

# Republic of Malawi



# **Animal Welfare Guidelines**

(Livestock, Working Animals, and Companion Animals)

Ministry of Agriculture, Irrigation and Water Development Department of Animal Health and Livestock Development P.O. Box 2096 Lilongwe 3, Malawi

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Foreword	5
Preface	6
Acknowledgements	7
Introduction	8
General principles of animal welfare	10
Part A: Livestock	12
Poultry	13
1. Management	13
2. Transport and markets	17
3. Health and veterinary care	
4. Slaughter and end of life care	
Beef cattle	22
1. Management	22
2. Transport and markets	
3. Health and veterinary care	
4. Slaughter and end of life care	28
Dairy cattle	33
1. Management	33
Sheep and Goats (Shoats)	39
1. Management	
2. Transport and markets	43
3. Health and veterinary care	
4. Slaughter and end of life care	44
Pigs	47
1. Management	47
2. Transport and markets	
3. Health and veterinary care	
4. Slaughter and end of life care	55
Part B: Working animals	59
Working equids	60
1. Management	
2. General working animal conditions	
3. Transport and markets	
4. Health and veterinary care	
3 MODORIEL ONG BUG OF MB COTA	A 4

Working dogs	65
Part C: Dogs and cats	67
1. Management	68
2. Vaccination and health care	72
3. Additional provisions for working dogs	72
4. Transport and markets	74
5. Confiscations	74
6. Population management and end of life care	75
Useful additional resources	76
Annex 1: Gait scoring in poultry	77
Annex 2: Dairy mobility score	78
Annex 4: Body condition scoring of sheep	84
Annex 5: Body condition scoring of dogs	85

#### **Foreword**

The development of the **Animal Welfare Guidelines (Livestock, Working Animals and Companion Animals)** is a landmark step in the Ministry of Agriculture, Irrigation and Water Development's aims to improve the standard of animal welfare in Malawi. The Guidelines are a voluntary code to outline the responsibility of all animal owners and managers to ensure at least minimum standards of welfare for the animals in their care. Although voluntary, the Guidelines support the provisions of the Protection of Animals Act (Cap 66:01, 1970) and will be used in assessing standards of welfare for livestock, working animals and companion animals, including, where pertinent, during prosecutions under the Protection of Animals Act.

The Guidelines were developed to provide clear and achievable standards to promote good animal welfare for all livestock, working animals and companion animals in Malawi. They draw on international standards where appropriate, but also recognise the need for local adaptation. The Guidelines outline the responsibility and expected standards to be upheld by all stakeholders (including farm owners and staff; feedlot, ranch and dairy farm owners and staff; commercial poultry production owners and staff; transporters; abattoir owners and staff; security companies and agencies using dogs; pet owners; government officials; animal welfare organisations and veterinarians) involved in animal management and care.

Malawi recognises the global drive to improve animal welfare. The 'One Health/One Welfare' concept describes the connections between animal health and welfare, human well-being and environmental health and welfare. Ensuring high standards of animal welfare can positively impact on human livelihoods, for example by promoting good animal health and welfare the productivity and longevity of livestock can increase, thereby providing additional resources for the owner and the wider economy.

As a member of the World Organisation for Animal Health (OIE), Malawi is striving to uphold the OIE's standards on animal welfare. The Ministry of Agriculture, Irrigation and Water Development also supports the goal of the African Union's recently launched 'Animal Welfare Strategy for Africa' which is 'To transform the animal resources sector through adoption of good animal welfare practices for human well-being, sustainable livelihoods, poverty reduction and economic growth'.

The Animal Welfare Guidelines for Malawi will play an integral part in our country's progression towards improved animal welfare across all sectors from small-scale farmers to commercial farming and livestock slaughter companies and the care provided to working and companion animals. We must all play our part – Government, animal owners, industry and academia to implement and enforce the standards in the Guidelines and ensure the responsible management of all animals in our care.

Hon. Kondwani Nankhumwa, M.P.

MINISTER FOR AGRICULTURE, IRRIGATION AND WATER DEVELOPMENT

August, 2019

# **Preface**

The Department of Animal Health and Livestock Development developed the **Animal Welfare Guidelines (Livestock, Working Animals and Companion Animals)** in support of Malawi's ongoing efforts to comply with international animal welfare standards. The development of the Guidelines, with the involvement of stakeholders and animal welfare experts, demonstrates the Department's commitment to working with other Government Departments, technical partners and beneficiaries to develop animal welfare policies and ensure effective implementation and enforcement.

These Guidelines will be a source of reference for all those charged with the responsibility of caring for animals and for those developing and enforcing animal welfare legislation and policies. As a working document, the Guidelines will be regularly reviewed and where necessary updated to reflect developments in animal welfare science and changing conditions in Malawi's agriculture sector. Climate change mitigation is a serious concern for Malawi. Improved livestock management, including through better animal welfare, can contribute to a more productive livestock sector and reduced greenhouse gas emissions.

The Ministry for Agriculture, Irrigation and Water Development welcomes the development of these Guidelines and looks forward to all stakeholders working to uphold the standards therein.

Gray Nyandule Phiri

SECRETARY FOR AGRICULTURE, IRRIGATION AND WATER DEVELOPMENT

August, 2019

# **Acknowledgements**

Malawi's Animal Welfare Guidelines (Livestock, Working Animals and Companion Animals) 2019 have been developed by the Department of Animal Health and Livestock Development (DAHLD) through a consultative and participatory process in collaboration with experts and stakeholders. The draft Guidelines were developed by veterinarians and animal welfare experts and presented to a diverse group of stakeholders for input and endorsement. The Guidelines were further refined by a small technical working group of veterinarians and animal welfare experts from Government, academia and NGOs. DAHLD acknowledges and thanks all collaborators for contributing their time and expertise to complete these important Guidelines. DAHLD would particularly like to thank the Lilongwe Society for the Protection and Care of Animals, (LSPCA) Malawi Veterinary Association, Lilongwe University of Agriculture and Natural Resources and Dr Martyn Edelsten for their technical input and the Royal Society for the Prevention of Cruelty to Animals (UK) for financial support to complete the Guidelines.

DAHLD is grateful to LSPCA, Rural Poultry Centre in Malawi, Alexander Caminada Photography and Lilongwe Wildlife Trust for kindly permitting the use of their photographs in this publication.

Dr Patrick Chikungwa

DIRECTOR OF ANIMAL HEALTH AND LIVESTOCK DEVELOPMENT

August, 2019

#### Introduction

The World Organisation for Animal Health (OIE) Terrestrial Animal Health Code (2016)<sup>1</sup> defines animal welfare as: "how an animal is coping with the conditions in which it lives. An animal is in a good state of welfare if (as indicated by scientific evidence) it is healthy, comfortable, well nourished, safe, able to express innate behaviour, and if it is not suffering from unpleasant states such as pain, fear and distress. Good animal welfare requires disease prevention and veterinary treatment, appropriate shelter, management, nutrition, humane handling and humane slaughter/killing. Animal welfare refers to the state of the animal; the treatment that an animal receives is covered by other terms such as animal care, animal husbandry, and humane treatment".

The OIE guiding principles on animal welfare include the universally recognised "Five Freedoms", which were published in 1965 to describe the conditions necessary to achieve basic animal welfare standards.

#### **Five Freedoms:**

- freedom from hunger, malnutrition and thirst;
- freedom from fear and distress:
- freedom from physical and thermal discomfort;
- freedom from pain, injury and disease; and
- freedom to express normal patterns of behaviour.

## The OIE also recognises:1

- That the use of animals in agriculture, education and research, and for companionship, recreation and entertainment, makes a major contribution to the well-being of people.
- That the use of animals carries with it an ethical responsibility to ensure the welfare of such animals to the greatest extent practicable.
- That improvements in farm animal welfare can often improve productivity and food safety, and hence lead to economic benefits.

The African Union's Inter-African Bureau for Animal Resources (AU-IBAR) launched the 'Animal Welfare Strategy for Africa' in 2017<sup>2</sup>. The strategy outlines the key animal welfare challenges currently facing the continent, which include:

- Inadequate understanding by value chain actors of the value of animal welfare (economic, non-economic, social etc.) in production systems, trade and health;
- Inadequate policy framework, guidelines, strategies, and action plans as depicted by lack
  of laws or out-dated laws, inappropriate regulations and standards and weak or no
  implementation and enforcement;
- Inappropriate husbandry practices, both in indigenous and modern husbandry that lack adequate knowledge on impact of good animal welfare practices on production, productivity and quality/health leading to disregard of animal welfare in production systems.

<sup>&</sup>lt;sup>1</sup> Terrestrial Animal Health Code. Chapter 7.1, article 7.1.1. World Organisation for Animal Health. http://www.oie.int/index.php?id=169&L=0&htmfile=chapitre\_aw\_introduction.htm

<sup>&</sup>lt;sup>2</sup> AU-IBAR Animal Welfare Strategy for Africa (2017) https://au.int/sites/default/files/documents/33005-doc-awsa\_executive\_summary\_layout\_eng.pdf

It is hoped that these Guidelines will contribute to the continental level effort to improve access to information on animal welfare standards for all stakeholders, and provide benchmarks for monitoring and evaluation.

Consumers around the world are increasingly concerned about the conditions in which food animals are reared and killed and are demanding higher welfare standards. Some African countries risk being restricted from certain markets in the future due to non-compliance with provisions on animal welfare. Conversely, producing food animals at higher standards of animal welfare can provide a market differentiator and lead to increased sales of better quality meat and dairy products.

This is a working document, which we expect will be regularly updated as the scientific evidence base for developing welfare standards continues to advance, community expectations in terms of animal welfare increase, and new ways to improve animal welfare outcomes are developed. The Guidelines should be read in conjunction with the Protection of Animals Act (Cap 66:01, 1970). Captive Care Guidelines for wildlife are included in the National Parks and Wildlife Act Regulations.

The Department of Animal Health and Livestock Development encourages all animal owners and managers to familiarise themselves with the standards laid out in these Guidelines, and ensure that they meet the requirements for all animals in their care.

# General principles of animal welfare

These Guidelines are based on the 'Five Freedoms' as developed by the UK Farm Animal Welfare Committee and where necessary are adapted for conditions in Malawi.

The Five Freedoms and Five Provisions for promoting animal welfare:

- 1. **Freedom from hunger and thirst** by ready access to fresh water and a diet to maintain full health and vigour.
- 2. **Freedom from discomfort** by providing an appropriate environment including shelter and a comfortable resting area.
- 3. Freedom from pain, injury or disease by prevention or rapid diagnosis and treatment.
- 4. **Freedom to express normal behavior** by providing sufficient space, proper facilities and company of the animal's own kind.
- 5. **Freedom from fear and distress** by ensuring conditions and care, which avoid mental suffering.

# These freedoms will be better provided for if those who have care of livestock practise/provide:

- Caring and responsible planning and management
- Skilled, knowledgeable and conscientious stockmanship
- Appropriate environmental design
- Considerate handling and transport
- Humane slaughter

# Competency of animal handlers

People handling animals should be competent in the animal handling skills required for the task at hand. This applies to all species of animals. It applies to people who care for animals on a daily basis as well as people responsible for transport (including drivers), sale of animals and slaughter. Some people have a high level of competence, perhaps innate or perhaps acquired through previous training or experience. However, others do not have such skills or have adopted from their peers norms applying to animal handling, which simply do not meet an acceptable animal welfare standard.

Peer group norms are not necessarily the benchmark for acceptable standards of animal welfare. It is not acceptable to continue to practice low standards of animal welfare merely because "that is how we have always done it". People handling animals need to understand the welfare needs of the animals they are managing and managers/owners should be held accountable to ensure this is practiced.

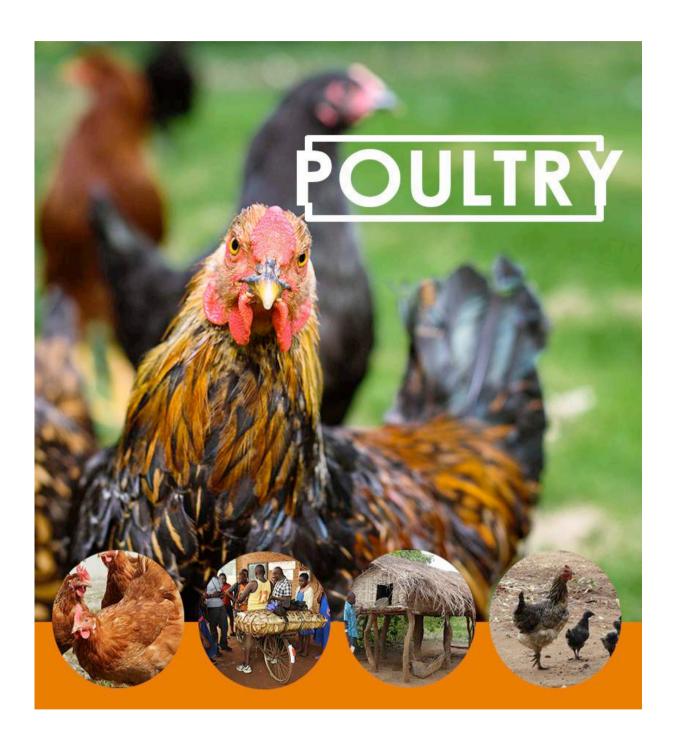
Ensuring an adequate level of competence on the part of the animal handler is the responsibility of the owner/manager of the animals. Depending on circumstances, it may entail formal training, or day-to-day guidance from competent people. Much has been written to provide adequate knowledge of better animal handling. Such resources can and should be utilised to ensure people managing and handling animals have an acceptable level of skills.

# Under intensive farming, managers must:

- a) Develop and implement a suitable training programme for stock-keepers with regular updates and opportunities for continuing professional development and keep records of such training.
- b) Maintain records of production data and use of medication these records must include types and quantities of medicines used.

# Prior to being given responsibility for the welfare of livestock, stock-keepers must:

- a) Be properly trained
- b) Be able to recognise signs of normal behaviour, abnormal behaviour and fear
- c) Be able to recognise signs of common diseases and understand their prevention and control, and know when to seek veterinary advice
- d) Have basic knowledge of body condition scoring for the species they are caring for and recognise when nutritional needs are not being met



# **Poultry**

The poultry industry in Malawi spans a diverse range of levels from the vertically integrated commercial sector, through small-scale commercial enterprises, to village flocks of 'backyard chickens' where inputs are minimal and scavenging is the norm. Because of this diversity of enterprises, these guidelines should be read in the context of the particular sector concerned.

# 1. Management

The following sections cover some specific criteria, which are necessary to ensure minimum contemporary standards for welfare of poultry. They should be read in the context of the particular scale and level of development of the poultry sector concerned.

# 1.1 Flock Health and Welfare Programme (FHWP) for large enterprises

The objective of health and welfare monitoring is to define and implement a process that will continually ensure adequate levels of welfare, including health, of the birds on the farm. The animal welfare concerns may differ somewhat depending on the management system. A high degree of caring and responsible management and stockmanship is vital to ensure good animal welfare. Managers and stock-keepers need to be skilled and competent in animal husbandry and welfare, and have a good working knowledge of the livestock under their care.

All poultry enterprises in Malawi with over 25,000 birds (including all ages and locations) must ensure the welfare requirements of the birds are met at all times through the establishment of a documented, formal Flock Health and Welfare Programme (FHWP) which is:

- a) Specifically tailored to the respective enterprise, including all sections involving live poultry e.g. transport, breeding facilities, slaughter facilities etc
- b) Available as a consolidated document
- c) Regularly (at least yearly) reviewed and, if necessary, updated
- d) Made available to the relevant veterinary authority, this at present being the Director of Animal Health and Livestock Development
- e) Identify and list all the health and welfare conditions currently affecting and likely to affect the flock
- f) Document (i) how, (ii) when and (iii) how often each condition will be monitored
- g) Record the type of animal affected (i.e. age, stage of production etc)
- h) Record the level of each condition for the whole flock
- i) Monitor the level of each condition for the farm
- j) For each condition, develop and implement a plan designed to prevent any increase in, and/or reduce the average level of that condition for the farm (a prevention plan), including the method of control to be used
- k) Ensure a treatment plan is developed for the health and welfare conditions.

# Typically, such a plan will also include standard operating procedures covering:

- a) Procedures and record keeping for vaccination, disease control and antibiotic use, hygiene, disinfection and biosecurity, which are routinely adopted on the establishment(s)
- b) Handling of sick, injured and unproductive birds
- c) Humane killing of sick or injured birds
- d) Emergency procedures in the event large numbers of birds may need to be slaughtered.

#### 1.2 Food and water





The availability and quality of feed and water for poultry must be of a standard that avoids conditions, which cause disease or disablement of birds. The frequency of feeding of housed poultry must be at least once daily. Newly hatched chicks must receive feed and water within 4 hours of hatching.

Feeder space requirements will depend on the size of the birds and the frequency of feeding. The over-riding principle should be that birds on lower dominance levels still get access to adequate feed after the more dominant birds are satiated.

To ensure this under once-a-day feeding, feeding space and distribution must be such that 90% of birds have access to feed at once. For ad-lib feeding systems, feeding space need only be such that 20% of birds have simultaneous access.

Housed poultry must have access to sufficient potable water to meet their physiological requirements at all times. In the case of drip or mini-cup style waterers, the minimum number of water points required will depend on demand, which

will vary with bird size and ambient temperature. The number and distribution must always be sufficient to ensure that the less dominant birds still have ready access to water.

Water must be sufficiently cool in summer that birds do not refuse to drink. For housed poultry, there should be a minimum supply of water available in storage, and a means of delivering it, in case of breakdowns or failure of the regular supply.

Free-range poultry must have access to water of a quantity and quality that does not incur any deleterious effect, including prolonged thirst, on the birds.

## 1.3 Environment

Housing for poultry should always provide the birds with protection against extremes of temperature, excessive wind, rodents and other predators.

### 1.4 Space requirements



Minimum space requirements will vary depending on many factors including species, breed, age and housing type. For chickens housed on the floor, the maximum bird density is 30 kg body weight per square metre of total available floor space. For caged layers, breeders or pullets, the minimum floor space should satisfy the conditions in Table 1.

In cages, birds must be able to stand at normal height. Cages must be at least higher than the maximum height of the birds standing normally. The height of all cages must be at least 40 cm over 65% of the cage floor area and not less than 35 cm at any point.

Table 1 Space requirements - caged layers

Birds per cage	Maximum live weight per unit of floor area
3 or more	46 kg /m²
2	40 kg/m²
1	26 kg/m²

#### 1.5 Air temperature and quality

Ventilation should be such that air quality and temperature do not adversely affect housed poultry. In particular, ventilation must be designed such that there is no excessive build-up of noxious gases such as ammonia and hydrogen sulphide. It should also be designed such that there is not excessive humidity within the poultry house at higher ambient temperatures. The optimum temperature within a poultry house will vary depending on the species and age of birds. Temperature should be controlled so that there is no excessive adverse behaviour such as huddling in hotter or cooler areas.

#### 1.6 Substrate



The floor of a poultry house must be designed, constructed and maintained to minimise the risk of injury and disease, and to adequately support the birds. Where poultry are kept on slats or wire, the design and management must ensure that it does not cause physical injury to the birds.

Where litter floors are used, the management of the litter is critical for the welfare of the birds. In deciding what depth of litter to use, consideration must be given to the stocking density of the birds and the length of time in the shed. Poor litter management may lead to litter that is caked, wet or excessively dusty, and attempts must be made to prevent these conditions and rectify them should they occur.

Perches or perching areas should be provided for birds to roost at night. They should be strong enough to hold the birds and should not bend, sway or rotate. They should be positioned to minimise fouling of any birds below. There should be sufficient perch space so that all birds can roost at once. The recommended space for chickens is 15 cm per bird.

# 1.7 Beak trimming

Beak trimming should be avoided if possible and if applied, must only be undertaken by a trained and experienced operator.

# 1.8 Gait scoring

A bird's level of lameness can be determined by assessing its walking ability. The University of Bristol's Gait Scoring Guide is included in Annex 1. As in 4.1 (c) birds must be humanely killed without delay if they have difficulty walking or reaching food or water.

# 2. Transport and markets



It is not acceptable to transport poultry tied and hung from the legs on bicycles or other vehicles.

Transport of birds must be managed such that they do not remain without food for more than 12 hours. They must have access to water up until the time of loading/catching. Any birds remaining behind must be provided with feed and water and a comfortable environment without delay.

Birds, which are visibly unfit, must not be transported. They must be handled humanely and culled or cared for without delay. **Under no circumstances may poultry be transported while tied and hung from the legs.** 

# 2.1 Vehicle transport

The minimum space required for humane transport of poultry will depend on the size of the birds. A guide to minimum space requirements is shown in Table 2 below. All birds should be able to rest on the floor at the same time and remain evenly distributed. The minimum height for chickens is 25 cm between the floor and the ceiling. During transport by vehicle the top layer and all sides must be adequately shaded from direct sunlight, rain and excessive wind.

Transporters/middlemen/businessmen/personnel in charge of chicken transportation must have undertaken proper training in the requirements for humane transport and must be able to demonstrate their competence in handling chickens during all phases of transport.

**Table 2.** Space requirements for vehicular transport of chickens

Category	Floor space
day-old chicks	435 chicks per m
poultry less than 1.0 to 1.6 kg	40 birds per m
poultry 1.6 kg to 2.2 kg	36 birds per m
poultry 2.2 kg to 3.0 kg	28 birds per m
poultry 3.0 kg to 5.0 kg	20 birds per m

# Transport vehicles must:

- a) Be fit for purpose
- b) Be properly cleaned before each use
- c) Be well maintained, e.g. free from sharp edges and protrusions
- d) Not cause injury to the birds.

All birds must be slaughtered within 8 hours of loading the first bird into the transport basket/crate. The time from when the birds leave the farm/market to arriving at the processing plant must be no longer than 6 hours.

#### Bicycle and motor-cycle transport

# The practice of transporting poultry tied and hung upside down from the legs is unacceptable.

Transport in traditional, locally made baskets or manufactured crates/cages is appropriate provided that all birds should be able to rest on the floor at the same time. The design of the basket/cage/crate must be such as to avoid injuries and discomfort.

The time limits for access to feed and water, which are described above for vehicular transport, should also be applied in the case of poultry transported by bicycle/motor-cycle.

# 2.3 Transport of day-old-chicks

Day-old-chicks should be healthy and vigorous. They should be placed in suitably ventilated boxes without overcrowding. They should not be transported in open vehicles or bicycles when ambient temperature is outside a range of 22 - 30°C.

#### 2.4 Markets

All livestock must be sold in designated areas with provision of shelter/shade, only appropriate tethering which does not cause injury/distress can be used and water and feed should be provided throughout the day. The market operator or committee is responsible for overseeing the welfare of animals sold at markets and ensuring that they are cared for and treated humanely. It is the owner and market operator's responsibility to ensure that no unfit animal is available for sale at market. An authorised welfare organisation or a Veterinary Authority can remove animals from sale that are unfit and take further enforcement action, including the humane destruction of animals unfit for onward transport.

There must be suitable arrangements for holding, feeding and watering of any birds not sold at the end of the day.

# 3. Health and veterinary care

Poultry must be protected from pain, injury and disease. The environment in which birds are housed must be conducive to good health. All large producers must develop a health plan in consultation with their veterinary surgeon/personnel.

All large poultry units must have a written **Veterinary Health Plan (VHP)**, drawn up and regularly updated by the producer in conjunction with the attending veterinary assistant or veterinary surgeon. All sudden deaths, disease outbreaks, antibiotic prescription and use and birds humanely killed as unfit, must be: a) recorded b) reported to the veterinary surgeon/personnel if appropriate.

# 3.1 Preventative veterinary care

All large flocks must be continually monitored for flock performance including:

- a) Production diseases
- b) Infectious diseases
- c) Injury as a result of housing/husbandry.

Provision must be made for the segregation and care of sick and injured animals. Any birds suffering from illness or injury must be: segregated if necessary and treated without delay. If abnormal behavioural activities develop repeatedly in any particular animal(s), a programme of modification and enrichment must be agreed together with the farm veterinary surgeon/personnel and pursued until the problem is solved.

# 4. Slaughter and end of life care

These Guidelines should be read alongside Chapter 7.5 'Slaughter of Animals' of the OIE Terrestrial Animal Health Code, which Malawi aspires to comply with.

http://www.oie.int/index.php?id=169&L=0&htmfile=chapitre\_aw\_slaughter.htm

# 4.1 Casualty birds/emergency slaughter

Each farm must have provisions for the humane killing/slaughter of casualty birds without delay.

# Birds must be humanely killed without delay if they:

- a) Are in severe pain that is uncontrollable
- b) Are injured, ailing or distressed such that they cannot comfortably survive
- c) Have difficulty walking or reaching food or water.

#### Casualty killing/slaughter must be carried out by either:

- a) A named, trained, competent member of staff, or
- b) A licensed slaughter-man, or
- c) A veterinary or para-veterinary practitioner.

# 4.2 Training

Managers of large poultry slaughter enterprises must develop and implement an **Animal Welfare Policy**. The Animal Welfare Policy must include written procedures regarding:

- a) Maintaining animal welfare in the abattoir
- b) Responsibilities and duties of staff
- c) Emergency procedures.

The Animal Welfare Policy must be regularly reviewed and updated. Managers must appoint at least one trained Animal Welfare Officer (AWO), who is responsible for the implementation of the Animal Welfare Policy.

# Managers, in conjunctions with the AWO, must develop and implement:

- a) A training program for all staff handling and slaughtering animals ensure that staff are properly trained to carry out their duties and be competent to perform them.
- b) Written procedures with regard to ensuring the welfare of the animals is maintained, which must include procedures for emergencies such as escaped, trapped or injured livestock.

### 4.3 Planning and design

Persons responsible for slaughter facilities for poultry must ensure that:

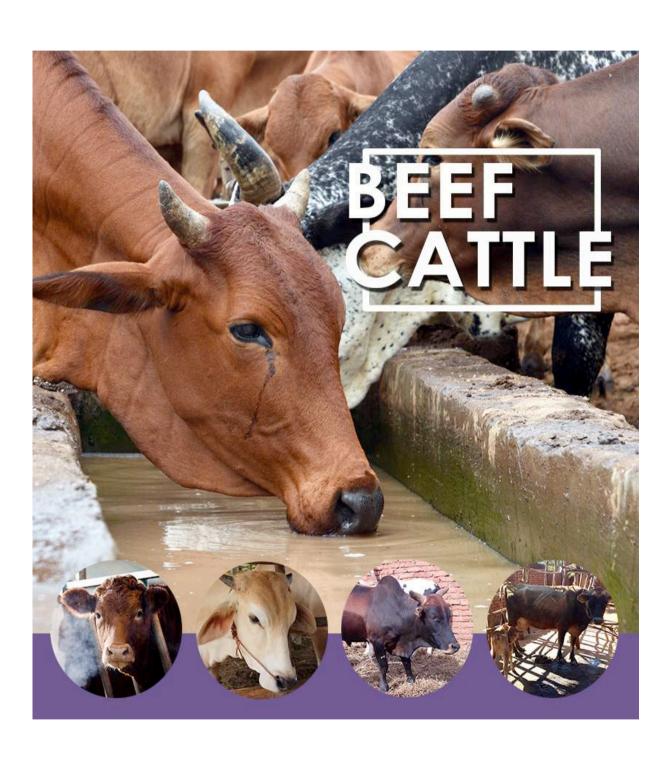
- a) There is a proper plan for humane management of stock on a daily basis, ensuring that poultry are not subjected to unnecessary stress
- b) Birds are not deprived of food for more than 10 hours prior to slaughter
- c) The design of the facility is satisfactory for handling the highest expected throughput without compromising minimum welfare standards
- d) Contingency procedures are in place for emergencies, breakdowns, industrial action etc, to minimise risks to animal welfare
- e) All relevant staff are competent in and aware of the need for adherence to minimum standards of animal welfare
- f) Weak, ill or injured livestock are promptly identified and dealt with in a humane manner
- g) Procedures for humane slaughter, including restraint, stunning and slaughter of livestock, are carried out to minimise stress and in an efficient and effective manner.

# 4.4 Humane slaughter procedures

Procedures for humane slaughter, including restraint, stunning and slaughter of livestock, must be carried out in an efficient manner, which minimises stress.

Stunning, if employed, must be demonstrably effective before sticking and/or scalding commences.

No bird must be deprived of food for more than 10 hours prior to slaughter. Birds must have access to water up to the time of catching.



# **Beef cattle**

The beef industry in Malawi spans a diverse range of levels from small scale farmers owning herds of a few cattle to larger commercial enterprises importing, growing and slaughtering thousands of cattle per year. These Guidelines should therefore be read in the context of the particular sector concerned, with more responsibility placed on larger enterprises to comply with all the standards due to their available resources and personnel and because of the number of animals affected. Small-scale farmers should however also ensure that basic animal welfare standards are upheld for their animals.

# 1. Management



#### 1.1 Herd Health and Welfare Programme for large enterprises

The objective of health and welfare monitoring is to define and implement a process that will continually ensure adequate levels of welfare, including health, of animals on the farm. The animal welfare concerns may differ somewhat depending on the management system. A high degree of caring and responsible management and stockmanship is vital to ensure good animal welfare. Managers and stock-keepers need to be skilled and competent in animal husbandry and welfare, and have a good working knowledge of the livestock under their care.

All large/intensive cattle units must have a written **Herd Health and Welfare Programme (HHWP)**, drawn up and regularly updated in conjunction with the attending veterinary practitioner.

#### The individual farm HHWP must be:

- a) Specifically tailored to the respective enterprise, including all sections involving live animals e.g. transport, breeding facilities, feedlot and slaughter facilities etc
- b) Available as a consolidated document
- c) Regularly (at least yearly) reviewed and, if necessary, updated
- d) Made available to the relevant veterinary authority, this at present being the Director of Animal Health and Livestock Development
- e) Identify and list all the health and welfare conditions currently affecting and likely to affect the herd
- f) Document (i) how, (ii) when and (iii) how often each condition will be monitored
- g) Record the type of animal affected (i.e. age, stage of production etc)
- h) Record the level of each condition for the whole herd
- i) Monitor the level of each condition for the farm
- j) For each condition, develop and implement a plan designed to prevent any increase in, and/or reduce the average level of that condition for the farm (a prevention plan), including the method of control to be used
- k) Ensure a treatment plan is developed for the health and welfare conditions
- I) Where appropriate, consult with a specialist veterinarian in feedlot medicine and feedlot herd health management, specific to feedlot programmes, and include policy on arrival procedures, transport, handling, feeding and record keeping
- m) Maintain sufficient numbers of trained staff, thoroughly familiar with the feedlot management programme, to cater adequately for the programme on a 7-day-a-week basis.

# Typically, an HHWP plan will also include standard operating procedures covering:

- a) Procedures and record keeping for vaccination, disease control, hygiene, disinfection and biosecurity, which are routinely adopted on the establishment(s)
- b) Handling of sick, injured and unproductive animals
- c) Humane killing of sick or injured animals
- d) Emergency procedures in the event large numbers of animals may need to be slaughtered.

#### 1.2 Food and water

#### Availability and access to water

Cattle, including calves over 7 days, must be provided with continuous access to an adequate supply of clean, fresh drinking water each day, except when required by the attending veterinary surgeon. When cattle are housed, the water delivery systems must allow at least 10% of the herd to drink at any one time. Minimum drinking space must be calculated on the basis that cattle of 350 to 700kg must be provided with 450 to 700mm of water trough space per head – see Table 3.

Cattle require the following volume of drinking water: 4.5 litres per 50 kg live-weight per day plus, 3.0 litres per litre of milk produced. Ideally, the water trough should be set into the bedded area with the front of the trough in line with the division separating the bedded area and the hard standing/ loafing area, where there is one. The water trough should be walled off on the bedded side to a height of approximately 1.4m above the level of bedding. This will force the cattle onto the loafing area to drink and will help to prevent any poaching (i.e. damage to the ground from the action of the feet of livestock) of the bedded area.

**Table 3.** Recommended minimum effective drinking space per herd size

	0 1 1
Herd size	Minimum effective drinking perimeter (m)
50	2.25
100	4.50
125	5.65
150	6.75
200	9.00

At pasture, the area around the water troughs should be managed to avoid damage to the ground and excessive mud and, if necessary, consideration should be given to placing troughs on concrete foundations. At pasture, cattle should not be expected to have to walk more than 250 m to access water, if adequate intakes are to be achieved. Wherever possible, troughs and gateways should be sited away from the bottom of slopes and dips in the ground. This will ensure better drainage and will allow areas of deep mud to be avoided.

# Appropriate food/fodder



Livestock must have freedom from hunger, thirst and malnutrition by ready access to fresh water and a diet to maintain full health and promote a positive state of well-being. Feed and water must be distributed in such a way that livestock can eat and drink without undue competition (see Table 4).

Grazing areas must be kept clean and free from rubbish and sharp objects that could cause injuries or be ingested, which can lead to serious health issues and fatalities.

Body Condition Scoring (BCS) should be used to assess whether cattle are receiving adequate, nutritious food. See Annex 2 for an example of a BCS system.

**Table 4.** Trough lengths/animal feed

Live weight (kgs)	Min length (mm) of trough per head	
Live weight (kgs)	Rationed Feed	Ad-lib
100	350	100
200	400	100
300	500	125
400	600	150
500	700	150
600	750	200

# 1.3 Environment

# Space requirements and substrate



Cattle kept in straw yard accommodation must be kept on, or have access at all times to, a lying area which is: a) well-drained or well-maintained with dry bedding and b) of sufficient size to accommodate all cattle lying down together in normal resting posture.

Table 5. Recommended minimum space per weight of animal

Weight of animal (kg)	Min. bedded lying area (m²)	Min. non bedded/loafing area	Min. total area per animal (m²)
< 100	1.5	1.8	3.3
101 to 199	2.5	2.5	5.0
200 to 299	3.5	2.5	6.0
300 to 399	4.5	2.5	7.0
400 to 499	5.5	2.5	8.0
500 to 599	6.0	2.5	8.5
600 to 699	6.5	2.5	9.0
700 to 799	7.0	3.0	10.0
> 800	8.0	3.0	11.0

#### 1.4 Breeding

Good animal health and welfare standards are essential components of the beef cattle reproductive program. Management of the cows and heifers, in particular control over mating, is vital in order to avoid welfare problems associated with dystocia (obstructed labour). Heifers should reach full maturity before calving. Choice of bull is also important to ensure appropriate calf size and the avoidance of a long gestation period.

# 1.5 Animal handling including equipment

Cattle must be handled quietly at all times, with care to avoid unnecessary pain or distress. Cattle have the following behaviour characteristics, which must be taken into account when they are being moved:

- a) They have poor vision for distance and detail; therefore they must not be led into shadowy areas
- b) They must not be subjected to sudden movement of nearby objects
- c) Their hearing is similar to humans, so they must not be subjected to sudden loud noise
- d) Their instinct to herd is strong so they must not be isolated.

#### 1.6 Promotion of natural behaviour

In some cases, cattle are tethered in order to avoid other problems or dangers. If cattle are tethered, they must have access to feed and water in accordance with the principles described above. The tether must be applied in a competent manner, which avoids restriction of blood flow or damage to skin or underlying tissues.

Cattle pens (kholas) must be constructed so as to avoid excessive inundation with mud and water during the wet season. All cattle in the khola should be able to lie on firm ground without excessive muddying of their bodies.

# 1.7 Education/training of owner/manager

A high degree of caring and responsible management and stockmanship is vital to ensure good animal welfare. Managers and stock-keepers must be skilled and competent in animal husbandry and welfare, and have a good working knowledge of their system and the livestock under their care.

# 2. Transport and markets

# 2.1 Animal handling procedures

Sticks must not be used for hitting cattle. Electric goads must not be used. Sticks and benign handling aids may be used as extensions of the arms.

Races and gates must be designed so that animals can move through them unhindered when required. When operating gates and catches, every effort must be made to reduce excessive noise, which may cause distress to the animals. If a problem is identified, noise reduction mechanisms must be fitted as necessary.

Cattle must not be moved or loaded unless the way forward is clear, and there is adequate space available for them to move into. Loading facilities must provide a ramp of no more than a 20% incline. Both loading ramps and tailboards must be appropriately designed and covered with an appropriate substrate (e.g. straw) to prevent animals from falling off or slipping. Transport facilities must be such that cattle can stand during transport. Except for emergencies and casualties, it is unacceptable for cattle to be trussed or tied during transport by vehicle.

All tailboards to vehicles must be fitted with foot battens. If a loading ramp is to be modified or newly installed, a reverse ramp must be provided.

# 2.2 Transport equipment/vehicle

Transport vehicles must have sufficient headroom so that when cattle are standing in a natural position there is clearance of: for calves 10 cm above highest point of animal; for cattle 20 cm above highest point of animal. The floors of all vehicles must be covered with sufficient bedding in order to provide comfort and reduce the likelihood of injury. The following space allowances must be provided during transport.

**Table 6.** Recommended space allowances during transportation

Animal size	Weight (Kg)	Minimum area per head (m2)
Small calves	50	0.3 to 0.4
Medium calves	110	0.4 to 0.7
Heavy calves	200	0.7 to 0.95
Medium cattle	325	0.95 to 1.30
Heavy cattle	550	1.30 to 1.60
Very heavy cattle	>770	>1.60

#### 2.3 Fitness of animal to travel

A sick or injured animal must not be transported unless it is being taken for veterinary treatment or it is being taken to the nearest available place for humane slaughter, and then only if the said animal is suitable for loading, travelling and unloading.

# 2.4 Food/water/rest provisions

Cattle, including calves, must have access to water up to the point of transport. Cattle must have access to food up to at least 4 hours before loading onto the lorry.

#### 2.5 Markets

All livestock must be sold in designated areas with provision of shelter/shade, only appropriate tethering which does not cause injury/distress, water and feed throughout the day. The market operator or committee is responsible for overseeing the welfare of animals sold at markets and ensuring that they are cared for and treated humanely. It is the owner and market operator's responsibility to ensure that no unfit animal is exposed for sale at market. An authorised welfare organisation or a Veterinary Authority can remove animals from sale that are unfit and take further enforcement action, including the humane destruction of animals unfit for onward transport.

# 3. Health and veterinary care

# 3.1 Health and welfare monitoring

Livestock must be protected from pain, injury and disease. The environment in which livestock are housed must be conducive to good health. All large producers must develop a **Herd Health and Welfare Plan** in consultation with their veterinary surgeon/personnel.

All large cattle units must have a written Veterinary Health Plan (VHP), drawn up and regularly updated by the producer in conjunction with the attending veterinary assistant or veterinary surgeon. All sudden deaths, disease outbreaks and cattle humanely killed as unfit, must be: a) recorded b) reported to the veterinary surgeon/personnel if appropriate.

# 3.2 Preventative veterinary care

All large herds must be continually monitored for herd performance including:

- a) Production diseases
- b) Infectious diseases
- c) Injury as a result of housing/husbandry.

Provision must be made for the segregation and care of sick and injured animals. Any cattle suffering from illness or injury must be: segregated if necessary and treated without delay. If abnormal behavioural activities develop repeatedly in any particular animal(s), a program of modification and enrichment must be agreed together with the farm veterinary surgeon/personnel and pursued until the problem is resolved.

# 4. Slaughter and end of life care

All slaughter/killing systems must be designed and managed to ensure livestock are not caused unnecessary distress or discomfort. Stress associated with pre-slaughter handling of livestock must be kept to an absolute minimum. Personnel involved in the slaughter must be thoroughly trained and competent to carry out the tasks required of them.

These Guidelines should be read alongside Chapter 7.5 'Slaughter of Animals' of the OIE Terrestrial Animal Health Code, which Malawi aspires to comply with.

http://www.oie.int/index.php?id=169&L=0&htmfile=chapitre\_aw\_slaughter.htm

# 4.1 On-farm casualty slaughter

Each farm must have provisions for the prompt, humane slaughter of emergency/casualty cattle, carried out by a named, trained, competent member of staff or a licensed slaughterman. Cattle that are unable to walk must be slaughtered without being moved, i.e. on the lorry or in the lairage pen, using humane casualty slaughter equipment and procedures. Casualty animals must be killed in a humane and pain-free manner without delay.

Where provisions relating to humane slaughter are not possible, a veterinary surgeon must be called out to carry out the procedure. If there is any doubt as to how to proceed, the veterinary surgeon must be called at an early stage to advise whether treatment is possible or whether humane slaughter is required to prevent suffering. If an animal is in severe pain that is uncontrollable, then the animal must be promptly and humanely slaughtered.

It is not illegal to slaughter an animal to prevent further severe suffering if a method of humane slaughter is available on the premises and there is someone competent to undertake the procedure. However, for non-emergency casualty slaughter, a licensed meat inspector should be called and a humane method such as a captive bolt pistol used.

#### 4.2 Training

Managers of large cattle slaughter enterprises must develop and implement an **Animal Welfare Policy**. The Animal Welfare Policy must include written procedures regarding:

- a) Maintaining animal welfare in the abattoir
- b) Responsibilities and duties of staff
- c) Emergency procedures.

The Animal Welfare Policy must be regularly reviewed and updated. Managers must appoint at least one trained Animal Welfare Officer (AWO), who is responsible for the implementation of the Animal Welfare Policy.

# Managers, in conjunction with the AWO, must develop and implement:

- a) A training program for all staff handling and slaughtering animals ensure that staff are properly trained to carry out their duties and be competent to perform them.
- b) Written procedures with regard to ensuring the welfare of the animals is maintained, which must include procedures for emergencies such as escaped, trapped or injured livestock.

# 4.3 Lairage

Slaughterhouse managers must ensure that the premises are constructed and maintained so as to prevent any injury being caused to animals confined there.

# The slaughterhouse must provide a lairage facility which:

- a) Is constructed so as to provide shelter from direct sunlight and adverse weather conditions
- b) Provides animals with a dry lying area
- c) Is of adequate size and construction for the number of animals confined there
- d) Provides adequate draught-free ventilation
- e) Is properly lit to permit animals to be inspected
- f) Has drainage facilities for faeces and urine
- g) Is able to be thoroughly cleaned between batches of animals

h) Provides easy access to adequate water, which must be available at all times, and to food, if necessary.

The lairage facility must have isolation pens available, in which sick or injured animals can be isolated and, if necessary, humanely slaughtered, located close to the unloading area and within easy access of the stunning area. Isolation pens must be available for use at all times.

When cattle are kept in a lairage, the following stocking densities must apply:

Table 7. Recommended stocking densities when cattle are kept in lairage

Weight (kg)	Minimum bedded lying area per animal m²)	
< 100	1.5	
101 to 250	2.5	
251 to 350	3.5	
351 to 450	4.5	
451 to 550	5.0	
551 to 600	5.5	
601 to 650	6.0	
651 to 700	6.25	
> 700	6.5	

Where animals are to be housed overnight in a lairage, then fully bedded pens without any hard standings are acceptable. Cattle which, because of their sex, age or origin, are likely to be aggressive, must be separated from each other at lairage, and must stay in on-farm groups (or be sub-divided).

Cattle in lairage pens must not be exposed to bright artificial light or direct sunlight except during ante-mortem inspection, which must be carried out in a minimum of 220 lux illumination.

# 4.4 Pre-slaughter handling

Cattle must be handled calmly and quietly, with care to avoid unnecessary excitement or distress. Race design and construction must encourage cattle to move forward, with:

- a) As few right-angled bends as possible
- b) No projections and obstructions in the races and passageway
- c) Appropriate lighting.

Cattle must not be moved or loaded unless the way forward for the lead animal is clear, and there is adequate space available for them to move forward. Flooring must be non-slip in races and passageways. **Electric goads must not be used**.

#### 4.5 Slaughter equipment

The equipment used for the stunning and killing of animals, including the stunning pen and/or restraint devices, must be designed, manufactured and maintained to ensure rapid and effective stunning or killing. All slaughter equipment must be thoroughly and appropriately cleaned after use. Slaughter equipment must be checked at least once daily by an AWO to ensure it is in working order and in a good state of repair.

A record of the check on slaughter equipment must be made. Reserve equipment for the stunning and killing of animals must be kept at the place of slaughter for use in an emergency. Reserve equipment must be checked at least once weekly by an AWO to ensure it is in working order and a good state of repair. A record of the check on reserve equipment must be made.

#### 4.6 Stunning

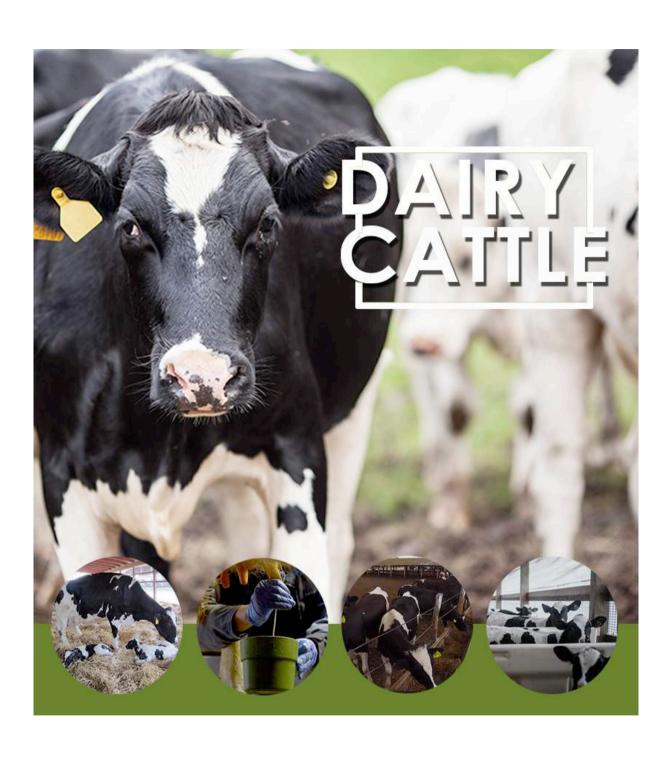
Cattle must be stunned prior to slaughter by means of a stunning system, which renders them instantaneously unconscious and insensitive to pain and maintains that state until the point of death.

Cattle must not be allowed into the slaughter box unless the slaughterman is ready to immediately stun the animal. Cattle must be fully in the stunning pen before the floor is dropped.

# All stunning pens for cattle must be constructed to:

- a) Restrict backwards, forwards or sideways movement
- b) Allow release of the animal's head as soon as the stunning has been completed
- c) Allow the slaughterman free access to the animal's forehead while it is restrained.

Cattle must only be stunned when they can be stuck immediately afterwards with a stun-tostick interval of no more than 60 seconds. Animals must be unconscious before shackling. To prevent a return to consciousness, animals must be stuck before shackling to enable bleeding out to occur during hoisting.



# Dairy cattle

The following provisions are in addition to the provisions for beef cattle and should therefore be read alongside the beef cattle chapter.

# 1. Management

#### 1.1 Environment

The environment in which livestock are kept must take into account their welfare needs and be designed to protect them from physical and thermal discomfort, fear and distress, and allow them to perform their natural behaviour. At pasture, the stocking density should allow the animals to perform their natural behaviours without hindrance. Where this is not deemed possible, then extra land should be provided.

# 1.2 Buildings and space requirements

Floors should be made of non-slip material or be maintained so as to reduce the risk of slipping. Floors should never be so rough as to cause foot damage nor so smooth as to result in slipping. Rubberised flooring can be incorporated into areas of heavy use, such as collecting yards, milking parlours and feed passageways. This makes walking surfaces more comfortable and reduces the risk of causing injury to the soles of the feet. Careful management of these compounds is required to avoid them becoming slippery.

Cattle kept in zero grazing accommodation must be kept on, or have access at all times to, a lying area which is: a) well-drained or well maintained with dry bedding and b) of sufficient size to accommodate all cattle lying down together in normal resting posture.

Cows must be able to lie down in a normal position without risk of being trodden on or kicked by other cows. Loose housed, growing cattle must be grouped according to size and age. The space allowance for cattle housed in groups must take account: a) of the presence or absence of horns b) the size of the group. Recommended floor space allowances in straw yard accommodation are shown in Table 8.

**Table 8.** Recommended space allowances in straw yard accommodation

Animal weight (kg)	Min. bedded lying area (m²)	Min. non-bedded/loafing area (m²)	Min. total area per animal (m²)
< 100	1.5	1.8	3.3
101 to 199	2.5	2.5	5.0
200 to 299	3.5	2.5	6.0
300 to 399	4.5	2.5	7.0
400 to 499	5.5	2.5	8.0
500 to 599	6.0	2.5	8.5
600 to 699	6.5	2.5	9.0
700 to 799	7.0	3.0	10.0
> 800	8.0	3.0	11.0

#### 1.3 Cow pen

The emphasis of pen design should be to maximise the comfort of the animal. Given the wide range of sizes and body-weights within and between herds and individual breeds, it is difficult to prescribe actual dimensions of pens. However, animals must be provided with an exercise area, of at least 3m<sup>2</sup> per head as a guide.



# Non-bedded areas must be:

- a) Slatted or of solid concrete
- b) Scraped to remove manure at least twice daily. Straw or wood shavings may be used to a minimum depth of 50 mm. Cow mats (not of the solid type) may be used with a thin layer of bedding to absorb moisture.

Bedding must be managed in a way that maximises cow comfort. Fouled bedding must be removed twice daily. Animals using cubicles must be able to stand with all 4 feet in the dry cubicle. Animals must be able to change position from standing to lying and vice versa in a normal manner without difficulty or injury, in each cubicle. There must be a minimum of 0.7 m provided for forward lunging and bobbing of the head, in each cubicle. The cubicle must be constructed so that it prevents the animal from standing or lying so far forward that it either consistently soils the back of the bed or becomes unable to rise normally.

# Cubicle divisions must be designed to:

- a) Align a cow properly in her own cubicle
- b) Prevent interference with her neighbour
- c) Prevent injury to her neighbour or herself.

#### 1.4 Bull pens

Bull pens must be sited so as to allow the bull sight, sound and odour of other cattle and general farm activity. Bulls must be attended to at least twice daily by farm staff. Individual accommodation for an adult bull of average size must include a bedded sleeping area of not less than 16 m<sup>2</sup>. For very large bulls, the sleeping area must not be less than 1 m<sup>2</sup> for each 60 kg live-weight.

An exercise and service area must be provided and be no less than 25 m<sup>2</sup> in total area. Bullpens must be safe for the stock-keepers tending them and include adequate restraining facilities.

# 1.5 Calving environment

The highest standards of hygiene must be practised in the parlour to reduce the risk of infection. Cows must be clean at calving, paying particular attention to udders and teats. Udder, teats and flanks must be clean, dry and free from sores on entry to the parlour. 'Multi-use' udder cloths must not be used. Medicated teat towels must be used according to the manufacturers' recommendations.

# 1.6 Milking parlour



Parlour staff must have clean hands when handling teats. Consideration must be given to the use of rubber gloves. Routine 'fore-milk' examination must be made to identify early cases of mastitis. All cases of mastitis must be treated promptly, and underlying predisposing factors corrected. When the mastitis rate exceeds the target figure over a 2-month period, the specific organisms involved must be identified. Any cows with mastitis must be marked and milked last, and the milk discarded, or milked with a separate cluster and bucket. Consideration should be given to humanely slaughtering cows with chronic mastitis. Cell counts, clinical cases of mastitis and mastitis tube usage, must be monitored and recorded.

Hand milking must be done by people competent in the task. Poor milking technique can be a significant welfare issue, quite apart from its ill effects on productivity.

Milking machinery must be properly maintained. All teats must be properly dipped or sprayed with appropriate teat products after milking. An emollient must be used when teats are dry, chapped or cracked.

Following completion of milking, cows must be encouraged to remain standing for approximately half an hour to allow the teat canal sphincter to close before returning cows to the relatively dirty conditions of the cubicle house or straw yard. Measures must be in place to minimise the risk/incidence of mastitis in dry cows. Milking machine testing must be carried out and recorded at least every 6 months.

Where any cows that are calving are kept in a building, they must be kept in a pen or a yard that is fully bedded. The pen or yard must be of such a size, and equipped with a means of restraint, so as to permit a person to safely attend the cows and their calves.

Cattle that are calving must be kept separate from other cattle. When housed there must be enough calving space to accommodate the number of cows calving. Calving and isolation boxes must be designed so that they can be managed hygienically. Adequate provision for securing cattle must be provided. Adequate provision for milking isolated cows must be provided. Calving cows and heifers must be inspected at least twice per day.

# 1.7 Fencing



Any electric fencing must be adequately inspected and maintained. Fences must be designed, installed, used and maintained so that contact with them does not cause more than momentary discomfort to the cattle. The use of electric fences on self-feed silage systems is prohibited. Alternative feed barriers must be designed so as to avoid any potential threat to the animals; for example, becoming trapped between the feed face and the barrier.

# 1.8 Breeding

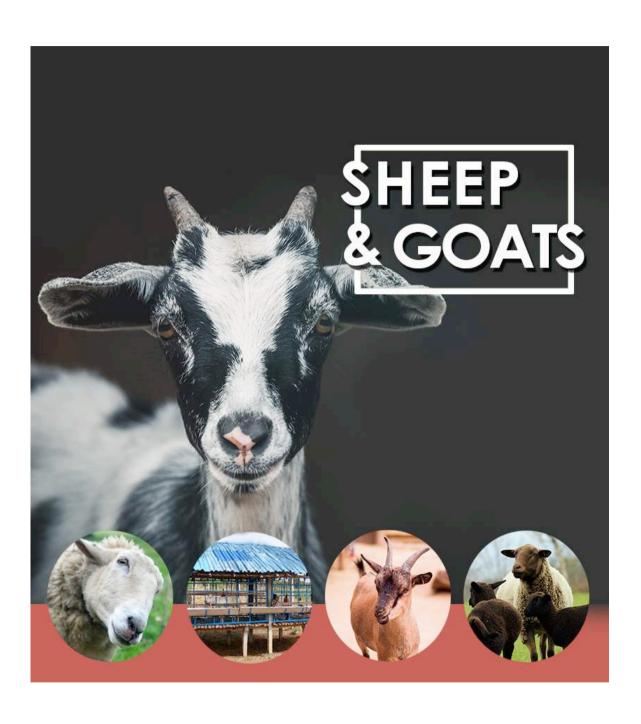
Good animal health and welfare standards are essential components of the dairy cow reproductive programme. Management of the dairy heifer is vital in order to avoid welfare problems associated with dystocia (labour obstruction).

Heifers should reach full maturity before calving. Choice of bull is also important to ensure appropriate calf size and the avoidance of a long gestation period.

# 1.9 Calving

# The following should be adhered to:

- a) Body condition score within the range 2.5 to 3.0 for the cow at calving is desirable (using the Defra UK 'Condition Scoring of Dairy Cows' system see Annex 3)
- b) Provide safe calving facilities to ensure minimum stress and risk of injury
- c) For indoor calving a bedded pen should be available
- d) In the case of abnormal or difficult calvings, prompt intervention should take place including veterinary assistance where necessary to avoid distress or even death to the cow and/or the calf
- e) Care should be taken when using a calving jack and particularly so when early use is being considered
- f) Assist the calf in obtaining adequate amounts of colostrum within 2 to 4 hours of birth. For a calf remaining with the cow, provide conditions that will promote bonding between mother and offspring.
- g) New born calves with a wet navel should not be offered for sale.



# **Sheep and Goats (Shoats)**

# 1. Management

The following management systems are practised in the rearing of sheep and goats in Malawi:

- a) Herding This may be shoats from one or several kraals herded together
- b) Free range shoats are left to scavenge. This usually happens after harvesting crops
- c) Tethering animals are tethered by the leg or neck (advisable). These must be given water, shelter and shifted from place to place or supplemented with feed.

The animal welfare concerns may differ somewhat depending on the management system. These Guidelines should therefore be read in the context of the particular sector concerned, with more responsibility placed on larger enterprises to comply with all the standards due to their available resources and personnel and because of the number of animals affected. Small-scale farmers should however also ensure that basic animal welfare standards are upheld for their animals.

#### 1.1 Herd Health and Welfare Programme

All large/intensive shoats units must have a written **Herd Health and Welfare Programme** (**HHWP**) drawn up and regularly updated in conjunction with the attending veterinary practitioner.

#### The individual farm HHWP must be:

- a) Specifically tailored to the respective enterprise, including all sections involving live animals e.g. transport, breeding facilities, slaughter facilities etc
- b) Available as a consolidated document
- c) Regularly (at least yearly) reviewed and, if necessary, updated
- d) Made available to the relevant veterinary authority, this at present being the Director of Animal Health and Livestock Development
- e) Identify and list all the health and welfare conditions currently affecting and likely to affect the herd
- f) Document (i) how, (ii) when and (iii) how often each condition will be monitored
- g) Record the type of animal affected (i.e. age, stage of production etc)
- h) Record the level of each condition for the whole herd
- i) Monitor the level of each condition for the farm
- j) For each condition, develop and implement a plan designed to prevent any increase in, and/or reduce the average level of that condition for the farm (a prevention plan), including the method of control to be used
- k) Ensure a treatment plan is developed for the health and welfare conditions.

# Typically, such a plan will also include standard operating procedures covering:

- a) Procedures and record keeping for vaccination, disease control, hygiene, disinfection and biosecurity, which are routinely adopted on the establishment(s)
- b) Handling of sick, injured and unproductive animals
- c) Humane killing of sick or injured animals
- d) Emergency procedures in the event large numbers of animals may need to be slaughtered.

A high degree of caring and responsible management and stockmanship is vital to ensure good animal welfare. Managers and stock-keepers need to be skilled and competent in animal husbandry and welfare, and have a good working knowledge of the livestock under their care.

#### 1.2 Food and water

Goats are generally browsers and feed on a variety of herbage, while sheep are grazers. Under confinement, intensive production or to ensure a balanced diet, there is a need for supplementation.

#### Common local browse plants

Acacia spp. (e.g. msangu), (mpalankhanga), Cassia (mpwaukwaru), Pterolobium (lunguzi), Mangifera indica (mango), Gmelina, Neem, Leucaena, Sesbania sesban.

Shoats must have access to a wholesome diet, which is appropriate to the breed and management system.

#### The diet should be:

- a) Fed in sufficient quantity to satisfy appetite
- b) Balanced to satisfy their nutritional needs.



While it is important to provide supplementary feed, this is especially critical for tethered shoats that have limited access to forage. No goat or sheep should at any time have a body condition score less than 2. See Annex 4 for a guide to condition scoring for sheep.

Sheep and goats must have access to food each day, except when food is required to be withheld as advised by the attending authorised veterinary personnel. Feed producers must have a written record of the constituents of compound feeds and feed supplements. Shoats must be fed so that their body condition is likely to sustain full health and normal reproductive capacity over their maximum foreseeable life span. Body condition change in shoats must be carefully planned and maintained according to the stage of production cycle. Efforts must be made to avoid sudden changes in the type and quantity of food.

For concentrate feeding, approximately 45 cm trough space should be provided. For hay and silage feeding ad libitum, approximately 12 to 15 cm trough space per ewe/goat should be provided, depending on access and other relevant factors, e.g. whether ewes are horned. Floor feeding is permitted, providing bedding is kept clean and dry.

Troughs must be kept clean and any stale food removed. Equipment and utensils used for liquid feeding must be thoroughly cleansed daily and must be effectively sterilised.

#### Water

Sheep and goats must be provided with ready access to clean, fresh drinking water at all times. Water troughs must be provided unless natural water sources are sufficient to ensure adequate daily access. Water bowls and troughs must be kept thoroughly clean and managed in a way which ensures that they are capable of dispensing sufficient clean water at all times. Bowls/troughs must be sited to avoid lambs/kids drowning.

# 1.3 Environment Buildings and substrate



Proper housing reduces diseases and parasites and protects animals from theft and predators.

#### Shoats must be provided with shelter which:

- a) Protects them from rain, wind and strong sunlight
- b) Is clean and regularly cleared of manure
- c) Is well-ventilated to reduce ammonia build up that lowers pneumonia incidences in shoats.

For raised, slatted kholas, leave narrow spaces (25mm) to allow for droppings to pass through, but not too wide for feet to get stuck to avoid injuries. For deep litter housing, provide bedding in the form of straw or equivalent material to ensure that animals are comfortable when lying down. The bedding must be replaced regularly.

# **Space requirements**

An adult goat or sheep requires about 1.0 - 1.4 m<sup>2</sup> floor space in the prevalent management practices in Malawi.

#### Air auality

Good ventilation should be ensured to reduce ammonia build up to reduce pneumonia and other disease incidences in the animals. Some indicators of poor ventilation are stuffy kholas, coughing, and pneumonia (the level of which should be monitored at meat inspection).

#### 1.4 Breeding

Artificial insemination must only be performed by a qualified person under the direction of a veterinary surgeon. Trans-cervical and/or intrauterine (laparoscopic) artificial insemination must not be carried out unless under an approved programme of research or investigation. The use of electro-ejaculation in rams/bucks is not permitted.

# 1.5 Animal handling and facilities

Goats and sheep can be enticed to move with food, or the flock can be herded to a pen or enclosure. All producers must have suitable facilities for routine handling and management of the flock. Handling systems must be designed, constructed and maintained so as to minimise stress and the likelihood of injury to the sheep/goats during handling.

#### Sheep and goats must be handled:

- a) Quietly and calmly at all times
- b) Firmly as is necessary to keep the animal safe and under control
- c) With care to avoid unnecessary pain or distress.

Sheep must not be caught by the fleece alone, nor lifted or dragged by the fleece, limbs, ears or tail, nor roughly handled by the horns. Horns, particularly of young sheep/kids, can be damaged or broken if they are roughly handled. Shoats must be handled or restrained by means of a hand or an arm under the neck (holding, but not pulling, the neck wool if necessary) with the other arm placed on or around the rear.

Electric goads must not be used. Sticks must not be used for hitting sheep or goats. Sticks or other benign handling aids may be used as extensions of the arms. Heavily pregnant shoats must only be handled when absolutely necessary. Heavily pregnant shoats must be handled with care to avoid distress and injury, which may result in premature lambing/kidding.

# 2. Transport and markets

# 2.1 Equipment and vehicles

Transportation includes from farm to slaughter, market, to another farm or within the farm. Any stress sheep and goats experience during transportation can adversely affect their welfare, immune system and carcass quality. Procedures must therefore be put in place to ensure that animals are not caused unnecessary distress, discomfort or injury before, during and after transit.

The practice of transporting goats tied to a carrier on the back of a bicycle is unacceptable.

#### 2.2 Handling and loading

Never grab shoats by the hair or fleece and be careful catching them by the horns as breaking the horns can damage the skull. Loading and unloading facilities and vehicles must be designed, constructed and maintained to avoid panic, injury and other suffering. This includes pens, chutes, walk ways and ramps, vehicle floors and sides.

Appropriate lighting, whether natural or artificial (if loading at night), must be available when loading and unloading shoats and to enable thorough inspection. If artificial, position the light so it does not shine into the shoats' eyes, but into the vehicle.

#### 2.3 Fitness to travel

Except in certain circumstances, only transport sheep and goats that are fit to travel and do not move animals that are injured, fatigued, in poor health, about to kid or very young. A sick or injured animal may only be transported if it is being taken for veterinary treatment or it is being taken to the nearest available place for humane slaughter, and then only if the said animal is suitable for loading, travelling and unloading.

#### 2.4 Vehicle

The vehicle must be safe and appropriate to transport shoats. Vehicles without adequate sides or with open tops from which animals can jump, fall, or be pushed off are not allowed. A roof keeps the animals safe and protects them from the sun and rain. The interior of the vehicle must be checked for sharp objects or edges that may cause bruising and injuries during loading or travel. Partition large vehicles into smaller areas no longer than 3.1m to improve stability.

#### 2.5 Personnel

Personnel involved in transport need to be appropriately trained and competent to carry out the tasks required of them. Drivers need to be aware of the effect of their driving style on the welfare of livestock on-board vehicles. In particular, they should make every effort to corner smoothly and pull away/stop as gently as possible.

#### 2.6 Travelling

When expecting hot (and humid) weather, plan on loading and travelling at night or during the cooler times of the day. Check on the shoats early in the trip. Overcrowding and humidity build up during transportation can be harmful and cause overheating and discomfort of shoats, the signs of which may include:

- a) Moving around and not settling in one place
- b) Continued vocalization for a prolonged time
- c) Scrambling for footing and
- d) Lying down involuntarily.

#### 2.7 Markets

All livestock must be sold in designated areas with provision of shelter/shade, only appropriate tethering which does not cause injury/distress may be used and water and feed must be provided throughout the day. The market operator or committee is responsible for overseeing the welfare of animals sold at markets and ensuring that they are cared for and treated humanely. It is the owner and market operator's responsibility to ensure that no unfit animal is exposed for sale at market. An authorised welfare organisation or a Veterinary Authority can remove animals from sale that are unfit and take further enforcement action, including the humane destruction of animals unfit for onward transport.

# 3. Health and veterinary care

Good health is a useful indicator of good welfare and measures which promote good health contribute greatly to the welfare of shoats. Key elements of husbandry include good hygiene, a balanced diet and effective ventilation (see above sections).

Shoats must be protected from pain, injury and disease. The environment in which shoats are housed must be conducive to good health. All large producers must develop a health plan in consultation with their veterinary surgeon/personnel.

All large shoat units must have a written **Veterinary Health Plan (VHP)**, drawn up and regularly updated by the producer in conjunction with the attending veterinary assistant or veterinary surgeon. All sudden deaths, disease outbreaks, antibiotic prescription and use and shoats humanely killed as unfit, must be: a) recorded b) reported to the veterinary surgeon/personnel if appropriate.

#### 3.1 Preventative veterinary care

All large shoat units must be continually monitored for performance including:

- a) Production diseases
- b) Infectious diseases
- c) Injury as a result of housing/husbandry.

Provision must be made for the segregation and care of sick and injured animals. Any shoats suffering from illness or injury must be segregated if necessary and treated without delay. If abnormal behavioural activities develop repeatedly in any particular animal(s), a programme of modification and enrichment must be agreed together with the farm veterinary surgeon/personnel and pursued until the problem is solved.

#### 4. Slaughter and end of life care

These Guidelines should be read alongside Chapter 7.5 'Slaughter of Animals' of the OIE Terrestrial Animal Health Code, which Malawi aspires to comply with.

http://www.oie.int/index.php?id=169&L=0&htmfile=chapitre\_aw\_slaughter.htm

#### 4.1 On-farm emergency slaughter

In case of severe injuries or diseases associated with severe pain or suffering, emergency slaughter may be the only option to alleviate the animal's suffering. The animal must be slaughtered as soon as possible using acceptable humane methods. Humane slaughter ensures the animal suffers minimal pain and stress and is killed almost instantly and is achieved

through stunning. Stunning only renders the animal unconscious and humane slaughter must proceed quickly before the animal regains consciousness. Stunning is generally not being practiced in Malawi outside of the larger abattoirs. The captive bolt is the most effective stunning instrument and suitable for use in sheep and goats. Electrical stunning is also acceptable for stunning sheep. Animals must be bled instantly by sticking or inserting the sticking knife through the neck behind the jawbone and below the first neck bone with the aim to sever the blood vessels of the neck.

#### 4.2 Training

Managers of large shoat slaughter enterprises must develop and implement an **Animal Welfare Policy**. The Animal Welfare Policy must include written procedures regarding:

- a) Maintaining animal welfare in the abattoir
- b) Responsibilities and duties of staff
- c) Emergency procedures.

The Animal Welfare Policy must be regularly reviewed and updated. Managers must appoint at least one trained Animal Welfare Officer (AWO), who is responsible for the implementation of the Animal Welfare Policy.

# Managers, in conjunctions with the AWO, must develop and implement:

- a) A training program for all staff handling and slaughtering animals ensure that staff are properly trained to carry out their duties and be competent to perform them.
- b) Written procedures with regard to ensuring the welfare of the animals is maintained, which must include procedures for emergencies such as escaped, trapped or injured livestock.

# 4.3 Pre-slaughter handling

Shoats must be handled calmly and quietly, with care to avoid unnecessary excitement or distress. Sticks or forceful methods must not be used.

# 4.4 Slaughter equipment

The equipment used for the stunning and killing of shoats must be such as to ensure rapid and effective stunning and killing. If shoats are stunned, they must be stuck immediately afterwards with a stun-to-stick interval of no more than 60 seconds. Stunning equipment must be regularly checked and serviced to ensure it is working correctly.



# **Pigs**

# 1. Management

In Malawi, the following management systems are currently used to keep pigs:

- a) Free range pigs get most of their food by scavenging. The diet may be supplemented with maize bran, kitchen waste, commercial feed etc. Pigs are penned in mud brick buildings or weaker wooden structures.
- b) Housed pigs these rely on being given products such as those described above. Quality of houses ranges from purpose built brick structures, to flimsy wicker structures.
- c) In some areas, pigs are tethered outside by a hind leg and fed as above.

Welfare issues differ slightly according to the management system.

# 1.1 Herd Health and Welfare Programme

All large/intensive pig units must have a written **Herd Health and Welfare Programme (HHWP)**, drawn up and regularly updated in conjunction with the attending veterinary practitioner.

#### The individual farm HHWP must be:

- a) Specifically tailored to the respective enterprise, including all sections involving live animals e.g. transport, breeding facilities, slaughter facilities etc;
- b) Available as a consolidated document;
- c) Regularly (at least yearly) reviewed and, if necessary, updated;
- d) Made available to the relevant veterinary authority, this at present being the Director of Animal Health and Livestock Development.
- e) Identify and list all the health and welfare conditions currently affecting and likely to affect the herd
- f) Document (i) how, (ii) when and (iii) how often each condition will be monitored
- g) Record the type of animal affected (i.e. age, stage of production etc)
- h) Record the level of each condition for the whole herd
- i) Monitor the level of each condition for the farm
- j) For each condition, develop and implement a plan designed to prevent any increase in, and/or reduce the average level of that condition for the farm (a prevention plan), including the method of control to be used
- k) Ensure a treatment plan is developed for the health and welfare conditions.

# Typically, such a plan will also include standard operating procedures covering:

- a) Procedures and record keeping for vaccination, disease control, hygiene, disinfection and biosecurity, which are routinely adopted on the establishment(s)
- b) Handling of sick, injured and unproductive animals
- c) Humane killing of sick or injured animals
- d) Emergency procedures in the event large numbers of animals may need to be slaughtered.

#### 1.2 Food and water

#### Water

All pigs must have continuous access to clean, fresh drinking water, except when advised differently by an attending veterinary practitioner.

#### For housed pigs:

- a) At least one drinking place must be provided per 10 pigs. A drinking place is defined as the space required by a single pig whilst drinking
- b) Drinking places should be spaced sufficiently to allow all places to be occupied at once without interference from pigs at the other drinking places
- c) Where water is provided in troughs, the following space allowances must be provided:

**Table 9** Recommended space allowances for water trough provided pigs

Weight of pig (kg)	Maximum no. of pigs per meter of trough	
< 25	100	
25 to 40	84	
> 40	67	

Troughs should be designed, constructed and maintained to ensure an even distribution of clean water within the trough. The water should fill the full length of the trough i.e. trough should be level. Where a wet and dry feeder system is used (the water and feed are in the same place), additional drinkers must be supplied in the pen at a rate of one drinker per 10 pigs.

Where a pipeline wet feed system is used, which keeps the trough topped up with water (i.e. ad lib feed), additional drinkers must be supplied in the pen at a rate of one drinker per 30 pigs. Water troughs, bowls and nipples must be maintained properly so that they are kept clean and are capable of dispensing water at all times.

# Food

Pigs must have access to a wholesome diet, which is appropriate to the breed and management system. It should be:

- a) Fed in sufficient quantity to satisfy appetite (see body condition scoring below)
- b) Balanced to satisfy their nutritional needs.

Free-range pigs should be offered supplementary feed if the diet from scavenging is insufficient.

Pigs must have access to food each day, except if advised differently by an attending veterinary practitioner.

# A good guide to ensuring that the diet is adequate is body condition score<sup>3</sup>:

- a) No sow should at any time have a body condition score less than 2.
- b) Sows should have a body condition score of at least 3 by the 70th day of pregnancy.

Using the Garth Pig Stockmanship Standards as shown at 'The Pig Site': http://www.thepigsite.com/stockstds/23/body-condition-scoring/

Sudden changes in the type and quantity of food should be avoided as they cause discomfort and may lead to serious disease. Pigs should have access to roughage at all times.

Feed pellets must be broadcast over the entire pen area at intervals of no greater than one week. Pigs must be fed in ways that minimises bullying.

#### For ad lib feeding there must be a maximum of:

- a) 6 pigs per feed place when using a dry feeder with no full head barriers between each feeding place
- b) 10 pigs per feed place where there are full head barriers
- c) 14 pigs per feed place where there is the opportunity to mix water with the feed (wet and dry feeders).

Feeders must be kept clean at all times. Feed storage areas and containers should be constructed to reduce the risk of introduction and spread of infectious diseases by vermin (rats, mice, wild birds etc.).

# 1.3 Environment Buildings, substrate



Pigs must always have access to shelter, sufficient to protect them from heavy rain and strong sunlight. This is particularly important for white-skinned pigs, which easily suffer from sunburn. Rough concrete, jagged wood and metal such as barbed wire should be avoided because they cause sores and lead to formation of abscesses.

# Bedding must be provided in the form of straw or equivalent material:

- a) To ensure that pigs are comfortable when lying down
- b) For housed pigs at all times
- c) For pigs kept outside if the ground is stony.

Old bedding should be replaced with fresh at least twice a week, or if a deep litter system is used, adequate drainage must be provided such that the bedding does not become waterlogged.

The incidence of abscesses should be monitored by scrutinising meat inspection records at slaughterhouses.

Construction and management planning for pig production should be such that mixing of different batches of pigs can be avoided as it often leads to disruption of the dominance order with consequent fighting and injuries.

#### Air quality, thermal environment

For housed pigs, ventilation must be adjustable and adequate for the prevailing conditions i.e. it must be possible to increase flow of air in hot conditions and reduce it in cold conditions.

A simple test of air quality is to sniff the air near ground level. A strong smell of ammonia is a good indicator of poor ventilation. Other indicators of poor ventilation are pigs coughing and catching pneumonia (the level of which should be monitored at meat inspection).

#### **Environmental enrichment**

Pigs are sociable, intelligent and playful, and housed pigs become bored easily, leading to behaviours such as tail biting and ear chewing. This can be alleviated by small changes in management e.g.:

- a) Ability to see other pigs
- b) Access to an outside enclosure
- c) Provision of toys, which stimulate their curiosity e.g. an old tyre or a heavy chain.

# 1.4 Breeding

- a) Gilts should be segregated from boars until they are ready for breeding, usually calculated by attainment of a target weight for the breed
- b) Gilts should only be served by small boars, to avoid damage to the spine
- c) Artificial insemination must only be carried out by a qualified person
- d) Travelling boars should only be used if they have certification of freedom from specified infections
- e) Body condition score is particularly important at time of mating and throughout pregnancy.

#### 1.5 Parturition

- a) Water must be available round the clock in the last 3 weeks of pregnancy
- b) Heavily pregnant animals must be given sufficient bedding to allow them to "nest"
- c) As parturition approaches gilts and sows should have access to a quiet and safe place, preferably on their own. Ample bedding must be provided to allow for "nesting".
- d) During delivery, stock handlers should quietly observe the process and assist only if the female is obviously in need of help
- e) Dam and offspring should not be disturbed or moved for at least 3 days after birth
- f) Care must be taken when sows are restrained, e.g. farrowing crate, tethering, to prevent crushing and suffocation of piglets, a problem which can occur at any time in the first month of life.
- g) Attendants should check pens every 1-2 hours in the first 24 hours following parturition (this is especially important for gilts) and take appropriate action if piglets are being trapped.

#### 1.6 Weaning

Piglets must not be weaned before 28 days of age, except when the conditions below apply:

- a) Under veterinary direction because the health or welfare of the sow or piglets would otherwise be adversely affected
- b) Weaned piglets are moved from sow accommodation into specialised housing. This has to be completely emptied, thoroughly cleaned and disinfected before the introduction of a new group.

In such cases, piglets may be weaned up to 7 days earlier (minimum of 21 days of age for any piglet), in order to maintain integrity of the batch management process and facilitate disease control.

# 1.7 Animal handling and restraint, promotion of natural behaviour

- a) Pigs are more intelligent and sensitive compared to other farm animals and get alarmed and upset if mistreated
- b) Sows have strong maternal instincts and may become aggressive if separated from their piglets
- c) Pigs are not easy to herd and handlers should be patient when restraining and moving them
- d) Pigs do not like being handled and object strongly to being picked up or otherwise restrained
- e) Beating with hard sticks must not be practised. Gentle prodding is permissible. Pigs will often follow someone with a bucket of food or enter a pen if food is provided.
- f) Pigs should be handled quietly with gentle use of sticks and other goads
- g) Restraint should be restricted to as short a time as possible
- h) Large pigs are best restrained by trapping them in a small space using boards e.g. an old door
- i) Piglets should only be picked up by trained personnel
- j) Snares and tethers should only be used where other methods of restraint are not possible. Soft materials must be used to prevent damage to skin and other tissues.

# 2. Transport and markets

#### 2.1 Transport equipment and vehicle

This section mainly refers to pigs being transported from farm to slaughter, but the guidance applies equally to movements at other times e.g. on farm or from home to market.

The practice of transporting pigs tied to a carrier on the back of a bicycle is unacceptable.

Procedures must be planned and executed to ensure that pigs are not caused unnecessary distress, discomfort or injury before, during and after transit.

Finishing pigs should be transported in their on-farm social groups, established at least 1 week prior to transport:

- a) Mixing of batches for transportation should be avoided
- b) Where mixing is unavoidable precautions must be taken to minimise aggression.

#### 2.2 Equipment

Loading and unloading facilities and vehicles must be designed, constructed and maintained to avoid panic, injury and other suffering. This includes pens, walkways and ramps, vehicle floors and sides i.e. all surfaces to which pigs have contact. Everything must be regularly

inspected and damaged structures rendered safe before further use. Surfaces should be non-slip and slopes gentle because pigs slip easily; sharp edges or protrusions must be avoided. Appropriate **lighting**, whether natural or artificial, must be available when loading and unloading pigs and to enable pigs to be thoroughly inspected at any time.

#### 2.3 Space allowance

- a) Pigs should be confined in small pens in a vehicle, around 6-10 pigs per pen, rather than in a single large area where the chances of suffocation and being thrown around are greatly increased
- b) Numbers/weight of pigs per square metre will be more than those recommended for housing, because this reduces the risk of pigs being thrown around in transit. However it must not cause suffocation.

Maximum stocking rates and minimum space allowances for pigs during transport are shown in Tables 10 and 11.

Table 10. Recommended stocking rates and minimum space allowances for pigs during transport

Weight of pig (kg)	Stocking rate (kg/m²)	Space allowance (m²/pig)
7-10	137	0.05
30	200	0.15
40	218	0.16
100	222	0.18
110	235	0.43
Sow	245	0.45

**Table 11.** Space allowance for pigs during transport

Average live weight (kg)	(kg) Space allowance (m²/head)	
5	0.04	
15	0.09	
25	0.12	
50	0.22	
75	0.29	
100	0.35	
125	0.42	
150	0.48	
175	0.55	
200	0.61	

Sufficient height must be allowed such that the tallest pigs in the space cannot bang their heads on the roof, and there is sufficient ventilation.

#### 2.3 Ventilation

- a) Appropriate air quality and quantity must be maintained on vehicles
- b) Ventilation may be sufficient when a vehicle is moving but may be insufficient when it stops
- c) Ventilation must be adjustable, to allow for different weather and travel conditions.

#### 2.4 Bedding

#### The floors of all vehicles must be covered with sufficient bedding:

- a) To provide comfort including thermal comfort
- b) To reduce the likelihood of injury such as fractures and bruising.

# **Journey planning**

- a) Journeys must be properly planned and travel time kept to a minimum
- b) The timing must be planned and agreed between slaughterhouse, haulier and producer, to minimise travelling and waiting time for the pigs
- c) Journeys of more than 4 hours should be discouraged and a single journey should never be more than a total of 8 hours, the time being calculated from first animal loaded to last unloaded. Stoppages of more than 30 minutes should be avoided.
- d) Pigs must be unloaded immediately on arrival at the slaughterhouse or farm
- e) Any interruption causing a delay of one hour or more to the scheduled arrival time must be notified to the receiving abattoir or farm
- f) Drivers should have a contingency plan to cover emergencies i.e. what to do in the event of a prolonged breakdown.

# Food/water/rest during transport

It is not advisable to feed pigs during transport, except in an emergency when time of transit exceeds 12 hours. In this case small quantities of food should be offered in a way that minimises fighting. For journeys over 4 hours, water should be offered at a rest point halfway through the journey.

# Additional considerations for pig welfare should be made for long-duration travel:

- a) For pigs after 12 hours without water
- b) For lactating sows, piglets and weaners after eight hours without water
- c) For pregnant sows after eight hours without water.

#### These considerations should include:

- a) That the pigs are fit for the remainder of the intended journey
- b) That adverse hot weather conditions are not prevailing or predicted
- c) A longer rest time at the end of the journey
- d) The recent management of the pigs before first loading.

On unloading, pigs should be fed and watered within 24-hour intervals in accordance with the relevant standards for production, market and processing sectors. Rest stops off the vehicle during transport of pigs should be avoided due to the risks of poor welfare associated with unloading and reloading and for biosecurity reasons. For rest stops or unexpected stops, arrangements should be made to protect pigs from the extremes of heat and cold, and provide them with water and feed as necessary.

#### Fitness of animals to travel

Pigs should be examined before movement and at regular intervals during transit. Only healthy animals should be transported. Animals with slight lameness can be carried, but they should be isolated in their own pen.

**Deaths and serious or multiple injuries in transit** must be reported by the driver to the haulier, the slaughterhouse manager and the owner/farm manager:

- a) The matter should be investigated and the results recorded on farm
- b) Where causes of incidents in transit are identified, prompt action must be taken to prevent further deaths and suffering occurring
- c) Levels of transit mortality (in animals from any single source) above 1 in 1000 pigs in any 3-month period must be the subject of veterinary investigation.

No violence or any other practices likely to cause excessive fear or injury can be used at any time.

# 3. Health and veterinary care

Good health is a useful indicator of good welfare and measures which promote good health contribute greatly to the welfare of pigs. Key elements of husbandry include good hygiene, a balanced diet and effective ventilation (see above sections).

Pigs must be protected from pain, injury and disease. The environment in which pigs are housed must be conducive to good health. All large producers must develop a health plan in consultation with their veterinary surgeon/personnel.

All large pig units must have a written **Veterinary Health Plan (VHP)**, drawn up and regularly updated by the producer in conjunction with the attending veterinary personnel. All sudden deaths, disease outbreaks, antibiotic prescription and use and pigs humanely killed as unfit, must be: a) recorded b) reported to the veterinary surgeon/personnel if appropriate.

# 3.1 Preventative veterinary care

All large pig units must be continually monitored for performance including:

- a) Production diseases
- b) Infectious diseases
- c) Injury as a result of housing/husbandry.

Provision must be made for the segregation and care of sick and injured animals. Any pigs suffering from illness or injury must be segregated if necessary and treated without delay. If abnormal behavioural activities develop repeatedly in any particular animal(s), a programme of modification and enrichment must be agreed together with the farm veterinary surgeon/personnel and pursued until the problem is solved.

#### 3.2 Infectious diseases

# Control of infectious diseases

- a) Good management goes a long way towards minimising husbandry-related diseases such as bacterial/viral pneumonia, enteritis and parasitic diseases
- b) Good management also reduces the need for medicines.

Stock-keepers should seek and follow veterinary advice when disease problems arise.

# 3.3 African swine fever (ASF)

Welfare issues are basically the same in different pig management systems (see Pigs introductory section). However, the following differences must be considered for ASF, which is endemic in many districts of Malawi.

- a) Free-range pigs are more likely to come in contact with wild pigs than housed pigs. Wild pigs are often carriers of the ASF virus.
- b) Free-range pigs are more likely to come in contact with pigs from surrounding villages, also increasing the risk of incursion of ASF
- c) Houses constructed of materials other than fired bricks may be infested with soft ticks (O. moubata) which carry the virus of ASF. It is almost impossible to get rid of these infestations and keep these houses free of ticks.
- d) There is no vaccine to control ASF
- e) Pig owners should be familiar with the symptoms of ASF and aware of the ways in which it spreads
- f) ASF is a notifiable disease, meaning that by law owners must report suspicions of ASF immediately to nearest veterinary staff or other government official
- g) Pig owners should take basic measures to reduce the risk of introducing ASF virus to their herd and the area
- h) They should ensure that only authorized products are used.

#### 3.4 Health and welfare monitoring

Useful information on the health status of the herd can be obtained from feedback at meat inspection in the abattoir.

For large/intensive pig units a written Herd Health and Welfare Programme (HHWP) must be drawn up and regularly updated in conjunction with the attending veterinary practitioner – see section 1.

In addition to reviewing the environment, management and veterinary care of pigs when health and welfare problems arise, consideration should be given as to whether genetics may be a contributory factor, and hence whether changes in the unit's/company's policy on genetics in the herd would be beneficial. Producers are encouraged to provide feedback on this issue to breeding companies.

# 4. Slaughter and end of life care

#### 4.1 Training

Managers of large pig slaughter enterprises must develop and implement an **Animal Welfare Policy**. The Animal Welfare Policy must include written procedures regarding:

- a) Maintaining animal welfare in the abattoir
- b) Responsibilities and duties of staff
- c) Emergency procedures.

The Animal Welfare Policy must be regularly reviewed and updated. Managers must appoint at least one trained Animal Welfare Officer (AWO), who is responsible for the implementation of the Animal Welfare Policy.

# Managers, in conjunction with the AWO, must develop and implement:

- a) A training program for all staff handling and slaughtering animals ensure that staff are properly trained to carry out their duties and be competent to perform them
- b) Written procedures with regard to ensuring the welfare of the animals is maintained, which must include procedures for emergencies such as escaped, trapped or injured livestock.

# 4.2 Casualty slaughter

Pigs must be handled calmly, quietly and firmly, with care to avoid unnecessary excitement or distress. Pigs that are not able to walk must be killed without delay to minimise their suffering. Such animals might be killed on the vehicle, in the lairage pen, or wherever they are situated, using emergency slaughter equipment and procedures.

# The presence and use of electric goads in any abattoir is prohibited.

Pigs which, because of their sex, age or origin, are likely to be aggressive, must be separated from each other at lairage and should preferably stay in their own on-farm group or sub-divided groups.

# 4.3 Race design and construction must encourage pigs to move forward with:

- a) As few right angled bends as possible
- b) No projections and obstructions in the races and passageways
- c) Appropriate lighting.

Pigs in lairage pens must not be exposed to bright artificial light or direct sunlight, except during ante-mortem inspection, which must be carried out in a minimum of 220 lux illumination.

Flooring must be non-slip in races and passageways.

#### 4.4 Lairage

Fasting must not exceed 18 hrs for any pigs prior to slaughter.

#### The slaughterhouse must have a lairage which:

- a) Can provide shelter from direct sunlight and adverse weather conditions
- b) Can provide animals with a dry lying area
- c) Is of adequate size and construction for the number of animals confined there (see Table 12 below)
- d) Provides adequate draught-free ventilation
- e) Is thermally comfortable for the pigs (i.e. the pigs are neither overheated nor chilled)
- f) Has adequate drainage for faeces and urine
- g) Can be thoroughly cleaned between batches of animals
- h) Has isolation pens in which sick or injured animals can be isolated and, if necessary, humanely killed. Such pens must be located close to the unloading area and within easy access of the stunning area
- i) Provides easy access to drinking water, which must be available at all times, and to food if necessary.

Staff in charge of a lairage must ensure that animals have sufficient space.

Table 12. Recommended spaces for animals confined in lairage

Live weight (kg)	Lying area (m²)	Total area (m²)
10	0.10	0.15
20	0.15	0.225
30	0.20	0.30
40	0.26	0.40
50	0.31	0.47
60	0.36	0.55
70	0.41	0.61
80	0.45	0.675
90	0.475	0.715
100	0.50	0.75
110	0.53	0.80

# 4.5 Pre-slaughter handling

Pigs must be handled calmly, quietly and firmly, with care to avoid unnecessary excitement or distress. Race design and construction must encourage pigs to move forward, see 4.3.

Flooring must be non-slip in races and passageways. Pigs must not be moved unless the way forward is clear, and there is adequate space available for them to move into. All pens, passageways and races must be designed and constructed to allow pigs to walk side by side, except in the case of races leading to the restraining equipment.

#### 4.6 Slaughter equipment

The equipment used for the stunning and killing of animals, including the stunning pen and/or restraint devices, must be maintained to ensure rapid and effective stunning or killing. All slaughter equipment must be thoroughly and appropriately cleaned after use and must be checked at least once daily to ensure it is in working order and in a good state of repair. A record of the check on slaughter equipment must be made.

Reserve equipment for the stunning and killing of animals must be readily available for use in an emergency. Reserve equipment must be checked at least once weekly to ensure it is in working order and a good state of repair.

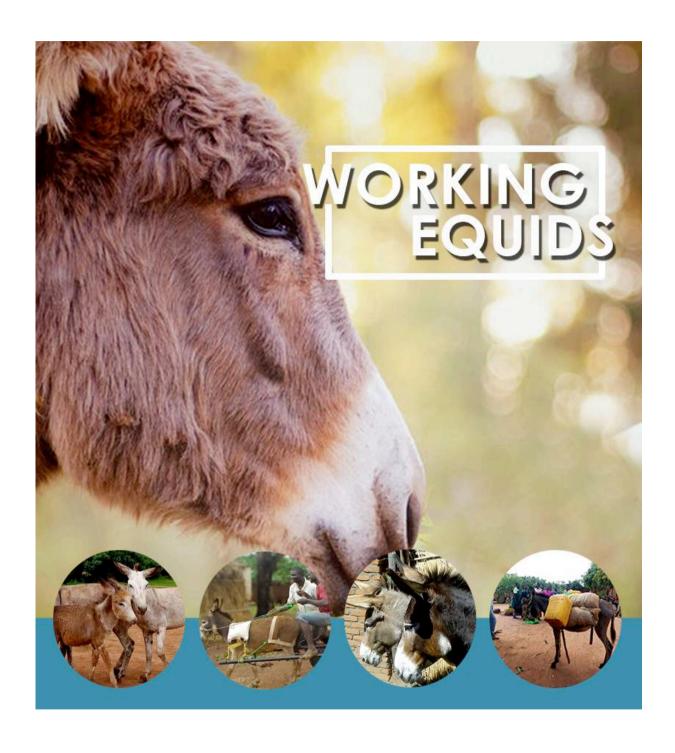
#### 4.7 Stunning

Pigs must be stunned prior to slaughter by means of a stunning system that renders them instantaneously unconscious and insensitive to pain and maintains that state until the point of death. If there is any indication that a stun has not been completely effective, or that animals are displaying signs of recovery from a stun, re-stunning must take place immediately.

Pigs must only be stunned when they can be stuck immediately afterwards with a stun-stick interval of no more than 15 seconds.

In the case of electrocution, the minimum current level during each stage (i.e. electrodes spanning the brain, and when spanning the brain and heart) must be:

- a) No less than 1.3 amps
- b) Attained within 1 second
- c) Maintained for at least 3 seconds.



# Working equids

This section refers manly to donkeys, however much of the information is also applicable to other working equids.

# 1. Management

#### 1.1 Food and water

The most important nutrient for the welfare of working equids is water. Working equids need regular and adequate access to potable water throughout the working day.

#### Appropriate food/fodder

Equids are natural grazers that eat small quantities, but often. Owners should allow working equids to forage whenever possible and allow for a number of breaks to allow the animal to eat. The natural diet consists of grasses, which have high roughage content. They should be provided with access to an appropriate quantity of balanced feed. In the event of grazing shortages, supplementation must be provided. In the event no supplements are available, steps must be taken to avoid starvation, including humane slaughter, sale or relocation.

# 1.2 Environment Buildings

Housing facilities should be designed and constructed to provide for the donkey's welfare. Donkeys should be provided with a clean, dry area for lying down; they should be free to stand up or lie down comfortably at all times. Housing facilities should provide for enough height to permit the donkey to have a full range of head and neck motion without touching the ceiling when standing with four feet on the floor. Flooring should be properly designed, constructed and maintained to provide good traction, proper drainage, comfort and prevent injury.

# Space requirements per donkey

Donkeys: 3.05 m x 3.05 m (10ft x 10ft) Large donkeys: 3.05 m x 3.65 m

# 1.3 Breeding

When selecting animals for breeding, attention should be given to selecting animals of appropriate size, breed and foaling experience. If a donkey is exhibiting signs to indicate that she is experiencing difficulties at any point during or following foaling, expert assistance must be provided immediately.

Laparoscopic artificial insemination must only be carried out by veterinarians or trained and competent operator under veterinary supervision. Cervical artificial insemination and pregnancy diagnosis must only be carried out by persons trained and competent in the techniques. Rectal pregnancy diagnosis must only be carried out by persons trained and competent in the techniques.

# 1.4 Animal handling including equipment

Owners should be discouraged from using whips and harmful goads such as sticks to drive the equid. Working equids should not be tethered or hobbled continuously. Mares in season should not be tethered close to stallions and mares about to foal or with a foal should not be tethered.

In situations where temporary hobbling is necessary, appropriate equipment designed for that purpose should be used. The parts of the hobbles in contact with the animal's skin should not

be made from material that causes pain or injury. The animal handler must ensure there is sufficient distance between the two hobbled legs to allow the equid to stand naturally and move without risk to injury.

Where temporary tethering is necessary, the working equid must be sheltered or have access to shade, able to lie down, turn around and walk. The tethering site must be free from obstacles that may entangle the tether. Water and feed must be within reach.



# 1.5 Promotion of natural behaviour

Management practices should accommodate the natural behaviour of donkeys, such as their need to graze, their need for exercise and to socialise. Long-term stabling, without exercise is unacceptable.

# 2. General working animal conditions

Only fit and healthy animals should be worked. Fitness to work is the state or condition of being physically sound and healthy to perform work well and factors such as age, physiological state (e.g. pregnancy) may influence an animal's fitness to work. Sick or injured animals should not be worked. Any working equid receiving veterinary treatment should not be returned to work until advised by the veterinarian.

In general the working life of the donkey should begin at three years of age or more, but never less than two years of age. Animals subjected to excessive work tend to suffer from leg and back injuries in later life, resulting in a shortened working life.

The working equid should work a maximum of 6 hours per day with a short break every two hours and they should be given at least one, but preferably two, full day's rests in every sevenday period.

Consideration should be given to weather conditions. Work should be reduced in very hot weather, with an increased number of breaks and access to water. Mares should not be worked three months prior to foaling and three months after foaling.

#### 2.1 Harnessing, carts and driving



Only a properly designed, well-fitted and comfortable harness should be used. Equids should be appropriately groomed before harnessing and checked after work for signs of rubbing and hair loss and the source of the problem should be removed through cart/harness maintenance and padding where required.

Harnesses should not have sharp edges, should fit well so that it does not cause wounds or chafing caused by excessive movement, should be smoothly shaped and padded so that loads imposed on the working equid's body is spread over a large area, and should not impede the animal's movement, normal breathing or blood supply.

Carts should be maintained to ensure accurate balancing and appropriate tyre pressure. Owners should ensure effective harnessing and good riding and driving practices. The use of ox carts is for donkeys is discouraged as these are not designed for a donkey's physique and the use of swingletrees is recommended to balance the pull and thus reduce the risk of sores from the harness.

# 3. Transport and markets

Any animal that is sick, immobile or heavily pregnant is not deemed fit for sale and as such should not be offered up for sale by the owner. Any working animal should only be sold at designated places or directly from the home/stable of the owner.

# 4. Health and veterinary care

# 4.1 Health and welfare monitoring

Non-ambulatory (unable to walk) working equids should have access to feed and water at all times. They should not be transported or moved unless absolutely necessary for treatment or diagnosis. Such movement should be done carefully using methods that avoid dragging or excessive lifting. When treatment is attempted, equids that are unable to stand unaided and refuse to eat or drink should be euthanised humanely as soon as recovery is deemed unlikely.

# 4.2 Preventative veterinary care

Owners and handlers should routinely clean and check the hooves before and after work. Hoof trimming should only be carried out by persons with the necessary knowledge and skills.

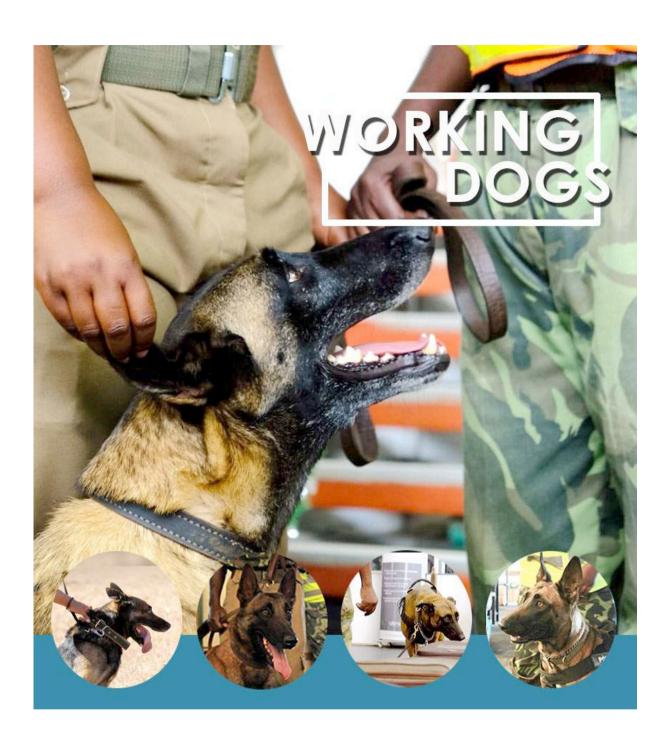
# 4.3 Emergency veterinary care

In the event of an emergency, a veterinarian must be notified immediately where possible. If a veterinarian is not immediately available, first aid, where applicable, must be carried out and a veterinarian must be notified within 24 hours of the incident.

# 5. Slaughter and end of life care

Owners must not abandon their equids as this will inevitably result in poor welfare and abandonment is illegal under the Protection of Animals Act. Equids must be handled, restrained and killed in such a manner as to minimise unnecessary pain and distress prior to death. Personnel undertaking emergency humane destruction must be competent in the handling and killing of equids. Equids must be rapidly rendered insensible and remain in that state, until death.

- a) They must not be shot in the back of the head
- b) The spinal cord must not be severed or broken in any equid
- c) Animals rendered unconscious by a blow or shot to the brain must be bled out immediately to ensure that death occurs before recovery from stunning
- d) Shotguns and rifles should be at least 10 cm from the animal's head when aimed
- e) Captive bolt guns, of a suitable design and calibre, should be used to render animals unconscious
- f) Wherever possible, humane slaughter should be conducted discreetly and away from other animals to avoid causing anxiety to other equids



# **Working dogs**

Standards for the care of dogs are described in **Part C**. These should be adhered to for working dogs. The following additional provisions apply for working dogs.

For the purpose of these Guidelines a "working dog" will be defined as any dog that has been trained to perform a task on a regular basis to assist its human companions. This definition includes, but is not exclusive to security/guard dogs, detection dogs and tracking dogs.

- a) It is a requirement for individuals or companies planning to use dogs for security purposes within Malawi, to seek clearance from the Department of Animal Health and Livestock Development (DAHLD) prior to establishment
- b) License to operate will only be granted upon meeting DAHLD and Local Government requirements
- c) Regular inspections will be carried out by the competent authority
- d) Each individual or security dog company must be in possession of a Licence and Certificate
- e) The Protection of Animals Act in Malawi refers to "Any person who uses a dog for security."

  If the dog is used for safeguarding on a permanent or temporary basis, the Act applies.

  "Owner" "in relation to an animal includes any person having the possession, charge, custody or control of that animal"
- f) All issues of animal welfare including handling, transportation, appropriate feeding and watering, provision of housing, veterinary care and training of dog handlers will be assessed by the Inspectors on a regular basis
- g) Owners and persons in charge who know that their dogs will be distant from veterinary care should carry a first aid kit appropriate for working dogs
- h) Health and welfare should be routinely checked in the daily management of working dogs. This should include observing whether a dog is eating, drinking, urinating, defecating and behaving normally
- i) A health plan emphasising prevention of illness or injury must be prepared in consultation with a vet to promote positive health and limit the need for treatment. It must address:
- Nutrition
- Vaccinations
- Parasite control
- Breeding and/or neutering
- Medical emergencies
- Euthanasia
- j) Dogs must not be worked if they are:
- Sick or injured
- Have a body condition score less that 4 (See Annex 5)
- A pregnant bitch in the second half of pregnancy
- A bitch after whelping until the puppies have been weaned.

- k) Dogs should have at least 60 minutes every day off the lead or chain or out of the run, with freedom to explore their immediate environment
- I) If a muzzle is considered necessary, it must only be used during work and must not: cause a cut that bleeds or discharges
- cause a skin abrasion that bleeds or discharges
- cause a swelling
- · prevent the dog from breathing normally, panting, drinking, or vomiting
- m) A working dog must only work for a maximum of 12 hours per day with one day off per week
- n) Weekly duty rosters must be made available on demand to veterinarians and Government inspectors





# **Dogs and Cats**

# 1. Management



#### 1.1 Food and water

- a) A nutritionally balanced, dry/wet, brand-name/commercial or homemade dog food that is age and breed appropriate must be provided
- Puppies from time of weaning to four months of age should be fed small quantities at regular intervals three to four times throughout the day
- Puppies from the age of four to nine months should be fed two to three times a day
- d) Dogs over the age of nine months should be fed at least once a day; however, the optimum frequency of

feeding will vary depending on the breed and the dog's level of activity. The feeding regime should be modified as necessary to maintain optimum body weight and health. If there is any doubt concerning feeding regimes, advice should be sought from a veterinarian.

- e) Pregnant bitches need to be fed three to four times a day
- f) Depending on the number of puppies being fed, a lactating bitch may require up to three times the maintenance amount of food to ensure her milk supply for the rapidly growing puppies and to prevent metabolic diseases
- g) All food needs to be presented on a clean plate at every feeding to avoid possible infection from environmental contamination of the ingested food. Feeding from the floor should only be carried out for enrichment purposes i.e. scatter feeding
- h) Special care must be taken to ensure food is made palatable (through soaking with warm water if it is a dry commercial preparation / mixing with appropriate canine or meaty delicacy) for young, old, blind and infirm animals as well as those not used to dry food only
- i) Some animals may even need to be hand-fed and encouraged before they eat especially elderly cats and dogs. Some animals find kennel/cattery environments stressful, so care should be taken to monitor their food and water intake and ensure they are receiving sufficient water and nutrition. It is not true that all animals 'will eat if they are hungry', often stressed animals do not eat well, which can lead to compromised welfare and a reduction in health.
- j) Clean, fresh water should be provided at all times and containers must be cleaned properly and regularly. It is vital to ensure that all animals are able to reach into the drinking bowls (height appropriate).
- k) Wilful cruelty, or failure to provide for your animal through neglect including not providing appropriate food and water are offences under the Protection of Animals Act and liable to prosecution

#### 1.2 Hygiene



This subject is of paramount importance to the maintenance of health and hygiene standards in built kennels.

- a) A programme for cleaning followed by disinfection of kennels should be drawn up and strictly adhered to
- Faeces must be picked up at least twice daily and cat litter trays changed twice daily (or more if necessary), as well as the kennels and cattery being cleaned thoroughly on a daily basis
- c) Disinfectants should be applied at least twice weekly (ideally under pressure) to kennels and catteries
- d) Precautions and directions for application / use of all pharmaceuticals should be strictly followed at all times in order to ensure the health and safety of animals and staff alike
- e) If cats sleep in boxes or baskets on shelving, the shelving must be wiped down daily with disinfectant

#### 1.3 Ectoparasite control

Living in the tropics exposes animals to many ecto-parasites. Tick and flea infestation is particularly prevalent, therefore:

- a) All dogs must be dipped, sprayed, powdered or spot / poured on using a veterinary approved insecticide routinely
- b) Cats should also be powdered or spot / poured on, with the appropriate insecticide
- c) Commercial/community dips are not effective if the dip is not replenished with insecticide at a sufficient strength/regularity to treat the number of dogs using it. This may result in persistent presence of parasites. It is important to assess whether your animal requires parasite control treatment by regularly observing the coat for fleas/ticks rather than assuming routine dipping is sufficient.

#### 1.4 Documentation

- a) All the information pertaining to vaccination, treatment, age and other relevant information for your animal should be recorded and kept safe
- b) This includes reasons for actions or medication, any long-term conditions or history of incidents that might guide future decisions (medical or behavioural) for the individual animals
- c) Misfiling and failure to complete documentation can result in poor animal well-being

#### 1.5 Exercise and stimulation

- a) Exercise is critical to the mental well-being of many animals, however due to health constraints in some animals it may not always be possible
- b) Exercise can reduce frustration, aggression and other behavioural concerns in most dogs, and is vital in some of the more highly active or prone to frustration breeds
- c) The practice of keeping dogs on a stationary chain for longer than a certain number of hours in a day needs to be reviewed with other considerations like weather, shade/shelter, length of the chain and safety/appropriateness of the surrounding environment and should be discouraged wherever possible.

#### 1.6 Training

- a) Training of dogs should be carried out with strong consideration for animal welfare
- b) Animal training should be science-based, using positive reinforcement that creates a partnership with the dog. Positive reinforcement training teaches that behaviours we want to reinforce in the dog should be rewarded with treats/play/affection and other behaviours (except those which absolutely cannot be ignored) are ignored and result in no positive consequence for the dog, hence teaching him/her to repeat the desired behaviours
- c) Traditional training methods use negative reinforcement through the application of pain (e.g. hitting the dog, electric collars) force/telling off in order to make it perform, or stop performing, certain behaviours. These training methods are now generally considered less effective and are certainly against good welfare and should not be used.

#### 1.7 Breeding

- a) All breeders should acquire permits to engage in breeding of companion animals as a business and must provide a conducive environment for those animals in their charge
- b) Breeders are also required to keep records on all the medical histories (including vaccination), date of birth and parentage information to present to the inspectors when a meeting is scheduled. Such information will avoid situations of inbreeding, breeding under or over-age animals and avoidance of possible suffering that could arise from the lack of this information e.g. difficult birth and other genetic defects.
- c) Only dogs in good health and physical condition (Body Condition Score 4-6, see Annex 5) should be used for breeding
- d) Bitches should not be intentionally mated at less than twelve months of age or on their first heat/season
- e) Veterinary advice should be sought before: mating bitches of seven years of age or more; or mating bitches for the first time at 5 years of age or more
- f) Bitches should not be mated so as to whelp and rear litters on consecutive seasons
- g) Bitches in heat should be carefully supervised or securely contained to prevent physical contact with male dogs and unwanted matings

#### 1.8 Environment

# Shelter, confinement and tethering

Dogs need access to shelter that provides warmth, and is free from draughts and excessive heat or cold, to meet their physical needs. They also need a dry bed and enough space to lie down, stand and turn around.

Kennels should be constructed of solid, non-permeable materials, preferably raised above ground level, be stable, draught-free and of sufficient size to comfortably house each dog.

Table 13: Minimum recommended space requirements per dog

Height of dog	Min area (Sa. m)	Min width (cm)	Min height (cm)
70 cm and above	15	240	180
40 – 70 cm	10	180	180
less than 40 cm	7	120	180

- a) Dogs should not be required to sleep on concrete or metal surfaces. Where kennel and run areas are made of these materials, dogs should be provided with a raised platform, shelf or other type of bed made of a softer material on which to sleep
- b) Tethering and housing should be sited to provide shelter from cold, wet and windy weather, and to provide shade on hot sunny days, with the ideal area providing both shade and sun. Shade is especially important during the hottest part of the summer when artificial shade should be provided where no natural shade exists.
- c) Where a number of dogs are kept together, such as in a boarding kennels or shelters, ventilation should be controlled to manage dampness and noxious odours and to minimise the airborne spread of infectious diseases such as kennel cough
- d) Dogs should only be housed communally if they are known to interact well together, or are kept under observation to ensure that they do not fight
- e) Kennels and kennels with runs attached should be no smaller than the minimum kennel and run sizes given in Table 13.
- f) Dogs must have access at all times to an area in which to urinate and defecate away from their lying area
- g) Faeces and urine must not be allowed to accumulate in any area in which the dog is kept
- h) Dogs must not be contained or tethered in a way that causes them injury or distress. Any collar or tether on a dog must not:
- Cause a cut that bleeds or discharges; or
- Cause a skin abrasion that bleeds or discharges; or
- Cause a swelling
- Prevent the dog from breathing normally, panting, or drinking
- i) Collars should be checked frequently, particularly in young growing dogs, and loosened if they become tight to prevent effects such as chafing of the skin or restriction of breathing.

#### 2. Vaccination and health care

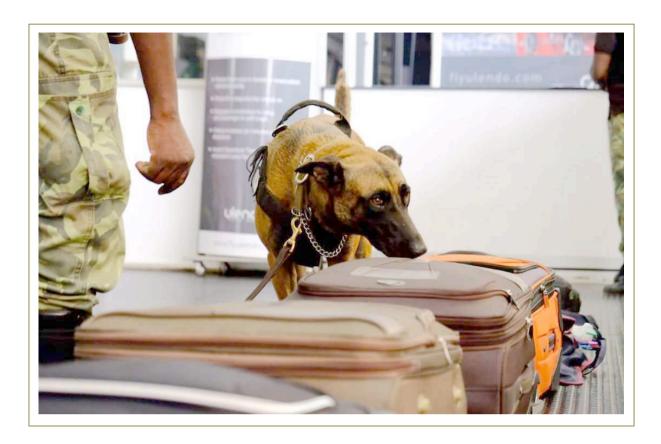


- a) All ill or injured dogs and cats should be examined by a veterinarian within 24 hours of the illness being observed
- b) All animals should have a body condition score of 4-6 (see Annex 5) regardless of physiological status (pregnant, nursing, puppy). Anything above this would be considered obese, which puts the animal at risk of certain diseases. Anything below this would be considered underweight.
- c) If an animal is under/over weight, the owner/manager must ensure it is seen by a vet within 1 month of noting the problem and document that the necessary measures, as recommended by the veterinarian, are being instituted
- d) All dogs and cats should be vaccinated for rabies once annually. Puppies and kittens must have had their first vaccination by 12 weeks of age
- e) Dogs and cats should be provided with protection against infectious diseases by vaccination according to veterinary recommendations
- f) A health care plan for the control of internal parasites should be made by the owner in consultation with a veterinarian
- g) Dogs and cats should be groomed regularly to prevent matting.
- h) Tails must not be docked unless all of the following apply:
- The tail is docked by a veterinarian and
- The tail is docked for the rapeutic purposes and
- The dog is given pain relief at the time of the procedure.
- i) Ears of dogs must not be cropped. There is no medical, physical, environmental or cosmetic advantage for the dog to have the pinnas (the ear flaps) surgically altered. To subject any dog to this "disfiguring" and unnecessary surgical procedure and subsequent taping and bandaging that sometimes needs to be done after the surgery, amounts to animal cruelty and is an offence under the Protection of Animals Act.

# 3. Additional provisions for working dogs

For the purpose of these guidelines a "working dog" is defined as any dog that has been trained to perform a task on a regular basis to assist its human companions. This definition includes, but is not exclusive to security/guard dogs, detection dogs and tracking dogs.

- a) It is a requirement for individuals or companies planning to use dogs for security purposes within Malawi, to seek clearance from the Department of Animal Health and Livestock Development (DAHLD) prior to establishment.
- b) License to operate will only be given upon meeting DAHLD and Local Government requirements.
- c) Regular inspections will be carried out by the competent authority.
- d) Each individual or security dog company must be in possession of a Licence and Certificate.



- e) The Protection of Animals Act in Malawi refers to "Any person who uses a dog for security."
- f) If the dog is used for safeguarding on a permanent or temporary basis, the Act applies.
- g) "Owner" "in relation to an animal includes any person having the possession, charge, custody or control of that animal".
- h) All issues of animal welfare including handling, transportation, appropriate feeding and watering, provision of housing, veterinary care and training of dog handlers will be assessed by the Inspectors on a regular basis
- i) Owners and persons in charge who know that their dogs will be distant from veterinary care should carry a first aid kit appropriate for working dogs
- j) Health and welfare should be routinely checked in the daily management of working dogs. This should include observing whether a dog is eating, drinking, urinating, defecating and behaving normally.
- k) A health and welfare plan emphasising prevention of illness or injury must be prepared in consultation with a veterinarian to promote positive health and limit the need for treatment. It must address:
- Nutrition
- Vaccinations
- Parasite control.
- Breeding and/or neutering.
- Medical emergencies.
- Euthanasia.

- 1) Dogs must not be worked if they are:
- Sick or injured
- Have a body condition score less that 4 (See Annex 5)
- A pregnant bitch in the second half of pregnancy
- A bitch after whelping until the puppies have been weaned.
- m) Dogs should have at least 60 minutes every day off the lead or chain or out of the run, with freedom to explore their immediate environment
- n) If a muzzle is considered necessary, it must only be used during work and must not: cause a cut that bleeds or discharges
- cause a skin abrasion that bleeds or discharges
- cause a swelling
- prevent the dog from breathing normally, panting, drinking, or vomiting
- o) A working dog must only work for a maximum of 12 hours per day with one day off per week
- p) Weekly duty rosters must be made available on demand to veterinarians and Government inspectors

### 4. Transport and markets

- a) Licensing of premises for the sale of live animals will be upon the approval of the City councils and certified by the Ministry of Agriculture through the Department of Animal Health and Livestock Development (DAHLD).
- b) Roadside selling of animals is an offence; it not only contravenes the Local Government Animal Control By-Laws but it also violates the Protection of Animals Act.
- c) Puppies and kittens must: be able to feed independently, at least 8 weeks old and be in good health when made available for sale or rehoming, unless:
- they have been orphaned and must be rehomed to ensure that they are able to obtain milk from another bitch/queen or be hand raised
- early removal from the bitch/queen is deemed necessary by a veterinarian.
- d) If dogs are carried in a purpose-built transport box fixed to a vehicle, it must be well-ventilated and free from exhaust fumes and road dust. The dogs must only be kept inside the boxes for the duration of the journey and must be immediately off-loaded upon arrival at the destination.
- e) If dogs are transported on the open deck or open trailer of a moving motor vehicle the dogs must be secured in a way that prevents them from falling or hanging off (for example, secured by a tether or a cage) and
- f) If a dog is to be secured by a tether during transportation the tether must be short enough to prevent the dog's legs from reaching over the sides of the open deck of the vehicle or open trailer, but long enough to allow the dog to stand or lie down in a natural position

#### 5. Confiscations

a) All animals confiscated for various reasons including welfare violations and mitigation from a possible violation, in association with the Police, shall be first photographed before they are taken from the property or from the individual.

- b) They will be taken to a location approved by DAHLD for further attention and housing as the matter is resolved with the owner or in court
- c) Relevant documentation and veterinary reports will be drafted after the initial examination for reference purposes
- d) Currently all animals confiscated or rescued are delivered to animal welfare charity kennels/catteries where they are quarantined for one month or the duration of the court proceedings over the matter
- e) If the court so directs, following court proceedings these animals can be adopted to new homes after a thorough home-check and assessment of the ability of the new owner to provide appropriate care for the animals
- f) All expenses incurred by the animal welfare shelter should be paid by the offender (if the animal was confiscated and the offender was found guilty) in addition to the court fine as prescribed in the Protection of Animals Act.

# 6. Population management and end of life care

- a) Since 2002 with the institutionalising of decentralization, Animal Population Control became a function of the local Government (Council and the City Councils (within the cities))
- b) All the major cities in Malawi ought to institute and enforce an animal population control bye-law
- c) In areas where no local government bye-laws exist regarding dog population control, individuals must only have a maximum of three dogs per property, which should be sterilised. More than three dogs per property can be kept provided written permission is sought from the respective local government.
- d) In areas with increased reports of dog bites and rabies in a community, a proactive approach ought to be sought to manage the escalation of such problems
- e) Dogs and cats ideally should be euthanised by a veterinarian
- f) Where a veterinarian is not available and a dog is to be shot (e.g. in the case of suspected rabies), this should be undertaken only by a fully competent person, taking special care to safeguard people and other animals in the area
- g) Drowning, stoning and beating of cats and dogs is inhumane and is an offence under the Protection of Animals Act.

#### Useful additional resources

The **Rural Poultry Centre**, Malawi provides resources on poultry including advice on Newcastle disease vaccination and nutrition: http://www.ruralpoultrymalawi.org/publications.html

The **Small Scale Livestock and Livelihoods Programme** has developed resources for Community Animal Health Workers on livestock:

http://smallscalelivestock.org/website/training-notes-for-community-animal-health-workers-a-field-manual/

The **Livestock Emergency Guidelines and Standards** (LEGS) is a set of international guidelines and standards for designing, implementing, and evaluating livestock interventions to help people affected by humanitarian crises. LEGS is based on three livelihoods objectives: to provide rapid assistance, to protect livestock assets, and to rebuild the livestock assets of crisis-affected communities. The Guidelines can be accessed here: http://www.fao.org/emergencies/resources/documents/resources-detail/en/c/177304/

## **Annex 1: Gait scoring in poultry**

The University of Bristol's Scoring Guide can be accessed at:

https://www.berspcaassured.org.uk/media/1213/rspca-standards-chickens-nov2013-with-april-2017-amendments.pdf

#### Gait scoring in poultry

A bird's level of lameness can be determined by assessing its walking ability. The following scoring system is based on the University of Bristol's Gait Scoring Guide:

#### Score 0 - The bird displays smooth, fluid locomotion

Typically the foot is picked up and put down smoothly and each foot is brought under the bird's centre of gravity as it walks (rather than the bird swaying). Often, the toes are partially curled while the foot is in the air.

#### Score 1 - The bird has a slight defect in its gait that is difficult to define precisely

The bird may take unduly large strides, be unsteady or wobble when it walks, which produces an uneven gait, but the problem leg is unclear/cannot be easily identified.

# Score 2 - The bird has a definite and identifiable gait abnormality, but this does not affect its ability to move

The bird may make short, quick, unsteady steps with one leg, but is not sufficiently lame to seriously compromise its ability to move, i.e. manoeuvre, accelerate and run.

# Score 3 - The bird has an obvious gait defect that affects its ability to move (bird welfare is compromised)

The bird may have a limp, jerky or unsteady strut, or splay one leg as it moves. The bird often prefers to squat when not coerced to move, and will not run.

## Score 4 - The bird has a severe gait defect

The bird is capable of walking, but only with difficulty and when driven or strongly motivated. Otherwise it squats down at the first available opportunity.

#### Score 5 - The bird is incapable of sustained walking on its feet

Although it may be able to stand, the bird cannot walk except with the assistance of the wings or by crawling on the shanks.

N.B. Not all the attributes of a score are necessarily identified in a bird.

Where it is difficult to determine between scores 2, 3 and 4 using the Bristol Gait Scoring Guide, the following assessment criteria, developed by the University of California, can be used as an additional tool to aid assessment:

#### Score 2 - The bird will stand for longer than 15 seconds when undisturbed

**Score 3 - The bird will not stand for 15 seconds or longer when undisturbed.** The bird will also stand on both feet within 5 seconds of being encouraged (i.e. gentle nudging by the observer).

Score 4 - The bird will not stand on both feet within 5 seconds of being encouraged (i.e. gentle nudging by the observer)

The University of California assessment criteria is to be used to supplement the Bristol Gait Scoring Guide.

## **Annex 2: Dairy mobility score**

This Dairy Mobility Score is from the UK's Agriculture and Horticulture Development Board (AHDB). The following is a summary of the details available on the AHDB website:

https://dairy.ahdb.org.uk/technical-information/animal-health-welfare/lameness/husbandry-prevention/mobility-scoring/#.XLRHc7aZPeQ

The AHDB Dairy Mobility Scoring system was developed with the University of Bristol in conjunction with farmers, veterinary surgeons and other animal health and welfare organisations. The system has been designed so that anyone with experience of working with dairy cattle is able to perform it effectively. It allows the mobility assessment to be carried out on a regular basis - ideally at least monthly - by someone, preferably independent of the farm, who has the opportunity to see every individual cow in the herd. To enable the assessment to be performed accurately and consistently, a suitable adequately-lit, flat area with a hard, non-slip floor surface is required, where cows can be observed as they walk past, preferably as part of their ordinary, routine movements so that they behave and move naturally.

### The Mobility Score is a four point score ranging from 0 to 3:

- A cow scoring 0 will have good mobility and will walk with even weight-bearing rhythm on all four feet, with a flat back, whereas;
- A cow scoring 3 will be unable to keep up with the healthy herd and will either show uneven weight-bearing on a limb that is immediately identifiable, or will walk with shortened strides and an arched back.

#### The benefits of the Mobility Scoring system include:

- The early detection of any mobility problems resulting in prompt identification and treatment.
- The ability to prioritise cases for treatment.
- Any poor mobility trends can be monitored and the causes identified.
- The provision of figures for benchmarking performance.
- An increase in the awareness of herd foot health and farm staff motivation to improve herd mobility.
- Its suitability for all herd types and situations.





# **AHDB Dairy Mobility Score**

Category of score	Score	Description of cow behaviour	Suggested action
Good mobility	0	Walks with even weight bearing and rhythm on all four feet, with a flat back. Long, fluid strides possible.	No action needed Routine (preventative) foot trimming when/if required Record mobility at next scoring session.
Imperfect mobility	1	Steps uneven (rhythm or weight bearing) or strides shortened; affected limb or limbs not immediately identifiable.	Could benefit from routine (preventative) foot trimming when/if required Further observation recommended.
Impaired mobility	2	Uneven weight bearing on a limb that is immediately identifiable and/or obviously shortened strides (usually with an arch to the centre of the back).	Lame and likely to benefit from treatment Foot should be lifted to establish the cause of lameness before treatment Should be attended to as soon as practically possible.
Severely impaired mobility	3	Unable to walk as fast as a brisk human pace (cannot keep up with the healthy herd).  Lame leg easy to identify – limping; may barely stand on lame leg/s; back arched when standing and walking.  Very lame.	This cow is very lame and requires urgent attention, nursing and further professional advice Examine as soon as possible Cow will benefit from treatment Cow should not be made to walk far and kept on a straw yard or at grass In the most severe cases, culling may be the only possible solution.

## Annex 3: Body condition scoring of dairy cows

This guide is from the Department for Environment, Food and Rural Affairs, UK 'Condition Scoring of Dairy Cows'

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/69371/pb6492-cattle-scoring-diary020130.pdf

- Scoring consistently requires handling cattle in order to assess body reserves but an overall visual inspection is also important.
- The scoring system is designed to cover all cattle but some allowance should be made for different breeds.
- The scoring method involves a manual assessment of the thickness of fat cover and prominence of bone at the tailhead and loin area.
- You should stand directly behind the cow to score both areas and always handle the animal quietly and carefully using the same hand.
- The tailhead is scored by feeling for the amount of fat around the tailhead and the prominence of the pelvic bones.
- The loin is scored by feeling the horizontal and vertical projections of the vertebrae and the amount of fat in-between.
- Assessment relies mainly on the tailhead but is refined by the loin score if both are very different. On a scale of 1-5, a score of 1 is extremely thin and a score of 5 is extremely fat. If possible assess the scores to the nearest half point.
- Consistency in the technique is the key to good condition scoring.

See photographs with descriptions on the following pages.

# **Description of Scores**

Score	Condition	<b>Detailed Description</b>	Visual Guide
1	Poor	Tail head – deep cavity with no fatty tissue under skin. Skin fairly supple but coat condition often rough.  Loin – spine prominent and horizontal processes sharp.	
2	Moderate	Tail head — shallow cavity but pin bones prominent; some fat under skin. Skin supple.  Loin — horizontal processes can be identified individually with ends rounded.	

# Score Condition Detailed Description Visual Guide

2.5



3 Good

Tail head – fat cover over whole area and skin smooth but pelvis can be felt.

Loin – end of horizontal process can only be felt with pressure; only slight depression in loin.



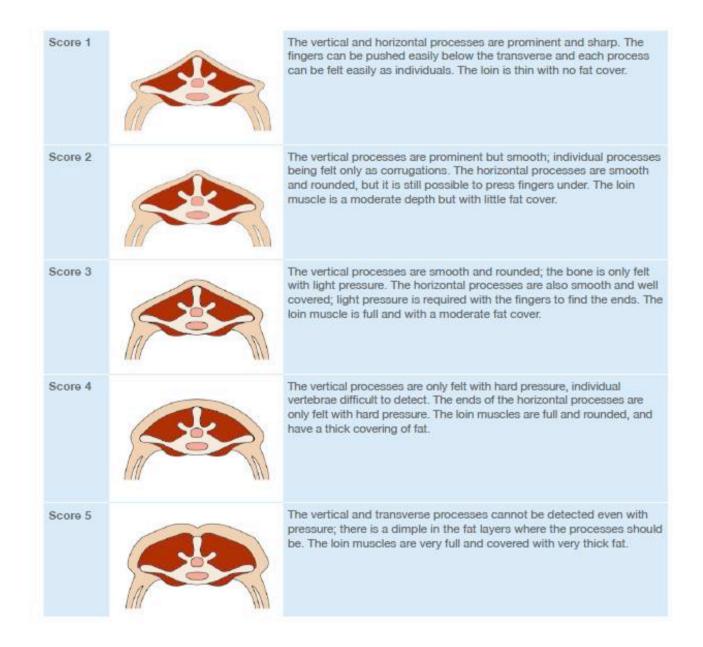


Score	Condition	Detailed Description	Visual Guide
4	Fat	Tail head – completely filled and folds and patches of fat evident.	
		Loin – cannot feel processes and will have completely rounded appearance.	
5	Grossly Fat	Tail head – buried in fatty tissue, pelvis impalpable even with firm pressure.	

# Annex 4: Body condition scoring of sheep

This condition-scoring guide is from the UK's Agriculture and Horticulture Development Board and can be accessed at:

http://beefandlamb.ahdb.org.uk/wp-content/uploads/2018/03/Feeding-the-ewe.pdf



## Annex 5: Body condition scoring of dogs

This condition-scoring guide for dogs is from WSAVA Global Nutrition Committee accessed at: https://www.wsava.org/WSAVA/media/PDF\_old/Body-condition-score-chart-dogs.pdf

# **Body Condition Score**



### **UNDER IDEAL**

- Ribs, lumbar vertebrae, pelvic bones and all bony prominences evident from a distance. No discemible body fat. Obvious loss of muscle mass.
- Ribs, lumbar vertebrae and pelvic bones easily vissible. No palpable fat.Some evidence of other bony prominences. Minimal loss of muscle mass.
- Ribs easily palpated and may be visible with no palpable fat. Tops of lumbar vertebrae visible. Pelvic bones becoming prominent. Obvious waist and abdorminal tuck.



#### IDEAL

- 4 Ribs easily palpable, with minimal fat covering. Waist easily noted, viewed from above. Abdominal tuck evident.
- **5** Ribs palpable without excess fat covering. Waist observed behind ribs when viewed from above. Abdomen tucked up when viewed from side.



# OVER IDEAL

- 6 Ribs palpable with slight excess fat covering. Waist is discernible viewed from above but is not prominent. Abdominal tuck apparent.
- 7 Ribs palpable with difficulty; heavy fat cover. Noticeable fat deposits over lumbar area and base of tail. Waist absent or barely visible. Abdominal tuck may be present.
- Ribs not palpable under very heavy fat cover, or palpable only with significant pressure. Heavy fat deposits over lumbar area and base of tail. Waist absent. No abdominal tuck. Obvious abdominal distention may be present.
- Massive fat deposits over thorax, spine, and base of tail. Waist and abdominal tuck absent. Fat deposits on neck and limbs. Obvious abdominal distention.





