Japan's Comments on
The Code Commission Report of the September 2016 meeting

Japan would like to express its appreciation to the Terrestrial Animal Health Standards Commission (TAHSC) and other relevant Commissions, Working Groups and ad hoc Groups for all the works they have done, Japan also appreciate the TAHSC for providing us the opportunity to comment on the proposed revisions to the text of Terrestrial Animal Health Code.

Please find our comments on the following texts:

1. Chapter 4.X. Vaccination
2. Chapter 6.X. Prevention and Control of *Salmonella* in Commercial Cattle Production Systems
3. Chapter 6.Y. Prevention and Control of *Salmonella* in Commercial Pig Production Systems
4. Chapter 6.7. Harmonisation of National Antimicrobial Resistance Surveillance and Monitoring Programmes
5. Chapter 7.X. Animal Welfare and Pig Production Systems
6. Chapter 7.11. Animal Welfare and Dairy Cattle Production Systems

1. Chapter 4.X. Vaccination

Article 4.X.1.

Introduction and objectives

In addition to other disease control measures, vaccination may be a component of a disease control programme. In order to maximise the effectiveness of the implementation of vaccination, member countries should recognise that appropriate disease control can be achieved only by using the vaccines produced in accordance with the *Terrestrial Manual* and applied in accordance with this chapter. The prerequisites to enable a Member Country to successfully implement vaccination include compliance with:

Rationale

Japan notes that there is a case in which the disease control has been failed to function due to the application of inappropriate vaccine which does not meet the standard of the Terrestrial Manual. Therefore, in order to clarify the intention of this chapter, Japan suggests to emphasise that the implementation of vaccination can reach success only when the vaccine is sufficiently effective against the subjected disease and selected in accordance with registration procedure of the veterinary authority which meets the standard of the Terrestrial Manual.

Article 4.X.3.

Vaccination programmes

2) Emergency *vaccination* provides an adjunct to the application of other essential *biosecurity* and *disease* control measures and may be applied to control *outbreaks*. Emergency *vaccination* may be used in response to:

a) an *outbreak* in a *disease* free country or *zone*;

b) an *outbreak* in a country or *zone* that applies systematic *vaccination*, but when vaccines are applied to boost existing immunity;

c) an outbreak in a country or *zone* that applies systematic *vaccination*, but when the vaccine employed does not provide protection against the strain of the pathogenic agent involved in the *outbreak;*

d) a change in the *risk* of introduction or emergence of *disease* in a *disease* free country or *zone*.

Rationale

Japan suggests to harmonize wording.

Article 4.X.7.

Choice of vaccine

2. Vaccine characteristics

b) Biological characteristics

- capability of monitoring for vaccine-induced antibodies

Rationale

Japan suggests to add “capability of monitoring for vaccine-induced antibodies” to biological characteristics because it is essential to differentiate the vaccinated animals

from the infected animals for monitoring the effect of vaccine.

Article 4.X.9.

Evaluation and monitoring of a vaccination programme

4) reduction of *incidence* ~~or~~, *prevalence* or both.

Rationale

Japan is of the opinion that assessing the reduction of either incidence or prevalence is not sufficient in such cases, particularly, that the available vaccine cannot completely prevent infection while disease incidence is reduced.

Article 4.X.11.

Impact on disease status and management of vaccinated animals

Disease free countries or *zones* applying systematic or emergency *vaccination* in response to a change in the *risk* of occurrence of a *disease* should inform trading partners and the OIE, as appropriate. ~~Unless otherwise specified in the relevant *disease* specific chapters, *vaccination* of animals does not affect the *disease* status of the country or *zone*, and should not disrupt trade.~~

Rationale

Japan is of the view that whether vaccination of animals affects the disease status depends on the characteristics of the disease in question as well as the characteristics of the vaccine applied (e.g. complete prevention of infection versus suppression of virus sheading). In other words, whether vaccination of animals affects the disease status or whether trade should be disrupted in the presence of vaccination needs to be assessed on disease-by-disease basis. Thus, the second sentence of this paragraph is inappropriate for a horizontal chapter of the Code.

2. Chapter 6.X. Prevention and Control of *Salmonella* in Commercial Cattle Production Systems

Article 6.X.5.

Biosecurity

Biosecurity is intended to assist with the prevention and control of *Salmonella*. A *biosecurity plan* should be developed according to the commercial cattle production systems employed.

The applicability of the measures, described below, will vary according to the type of commercial cattle production system.

When including *Salmonella* as part of a *biosecurity plan* the following should be addressed:

1) location, design and management of the *establishment*;

2) veterinary supervision of cattle health;

3) management of the introduction and mixing of cattle;

4) training of personnel in their responsibilities and their role in animal health, human health and food safety;

5) maintenance of records including data on cattle health, production, movements, feeding, water for drinking, medications, *vaccination*, and mortality, and cleaning and *disinfection* of farm buildings and equipment;

6) availability of test results to the farm operator when *Salmonella surveillance* is conducted;

7) removal of unwanted vegetation and debris that could attract or harbour pests around cattle premises;

8) minimising the entry of *wild* birds into cattle buildings and feed stores;

9) cleaning and *disinfection* procedures for buildings in which cattle are handled or housed in accordance with Chapter 4.13.;

10) control of pests such as rodents and arthropods as well as control of domestic animals, if applicable and regular assessment of effectiveness;

Rationale

As to 5) of the third paragraph, water for drinking can be a source of *Salmonella* for cattle.

As to 10) of the same paragraph, domestic animals (e.g. dogs, cats) can be sources of *Salmonella* for cattle.

Article 6.X.6.

Location and design of cattle establishment

When making decisions on the location and design of cattle *establishments,* it is recommended that reduction of the likelihood of transfer of pathogens, including *Salmonella*, from major sources of contamination be considered. Sources of *Salmonella* may include other livestock *establishments* or areas of application or disposal of contaminated waste or effluent. Other sources and *vectors* of *Salmonella* include *vehicles*, equipment, water-courses, personnel, domestic animals, birds, rodents, flies and *wildlife*.

The design of intensive cattle production systems should consider the following:

1) management of faecal waste (including proper manuring) to minimise contamination of the *establishment*;

Rationale

Proper manuring is important to prevent dissemination of *Salmonella*.

Article 6.X.11.

Additional prevention and control measures

1) The immune status of calves is important and therefore care should be taken to ensure that new-born calves consume adequate amounts of high quality colostrum in accordance with Article 7.9.5. (point 3*c)*) and Article 7.X.5. Raw milk from infected cows should not be fed to calves. Equipment for feeding milk to calves should be cleaned and disinfected properly.

Rationale

Calves are sensitive to *Salmonella* and equipment for feeding milk can be a source of *Salmonella*.

3. Chapter 6.Y. Prevention and Control of *Salmonella* in Commercial Pigs Production Systems

Article 6.Y.5.

Biosecurity

Biosecurity is intended to assist with the prevention and control of *Salmonella*. The choice of specific measures will vary according to the type of commercial pig production system.

When including *Salmonella* as part of a *biosecurity plan*, the following should be addressed:

1) location, design and management of the *establishment*;
2) veterinary supervision of pig health;
3) management of the introduction and mixing of pigs;
4) training of personnel in their responsibilities and their role in animal health, human health and food safety;
5) maintenance of records including data on pig health, production, movements, feeding, water for drinking, medications, *vaccination*, mortality, and cleaning and *disinfection* of farm buildings and equipment;
6) availability of test results to the farm operator when *Salmonella surveillance* is conducted;
7) removal of unwanted vegetation and debris that could attract or harbour pests around pig housing;
8) minimising the entry of *wild* birds into pig buildings and feed stores;
9) cleaning and *disinfection* procedures for buildings in which pigs are handled or housed in accordance with Chapter 4.13.;
10) control of pests such as rodents and arthropods as well as control of domestic animals, if applicable and regular assessment of effectiveness;

Rationale

As to 5) of the third paragraph, feeding and water for drinking can be sources of *Salmonella* for pigs.

As to 10) of the same paragraph, domestic animals (e.g. dogs, cats) can be sources of *Salmonella* for pigs.

Article 6.Y.~~7~~6.

Location and design of pig establishments

When making decisions on the location and design of pig *establishments,* reduction of the likelihood of transfer of pathogens, including *Salmonella*, from major sources of contamination should be considered. Sources of *Salmonella* may include other livestock *establishments* or areas of application or disposal of contaminated waste or effluent. Other sources and *vectors* of *Salmonella* include *vehicles*, equipment, water-courses, personnel, domestic animals, birds, rodents, flies and *wildlife*.

The design of commercial pig production systems should consider the following:

1) proximity of other livestock *establishments*, and *wild* bird and rodent populations;
2) management of faecal waste (including proper manuring) to minimise contamination of the *establishment*;

Rationale

Proper manuring is important to prevent dissemination of *Salmonella*.

Article 6.Y.11.

Additional prevention and control measures

4) Stress may induce faecal shedding of *Salmonella* in *Salmonella* carrier pigs. Management of potentially stressful situations may reduce the likelihood of shedding and dissemination of *Salmonella*.

Rationale

According to some scientific papers, stress may induce faecal shedding of *Salmonella* in *Salmonella* carrier pigs and can lead to dissemination of *Salmonella*.

Reference:

- TR Callaway, *et al.*, Social stress increases fecal shedding of *Salmonella* typhimurium by early weaned piglets. Current Issues in Intestinal Microbiology, 2006, 7: 65–72.
- T Hald, *et al.*, The occurrence and epidemiology of *Salmonella* in European pig slaughterhouses. Epidemiology and Infection, 2003, 131: 1187–1203.

4. Chapter 6.7. Harmonisation of National Antimicrobial Resistance Surveillance and Monitoring Programmes

Article 6.7.3.

The development of antimicrobial resistance surveillance and monitoring programmes

6. Bacterial isolates

The following categories of bacteria could be included in surveillance and monitoring programmes:

a) Animal bacterial pathogens relevant to the countries' priorities

iii) To promote a harmonised global approach to the selection of animal bacterial pathogens for inclusion in national surveillance and monitoring programmes, bacteria should be selected using the following criteria:

— impact on animal health and welfare;

— impact on food security and on production (economic importance of associated diseases);

— bacterial diseases responsible for the majority of veterinary antimicrobial usage (stratified by usage of different classes or their importance);

— existence of validated susceptibility testing methodologies for the bacterial pathogen;

— ~~E~~existence of quality assurance programmes or other pathogen reduction options that are non-antimicrobial (vaccines).

— implication of antimicrobial resistance in the bacterial pathogen on therapeutic options in veterinary practice;

The table below, derived using the above criteria, lists suggested animal bacterial pathogens for inclusion in a surveillance or monitoring programme of food-producing animals. This list is not exhaustive and should be adapted according to the situation in the country.

Table 3. Examples of target animal species and animal bacterial pathogens that may be included in resistance surveillance and monitoring programmes

Target animals	Respiratory pathogens	Enteric pathogens	Udder pathogens	Other
Cattle	*Pasteurella multocida*	*Escherichia coli*	*Staphylococcus aureus*	
	Mannheimia haemolytica	*Salmonella* spp.	*Streptococcus* spp.	
Pigs	*Actinobacillus pleuropneumoniae*	*Escherichia coli*		*Streptococcus suis*
		Salmonella spp.		*Erysipelothrix rhusiopathiae*
Poultry				*Escherichia coli*

Rationale

Swine Erysipelas is a zoonotic disease and has an impact on animal health and public health. For the 'validated susceptibility testing', the Clinical Laboratory and Standards

Institute (CLSI) has approved method for testing *E. rhusiopathiae*.

Article 6.7.3.

The development of antimicrobial resistance surveillance and monitoring programmes

9. Recording, storage and interpretation of data

a) Because of the volume and complexity of the information to be stored and the need to keep these data available for an undetermined period of time, careful consideration should be given to database design.

b) The storage of raw (primary, non-interpreted) data is essential to allow the evaluation in response to various kinds of questions, including those arising in the future.

c) Consideration should be given to the technical requirements of computer systems when an exchange of data between different systems (comparability or compatibility of automatic recording of laboratory data and transfer of these data between and within resistance monitoring programmes) is envisaged. Results should be collected in a suitable national database. They should be recorded quantitatively:

i) as distributions of MICs in micrograms per millilitre;

ii) or inhibition zone diameters in millimetres.

d) The information to be recorded should include, where possible, the following aspects:

i) sampling programme;

ii) sampling date;

iii) animal species and production type;

iv) type of sample;

v) purpose of sampling;

vi) type of antimicrobial susceptibility testing method used;

vii) geographical origin (geographical information system data where available) of *herd*, *flock* or *animal*;

viii) *animal* factors (e.g. such as age, condition, health status, identification, sex).;

ix) exposure of *animals* to *antimicrobial agents*;

x) bacterial recovery rate.

Rationale

'Bacterial recovery rate' is dependent on the isolation method, such as using the selection medium or not. So we suggest to change this heading as 'bacterial recovery rate and isolation method', or 'bacterial isolation rate and isolation method'. This heading may be more suitable in the 'laboratory data' section, namely in the section of "e) The reporting of laboratory data should include the following information:"

5. Chapter 7.X. Animal Welfare and Pig Production Systems

Article 7.X.4.

Criteria (or measurables) for the welfare of pigs

The following outcome-based criteria (or measurables), specifically animal-based criteria, can be useful indicators of *animal welfare*. The use of these indicators and their appropriate thresholds should be adapted to the different situations in which pigs are managed. Consideration should also be given to the design of the systems. These criteria can be considered as a tool to monitor the efficiency of design and management, given that both of these can affect *animal welfare.*

4. Changes in body weight, ~~and~~ body condition and quantity of livestock products

In growing animals, body weight changes outside the expected growth rate, especially excessive sudden loss, are indicators of poor *animal welfare* and health.

In mature animals, body condition outside an acceptable range may be an indicator of compromised *animal welfare*, health and reproductive efficiency.

9. Complications from common procedures

Some procedures such as surgical castration, tail docking, teeth clipping or grinding, tusk trimming, identification, nose ringing and hoof care are ~~commonly~~ performed in pigs to facilitate management, to meet market requirements and improve human safety and *animal welfare*.

However, if these procedures are not performed properly, *animal welfare* and health can be compromised.

Rationale

Changes in quantity of livestock products, such as yield could also be significant indicators since they may reflect the welfare status of pigs.

For improving clarity, Japan proposes to delete ‘commonly’ since the term ‘commonly’ is obscure.

Article 7.X.5.

Recommendations

Ensuring good welfare of pigs is contingent on several management factors, including system design, environmental management, and animal management practices which include responsible husbandry and provision of appropriate care. Serious problems can arise in any system if one or more of these elements are lacking.

Articles 7.X.6. to 7.X.X. provide recommendations for measures applied to pigs.

Each recommendation includes a list of relevant outcome-based criteria (or measurables) derived from Article 7.X.4.

This does not exclude other measures being used where or when appropriate.

Rationale

The terminology should be consistent with the Article 7.X.4

Article 7.X.6.

Housing

When new facilities are planned or existing facilities are modified, professional advice on design in regards to *animal welfare* and health should be sought.

Housing systems and their components should be designed, constructed and regularly inspected and maintained in a manner that reduces the risk of injury, *disease* or stress for pigs. Facilities should to allow for the safe, efficient and humane management and movement of pigs.

There should be a separate area where sick and injured animals can be treated and monitored. When a separated space is provided, this should accommodate all the needs of the animal e.g. recumbent or lame animals or animals with severe wounds may require additional bedding or an alternative floor surface.

Pigs should not be tethered as part of their normal housing systems.

Good *animal welfare* outcomes can be achieved in a range of housing systems. The design and management of the system are critical for achieving good *animal welfare* and health outcomes.

~~Pigs are social animals and prefer living in groups, therefore~~ When selecting housing systems ~~where pregnant~~ for sows and gilts, social nature of pigs should not be compromised to the extent possible. ~~can be kept in groups are recommended.~~

Rationale

As for paragraph 6, Japan proposes the amendment, since the OIE animal welfare standards, as proposed in the Article 7.1.x., 'emphasise good outcomes for the animals rather than prescribe specific conditions of the animals' environment and management'.

The words 'sows and gilts' should be consistent with other article.

Article 7.X.8.

Handling and inspection

Pigs should be inspected at least once a day when fully dependent on humans to provide for basic needs such as food and water and to identify welfare and health problems.

Some animals should be inspected more frequently, for example, farrowing sows, new born piglets, newly weaned pigs and newly-mixed gilts and sows.

Pigs identified as sick or injured should be given appropriate treatment at the first available opportunity by competent *animal handlers*. If *animal handlers* are unable to provide appropriate treatment, the services of a *veterinarian* should be sought.

Recommendations on the handling of pigs are also found in Chapter 7.3. In particular handling aids that may cause pain and distress (e.g. electric goads) should be used only in extreme circumstances and provided that the animal can move freely. The use of electric prods should be avoided (see also point 3 of Article 7.3.8.), and in any case should not be used in sensitive areas including the udder, face, eyes, nose or ano-genital region.

Comment

Japan seeks clarification on what 'extreme circumstances' in the paragraph 4 specifically means.

Article 7.X.9.

Painful procedures

Some procedures such as surgical castration, tail docking, teeth clipping or grinding, tusk trimming, identification including ear tagging, notching, or tatooing, and nose ringing are ~~commonly~~ performed in pigs. These procedures should only be performed to facilitate management, to meet market requirements and improve human safety and *animal welfare*.

These procedures have the potential to cause pain and thus should be performed in such a way as to minimise any pain and distress to the animal. These procedures should be performed at as early an age as possible or using anaesthesia or analgesia under the recommendation or supervision of a *veterinarian*.

Future options for enhancing *animal welfare* in relation to these procedures include: ceasing the procedure and addressing the current need for the operation through management strategies; or replacing the current procedure with a non-surgical alternative that has been shown to enhance *animal welfare*.

~~Options for enhancing *animal welfare* in relation to these procedures include the internationally recognised 'three Rs' which involves replacement (entire or inmunocastrated males vs. castrated males), reduction (tail docking and teeth clipping only when necessary) and refinement (providing analgesia or anaesthesia).~~

Rationale

For improving clarity, Japan proposes to delete 'commonly' since the term 'commonly' is obscure.

Other proposed amendments are for consistency with adopted chapter of other animals (dairy cattle and beef cattle).

Article 7.X.11.

Environmental enrichment

Animals should be provided with an environment that provides complexity and cognitive stimulation (e.g. foraging opportunities, social housing, etc.) to foster normal behaviour, reduce abnormal behaviour and improve biological function.

~~Pigs should be provided with multiple forms of~~ Environmental enrichment that aim to improve the welfare of the animals ~~through the enhancement of their physical and social environments, such as~~ may include:

– sufficient quantity of suitable materials to enable pigs to fulfil their innate needs to look for feed (edible materials), bite (chewable materials), root (investigable materials) and manipulate (manipulable materials) (Bracke *et al.*, 2006);

– social enrichment which involves either keeping pigs in groups or individually with visual, olfactory and auditory contact with other pigs;

– positive human contact (such as pats, rubs and talking).

Outcome-based criteria (or measurables): physical appearance (injuries), behaviour (stereotypies, tail biting), changes in body weight and body condition, handling response, reproductive efficiency, lameness and morbidity, mortality and culling rates.

Rationale

Rather than providing 'should' list, Japan proposes to provide examples of environmental enrichment because flexibility of environment should be taken into consideration under the various housing system.

Article 7.X.12.

Prevention of abnormal behaviour

In pig production there are a number of abnormal behaviours that can be prevented or minimised with appropriate management procedures.

Rationale

It should be clarified the causal association with reduction of abnormal behaviors and appropriate management procedures.

Article 7.X.13.

Space allowance

Space allowance should be managed taking into account different areas for lying, standing and feeding. Crowding should not adversely affect normal behaviour of pigs and durations of time spent lying.

Insufficient and inadequate space allowance may increase stress, the occurrence of injuries and have an adverse effect on growth rate, feed efficiency, reproduction and behaviour such as locomotion, resting, feeding and drinking, agonistic and abnormal behaviour (Gonyou *et al.*, 2006; Ekkel, 2003; Turner, 2000).

1. Group housing

   Floor space may interact with a number of factors such as temperature, humidity, floor type and feeding systems (Marchant–Forde, 2009; Verdon, 2015). All pigs should be able to rest simultaneously, and each animal lie down, stand up and move freely. Sufficient space should be provided to enable animals to have access to feed, water, to separate lying and elimination areas and to avoid aggressive animals.

   If abnormal behaviour is seen, corrective measures should be taken, such as increasing space allowance and providing barriers where possible.

   In outdoor systems where pigs have autonomy over diet selection, stocking density should be matched to the available feed supply.

   Outcome-based criteria (or measurables): reduction or variation in body weight and body condition, increasing agonistic and abnormal behaviour such as tail biting, injuries, morbidity, mortality and culling rates, and physical appearance (e.g. presence of faeces on the skin).

2. Individual pens

   Pigs ~~must~~should be provided with sufficient space so that they can stand up, turn around and lie comfortably in a natural position, and that provides for separation of dunging, lying and eating areas.

   Outcome-based criteria (or measurables): increasing abnormal behaviour (stereotypies), morbidity, mortality and culling rates, and physical appearance (e.g. presence of faeces on the skin, injuries).

3. Stalls (crates)

   Stalls ~~must~~should be sized appropriately to allow pigs to be able to:

   – ~~be able to~~ stand up in their natural stance without contact with either side of the stall,

   – stand up without touching the top bars,

   – stand in a stall without simultaneously touching both ends of the stall,

   – lie comfortably on their sides without disturbing neighbouring pigs.

   Outcome-based criteria (or measurables): physical appearance (e.g. injuries), increasing abnormal behaviour (stereotypies), reproductive efficiency, lameness and morbidity, mortality and culling rates (e.g. piglets).

Rationale

In paragraphs 2 and 3, the OIE codes usually do not use ‘must’ in recommendations. In paragraph3, it might be appropriate that ‘be able to’ is move to the position after ‘to allow pigs to’.

Article 7.X.24.

Biosecurity and animal health

1. Biosecurity and disease prevention

Biosecurity plans should be designed, implemented and maintained, commensurate with the best possible *herd* health status, available resources and infrastructure, and current disease risk and, for *listed diseases* in accordance with relevant recommendations in the *Terrestrial Code*.

These *biosecurity plans* should address the control of the major sources and pathways for spread of pathogens:

– pigs, including introductions to the *herd*,

– young animals coming from different sources,

– other domestic animals, *wildlife*, and pests,

– people, including sanitation practices,

– equipment, tools and facilities,

– *vehicles*,

– air,

– water supply, feed and bedding,

– manure, waste and disposal of dead animals,

– semen.

Outcome-based criteria (or measurables): morbidity, mortality and culling rates, reproductive efficiency, changes in weight and body condition, physical appearance (signs of disease).

a) Animal health management

Animal health management should optimise the physical and behavioural health and welfare of the pig *herd*. It includes the prevention, treatment and control of *diseases* and conditions affecting the *herd* (in particular respiratory, reproductive and enteric diseases).

There should be an effective programme for the prevention and treatment of *diseases* and conditions, formulated in consultation with a *veterinarian*, where appropriate. This programme should include the recording of production data (e.g. number of sows, piglets per sow per year, feed conversion, and body weight at weaning), morbidity, mortality and culling rate and medical treatments. It should be kept up to date by the *animal handler*. Regular monitoring of records aids management and quickly reveals problem areas for intervention.

For parasitic burdens (e.g. endoparasites, ectoparasites and protozoa), a programme should be implemented to monitor, control and treat, as appropriate.

Lameness can be a problem in pigs. *Animal handlers* should monitor the state of feet and legs and take measures to prevent lameness and maintain foot and leg health.

Those responsible for the care of pigs should be aware of early specific signs of *disease* or distress (e.g. coughing, abortion, diarrhoea, changes in locomotory behaviour, apathetic behaviour), and non-specific signs such as reduced feed and water intake, changes in weight and body condition, changes in behaviour or abnormal physical appearance.

Pigs at higher risk of *disease* or distress will require more frequent inspection by *animal handlers*. If *animal*

handlers suspect the presence of a *disease* or are not able to correct the causes of *disease* or distress, they should seek advice from those having training and experience, such as *veterinarians* or other qualified advisers, as appropriate.

Non-ambulatory pigs should not be transported or moved unless absolutely necessary for treatment or diagnosis. Such movements should be done carefully using methods that avoid dragging the animal or lifting it in a way that might exacerbate injuries.

Animal handlers should also be competent in assessing fitness to transport, as described in Chapter 7.3.

In case of *disease* or injury, when treatment ~~has failed~~is not feasible or recovery is unlikely (e.g. pigs that are unable to stand up, unaided or refuse to eat or drink), the animal should be humanely killed as soon as possible in accordance with Chapter 7.6.

Rationale

The word ‘feasible’ is consistent with the Article 7.1.4.8) of General Principles.

6. Chapter 7.11. Animal Welfare and Dairy Cattle Production Systems

Article 7.11.6.

Recommendations on system design and management including physical environment

When new facilities are planned or existing facilities are modified, professional advice on design in regards to animal welfare and health should be sought.

Many aspects of the environment can impact the welfare and health of dairy cattle. These include thermal environment, air quality, lighting, noise, etc.

5. Flooring, bedding, resting surfaces and outdoor areas

In all production systems cattle need a well-drained and comfortable place to rest. All cattle in a group should have sufficient space to lie down and rest at the same time.

Particular attention should be given to the provisions for areas used for calving. The environment in such areas (e.g. floors, bedding, temperature, calving pen and hygiene) should be appropriate to ensure the welfare of calving cows and new born calves.

In housed systems calving areas should be thoroughly cleaned and provided with fresh bedding between each calving. When ~~G~~group pens for calving are used, pens should be managed based on the principle 'all in - all out'. The group calving pen should be thoroughly cleaned and provided with fresh bedding between each animal group. The time interval between first and last calving of cows kept in the same group calving pen should be minimised.

Rationale

It should be clarified that the principle ‘all in- all out’ is only applied to group pens for calving.