure that ventilation is sufficient to maintain good air and litter quality.

7.4 Buildings must be designed and erected to be suitable for local weather conditions and be able to withstand expected seasonal extremes of weather.

7.5 There must be nothing in the chickens' environment that is likely to cause injury or distress to the birds that can be avoided.
7.6 All equipment and facilities provided to the birds must be:
a) fit for purpose
b) well maintained.

7.7 Inside houses:
a) the sound level must be minimised
b) ventilation fans, feeding machinery and other equipment must be constructed, placed, operated and maintained in such a way that they cause the least possible amount of noise.

7.8 Internal walls must be smooth, unobstructed and constructed of a durable material capable of withstanding clean-out procedures.

7.9 All electrical installations at mains voltage must be:

a) inaccessible to the chickens
b) well insulated
c) safeguarded from rodents
d) properly earthed
e) tested at least annually by a qualified or competent person (the outcome of this test must be recorded)
f) in good working order

Note: Electrical installations must be tested every 3 years to meet legal requirements relating to electrical safety. However, at least once a year, the 'trip switch' should be tested to ensure it is in correct working order. Fire fighting and personal protective equipment must be in place and in good working condition.

7.10 ensure the design, size and maintenance of the openings and doors of cages allow poultry to be placed in or removed without injury or unnecessary distress.

7.11 Cages must have doors the full height and width of the cage front. The doors must open either to the full width or to a width of 50cm or 19.7”and the height of all cages must be at least 40 cm or 15.75” over 65 percent of the cage floor area and not less than 35 cm or 13.75” at any point. •
7.12 Egg-producing hens must have an available area of 450 cm² inside the cage to guarantee their comfort and movement.
7.13 Chicken cages must have a feeder that can be available at all times to provide adequate feeding. Channel-type feeders are recommended, which must provide a space of 10 linear cm for each bird housed in the cage.
7.14 Chicken cages must guarantee the birds a supply of clean and available water. The use of automatic drinkers that lead to two nozzles per cage is recommended; Another alternative is to use 10 linear cm containers for each bird housed.
7.15 Battery cages for chickens should have an ideal height of 40 cm or 15.75” this height should be present in 65% of the total cage floor area not less than 35 cm or 13.75” at any point.

7.16 When birds are placed in the laying house, they need to be encouraged to explore the nest boxes.
7. 17 Cages must be at least higher than the maximum height of the birds standing normally.

8 Floor and litter

8.1 The floor must be constructed to provide support for each forward pointing toe.

8.2 The distance between the widest spaced cage floor support wires within the cage area should equal to or less than 5.1 cm or 2”.

8.3 The multi-tiered cages must be arranged so that:
a) birds in the lower tiers are protected from excreta from above, and
b) all birds are fully visible for regular inspection and individual birds can be easily removed from cages as required.

8.4 The floor of chicken cages should be strong enough to safely support each leg. Its inclination should not exceed 8 degrees, otherwise, it will cause discomfort to the birds, by generating slips when they want to move or stand. Cage floors are regularly made of materials such as:

a) 14-gauge welded wire
b) Perforated paper sheets
c) Plastic: used alone or as wire covering.
d) The floor of the cages should be of a grid size that is large enough to allow the free fall of feaces through the holes. At the same time, the grid of the floor should prevent the legs of the hens from coming out or getting caught in them. Their status should be checked frequently to avoid foot injuries that generate infections and thus cause a drop in egg production.

8.5 The slope of the floor should not exceed 8 degrees. This is equivalent to 14mm fall in 100mm or 1.7” fall in 12” of cage depth.

8.6 Egg laying chicken house flooring must allow for effective cleansing and disinfection, preventing a significant build-up of parasites and other pathogens.

8.7 Internal house floors must not become wet, or be likely to become wet, from rising moisture.

8.8 For deep litter systems, the floor of the house must be completely covered in litter. The litter must:

a) be of a good quality
b) be stored hygienically and kept dry
c) be of a suitable material and particle size with no large clumps
d) be managed to maintain it in a dry, friable (loose and free flowing) condition (and replaced where necessary)
e) be an average minimum depth of 5cm to allow for the dilution of faeces
f) allow birds to dust bathe
g) be topped up daily, if necessary, with fresh litter
h) be managed hygienically.

Note: Litter moisture content can be approximated by taking a large handful of litter and squeezing it: if the litter clumps and stays in a ball then it is too wet; if it instantly falls apart into fine particles then it may be too dry; if it initially clumps and then starts to fall apart gradually, it is probably about right.

9 Lighting

9.1 Adequate lighting, whether fixed or portable, must be available and evenly distributed to enable the chickens locate feed and water and also to be thoroughly inspected at any time.

9.2 An effective lighting pro- gramme for houses where outside daylight can be excluded involves
i. giving pullets 20 to 22 hours of light a day at 30 lux in the first week,
ii reducing it to 20 hours at 5 lux in the second week, and
iii then reducing the photo period over the following weeks, to reach ten to 12 hours by seven to nine weeks of age

9.3 No area of the house must be lit at less than to 10 to 30 lux.

9.4 The natural light openings in the house must correspond to at least 3.0% of the total floor area of the house.

9.5 Light openings must be of a sufficient size to ensure that streams of daylight (except direct sunlight) do not cause patches of bright light on the floor of the house.

9.6 It must be possible to readily control the amount of daylight entering the building to the extent that darkness can be achieved.

10 Stocking density

Follow the recommended stocking density for strain, age of birds and system of rearing.

Ensure that all caged laying chickens have:

a) 750 cm2 of usable space per bird if kept in a cage of 2 or more birds

b) 1,000 cm2 of usable space if a bird is kept in a single cage.

c) In a single level, all-litter house, a minimum of 1.5 sq. ft. (0.14 sq. m) per hen must be allocated to allow normal behavior and dilute the feces.

d) In a house with litter and a raised slatted area, with feeders, drinkers, and perching/roosting areas over a dropping's pit/belt, the minimum space allowance is 1.2 sq. ft. (0.11 sq. m) per hen.

e) a multi-tier house with feeders and drinkers on overhead perches/platforms, and in which the overhead perches/platforms provide;
i. sufficient space for at least 55% of the hens to perch,
ii minimum of 1 sq. ft. (0.09 sq. m) of available space per hen must be provided.

f) In Pasture Raised systems providing mobile housing with fully perforated flooring, the minimum indoor space requirement is 1 sq. ft. (0.09 sq. m) per hen.

10.1 Replacement Pullet Stocking Density

a. Birds must not be stocked at a density any greater than 20 kg/m at 16 weeks of age
b. It must not be likely to exceed 20 kg per metre.
   1. An adequate amount of space should be provided for each bird and the number of birds placed should be adjusted according to the age at which the birds will be transferred to the laying hen unit to provide sufficient space for older birds. As a guide, no more than 20% of the pullets should have live weights in excess of plus or minus 10% of the mean weight.
   2. The following guidelines should be used when determining the number of birds/m² to the rearing site:

Age of Pullets (weeks)	No. of Pullets/m²/ sq.ft.(1/m²/z10.76 sq. ft .)
15 weeks:	15 birds/ 1.02.m^2 sq. ft. or . 0.1m^2 sq. ft/pullet
16 weeks:	14 birds/11 sq. ft. or 0.1m2 sq. ft/pullet
17 weeks:	13 birds/1.02.m^2 sq. ft. or 0.1/sq. ft/ pullet
18 weeks:	12 birds/1.02.m^2 sq. ft. or 0.1./sq. ft. pullet

11. Air quality and thermal environment

11.1 Provision must be made to ensure that aerial contaminants do not reach a level at which they are noticeably unpleasant to a human observer.

11.2 Ammonia and dust levels must be assessed and recorded:
a) at least once each day
b) using calibrated meters, testing tubes or sensory evaluation (Annex A)

11.3 using sensory evaluation to assess air quality, scores of 1 and 2 (Annex A) indicate that ammonia and dust are excessive and air quality must be improved without delay.

11.4 Ventilation systems, natural or forced, must be constructed, maintained and operated in such a way that:

a) the ammonia concentration at bird height should be no more than 10 ppm and must not exceed 25 ppm except during brief periods of severe inclement weather when ventilation is affected.
b) Hydrogen sulfide should generally be less than 0.5 ppm and should not exceed 2.5 ppm.
c) Carbon dioxide should generally be less than 3000 ppm and should not exceed 5000 ppm.
d) Carbon monoxide should generally be less than 10 ppm and should not exceed 50 ppm.
e) Dust should generally be less than 1.7 mg/ m^3 (for respirable dust) and 3.4 mg/ m^3 (for total dust) and should not exceed 5 mg/ m^3 (for respirable dust) and 15 mg/ m^3 (for total dust), averaged over an 8-hour period.

11.5 Provision must be made to ensure egg laying chickens have access to a thermally comfortable environment at all times.

11.6 For controlled environment housing, the ventilation system must be able to control the temperature of the building to within ±3°C of the ambient temperature

11.7 House temperature, humidity and air quality parameters must be measured at the level of the chickens' heads.

11.8 Maximum and minimum temperatures must be recorded daily

11.9 Alarm systems must be installed where there is any risk of failure of ventilation equipment.

11.10 In the event of feather loss, sufficient feed must be provided in cold weather to enable hens to eat more to compensate for greater heat loss
11.11 Controlled environment housing must be equipped with fans and Foggers

12 Nest boxes

a) If nests are provided, there should be a sufficient number of appropriately sized nests for the strain and number of hens in each group.
b) Nest areas should be enclosed and provide a suitable floor substrate to encourage nesting behaviour.
c) Nest area flooring should not consist of wire or plastic-coated wire.
d) Nest areas should be kept clean and operational.
e) Individual nest boxes must be provided at not less than one per 5 hens.
f) All community nest systems must provide an overall minimum nesting area of 0.8 m^2 per 100 birds.
g) Nest boxes should be easily accessible and should not be so high above the floor level that birds may be easily injured when ascending or descending.
h) Nest litter, where used, should be kept clean, dry, friable and moisture absorbent. Nest liners should be kept clean and dry.
i) The construction and positioning of nest boxes should be such that they do not become heat traps.
j) Nest door height should be a minimum of 80cm high

13 Environmental Enrichment

13 Environmental enrichment provisions must be:

a) made available to the chickens as soon as possible, and certainly no later than from 7 days of age
b) maintained/replaced throughout the rearing period, as necessary.
c) Includes long chopped straw bales, perch space, perking objects etc

13.2 Perches must:

a) be fit for purpose
b) be designed to avoid damage/injury to the bird
c) be accessible and easily seen by the birds
d) be elevated
e) support the whole of the bird's foot allowing the bird to curl its toes around the object without obstruction to express its normal perching behaviour
f) be thick enough so that the chickens cannot puncture their own foot pads by curling their toenails
around the bottom of the perch.

13.3 Where perches are aligned adjacent to each other there must be a gap of no less than 1.5cm between them to allow the chicken to grip the perch without risk of trapping its feet.

13.4 For adjacent perches to be counted as separate perch space they must be spaced at least 30cm apart.

13.5 When a perch runs parallel to a wall, the distance between them must be at least 20cm.
13.6 Physical condition of birds should be monitored and recorded to enable future management decisions

14 Range area

Where range is provided, the following provisions are to be implemented in addition to all other relevant sections of this document.

14.1 The outdoor area in free-range systems must consist of pasture mainly covered by living vegetation

14.2 Hens with access to range must have access to a well-drained area for resting whilst outside the building.

14.3 If birds have access to any commercial arable crop then:

a) the crop may only be planted outside the perimeter of the range, to allow birds uninterrupted access to all parts of the range,
b) the crop must not be detrimental to bird welfare, and
c) birds must not be exposed to any crop management practice that may cause them harm, e.g. spraying, pesticide use, sowing, cropping etc.

14.4 Where there is a risk of a build-up of parasites or disease on free-range land, rotational grazing or other disease control measures must be applied.

14.5 The range area must be actively managed to:

a) encourage birds outside, away from the building, and to use the range area fully
b) prevent and/or manage muddy/worn areas

c) minimise any build-up of parasites or other disease-causing organisms.

14.6 Birds must be provided with access to the range for at least half their lifetime and, in the case of:

a) birds to be labeled free-range, this must be no later than 28 days of age.
b) birds to be labeled organic, this must be no later than 35 days of age.

14.7 The maximum distance travelled by a chicken within a building to reach a pop hole leading onto the range must not exceed 14m.

15 Management

15. 1 Managers must:

a) ensure all stock-keepers have completed relevant and adequate training and can satisfy the requirements of their competence in practical circumstances
b) develop and implement plans and precautions to prevent and cope with emergencies such as fire, flood, breakdown of environmental control systems or interruption of supplies, e.g. food, water, electricity
c) provide an emergency action board, sited in a prominent position that is visible to all farm staff and the emergency services, highlighting the procedures to be followed by those discovering an emergency (e.g. a fire, flood, power failure)
d) maintain records of production data for each house, which include documentation on:

i. the breed/s of hens being reared
ii. details of the number of birds placed
iii. egg production
iv. the daily mortality (the cause of death must be stated where this can be identified)
v. the number culled (including reasons for culling)
vi. feed consumption
vii. daily water consumption
viii. maximum and minimum temperatures
x. relative humidity
xi. ventilation (including settings and any necessary changes)
xii. any medication provided.
xii. Toxic gas levels e.g. ammonia, Carbon Dioxide, Carbon Monoxide.

e) develop and implement a transport plan ~~for egg produced~~ which minimizes waiting time for the eggs produced.

15.2 For existing or new equipment which is used in management, e.g. heaters, lighting, ventilation, stock keepers must be able to:

a) demonstrate an ability to operate the equipment competently
b) demonstrate the ability to carry out routine maintenance
c) recognise common signs of malfunction
d) demonstrate knowledge of action to be carried out in event of malfunction.

15.3 Prior to being given responsibility for the welfare of livestock, stock-keepers must be properly trained and competent to:
a) recognise signs of common diseases
b) know the appropriate actions for treatment of common diseases
c) recognise signs of normal behaviours, abnormal behaviour and fear
d) understand the concept of stress and the signs that indicate good health and welfare

e) understand the environmental requirements for hens, including their drinking and feeding needs
f) treat hens in a positive and compassionate manner
g) recognise a potential welfare problem in its earliest stages, enabling them to identify the cause and put matters right immediately.

15.4 Stock-keepers must:
a) be able to demonstrate their proficiency in procedures that have the potential to cause suffering, e.g. culling
b) be aware of the welfare problems associated with poor litter management, e.g. hockburn, foot pad lesions and breast blemishes
c) Understand the factors that affect litter condition.

15.5 All training must be recorded.
Egg Management

Collected eggs should be graded. Defective, cracked and soiled eggs to be rejected.

All Eggs shall be stored in a clean well-ventilated cool area with the pointed ends pointing down.

Eggs must be transported in the coolest time of the day in appropriate vehicles.

Eggs must be delivered to their destination as quickly as possible.

Eggs trays must be sanitized after each use.

15.6 Inspection

15.6.1 Birds, and the facilities on which birds depend, must be inspected at least twice daily.

15.6.2 At least one of the inspections relating to 16.1 must be sufficiently thorough to identify any bird that is showing signs of poor health or injury.

15.6.3 Inspection should be done in such a way that hens are not unnecessarily disturbed, for example, animal handlers should move quietly and slowly through the flock.

15.6.4 The records of inspection must be dated, signed and the time of inspection noted.

15.6.5 On completion of inspection, records must be kept of ill and injured birds, including the causes.

15.6.6 Poultry distribution and behaviour should be monitored during daily inspections and corrective action should be taken to adjust light, temperature, ventilation, bedding condition, and feed and water supply as required.

16 Equipment

16.1. Stock-keepers must inspect the equipment, including the automatic equipment, upon which chickens depend, at least once daily to check that there are no defects.

16.2 Where a defect relating to 17.1 is found it must be rectified immediately.

16.3 If is impracticable, such measures as are required to safeguard the birds from suffering unnecessary pain or distress as a result of the defect must:
a) be taken without delay
b) be maintained until the defect is rectified.

16 .4 Alarms fitted to automatic equipment on which birds depend, i.e. feeders, drinkers and ventilation, must not be deactivated or turned onto silent when birds are occupying the house.

16 .5 The alarms must be checked daily to ensure they are in correct working order.

16 .6 Where buildings rely totally or partially on automatic ventilation systems, they must have an alarm system that:
a) responds to a failure in the:
i. power supply to the equipment
ii. equipment to maintain control of the house temperature
b) alerts a responsible and competent stock person to address the issue.

16 .7 Additional equipment or means of ventilation must be available (whether automatic or not) which, in the event of such a failure of the ventilation system, will provide adequate ventilation so as to prevent the birds from suffering unnecessary distress as a result of the failure.

16 .8 An auxiliary power supply which is capable of providing instant start and power to the house and all equipment within the house for a 24-hour period must be situated on site.

16 .9 The power supply must be tested once weekly and the outcome of the test recorded

17 Protection from other Animals

17 .1 Levels of potentially harmful wild animals (e.g. rodents and birds) must be managed humanely to avoid:
a) the risk of disease spread to hens
b) damage to hens' buildings and the services on which birds depend
c) contamination and spoilage of feed.

17 .2 The primary means of protecting birds from wild animals, must be by:
a) physical exclusion methods
b) the removal of elements in the vicinity that might encourage the presence of wild animals
c) maintaining units in a clean and tidy condition to minimise the risk of wild animals gaining access to the unit.

17-.3 Where any method of lethal control is being considered, a site survey of the unit must be carried out before applying the control, i.e. bait or traps, identifying:
a) the type, level and extent of the problem species
b) any non-target animals likely to be present (including pets and children)
c) any maintenance and proofing issues.

17 .4 Long-term baiting must not be used as a routine rodent control measure.

17 .5 When bait and/or traps are used, record of their use must be kept and:

a) state the location of the bait/traps
b) state what bait/traps were used
c) state the volume/number of bait/traps placed

d) state the name of the person who placed the bait/trap
e) be retained for at least two years.

17 .6 Bait and traps must:

a) be placed in suitable positions, and

b) be sufficiently protected to avoid harming non-target animals.

17.7 Bait must be used according to the manufacturer's instruction for:
a) storage
b) usage, including areas of use and replenishment
c) disposal.

17.8 Traps must be:

a) used according to the manufacturer's guidelines
b) maintained in good order
c) disposed of appropriately if no longer fit for purpose, e.g. have broken
d) stored safely and securely.

17.9 Bait points must:

a) be monitored regularly, and
b) records of monitoring must be kept, including:
i. levels of any activity at each bait point
ii. any missing or disturbed bait
iii. the name of the person responsible for monitoring the bait points.

17.20 Trap points must:
a) be monitored at least twice a day, ideally at dawn and dusk, and
b) records of monitoring must be kept, including:
i. levels of any activity at each trap
ii. any missing or disturbed traps
iii. the name of the person responsible for monitoring the traps.

17.21 Any injured, sick or dying wild animals found – that have been targeted for control – must be humanely dispatched immediately to prevent further suffering.

17.22 Where bait is used, dead animals must be disposed of safely, in line with the manufacturer's product label.

17.21 Once treatment is complete, all traps and traces of bait must be:

a) removed
b) disposed of/stored according to the manufacturer's instructions.

18 Biosecurity

18.1 A record of all visitors to the farm must be maintained. The visitor record must include the following details of the visitor:

a) name
b) organisation
c) date and time of arrival
d) recent visits to poultry sites and farms

e) certification that they are not suffering with any enteric illness.

18.2 Where there is an identifiable and significant risk of visitors compromising the health and welfare of the birds they must not be allowed onto the site.

18.3The wheels of all vehicles entering and leaving the farm must be disinfected.

18.4 Farm dedicated protective clothing must be supplied to all visitors
.
18.5 Protective clothing must be washed or discarded between flocks.

18.6 On each occasion on entering/leaving a poultry house, all farm personnel and visitors must dip footwear.

18.7 A physical barrier footwear system, with dedicated footwear, must be provided at the entrance to each bird area.

18.8 The physical barrier must:

a) be no less than 30cm high
b) be removable for washing or, if fixed, there must be appropriate drainage to allow effective cleansing of the barrier area.

18.10 Separate footwear must be worn on each side of the barrier.

18.11 On entry into a bird area, all staff and visitors must change into dedicated boots or use new disposable overshoes.

18.12 Hand sanitisers or hand wash facilities must be:

a) present within reach of the physical barrier
b) used before entering and after exiting the bird area.

18.12 Toilets and hand washing facilities must be available and must consist of a basin with running water, anti-bacterial soap, and disposable towels or hand dryers.

18.13 All disinfectants must be used in accordance with manufacturer’s instructions.

18.14 Permanent standing water must not accumulate on the farm.

18.15 The house must operate at least 14 days ~~period~~ free of all livestock between flock cycles.
18.16 Routine Laboratory Testing should be carried out in qualified laboratories for surveillance and monitoring of diseases, parasites and any other hazards.

19 Transportation

19.1 Personnel in charge of hens/eggs transporters must have:

a) completed an approved training course
b) be able to demonstrate their competence in handling hens/eggs when loading and unloading them and while in transit.

19.2 Animal transport systems must be designed and managed to ensure hens are not caused unnecessary distress or discomfort.

19.3 Transport containers must be:
a) fit for purpose
b) thoroughly cleaned before each use
c) well maintained, e.g., free from sharp edges and protrusions
d) not cause injury to the birds/eggs.
e) kept to absolute minimum.

19.4 Transport vehicles must be thoroughly cleaned before each use.

19.5 Transportation vehicles shall allow easy loading and off loading of chicken or eggs.

19.6 Transportation vehicles shall be labeled live animals on board.

19.7 In periods of hot weather (in excess of 25ºC) chickens must be transported at night or in the coolest parts of the day.

19.8 Every effort must be made to ensure:
a) journeys are completed without unnecessary delays
b) drivers are aware of any potential traffic problems and plan their journey accordingly.

19.9 Measures must be taken so as to avoid wetting and chilling, such as equipping the vehicle with suitable curtains.

Annex A
(normative) or (informative)

sensory evaluation

Whilst the use of calibrated meters is encouraged, sensory evaluation, using the following air quality assessment protocol, can be used instead:
Step 1: Using the chart below, assess ammonia and dust levels immediately upon entering the house.
Step 2: Just prior to leaving the house during that flock inspection, assess the air quality once again.
Step 3: Record the highest score from the two assessments

SCORE	DESCRIPTION
0	Zero/weak: odour and dust not/hardly noticeable; easy to breathe.
1	1 Moderate: odour and dust distinct; experience watery eyes and/or coughing.
2	2 Strong: odour and dust irritating; experience stinging eyes and/or mouth,

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