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## **GUIDELINE FOR DEVELOPING INSPECTION PROTOCOLS FOR FARMS, MARKETS, ABATTOIRS, AND BUTCHERS**

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### **Guideline for developing inspection protocols for farms, markets, abattoirs, and butchers**

#### **Work Package 74, Sub-activity 4.2**

Sub-activity. 1.4.2. Develop risk-based inspection protocols for governing food safety of animal products along the value chain, harmonized with international requirements

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## Abbreviations and Acronyms

AMI	Ante Mortem Inspection
AMR	Antimicrobial resistance
CAC	Codex Alimentaria Commission
CA	Competent Authority
DLO	District Livestock Officer
DLS	Department of Livestock Services
ETP	Effluent Treatment Plant
GAHP	Good Animal Husbandry Practices
GHP	Good Hygiene Practices
HACCP	Hazard Analysis Critical Control Point
LDDP	Livestock and Dairy Development Project
MoFL	Ministry of Fisheries and Livestock
MO	Market Operator
PPE	Personal Protective Equipment
PMI	Post Mortem Inspection
SoP	Standard Operational Procedure
THI	Temperature Humidity Index
UNIDO	United Nations Industrial Development Organization
WOAH/ OIE	World Organization for Animal Health (formerly the Office International des Epizooties)

# CONTENTS

Executive Summary .....	1
Introduction .....	1
Objectives .....	2
Food Safety Inspection .....	3
Preparatory steps to perform inspection procedure .....	5
Development of inspection checklist .....	6
1. Inspection protocol in the meat value chain .....	6
1.1 Beef Farm .....	6
1.2 Animal Transport .....	8
1.3 Slaughterhouse .....	9
1.4 Ante and Post Mortem Inspection Matrix .....	14
1.5 Meat shops .....	19
1.6 Live Animal Market .....	22
2. Inspection checklist for poultry farm facilities transportation and live bird market .....	23
2.1 Farm Biosecurity and their maintenance .....	24
2.2 Farm biosecurity and pest control .....	24
2.3 Farm GHP, cleaning and disinfection .....	25
2.4 Farm waste management .....	25
2.5 Good Animal Husbandry procedures .....	25
2.6 Animal Identification .....	26
2.7 Transport facilities, equipment and GAHP .....	26
2.8 Live Birds' Market .....	26
3. Inspection checklist for milk value chain .....	28

3.1	Inspection check list of dairy farm facilities .....	28
3.2	Inspection checklist for Milk collector/Goyala .....	30
3.3	Inspection checklist for milk chilling point .....	31
3.4	Inspection check list for sweetmeat shop .....	33

# EXECUTIVE SUMMARY

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Bangladesh has a considerable agrifood sector involved in the production of animal origin foods including meat, milk and eggs. The sector has grown considerably from the days of independence with a vulnerable food supply to the current position of near self-sufficiency in food. During this time the priority was increasing domestic food production with considerations of food safety being of a lower priority.

In today's global context, food safety has gained importance. Furthermore, as Bangladesh entrepreneurs are trying to develop export markets they are faced with challenges to comply with the food safety standards of their export markets. These are proving difficult to achieve.

In this context, the Livestock and Dairy Development Project (LDDP) of Department of Livestock Services engaged the United Nations Industrial Development Organization (UNIDO) to undertake an initiative to evaluate the current food safety status of foods of animal origin in Bangladesh. Specifically it was engaged to deliver a "Gap analysis of existing legislation, drafting legal amendments, development of baseline data of food safety, establishment of animal origin food inspection program and quality assurance scheme (Package 74 of LDDP). The objective of this agreement was to recommend ways to improve the food safety situation in Bangladesh.

As a part of this activity, UNIDO has developed Good Animal Husbandry Practices (GAHP) guidelines for different actors in the meat and milk value chain. To assure compliance with the guidelines at all stages along the food chain, an inspection guideline for DLS inspectors is essential. On this basis, this food safety inspection protocol has been developed based on GAHP and GHP guidelines.

It is the intent that these guidelines will help DLS and other relevant inspectors to perform their inspection activities in different stages of the meat and milk value chain. It is mentioned in this document that, to operate this inspection process well, a number of other preparatory activities are required. Coordination with other relevant regulatory organizations is also necessary. It is expected that, DLS will take initiatives to undertake all necessary actions to start an inspection procedure to improve food safety situation to support human health situation, as well to support the sector in Bangladesh. This document serves as a valuable resource for inspection of food safety measures in farms, markets, abattoirs and butchers.

## INTRODUCTION

Bangladesh is a densely populated country with a population (estimated) of 171.73 million in 1 July, 2022. The density of population was 1,163 per sq.km. in 2022. [1]. The animal population is also high in Bangladesh. According to the Department of Livestock Services (DLS) (2022-23), there are 24.86 million cattle, 1.52 million buffalo, 30.77 million goat and sheep and 385.70 million poultry. Most of the ruminants and a considerable percentage of poultry free-rangers are kept in

close proximity to human habitation. Therefore, there is a strong risk of transmission of zoonotic disease from animals to humans and vice versa. Formal slaughtering of animals and meat processing is very limited in Bangladesh and occurs in the minority of instances. Accordingly the national meat inspection system is almost non-existent.

Most of the practices in the different stages of the meat and milk value chain is traditional. Safety and hygiene issues are rarely addressed. In regulating the sector, DLS is primarily responsible for assuring safety and hygienic issues as the competent authority. There is no specific regulatory act for assuring food safety for foods of animal origin, however there are a number acts and rules, like the animal disease act and rules, animal slaughter and meat quality control act, fish feed and animal feed act, animal and animal products quarantine act etc., the enforcement of which could improve the food safety compliances to a considerable level. However enforcement and compliance with the food safety legislative acts is low.

The development of practical guidelines for use in different establishments, and implemented through the training of workers will improve food safety practices along the food chain. The development of inspection protocols implemented by trained, dedicated inspectors of the regulatory authority, with access to testing facilities, will strengthen food safety compliance.

The Livestock and Dairy Development Project (LDDP) of Department of Livestock Services engaged United Nations Industrial Development Organization (UNIDO) to implement the project comprising of a 'Gap analysis of existing legislation, drafting legal amendments, development of baseline data of food safety, establishment of animal origin food inspection program and quality assurance scheme. The purpose of this was to recommend ways to improve food safety in Bangladesh. As a part of this activity, UNIDO has developed GAHP and GHP guidelines for different actors of the meat and milk value chain.

This initiative is to develop an inspection protocol to inspect, supervise and monitor the compliances of GAHP and GHP in different level by the regulatory authorities with a view to assure constant improvement of food safety practices.

This inspection protocol is fully based on the GAHP and GHP guidelines. Based on scale of compliance, three types of guidelines are developed for the actors: i) basic compliance, ii) attainment of medium standards and iii) attainment of higher and international standards.

In practice, there are very few food business operators achieving medium or higher standards. For a good number of actors, it will be hard to achieve the basic compliances, which is the minimum OIE/WOAH requirements and/or international standards. It will require a time bound science-based plan to implement such a complex activity.

## **OBJECTIVES**

The objectives of this report "Guidelines for developed inspection protocols for farms, markets, abattoirs, and butchers" is to



- a. Develop risk-based inspection protocol throughout the value chain with a view to assure production of safe animal origin food
- b. Improve food safety practices to harmonize with international requirements

## FOOD SAFETY INSPECTION

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Animal origin food forms a major part of our diets with meat, milk, egg and their derivatives being a main source of protein in our diets. However these foods are susceptible to food safety hazards as microbial, chemical, physical or other hazards may enter the food chain at any stage of production, transport, processing or preservation.

To prevent or reduce the risk of hazards, food safety interventions are implemented at different stages by different actors along the food chain. These interventions must be overseen by the competent authorities to ensure safe food can be placed on the market. In Bangladesh, food production and primary processing (transport, slaughter, cooling, etc.), come under the responsibility of the Department of Livestock Services (DLS).

Most animal husbandry and primary processing in Bangladesh takes place in a very traditional way where food safety practices are not prioritized. It will take time and planning for food safety to be prioritized along the food chain and for all actors to comply with the relevant food safety legislation appropriate to their activities.

UNIDO has drafted guidelines for different actors:

- i) Beef cattle farm
- ii) Animal transporters
- iii) Slaughter house
- iv) Meat shop

The guidelines comprise of three steps for each type of practices:

- a) Basic compliance
- b) Medium standards and
- c) Higher and international standards

For each inspection activity, there are a number activities to be performed by the actor. For example, activities regarding farm biosecurity would be as follows

Inspection protocol	Basic compliance	Medium standards	Higher & International standards
<p>Adequate personnel and visitors' hygiene protocol should be in place.</p> <p>The farmer should provide the correct PPEs and have a Biosecurity protocol for any person entering in the farm.</p> <p>Adequate vehicle and equipment hygiene and disinfection protocol should be in place to avoid spreading disease and pest inside and outside the farm.</p>	<ul style="list-style-type: none"> <li>• Every person before entering in the animals' facilities should wear clean overalls or use disposable ones</li> <li>• Every person before entering in the animals' facilities should clean and disinfect their boots or use disposable shoes covers.</li> <li>• Every person before entering in the animals' facilities should wash and disinfect hands and arms.</li> <li>• Any person affected by any acute or chronic disease transmissible to animals should not enter in their facilities.</li> <li>• The visitor should be instructed about the farm Biosecurity protocol, with the use of pictures, before entering in the farm.</li> </ul>	<ul style="list-style-type: none"> <li>• Every person before entering in the farm should wear clean overalls or use disposable ones</li> <li>• Every person before entering in the farm should clean and disinfect the boots or use disposable shoes covers after disinfected the sole.</li> <li>• Every person before entering in the farm should wash and disinfect hands and arms.</li> <li>• Every person should wash and disinfect hands and arms every time moving from one animals' facility to another.</li> <li>• Every person should wash and disinfect the boots and/or the shoes sole every time moving from one animals' facility to another.</li> <li>• The visitor should read and sign the farm written Biosecurity protocol before entering in the farm.</li> <li>• Proper warning signage should remind all of the biosecurity steps to the workers or visitor.</li> <li>• Each vehicle wheels and mudguard should be cleaned and disinfected before entering in the farm</li> </ul>	<ul style="list-style-type: none"> <li>• Every person before entering in the farm should wear a clean overall or a disposable one provided by the farmer</li> <li>• Every person before entering in the farm should clean and disinfect the boots. Disposable shoes covers are not allowed.</li> <li>• Every person before entering in the farm should take a shower to wash and disinfect the whole body.</li> <li>• All the above points should be carried out in a farm neutral area located close to the entry gate.</li> <li>• Every person should wash and disinfect hands and arms every time moving from one herd to another.</li> <li>• Every person should wash and disinfect the boots and change the overall every time moving from one herd to another.</li> <li>• Vehicle wheels, mudguard and any external vehicle surface (not in contact with animals or feed) should be cleaned and disinfected before entering in the farm.</li> <li>• A goods unloading area close the entry gate should be designed and used for any consignment except for animals.</li> <li>• Each vehicle entering in the farm should follow a forward flow itinerary in order to avoid the use of the same path twice.</li> <li>• Any person must follow the disinfection protocol with shower before entering or leaving the farm.</li> </ul>

An inspector should consider first, the category in which the operator falls and then verify the steps the farms should follow to comply with the particular activity. Bringing a traditional operator into a systematic approach is not an easy one. It will need some specific initiatives by the regulator/s to activate such process.

Such detail inspection procedures for basic compliances, medium standards and higher & international standards are described in the 1.5.4: 'GAHP and GHP designed' by UNIDO

## **PREPARATORY STEPS TO PERFORM INSPECTION PROCEDURE**

To initiate the inspection process, it is important to get the relevant actors ready to comply with the biosafety and hygienic procedures. Inspectors and other actors including laboratories must be involved in testing the samples collected by the inspectors in relevant cases. Infrastructural developments are also important to ensure compliant establishments such as slaughter houses, meat shops etc. Therefore, some preparatory steps are to be undertaken ahead of starting the inspection process. To start inspection process, DLS needs a group of dedicated skilled inspectors as well as an inspectorate system in place to follow up, monitor and over all coordinate the inspection process internally, as well as externally with other regulatory organizations. Some of the inspections like animal farms may be started shortly with the existing extension services. Here we list some of the activities, which may be needed to start an inspection system:

- Bring all actors under a technical registration system
- Develop and distribute the operational guidelines to the actors (Guidelines developed by UNIDO may be utilized for this purpose)
- Train actors and provide a time frame to improve/correct their practice
- Develop and distribute a recording system of the actors of their practices, which will be helpful for inspection/verification process
- Identify/recruit inspectors, supervising and monitoring officers/staffs and develop their skills on inspection procedure
- Identify/develop laboratories for food safety hazard testing and link them in the process
- Start inspection process involving all actors
- Coordinate with other relevant regulators for necessary support and avoiding duplication of activities
- Establish a food safety inspectorate in DLS

# DEVELOPMENT OF INSPECTION CHECKLIST

Check lists for the inspection of different actors in the meat and milk value chain are developed based on the GAHP and GHP guideline already developed by UNIDO in accordance with international standards that relate to the food safety system. Those checklists were reviewed by DLS personnel and other experts who attended the GAHP/GHP validation workshop as well as the workshop on the milk and meat value chain. The draft checklists for the inspection are given below which may be used by the competent authority during the inspections.

## 1. Inspection protocol in the meat value chain

### 1.1 Beef Farm

Date:					
Beef Farmer's Name:					
Name of the farm (if any)					
Address:					
Mobile:					
Mobile Number:					
	Farm registration number				
	Animal number in the farm at present				
	Source of animal	Own farm/purchased			
	<b>Activity</b>	<b>Yes</b>	<b>Partial</b>	<b>No</b>	<b>Remarks</b>
<b>Infrastructure and their maintenance</b>					
	Providing required documented records, which reflect compliance with present law, licensing regulation and the related applicable by-laws and decisions of the authorities.				
	Farm's shall be located in a suitable location, kept clean and maintained in good conditions at all the times. The location shall be away from polluted and industrial areas and the area shall not be prone to pests and rodents.				
	The new farm location should be chosen in order to protect the animals from any kind of health risk and welfare issues which can make the animal sick and the final product (meat) unfit for human consumption.				
	Farms production site is of a suitable size, location, and construction, and be maintained to reduce the risk of diseases and facilitate the production of healthy animals				

	The layout and the size of the animal facilities is proportional to the species and the number of animals in order to keep them in a healthy and stressless manner.				
	Materials used for the internal structure of buildings are durable, prevent build-up of dirt, be easy to clean and maintain and safe for staff				
	The farm structure protects the animals from any health and welfare issues.				
	Feeding facilities design and maintenance is sufficient.				
	Quarantine facility in place for newly introduced/sick animals				
	Provide a reliable supply of electricity				
	Adequate personal hygiene and sanitary facilities are provided on the farm.				
	The premises have good lighting				
	There is adequate natural or mechanical ventilation				
<b>a. Biosecurity and pest control</b>					
	Adequate personnels and visitors' hygiene protocol is in place. The farmer provides the correct PPEs and make aware of Biosecurity protocol to any person entering in the farm.				
	Adequate vehicle and equipment hygiene and disinfection protocol is in place to avoid spreading disease and pest inside and outside the farm.				
	Adequate procedures are in place to control pests and prevent wild and domestic animals (excluding the work animals as the dogs) from having access to places where the animals are kept.				
	Buildings are kept in good repair and condition to prevent pest access and eliminate potential infestation sites				
	Biosecurity measures for the animals and their facilities. Procedure are in place before accommodating new livestock or new-born animals				
<b>b. Facility's cleaning and GHP</b>					
	Maintaining all facilities, equipment... vehicle used in connection with <b>primary production</b> and associated operations...in clean conditions and, where necessary, disinfect them after cleaning in an appropriate manner.				
	Farms is provided with appropriate facilities and procedures in place to ensure that any necessary cleaning and maintenance is carried out effectively and to an appropriate degree...				
	Cleaning and disinfection programs are established to ensure the correct hygiene standards are met for the animals and their facilities				
	Any container containing feed shall be covered all the time with a tight-fitting cover, lid or gauze in order to protect it.				
	Provide potable water for cleaning, disinfection procedures. Have reliable water services to allow thorough cleaning				
<b>c. Farm Waste management</b>					

	Has appropriate containers and suitable waste storage area. All wastes are eliminated in a hygienic and environmentally friendly way.				
<b>d. Animal Health and general animal husbandry practices</b>					
	Ensure good <b>fitness and cleanliness of the animals.</b>				
	Ensure a good protection from the disease to the animals.				
	Record all vaccinations				
	Maintain general animal husbandry practices				
	Animal husbandry procedures for new livestock animals.				
	Good quality and enough feed and water is provided.				
	Management and treatment of sick and injured animals				
	Record all animal specific treatments				
	Management during extreme environmental conditions				
<b>e. Animal identification</b>					
	All the animals should be clearly identifiable using a clear animal Identity system (ears tag, tattoo, microchip or any other kind of identification system) with unique identification numeric or alpha-numeric number				

## 1.2 Animal Transport

Date:					
Name of the Animal Market:					
Transporters Name:					
Address:					
Type:	Basic compliance	Medium standards	Higher & International standards		
Licensing/Registration:					
Mobile Number (optional):					
		Yes	Partial	No	Remarks
	• Transport equipment, facilities and documents must be maintained in good order and checked before being used.				
	• Animal transport should take place only if the animals' facilities, equipment, vehicle, loading/unloading procedures, documents and licenses are in good order and well organized to reduce animal stress and the risk of injuries.				
	• Inspection of animals and management of downer livestock during transport and loading procedures				

	• Handling escaped animals during the unloading				
	• Follow animal loading and unloading instructions				

### 1.3 Slaughterhouse

Date:					
Name of the slaughterhouse					
Type:	Basic compliance	Medium standards	Higher & International standards		
Name of FBO:					
Address:					
Licensing/Registration:					
Mobile Number ():					
	<b>Activities</b>	<b>Yes</b>	<b>Partial</b>	<b>No</b>	<b>Remarks</b>
<b>Abattoir's requirements for the FBO:</b>					
Providing required documented records, which reflect compliance to present law, licensing regulation and the related applicable by laws and decisions of the authorities					
The production site should be of a suitable size, location and construction, and be maintained to reduce the risk of contamination and facilitate the production of safe and hygienic finished products (live animals ready to be slaughtered)					
The layout and the animal facilities size of the lairage abattoir should be proportional to the species and the number of animals in order to keep them in a healthy manner waiting for them to be slaughtered.					
<b>Maintenance and design of facilities</b>					
Materials used for the internal structure of buildings should be durable, prevent build-up of dirt, be easy to clean and maintain and safe for staff					
The lairage structure should protect the animals from any health and welfare issues.					
Feeding facilities design and maintenance					
provide feed to the animals only if they will stay in the lairage overnight. If the abattoir has a slaughtering flow system where the animals will be slaughtered without being accommodated for over 3 hours, then all the requirements about feeding facilities are not applicable.					
Provide a reliable supply of electricity					
Adequate personal hygiene and sanitary facilities must be provided in the abattoir.					
The premises must have good lighting					
There must be adequate natural or mechanical ventilation					
<b>Pest control</b>					

Adequate procedures must be in place to control pests and prevent domestic and wild animals from having access to places where the animals are kept.				
Buildings must be kept in good repair and condition to prevent pest access and eliminate potential infestation sites				
<b>Cleaning</b>				
Maintaining all facilities, equipment, vehicle used in connection with primary production and associated operations in a clean condition and, where necessary, disinfect them after cleaning in an appropriate manner.				
Abattoirs shall be provided with appropriate facilities and procedures in place to ensure that any necessary cleaning and maintenance is carried out effectively and to an appropriate degree.				
Establish cleaning and disinfection programs to ensure the correct hygiene standards are met to minimize the risk of disease spreading and decrease the animal exposure to transmittable notifiable diseases				
Provide potable water for cleaning, disinfection and handwashing.				
The premise must have reliable services to allow thorough cleaning				
Adequate personnels and visitors' hygiene protocol should be in place. The FBO should provide the correct PPEs and make aware of Biosecurity protocol to any person entering in the abattoir.				
Adequate vehicle and equipment hygiene and disinfection protocol should be in place to avoid spreading disease and pest inside and outside the abattoir.				
<b>Waste management</b>				
Shall provide appropriate containers and suitable waste storage area. Establish adequate procedures for the storage and removal waste				
All waste shall be eliminated in a hygienic and environmentally friendly way				
There must be an adequate system in place to drain and eliminate the waste.				
<b>Abattoir Animal Husbandry procedures</b>				
Every feed container shall be covered all the time with a tight-fitting cover, lid or gauze in order to protect it.				
Animals' facilities shall pay attention to reduce the risk of accidental animal environment contamination, even from chemicals. Also, measures shall be exercised to eliminate any possible effect of sudden windstorm, dust storm and hazardous rain storm.				
<b>Animal health and general animal husbandry practice</b>				
Ensure the <b>fitness and the cleanliness of the animals</b> intended for slaughtering and meat production.				
This is in order to have, at all the time in abattoir, cleaned and healthy animals in order to reduce any welfare and health issue and reduce cross contaminated meat at the end of the process				
Animal husbandry: It is one of the key points in an abattoir with a good livestock management. Good quality and enough feed and water need to be provided in order to make the animals comfortable as soon as possible.				
Management and treatment of sick and injured animals				
Management during extreme environmental conditions				
<b>Traceability</b>				
Animal identification				



The animal identification is crucial in the slaughterhouse during the AMI and PMI. It can be the milestone for stopping the black market and have a proper animal and meat traceability system in place.				
It is suggested for the non-commercial and familiar farm's animals not to tag or tattoo or microchip them yet at this first stage. What it could be crucial is provide each animal in the farm with an individual				
"passport" with the animal silhouette drawn (fur colour, marks, characteristic signs) and well describe animal identification characteristics in order to make the animal identification possible and easy.				
<b>Abattoir infrastructures, facilities and equipment</b>				
The Food establishments shall be located in a suitable location, kept clean and maintained in good conditions at all the times.				
The location shall be away from polluted and other industrial areas and the area shall not be prone to pests and rodents.				
The location of the abattoir should be chosen in order to protect the productions from any kind of contaminations and pests' issues which can make the meat unfit for human consumption.				
The production site should be of a suitable size, location and construction, and be maintained to reduce the risk of contamination and facilitate the production of safe and hygienic finished products				
The layout and the production size of the plants should be proportional to the throughput and the production type in order to permit good hygienic handling of meat.				
the layout of the food premises shall permit good food hygiene practices, including protection against cross contamination, pest access and infestation				
Materials used for the internal structure of buildings should be durable, prevent build-up of dirt, be easy to clean and maintain and safe for staff				
The structure of the premises should protect the food from any form of contamination				
Working Surfaces in food contact area shall be made of washable corrosion resistant and non-toxic material and maintained in a sound condition, be durable and allow for easy cleaning and disinfection				
Provide potable water for cleaning, disinfection and handwashing				
The premise must have reliable services to allow thorough cleaning				
Provide a reliable supply of electricity				
The drainage channels shall be fully or partially open, they shall be designated so as to ensure that waste does not flow from a contaminated area towards or into a clean area				
There must be adequate drainage and waste disposal systems				
Adequate personal hygiene and sanitary facilities must be provided in the food premises				
The premises must have good lighting				
There must be adequate natural or mechanical ventilation				
<b>Animal by product facilities and equipment</b>				
All food establishments must have appropriate waste containers and suitable waste storage areas.				
Meat waste, non-edible by products and other refuse must be removed from food rooms as quickly as possible to avoid cross contamination.				

Meat waste, non-edible animal by products and other refuse must not be allowed to accumulate in meat rooms				
There must be adequate procedures for the storage and disposal of waste				
All waste must be eliminated in a hygienic and environmentally friendly way				
<b>Meat storage and Handling equipment</b>				
Meat, raw materials and ingredients must be sorted to separate material which is unfit for human consumption				
Food shall be maintained at correct temperatures				
<u>If the meat is not immediately delivered once ready (warm meat), the plant must have reliable services to ...support the cold chain</u>				
Machinery and equipment must be of food grade material and in good sanitary condition and shall not be of a state which is likely to affect the quality of meat or make it harmful to consume				
Equipment coming into contact with meat should be designed and constructed to ensure that, where necessary, they can be adequately cleaned, disinfected and maintained to avoid the contamination of food.				
Where necessary equipment should be moveable or capable of being disassembled to allow for maintenance, cleaning, disinfection, monitoring and inspection for pests				
Every vessel containing food or ingredient shall be covered all the time with a tight-fitting cover, lid or gauze in order to protect the food				
All wrappers, containers and packaging material should be of food grade material which will not contaminate food.				
Machinery [and equipment] should comply with sanitary design standards				
Slaughtering equipment, particularly for smaller-scale operations, need not be elaborate. The amount of equipment will depend on the slaughtering procedures employed.				
<b>Abattoir work procedures and systems:</b>				
<b>Cleaning And Sanitation</b>				
Establish cleaning and disinfection programs to ensure the correct hygiene standards are met to reduce the risk of a food borne outbreak				
Correct cleaning and disinfection (where necessary) of equipment, machinery and utensils used in food preparation and sale				
<b>Pest Control</b>				
Adequate procedures must be in place to control pests				
the layout of the food premises shall permit good food hygiene practices, including protection against cross contamination, pest access and infestation				
Buildings must be kept in good repair and condition to prevent pest access and eliminate potential infestation sites				
<b>Transport – Storage – Sale Procedures</b>				
Appropriate food safety measures have to be applied during handling, storage and transportation				
There must be effective physical separation of packed meat and unpacked meat and separation of meat and meat products/preparations				

Transport of food shall be carried out in such a way to prevent any contamination of the food, maintain its integrity and at appropriate temperatures.				
Food must be protected from contamination during all stages of purchase, transport, storage and sale.				
Food must be protected from hazards related to contamination from air, soil, water, feed, fertilizers, pesticides, biocides, veterinary drugs, faecal contamination and cleaning and disinfection agents				
Conveyances and any form of transport must protect the food from any contamination, including dust and fumes				
Containers and conveyances must be kept clean and be able to be effectively cleaned and where necessary disinfected between batches				
Food items shall be physically separated from non-food items during transport				
Ready to eat foods and raw foods transported in the same vehicle shall be adequately separated to avoid cross contamination				
Temperature throughout the food chain shall be monitored and verified to ensure that the food is safe and being maintained at the correct temperatures				
Conveyances and transport must maintain an appropriate temperature and humidity, and any other conditions needed, to protect the food from harmful or undesirable microbial growth and deterioration				
The meat is declared unfit for human consumption unless the animals and the carcasses went through all the required ANTE-MORTEM INSPECTION (AMI) and POST-MORTEM INSPECTION (PMI) procedures. All the procedures and checks in place reduce substantially the chance to sale unfit meat.				
<b>Traceability</b>				
Food business operators should have effective recall procedures to stop the delivery, sale and consumption of suspect products				
An appropriate product identification system must be implemented, connected to the animal identification system used by slaughter houses and farms				
<b>Personnel and training:</b>				
<b>Personnel</b>				
Food Handlers shall maintain a high degree of personal cleanliness				
Food handlers shall wear suitable clean and protective clothing while handling food				
Food Handlers shall refrain from any behaviour that may risk contamination of the food				
Food handlers suffering from any disease that can be transmitted through food are prohibited from handling food until clear of the disease				
Food handlers must be medically fit to work and provide a medical fitness certificate				
Food handlers with cuts, sores, wounds or boils must cover the relevant area with suitable water proof dressings or, if this is not possible, refrain from handling food.				
Food handlers shall wash and disinfect their hands, as appropriate				
<b>Training</b>				

All food handlers must be trained as applicable to their assigned tasks and have the necessary skills to enable them to handle food hygienically.				
All food handlers and lairage staff must be trained as applicable to their assigned tasks and have the necessary skills to enable them to work hygienically and following the SOP				
Those who handle strong cleaning chemicals or other potentially hazardous chemicals shall be instructed in safe handling techniques				
All employees must be provided with training in an understandable language				
Casual workers or temporarily employed staff shall also receive relevant training on food hygiene				

### 1.4 Ante and Post Mortem Inspection Matrix

Any slaughter operation, from killing to dispatch must be done inside the abattoir. Slaughtering animals on the street or outside premises must be absolutely forbidden.

**AMI:**

Animals must not be slaughtered unless the Official Veterinarian (OV) has, on behalf of the DLS or City Corporation:

1. carried out a **full ante-mortem inspection** in accordance with this guidance.
2. carried out a **full animal documentary check**
3. the animal was declared fit to slaughter for human consumption which means the OV did not spot any notifiable or zoonosis disease which can have an impact of the public health.

Different AMI protocols should be applied according to:

1. The area where the farm is located (endemic diseases? outbreaks?)
2. The animal health history and the information recorded in the “passport” (if available) or in the owner declaration.

**SLAUGHTER OPERATIONS:**

The following slaughter operational steps should be followed in order to have a solid and systemic PMI:

1. the animal is slaughtered, then once unconscious,
2. it is left to bleed upside down (if it is hooked to the ceiling) or in a side (if it is left on the floor).

3. the blood could be collected for other purpose,
4. the carcass should be accommodated on the skinning rack (dressing cradle) to avoid contact with the floor,
5. the carcass dress should start,
6. the skin should be removed from the carcass without exposing the meat to any possible contamination (contact with dirty surfaces or machineries),
7. **the head is removed and left for inspection on a clean surface or hooked,**
8. the carcass is split and eviscerated following the below order:
  - i. Liver (red offal)
  - ii. Spleen
  - iii. Green offal (stomach and intestines)
  - iv. Lungs (red offal)
  - v. Heart (red offal)
  - vi. Udder
  - vii. Genitals
  - viii. Kidneys
9. the **green offal** should be removed very carefully and hygienically. It should be moved away from the carcass to avoid any possible contamination. They need to be left available for the OV to carry on the **inspection** on it,
10. The **red offal** should be removed and hang on a hook or on a clean surface for inspection,
11. The **spleen, genitals, kidney and udder** should be located on a clean surface for **inspection,**
12. The carcass should be all dressed and trimmed before presenting for the final inspection.
13. The OV will carry on a final inspection on the **carcass (pleura and peritoneum) and its lymph nodes** before then taking the final decision

**There must be a clear correlation between the carcass and all its parts as, head, offal and udder. Any part of the carcass which should be inspected by the OV cannot be handled or cut by anyone else until the OV have finished the all PMI on that animal.**

**PMI:**

Carcasses, offal and any meat products should not be declared fit for human consumption unless the OV has on behalf of the BFSA and DLS:

1. Carried out a full post-mortem inspection in accordance with this guidance
2. has passed all the tests if required and/or needed

The OV must decide what type of PMI and tests need to be done carcass by carcass and this decision is linked to the AMI results. Different PMI protocols should be applied according to the AMI outcome and the animal health history.

- a. Animals coming from non-commercial farms or from farms located in other countries should be qualified as a high-risk animals and a deep full PMI needed
- b. Animals coming without any documentation (owner declaration or animal passport) should be qualified as high-risk animals and a deep full PMI needed.
- c. Animals coming from semi-commercial or commercial farms located in an area where there are endemic non transmissible diseases, are qualified as medium risk animals and an accurate PMI needed.
- d. Animals coming from known commercial or semi-commercial farm, regularly checked by the authority and declared free from endemic diseases, are qualified as low risk animals and a moderate PMI needed

**DEEP FULLY PMI**

It should be used for high-risk animals which can carry on notifiable and/or zoonosis disease.

- a. Head inspection (tongue, masseters, tonsils) and lymph-nodes cuts (Retropharyngeal LN, Parotid LN, Submandibular/Submaxillary LN)
- b. Prescapular lymph-nodes cuts
- c. Heart inspection (pericardium) and longitudinal cut
- d. Lung inspection (palpation and longitudinal cut) and Lymph-node cuts (Bronchial and Mediastinal LN)
- e. Liver Inspection and hepatic lymph-node cut (Hepatic LN)
- f. Kidney inspection and longitudinal cut
- g. Abdominal viscera (green offal) inspection and mesenteric lymph-nodes cut.
- h. Udder inspection and lymph-node cut (Supramammary LN)

- i. Inguinal area inspection and cuts
- j. Superficial inguinal and Precurral lymph-node cuts
- k. Genital organs inspection
- l. Diaphragm inspection
- m. Accurate check of ABP and SRM removal from the carcass
- n. Accurate inspection of carcasses peritoneum and pleura.
- o. Accurate inspection of the carcasses after the trimming and also before to approve the carcass for human consumption (contaminations or pathologic lesions)
- p. Meat tests (BSE, TB, drug residues, microbiological swabs etc.)

**ACCURATE PMI:**

It should be used for medium-risk animals which come from semi-commercial or commercial farms and with all the animal health document in order. The farm of origin should be located far (at least 30km) from any currently outbreak and outside any notifiable or zoonosis endemic area. To keep this status the farm of origin should be located in an area where there are endemic non transmissible diseases, only.

- a. Head inspection (tongue, masseters, tonsils) and lymph-nodes cuts (Retropharyngeal LN, Parotid LN, Submandibular/Submaxillary LN)
- b. Heart inspection (pericardium) and longitudinal cut
- c. Lung inspection (palpation and longitudinal cut) and Lymph-node cuts (Bronchial and Mediastinal LN)
- d. Liver Inspection and hepatic lymph-node cut (Hepatic LN)
- e. Kidney palpation. No cut.
- f. Abdominal viscera (green offal) inspection and mesenteric lymph-nodes cut.
- g. Inguinal area inspection and cuts only if needed
- h. Udder inspection, no LN cut
- i. Genital organs inspection
- j. Diaphragm inspection
- k. Accurate check of ABP and SRM removal from the carcass
- l. Accurate inspection of carcasses peritoneum and pleura.

- m. Accurate inspection of the carcasses after the trimming and also before to approve the carcass for human consumption (contaminations or pathologic lesions)
- n. Meat tests (BSE, TB, drug residues, microbiological swabs etc. **if needed**)

#### **MODERATE PMI:**

Animals coming from known commercial or semi-commercial farm, regularly checked by the authority and declared free from endemic diseases, are qualified as low risk animals and a moderate PMI needed

- a. Head inspection (tongue, masseters, tonsils) and lymph-nodes cuts (Retropharyngeal LN, Parotid LN, Submandibular/Submaxillary LN)
- b. Heart inspection and cut
- c. Lung palpation and Lymph-node cuts (Bronchial and Mediastinal LN)
- d. Liver Inspection and hepatic lymph-node cut (Hepatic LN)
- e. Kidney palpation. No cut.
- f. Abdominal viscera (green offal) inspection and NO LN cuts
- g. Diaphragm inspection
- h. Accurate check of ABP and SRM removal from the carcass
- i. Accurate inspection of carcass peritoneum and pleura.
- j. Accurate inspection of the carcass just before to approve it for human consumption (contaminations or pathologic lesions)

#### **HEALTH STAMP:**

Once the OV finished with the last check on the carcass and offal, they can approve it for human consumption marking it (as for example with a health mark) and the it should be immediately transported to the chiller or to the storage room before being dispatched. If the OV judge the carcass and/or the offal unfit for human consumption (even partially), the rejected parts should be disposed as waste and stained with painting.

The health mark indicates that the animals and the resulting carcasse have undergone ante and post-mortem inspection and there are no grounds for declaring the meat unfit for human consumption. Any kind of health mark can be applied to the carcasses and offal and it is up to the Competent Authority to decide what to use.

The health mark should be applied in the slaughterhouse so that if carcasses are cut into half or quarters or half carcasses are cut into 3 pieces, each bear such a health mark. The FBO should inform the OV or MIs how many pieces the carcasse will be cut into if they wish the minimum



number of marks to be applied. The health mark should not be applied on the offal.

## 1.5 Meat shops

Name of FBO:					
Address:					
Licensing/Registration:					
Mobile Number:					
Type:	Basic compliance	Medium standards	Higher & International standards		
Licensing/Registration:					
Mobile Number (optional):					
	<b>Structure - Premises and equipment</b>	Yes	Partial	No	Remarks
	<b>The production site is of a suitable size, location and construction, and maintained to reduce the risk of contamination</b> and facilitate the production of safe and hygienic finished product				
	<b>the layout of the food premises permit good food hygiene practices, including protection against cross contamination,</b> pest access and infestation				
	<b>Materials used for the internal structure of buildings are durable, prevent build up of dirt, easy to clean and maintain and safe for staff</b>				
	Working Surfaces in food contact area are made of washable corrosion resistant and non-toxic material and maintained in a sound condition, durable and allow for easy cleaning and disinfection				
	Provide Potable water for cleaning, disinfection and handwashing				
	Adequate personal hygiene and sanitary facilities are provided in the food premises				
	Adequate natural or artificial light provided				
	There are adequate natural or mechanical ventilation				
	Food are maintained at correct temperatures The premise have reliable services to ...support the cold chain				
	Where necessary equipment are moveable or capable of being disassembled to allow for maintenance, cleaning, disinfection, monitoring and inspection for pests				
	Every vessel containing food or ingredient are covered all the time with a tight-fitting cover, lid or gauze in order to protect the food				
	All wrappers, containers and packaging material are of food grade material which will not contaminate food.				
	Machinery [and equipment] comply with sanitary design standards				
	<b>Systems</b>				
	<b>Sanitation</b>				
	Established cleaning and disinfection programs to ensure the correct hygiene standards are met to reduce the risk of a food borne outbreak				

Name of FBO:				
Address:				
Licensing/Registration:				
Mobile Number:				
Type:	Basic compliance	Medium standards	Higher & International standards	
Licensing/Registration:				
Mobile Number (optional):				
	Proper cleaning and disinfection of food preparation areas			
	Correct cleaning and disinfection (where necessary) of equipment, machinery and utensils used in food preparation and sale			
	<b>Pest control</b>			
	Adequate procedures are in place to control pests			
	The layout of the food premises permit good food hygiene practices, including protection against cross contamination, pest access and infestation			
	Buildings must be kept in good repair and condition to prevent pest access and eliminate potential infestation sites			
	<b>Purchase-Transport-storage-sale</b>			
	Appropriate food safety measures are applied during handling, storage and transportation			
	Transport of meat are carried out in such a way to prevent any contamination of the food, maintain its integrity and at appropriate temperatures			
	Food is protected from contamination during all stages of purchase, transport, storage and sale			
	Meat is protected from hazards related to contamination from air, soil, water, feed, fertilizers, pesticides, biocides, veterinary drugs, faecal contamination and cleaning and disinfection agents			
	Conveyances and any form of transport protect the meat from any contamination, including dust and fumes			
	Containers and conveyances are kept clean and are able to be effectively cleaned and where necessary disinfected between batches			
	Food items are physically separated from non-food items during transport			
	Ready to eat foods and raw meat transported in the same vehicle are adequately separated to avoid cross contamination			
	Temperature throughout the food chain is monitored and verified to ensure that the meat is safe and being maintained at the correct temperatures			
	Raw materials or ingredients are inspected and sorted on purchase or delivery			
	<b>Traceability</b>			

Name of FBO:				
Address:				
Licensing/Registration:				
Mobile Number:				
Type:	Basic compliance	Medium standards	Higher & International standards	
Licensing/Registration:				
Mobile Number (optional):				
	Have effective recall procedures to stop the delivery, sale and consumption of suspect products			
	An appropriate product identification system is implemented, connected to the animal identification system used by slaughter houses and farms			
	<b>Sampling and testing</b>			
	Routing sampling and testing of microbial, chemical or physical hazards for food safety to be in place			
	Inspectors may check test results or may collect samples for testing			
	<b>Personnel and training</b>			
	<b>Personnel</b>			
	Food Handlers maintain a high degree of personal cleanliness			
	Food handlers wear suitable clean and protective clothing while handling food			
	Food Handlers refrain from any behaviour that may risk contamination of the food			
	Food handlers suffering from any disease that can be transmitted through food are prohibited from handling food until clear of the disease			
	Food handlers with cuts, sores, wounds or boils cover the relevant area with suitable water proof dressings or, if this is not possible, refrain from handling food.			
	Food handlers wash and disinfect their hands, as appropriate			
	Food handlers are medically fit to work and provide a medical fitness certificate			
	<b>Training</b>			
	All food handlers are trained as applicable to their assigned tasks and have the necessary skills to enable them to handle food hygienically			
	Those who handle strong cleaning chemicals or other potentially hazardous chemicals are instructed in safe handling techniques			
	All employees are provided with training in an understandable language			
	Casual workers or temporarily employed staff also receive relevant training on food hygiene			

## 1.6 Live Animal Market

<b>Markets infrastructures and their maintenance</b>					
Name of FBO:					
Address:					
Licensing/Registration:					
Mobile Number:					
Type:	Basic compliance	Medium standards	Higher & International standards		
Licensing/Registration:					
Mobile Number (optional):					
		<b>Yes</b>	<b>Partial</b>	<b>No</b>	<b>Remarks</b>
	Providing required documented records, which reflect compliance to present and future laws, licensing regulation and the related applicable bylaws and decisions of the authorities				
	The market should be of a suitable size, location and construction, and be maintained to reduce the risk of disease and facilitate the animals trade without spreading pathologies around the country.				
	The layout and the animal facilities size of the lairage should be proportional to the species and the number of animals in order to keep them in a healthy manner. This is crucial for the control of notifiable and zoonosis disease.				
	Materials used for the internal structure of buildings should be durable, prevent build-up of dirt, be easy to clean/maintain and safe for staff/animals				
	The lairage structure should protect the animals from any health and welfare issues.				
	Feeding and drinking facilities design and maintenance.				
	Food should be provided to the animals if the animals stay overnight or they have been in fast for more than 8 hours				
	Every feed container or storage area shall be covered all the time with a tight-fitting cover or lid to protect the animals' feed.				
	Provide a reliable supply of electricity				
	The premises must have good lighting				
	There must be adequate natural or mechanical ventilation				
	Measures shall be exercised to eliminate any possible effect of sudden windstorm, dust storm and hazardous rain storm.				
<b>Market biosecurity and pest control</b>					
	Adequate vehicle and equipment hygiene and disinfection protocol should be in place to avoid spreading disease and pest inside and outside the market.				
	Adequate procedures must be in place to control pests and prevent domestic and wild animals (excluding the work animals as the dogs) from having access to places where the animals are kept				
	Buildings must be kept in good repair and condition to prevent pest access and eliminate potential infestation sites				
<b>Market GHP, cleaning and disinfection</b>					

<b>Markets infrastructures and their maintenance</b>				
	Maintaining all facilities, equipment and vehicle used in connection with the market and associated operations, in clean conditions and disinfect them after use.			
	Markets shall be provided with appropriate facilities and procedures in place to ensure that any necessary cleaning and maintenance is carried out effectively and to an appropriate degree.			
	A solid cleaning and disinfection program ensures the correct hygiene standards for the animals. This minimizes the risk of disease spreading and decrease the animal exposure to transmittable notifiable diseases			
	Provide potable water for cleaning, disinfection and handwashing.			
<b>Market waste management</b>				
	The Market Operator shall provide appropriate containers and suitable waste storage area. Establish adequate procedures for the storage and removal waste is crucial. All waste shall be eliminated in a hygienic and environmentally friendly way.			
	There must be an adequate system in place to drain and eliminate the waste.			
<b>Animal Health and General Husbandry procedures</b>				
	Handle animals humanely			
	Ensure the <b>fitness and the cleanliness of the animals</b> is always kept good to protect the animals' health and reduce any possible disease spread through fomites.			
	Apply General animal husbandry practices			
	Follow Procedure before accommodating new livestock			
	Follow Animal husbandry procedures for new livestock			
	Good quality, enough feed and fresh water need to be provided in order to make the animals comfortable as soon as possible. It is one of the key points in a market with a good livestock management			
	Follow procedures of Management and treatment of sick and injured animals			
	Follow procedures of Management during extreme environmental conditions			
<b>Animal Identification</b>				
	A regulatory measure at national level is strongly recommended in order to regulate the traceability. At the moment the animals' traceability in the markets could difficult to implement because animals from no-commercial and commercial farms are mixed together for sale.			

## 2. Inspection checklist for poultry farm facilities transportation and live bird market

## 2.1 Farm Biosecurity and their maintenance

<b>Inspection checklist for poultry farm facilities transportation and live bird market</b>				
Name of FBO:				
Address:				
Licensing/Registration:				
Mobile Number:				
Attributes	Yes	Partial	No	Remarks
Registration from competent authorities				
Farm shall be located in a suitable location, kept clean and maintained in good conditions at all the times. The location shall be away from polluted and industrial areas and the area shall not be prone to pests and rodents.				
The new farm location should be chosen in order to protect the animals from any kind of health risk and welfare issues which can make the animal sick and the final products (meat and eggs) unfit for human consumption.				
Farms production site should be of a suitable size, location, and construction, and be maintained to reduce the risk of diseases and facilitate the production of healthy animals				
The layout and the animal facilities size of the farm should be proportional to the species and the number of animals in order to breed them in a healthy and stressless manner.				
Materials used for the internal structure of sheds should be durable, prevent build-up of dirt, be easy to clean and maintain and safe for staff				
The farm structure should protect the animals from any health and welfare issues				
Feeding facilities design and maintenance				
Provide a reliable supply of electricity				
Adequate personal hygiene and sanitary facilities must be provided in the farm.				
The premises must have good lighting				
There must be adequate natural or mechanical ventilation				

## 2.2 Farm biosecurity and pest control

Adequate personnels and visitors' hygiene protocol should be in place. The farmer should provide the correct PPEs and make aware of Biosecurity protocol to any person entering in the farm.				
Adequate vehicle and equipment hygiene and disinfection protocol should be in place to avoid spreading disease and pest inside and outside the farm				

Adequate procedures must be in place to control pests and prevent wild and domestic animals from having access to places where the animals are kept.				
Buildings must be kept in good repair and condition to prevent pest access and eliminate potential infestation sites				
Biosecurity measures for the animals and their facilities.				
Procedure before accommodating new livestock or new-born animals				

### 2.3 Farm GHP, cleaning and disinfection

Maintaining all facilities, equipment vehicles used in connection with primary production and associated operation in clean conditions and, where necessary, disinfect them after cleaning in an appropriate manner.				
Farms shall be provided with appropriate facilities and procedures in place to ensure that any necessary cleaning and maintenance is carried out effectively and to an appropriate degree.				
Establish cleaning and disinfection programs to ensure the correct hygiene standards are met for the animals' facilities				
This refers more on the good animal cleaning procedures. It should be done in order to minimize the risk of diseases spreading, to reduce the animal welfare issues and to decrease the risk for the animals being exposed to transmittable diseases.				
Any container containing feed shall be covered all the time with a tight-fitting cover, lid or gauze in order to protect it.				
Provide potable water for cleaning and disinfection procedures.				
The farm must have reliable water services to allow thorough cleaning				

### 2.4 Farm waste management

In the farm should be appropriate containers and suitable waste storage area. Farmer should establish adequate procedures for the storage and removal of any waste. All waste shall be eliminated in a hygienic and environmentally friendly way.				
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### 2.5 Good Animal Husbandry procedures

Ensure good fitness and cleanliness of the animals. This practice ensures always cleaned and healthy animals in the farm and also reduce any welfare and health issue.				
Veterinarian drug protocol. Ensure a good protection from the disease to the animals. Rethinking the livestock system by implementing farming practices that prevent the introduction and spread of disease				
General animal husbandry practices				

Animal husbandry procedures for new day-old chicks or new-born birds in the farm.				
Good quality and enough feed and water need to be provided in order to improve the quality and the production according to the final purpose.				
Management and treatment of sick and injured animals				
Management during extreme environmental conditions. climate can be an important consideration when managing livestock in a farm. Extremes of weather may impact on animal welfare by causing heat or cold stress. Low temperatures with wind and rain may cause the animals to become chilled, while a heatwave may result in severe heat stress. The impact of extreme weather can be severe on animals				

## 2.6 Animal Identification

The "flock passport"				
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## 2.7 Transport facilities, equipment and GAHP

<b>GAHP during loading &amp; transport</b>				
Transport equipment, facilities and documents must be maintained in good order and checked before being used.				
Animal transport should take place only if the animals' facilities, equipment, vehicle, loading/unloading procedures, documents and licenses are in perfect order and well organized to reduce at the minimum the animal stress and the risk of injuries.				

## 2.8 Live Birds' Market

<b>A. Markets infrastructures and their maintenance:</b>				
Providing required documented records, which reflect compliance to present and future laws, licensing regulation and the related applicable bylaws and decisions of the authorities.				
The market should be of a suitable size, location and construction, and be maintained to reduce the risk of disease and facilitate the animals trade without spreading pathologies around the country.				
The layout and the animal facilities size of the lairage should be proportional to the species and the number of animals in order to keep them in a healthy manner. This is crucial for the control of notifiable and zoonosis disease				
Materials used for the internal structure of buildings should be durable, prevent build-up of dirt, be easy to clean/maintain and safe for staff/animals				
The lairage structure should protect the animals from any health and welfare issues				



Feeding and drinking facilities design and maintenance in the shed (if applicable). Food should be provided to the animals if the animals stay overnight or they have been in fast for more than 8-12 hours				
Every feed container or storage area shall be covered all the time with a tight-fitting cover or lid to protect the animals' feed.				
Provide a reliable supply of electricity				
The market/promises must have good lighting				
There must be adequate natural or mechanical ventilation				
Measures shall be exercised to eliminate any possible effect of sudden windstorm, dust storm and hazardous rain storm.				
<b>B. Market biosecurity and pest control</b>				
Adequate personnels and visitors' hygiene protocol should be in place. The Market Operator (MO) should provide the correct PPEs and make aware of Biosecurity protocol to any person entering in the Market.				
Adequate vehicle and equipment hygiene and disinfection protocol should be in place to avoid spreading disease and pest inside and outside the market				
Adequate personal hygiene and sanitary facilities must be provided in the Live Animals Market.				
Adequate procedures must be in place to control pests and prevent domestic and wild animals from having access to places where the animals are kept.				
Buildings must be kept in good repair and condition to prevent pest access and eliminate potential infestation sites				
Procedure before accommodating new livestock or new-born animals.				
<b>C. Market GHP, cleaning and disinfection</b>				
Maintaining all facilities, equipment and vehicle used in connection with the market and associated operations, in clean conditions and disinfect them after use.				
Markets shall be provided with appropriate facilities and procedures in place to ensure that any necessary cleaning and maintenance is carried out effectively and to an appropriate degree				
A solid cleaning and disinfection program ensures the correct hygiene standards for the animals. This minimizes the risk of disease spreading and decrease the animal exposure to transmittable notifiable diseases				
Provide potable water for cleaning, disinfection and handwashing. The lairage must have reliable services to allow thorough cleaning				
<b>D. Market waste management</b>				
The Market Operator shall provide appropriate containers and suitable waste storage area				
Establish adequate procedures for the storage and removal waste is crucial. All waste shall be eliminated in a hygienic and environmentally friendly way. There must be an adequate system in place to drain and eliminate the waste.				
<b>E. Animal Husbandry procedures</b>				

Animal movement: Moving and drafting livestock				
Animal health and general animal husbandry practice: Ensure the fitness and the cleanliness of the birds is always kept good to protect the animals' health and reduce any possible disease spread through fomites.				
General birds' management practices in the live animals' market.				
Procedure before accommodating new livestock				
Good quality, enough feed and fresh water need to be provided in order to make the animals comfortable as soon as possible. It is one of the key points in a market with a good livestock management.				
Management and treatment of sick and injured animals				
Management during extreme environmental conditions				
Climate can be an important consideration when managing livestock in a market. Extremes of weather may impact on animal welfare by causing heat or cold stress. Low temperatures with wind and rain may cause the animals to become chilled, while a heatwave may result in severe heat stress. The impact of extreme weather can be severe on animals especially those ones arrived from other more temperate areas of the country.				
<b>F. Animal Identification</b>				
Use of the flock identification during the commercial movements				
Each flock must have an individual "flock passport" and it should be kept in a secure place by the Market Operator (MO) during the time spent by the birds in the market.				

### 3. Inspection checklist for milk value chain

#### 3.1 Inspection check list of dairy farm facilities

Name:
Address:
Registration:
Mobile Number:

Attributes	Yes	Partial	No	Remarks
<b>Inspection check list of dairy farm facilities</b>				
Having farm registration from competent authority				
<b>Infrastructure and their maintenance</b>				
Well-ventilated Housing				
Separate area for milking cows, pregnant cows and calf pen				

Attributes	Yes	Partial	No	Remarks
<b>Inspection check list of dairy farm facilities</b>				
Ventilation facilities				
Bedding area is dry and clean				
<b>Biosecurity measures</b>				
➤ Fencing, Gate				
➤ Foot bath, Gate				
➤ Gate				
➤ No preventive measure				
➤ Wall protected area				
Pest control programs				
Having a record of Animal movements on and off the farm				
<b>GAHP/GHP</b>				
Clean and safe water source				
Clean Water is freely available to animals at all times				
Soil and water taste in pasture field				
Record for sick animals treated by				
➤ Veterinarian				
➤ Para-professional				
➤ Non-Professional				
Written program to control possible heat stress (following THI card in the shed)				
Electricity facilities and Backup support				
Well feeding facilities design and maintenance				
Control/separate storage conditions of animal feed				
Records of feed/feed ingredients purchase and use				
Records of vaccination (i.e., following schedule vaccination)				
Records for anthelmintic/deworming (i.e., following schedule deworm program)				
Cleaning in farm facilities (Equipment, work tools must be cleaned daily and disinfected at least weekly)				
Hygiene and sanitation measure in milking parlor				
Ensure milking routines				
Having isolation and quarantine area in the farm				
Record of diseases and treatment				

Attributes	Yes	Partial	No	Remarks
<b>Inspection check list of dairy farm facilities</b>				
Record for using antibiotics				
Training record for farm staffs				
Welfare of Farm workers (i.e., health checkup, dress code, working hour, training)				
Farm staff facilities (i.e., Toilets, canteen)				
<b>Waste management</b>				
Drainage facilities				
Disposal pit for a dead animal far away from farm premises				
Manure heap well separated from the clean areas where animals are kept and feed is stored				
Records for disposed farm materials i.e., used syringes/needles/ vial/ remaining drug				
<b>Animal identification</b>				
Using any mark for individual animal (ears tag, tattoo, microchip or any other kind of identification system))				
Having Relevant animals' identification documents				
<b>Other</b>				
Having loan agreement with legal authority (Bank/MFI)				
Having accounts register				
Independent audit in the facilities				

### 3.2 Inspection checklist for Milk collector/Goyala

Name:
Address:
Registration:
Mobile Number:

Attributes	Yes	Partial	No	Remarks
Having registration or name in the list of DLS				
Has an up-to-date listing of milk suppliers and their registration numbers				
Have a system in place for the detection of adulterants and antibiotics				

Have a reporting system for suppliers for preservatives found in raw milk during carrying milk				
Having stainless still container for carrying milk				
Recording for amount of milk purchase, milk selling and about spoiled milk				
Recording temperature of milk at collection				
Hygiene and sanitation measure for milking man/Goyala				
Water availability and quality				
Washing facilities (cleaning regime exists/transport and others)				
Maintaining any dress code during milking and transport				
Health checkup of milk collector				
Having any cold chain facilities to keep the milk in good cool condition				
Observe and record the information on the temperature of milk during storage, before and after processing				
Cleaning and disinfectant of				
Having training certificate for cow milking and farm management i.e., providing feed/water				
Record milk temperature at time of delivery				
Maintain standard required time for bringing raw milk from the farm house to the market/chilling plant				

### 3.3 Inspection checklist for milk chilling point

Attributes/issues	Yes	Partial	No	Remarks
Legal registration from competent authority				
Having records of previous inspections				
Having traceability record (milk comes in and goes out from the facilities)				
Location details, facilities map				
Biosecurity measures (Operating area, footbaths)				
Supply of potable water (supported by testing documentation) Clean and safe water availability				
Washing facilities (cleaning regime exists)				
Records of temperature of milk at accepted to facility				
Records of temperature of milk when shipped from facility				
Equipment validation (Service & maintenance, validation, third party audits etc.)				

Attributes/issues	Yes	Partial	No	Remarks
Check whether the gate valve, discharge motor, whip pipe is clean				
Equipment validation (Service & maintenance, validation, third party audits etc.)				
Checking amount of milk volume from scall and Farm Culling Tank (FCT)				
Checking of condition of milk on arrival (Temperature, foreign matter, smell, color, Test results, test frequency)				
Records for followed examination/platform test during the collection of milk				
Checking whether the temperature of the thermometer is correct with the temperature of the FCT				
Check whether the reading of digital machine is correct with Batkhara				
Checking whether FCT, generator, geyser is OK				
Keeping records of treated wastewater that correctly done				
Check whether the fat in the QC register, matches with the final bill register				
Checking the difference between purchased milk fat and fat obtained from QC register center				
Testing record of milk for FCT (Fat, CLR, Sugar, Oil, Soda etc.)				
Checking whether CIP (Cleaning in Place) SOP is being followed				
Rejected product segregation and disposal facilities of spoil milk/milk products				
Have records of where rejected milk is consigned				
Checking milk reject file				
Check of collected milk and chilled milk in the facilities				
Having emergency backup electric supply facilities				
Health checkup of staffs				
Training records exist for staff				
Having the written record of inspector to check the hygienic status of the premises.				
Having dress code of workers/staffs				
Having cleaning contract place				
Plan for staff development initiatives exist				

### 3.4 Inspection check list for sweetmeat shop

Name of FBO:
Address:
Licensing/Registration:
Mobile Number:

Attributes	Yes	Partial	No	Remarks
Legal permission from any competent authority				
Sweetmeat shop registered with any competent authority				
Having traceability record (milk/product comes in and goes out from the facilities, coding of the product)				
Separate dedicate space for manufacturing products and outlets				
Hygiene and sanitation measure for cleaning the premises				
Potable water supply				
Records of water test for quality /safety				
Cleaning utensil/tools with standard procedure				
Having storage facilities to keep products in good condition				
Rejected product segregation and disposal facilities of spoil milk / milk products				
Food products for laboratory tests				
Record keeping of tasted samples				
Product segregation facilities				
Labelled milk product package				
Date of Manufacture on Pack				
Expiry Date on Pack				
Having precautions before receiving milk				
Having cool chain facilities				
Have records of temperatures at cool chain points				
Health checkup of staffs				
Having emergency backup electric supply facilities				
Having the written record of inspector to check the hygienic status of the premises/sweetmeat shop				
Dress code of workers of sweet meat shop and manufacturing unit				
Record for Training of staff and worker				
Staff facilities (i.e., Toilets, canteen)				



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