1. Introduction

Guidelines/Standard Operation Procedure for milk collection and transportation in the milk collection chain is a fundamental need for the quality improvement of raw milk in Sri Lanka. This document guides farmers, milk collectors, transporters, processors and sellers in milk collection, transportation in the milk collection chain and, subsequently, the availability of quality raw milk for the production of quality milk products and quality fresh milk in the market.

The document consists of

1. Guidelines/Standard Operation Procedure for raw milk in milk collection chain
2. The procedure for the registration and monitoring of the premises and personnel in the milk collection chain in the Department of Animal Production and Health and registration no. format
3. Checklists for the registration and, monitoring of the premises and personnel in the Department of Animal Production and Health

<u>Standard Operation Procedure and Guidelines for raw milk in milk collection chain</u>

The following are the guidelines/standard operation procedure.

- Hygienic milk handling and transportation from farm to milk collecting point/milk receiver- implemented by farmers and milk collector.
- Receiving, handling, storing and dispatching milk at milk collecting points (MCP)-implemented in milk collecting points.
- Receiving, handling, storing and dispatching milk at Milk Chilling Center (MCC)-implemented in milk chilling centers.
- Receiving and storing raw milk until processing in the Milk Processing Plant (MPP)-implemented by a milk processing plant.
- Hygienic milk handling and transportation from farm to household consumers or to the retail market - implemented by farmers who sell milk.
- Hygienic milk collection and transportation of raw milk to regional small-scale milk processors-implemented by farmers or regional milk collectors or regional small-scale milk processors.

- Milk transportation from farm, to MCP, MCC, MPP and bulk milk collector - implemented by milk transporters.
- Cleaning, washing and disinfecting of utensils, equipment, and tanks - implemented by all the personnel involved in the milk collection chain.

The procedure for the registration and monitoring of the premises and personnel in the Department of Animal Production and Health

The following personnel and premises are monitored and registered with the Government Veterinary Office (GVS) to facilitate the implementation of guidelines to achieve quality raw milk for fresh milk consumers and processors.

- Farmers who sell raw milk and own small-scale processing plants
- Regional milk collectors
- Small-scale processors who produce dairy products with daily milk collection and selling to the regional market
- Milk collecting points and milk chilling centers
- Milk processing plants/factories are monitored for raw milk receiving

Check list for the registration and, monitoring of the premises and personnel in the Department of Animal Production and Health

All the above personnel and premises are inspected with a checklist before registration in the Department of Animal Production and Health. The registration will be renewed annually. The milk processing plants/factories are monitored annually by the Veterinary Research Institute, Department of Animal Production and Health.

2. Guidelines/Standard Operation Procedure for raw milk in milk collection chain

2.1 Guidelines/ Standard Operation Procedure for hygienic milk handling and transportation from farm to milk collecting point/milk receiver

Objective -To ensure the proper handling, storage, and transportation of raw milk from farm to milk receiver with maintenance of its quality

Scope -This SOP applies to dairy farmers who do the handling, storage, and transportation of raw milk from farm to milk receiver

*Receiver – MCP/MCC/milk collector

***Farm Registration, inspection and monitoring responsibility DAPH

	Standard Operation Procedure	Timeline
	General	
1	Collect milk a clean and dried milking bucket (SS 304G or aluminum, food grade)	<2 yrs.
2	Strain individual cow's milk into cleaned and dry pool milk cane (SS 304G or aluminum, food grade)	<2yr.
	Milk collection, transportation and milk rejection	
3	Make sure milk reaches the receiver just after milking (as soon as possible) Stage 1: Farmer transports milk within one hr. to MCP (no chilling facility) or to milk collector or transports milk directly to MCC Stage 2: Farmers transports milk in less than two hrs. to MCP with the chilling facility (4^0C) or within 2hrs to MCC (assumption: availability of the MCC to receive milk 2hrs of collection of milk at farm or /and availability of chilling facilities in all MCP for the required volume of milk collection: mini chillers)	<1yrs. <5 yrs.
4	If evening milk is collected	

	Stage 1: - Immediately (within two hrs. of milk collection) send to MCC or refrigerated (home)to <4^0C - Chilled milk (<4^0C) is sent to MCP in an insulated container - Chilled milk (<4^0C) is sent to MCC separately in cool conditions (4^0C) within 2 hrs. of collection Stage 2: The refrigerated milk (<4^0C) is sent to MCP with chilling facilities or MCC within 2 hrs. of milk collection from the farm -Chilled milk should not mix with milk at ambient temperature)	<2yr, <5yrs.
5	The transport cans should not be directly exposed to sunlight or high environmental temperature	<1 yr.
6	If milk is rejected due to non-compliance with the quality requirement of MCP • The farmer brings back rejected milk and discards in the farm premises • Ensure rejected milk does not contaminate surface water or groundwater	<1yr.
	Record keeping and training	
7	Keep records on milk collection/selling data, quality test records, if stored, storage temperature, rejection	<1yr.
8	Conduct training for farmers on hygienic milk collection, handling, storing and transportation	<1yr.
9	Provide guidelines for milk handling and transportation in both Sinhala and Tamil languages to all dairy farmers	<1yr.

2.2 Guidelines/Standard Operation Procedure for receiving, handling, storing and dispatching milk at milk collecting points (MCP)

Objective- To ensure the hygienic and efficient receiving, handling, and storing of raw milk at milk collection points to maintain quality and prevent contamination.

Scope -This SOP applies to all personnel involved in the receiving, handling, and storage of milk at collection points.

**Milk Collecting Point (MCP) - Receiving and collecting raw milk from more than one farm and handing over for the transportation to MCC

- The responsibility of registration, inspection and monitoring – Dept. of Animal Production and Health (DAPH)
- The responsibility for the management and operation of SOP – relevant MPP

	Guidelines/Standard Operation Procedure	Timeline
	General	
1	All MCP should be registered in the Dept. Animal Production & Health	1yr.
2	MCP should collect milk from registered dairy farms (registered in GVO/ Provincial DAPH)	1yr.
3	Select a location that is easily accessible for farmers and milk collectors • Road access and space for vehicle park • To receive milk within one hr of milk collection from a farm • Availability/access to electricity, clean water and proper drainage system	<2yrs.
4	Proper premises with the following basic facilities - Availability of hand/utensil washing facilities - Availability of a place for the initial washing of milk cans of the farmers - A place to keep record-keeping books/ utensils/testing equipment/sample collection bottles - A place to keep milk transport cans until dispatched to transport lorries/trucks - A place to store the other set of transport cans (washed and dried) brought by the transporter from MCC/collector -Toilets are not facing/close to the milk collecting/storing and testing area	<2yrs.
5	Ensure the capacity of the premises is sufficient to establish mini-chilling facilities	<5 yrs.
6	Cleanliness of working staff/milk collector <u>Stage 1</u>: With clean clothes and free from any illness, wounds/cut on hands	<1yr. <5yrs.

	Stage 2: Working staff are provided protective clothing (clean uniforms, gloves, and hairnets) and health monitoring activities	
7	Availability of cleaning schedule and procedure to ensure all equipment are cleaned and sanitized Regular sanitization of floors, walls, storage areas, weighing instruments, filters, measuring tools, milk testing instruments	<1yr.
	Milk receiving and handling	
8	Inspect milk cans for cleanliness visually at receiving	<1yr
9	Filter (recommended pore size 100-150 microns, non-woven fabric material or stainless-steel screen or mesh) and measure the received milk (volume or weight) Make sure to prevent cross contamination and use properly sanitized containers if measure the volume	<2yrs.
10	-Collect a sample for milk testing from each farmer -Get the milk temperature -Testing of milk samples at MCP • Platform test • Organoleptic test • Alcohol test (minimum 68%) • LR/Fat(optional) • COB (optional) • Acidity(optional) • Resazurin (optional) - Send milk samples to MCC for LR/Fat - If suspect any adulterant in an organoleptic test, inform the farmer and request MCC to test for adulterants -If any quality issue is suspected, transfer the suspected milk into a separate transport cane	< 2 yrs.
11	Rejection of milk -Non-compliance with the test results performed in MCP	<1yr.

	If positive for 68% alcohol test, reject milk • If the suspected positive reaction is due to any other management issue and not due to a hygiene issue (microorganism), inform the farmer. Then the milk is sent separately to MCC to check for other testing (keeping quality testing/adulterants etc.) and decide whether to reject or accept based on the test results at MCC - If the cool milk temperature is $>4^0$C reject milk - If milk is rejected at MCC, milk is discarded in MCC and aware the farmer - If the milk is rejected at MCP, milk is taken by the farmer (do not discard milk in MCP premises)	
12	Transfer milk (compliance with test results) into transport cans <u>Stage 1</u> - Washed and dried milk transporting cane (SS 304G or aluminum/food grade) - Label milk transporting cans with farmer no. (traceability to cane level) - If milk is collected from more than one farmer to one cane, label farmer no. and cane no. - If the MCP receives cool milk, $<4^0$ C transfers milk to insulated cans <u>Stage 2</u>- Transfer milk in mini chilling tank/transport cans (temperature 4^0C)	<2 yrs. <5 yrs.
	Milk transport cans dispatch	
13	-Ensure to close the lids of the milk transport cans (as soon as transfer milk to the cans) and store <u>Stage 1</u>- Store in a cool place until dispatched to the transport vehicle <u>Stage 2</u>- Store chilled milk into a mini chilling tank at 4^0C until dispatch -Transport chilled milk in insulated cans	< 1yr. < 5yrs.
14	All empty cans of the farmer are subjected to initial washing at MCP	< 1yr.
15	Hand over milk transport cans to transporter and receive empty cleaned, washed, and dried cans and, store them in a clean place at MCP	< 1yr.

16	Stage 1: Make sure transporting un-chilled milk cans reach MCC within 1hr Stage 2: Chilled milk collected at MCP should reach MPP via MCC within 48hrs of milking or directly to MPP within 48hrs of milking	<1yr. <4yrs.
17	Daily cleaning and sanitizing of the working area, equipment as to the schedule	<1yr.
	Record keeping and training	
18	Record keeping - Source of milk (farm/supplier). - Date/time /temperature of milk receipt and storage - Test results (fat/SNF/Alcohol/adulteration) - Milk rejection data with reasons for rejection - Suspicious abnormal milk data - Workers - Visitors log book	<1yr.
19	Proper disposal method for waste/by-products to avoid contamination of the collection point	<1yr.
20	Conduct training for all personnel at the collection point on hygienic milk handling practices, equipment cleaning and sanitization, and testing samples	<1yr.
21	Display guidelines in MCP for the working staff in both Sinhala and Tamil languages	<1yr.

2.3 Guidelines/Standard Operation Procedure for receiving, handling, storing and dispatching of milk at Milk Chilling Center (MCC)

Objective: To ensure the proper hygienic reception, handling, storing and, dispatching milk at milk chilling center (MCC) to maintain its quality and safety

Scope: This SOP applies to all personnel involved in receiving, storing and handling and, dispatching of raw milk at the MCC

* MCC (including bulk milk collectors' chilling centers) registration, inspection, and monitoring- DAPH

** MCC Management- Milk Processing Plant (MPP)/bulk milk collectors

	Guidelines/Standard Operation Procedure	Timeline
	General	
1	All MCC should be registered in the Dept. of Animal Production and Health	1yr.
2	Select an easily accessible location for milk transporters (MCP or milk collectors) - Road access and space for vehicle parking - Distance to receive milk within two hrs. of milk collection from the farm or within one hr. from the MCP - Away from polluted/garbage dumping areas, marshy lands (select a new place for MCC accordingly and modify the existing MCC)	<2yrs.
3	Proper building with basic facilities Availability of - 24 hrs. electricity supply (availability of generator) - Potable water, hot water facilities, and proper drainage system - Cleaning facilities (place/detergents/disinfectants etc...) for hand/utensils/ cans, milk pumps, lines, milking tanks, pipelines, and vehicles - Milk storage facilities - chilling tanks - Storage facilities for utensils, testing equipment, cleaned/dried transport cans, and record keeping books etc. - Working places to receive, weigh, collect samples, transfer milk etc. - Proper ceiling and lighting - Keep rubber matting in the milk unloading area - Use proper measures to control pests (pest control program and other animals) - Chilling area is separated from other areas of the MCC - Cleaning schedule and procedure for MCC and ensure MCC complies with required hygienic standards	<2yrs.

	- Equipment calibration schedule - Traceability system for identifying the source of milk - Waste management system - Toilets are not facing/close to the milk collecting/storing and testing areas (Select new buildings accordingly and modify existing MCC)	
4	The cane transport vehicle should be - Top covered with insulation to make sure cans are not directly exposed to sunlight or high environmental temperature - Maintain clean and free of odor - If the milk transport vehicle is used for other purposes, MCC makes sure the vehicle has undergone a special cleaning and washing program (ref. SOP for transporter)	<1yr.
5	Cleanliness of working staff/milk collector <u>Stage 1:</u> With clean clothes and free from any illness, wounds/cuts on hands <u>Stage 2:</u> The working staff is provided with protective clothing (clean uniforms, gloves, and hairnets) and health monitoring activities.	<1yr. <4yrs.
6	Availability of cleaning schedule and procedure (functional) Including - MCC premises: floors, walls, storage areas - Milk transport cans which are sent to MCP and milk transport vehicles - Milk chilling tanks - Weighing instruments, filters, measuring tools, milk testing instruments	<1yr.
7	The traceability system identifies the source of milk up to cane level (one farmer or 2-3 farmers' milk in one cane) -Identify the farm, based on test results -Take action (rejection/awareness/ correction/payment deduction) The traceability system identifies the source of milk up to the farm level	<1yr. <3yrs.
	Milk receiving, handling, and testing	
8	MCC should receive raw milk only from DAPH registered MCP or collectors or bulk milk collectors	<1yr
9	Inspection of the milk transport cans delivered to MCC	

	- Make sure the milk is transported in SS 304G or aluminum, food-grade cans - Check the condition of the milk transport cans for any damage, cleanliness, and sanitation - Visually inspect/smell the milk for any signs of abnormalities, contamination, or spoilage and any foreign material	<2yrs.
10	Testing of milk samples - Representative samples and risk-based samples according to the sample plan - Samples from individual farmers who brought milk directly to MCC - Collected samples from individual farmers at MCP for payment	<1yr.
11	Testing of milk samples at MCC -Check the milk temperature -Composite/representative samples • Organoleptic test • Alcohol test (minimum 68% alcohol) • Acidity /PH (optional) • COB (optional) • Resazurin/methylene blue (random) • LR/Fat -Risk-based samples • Adulteration (optional, based on the risk). This includes the list of suspected adulterated milk received from MCP • Antibiotic residues(optional) • Test separately suspected samples for quality deviation -Water quality testing (microbiology/PH/salinity)	<1yr.
12	Weigh, filter, and transfer milk immediately after testing - Weigh milk canes - Filter milk into chilling tank as soon as possible and ensure to use clean filters	<2yr.

	- Make sure milk non-compliance with test results, is not added to the chilling tank	
13	Rejection of milk (milk transport cans), non-compliance with test results	2yrs.
14	Discard rejected milk to a waste pit at MCC premises - Make sure rejected milk does not contaminate surface water or groundwater - If the milk in the chilling tank is rejected, it is handed over to gully bowser or discarded into a pit at MCC premises (if a facility is available) -Rejected milk cans (received from the MCP/collector) are not returned to MCP with milk	4yrs
	Storing and dispatch	
15	Ensure - To chill milk to 4^0C within 2 hrs. in the chilling tank and maintain the chilling tank temperature at 4^0C - Monitor the chilling tank temperature (sensors and manually) every hour - Install the pre-cooling unit to cool milk before entering to the chilling tank to reduce the cooling time and prevent temperature fluctuations in the chilling tank milk - If storing milk overnight, ensure to maintain the temperature to 4^0C until dispatch	<5yrs.
16	Transfer milk to milk bowser - Seal bowser tank after transferring milk to the bowser - Make sure the milk is in 4^0C during dispatch and reaches the MPP as soon as possible - Issue milk dispatch and transfer note at the time of departure of the bowser (volume/ milk collected data etc.) - Collect the bowser samples or/and chilling tank samples and test in MCC according to the sample plan (MCC ensures milk reaches MPP within 48hours of milk collection at the farm)	1yr.

17	The empty milk transport cans are subjected to cleaning and washing at MCC (ref. SOP for cleaning, washing and disinfection) - Cleaned, washed milk transport cans are dried and stored by the transporter - Cleaned, washed, and dried milk transport cans are handed over to MCP by the transporter (ref. transporter SOP)	<1yr.
18	Chilling tanks are subjected to Clean In Place (CIP) or manual washing (ref. SOP for cleaning and disinfection)	<1yr.
19	Cleaning and sanitizing of working area and equipment as to the cleaning schedule and the procedure	<1 yr
	Record keeping and storing	
20	Record keeping - Traceability records (source of the milk (MCP/collector/farmer). - Milk dispatch and storage records (date/time /weight/temperature of milk at receiving/storage) - Temperature monitoring/breakdown record of the chilling tank - Water quality testing and milk quality testing results - Pest control records - Cleaning and disinfection records - Equipment maintenance records - Glass available/breakage records - Workers' health records - Records on equipment calibration	<1yr.
21	Proper disposal method of waste/by-products to avoid contamination of milk in MCC	<1yr.
22	Conduct training for all MCC personnel on hygienic milk handling practices, equipment cleaning and sanitization, sample testing, etc.	<1yr.
23	Display guidelines for work instruction in MCC for the working staff in both Sinhala and Tamil languages	<1yr.

2.4 Guidelines\Standard Operation Procedure for receiving and storing raw milk until processing in the Milk Processing Plant (MPP)

Objective: To ensure the proper hygienic reception, efficient handling, and storage of raw milk at the Milk Processing Plant (MPP) to maintain its quality and safety until processing

Scope: This SOP applies to all employees involved in the receiving and storing of raw milk at the Milk Processing Plant (MPP)

MPP –The responsibility of inspection and monitoring – Dept. of Animal Production and Health (DAPH)

MCP – The responsibility for the management and operation of SOPs in MCP, MCC and MPP by the relevant MPP

	Guidelines/Standard Operation Procedure	Timeline
	General	
1	Location of MPP -Easily accessible for milk bowsers -Road access and space for vehicle parking -Ensure that no unauthorized personnel enter the milk receiving and storage area	1yr.
2	Availability of - Sufficient facilities to store milk or to initiate processing directly without storing - Laboratory facilities to test samples as to the sample plan and calibrate instruments - Working place to weigh (weighbridge or to measure volume) and collect samples - Clean water, proper drainage system, and waste management - Traceability system for identifying the source of milk	1yr.
3	Availability of place, schedule, and procedure for cleaning - CIP or manual washing of milk bowsers after transferring milk to storage tank	1yr.

	- CIP or manual washing of empty storage tanks, milk filters, pipes horses, milk testing instruments, etc. - Regular sanitization of milk receiving area - Facility for handwashing, cleaning and disinfection of utensils	
4	Cleanliness of working staff - Protective clothes are provided for the staff (clean uniforms, gloves, and hairnets) working staff - Conduct scheduled health monitoring activities for working staff	1yr.
	Receiving, handling, and testing	
5	Milk should be received from registered Milk Chilling Centers (belonging to MPP or bulk milk collectors' chilling centers) in DAPH (MPP may receive milk either from their own MCC/milk collector or bulk milk collector or from anther MPP)	1yr.
6	Preparation to receive milk bowser from MCC - All the machines (transfer lines, pipes and horse), and storage tanks are cleaned, washed, sanitized, and free from contaminants - All testing equipment is ready to collect samples for testing milk at the receiving	1yr.
7	Milk bowser receives an MPP (within 48hrs of milk collection from the farm) - The temperature of milk in the bowser should be 4-6^{0}C. Temperature sensors should be available (monitoring of temperature by the transporter) - Action has to be taken to minimize the time gap (milk receiving from MCC to MPP) - Transporter hands over the dispatch/transfer note to the MPP brought from MCC (includes date /time of departure/volume etc.	4yrs.
8	Inspect the bowser -Visually for any damage, leakage or any sign of contamination -Bowser tank lids are sealed and availability of traceability tag	1yr.
9	Check and verify the records of the source of milk (MCC/collector), temperature maintenance, and quantity	1yr.

10	Collect samples - Collect representative milk samples for testing and store (retention) according to the sampling plan from each apartment of each bowser - Check the milk temperature of each sample	1yr.
11	Testing of samples Routine testing • Organoleptic test • Composition SG/TS/SNF/Fat • Keeping quality test, Resazurin/methylene blue • Titratable acidity, • Alcohol test • Microbiology/TPC (optional) Risk-based testing • Adulterants • Residues (antibiotic residue) Periodic • Protein (optional) • SCC • Aflatoxin • Residues, pesticides, heavy metals (optional) (Validation from the external accredited lab every six months or annually)	2yrs.
12	Make sure to perform quality tests as soon as possible before transferring milk to storing tanks	1yr.
13	Transfer of milk to storing tank (directly or thermalization or initiate processing after thermalization)	1yr.
14	Filter milk while transferring (storage tank or initiate processing)	1yr.
15	Maintain milk at a temperature of 4°C and monitor temperatures continuously at regular intervals in storage tanks	4yrs.
16	Gently agitate the milk in storage tanks to maintain consistency	1yr.

17	Testing of milk in a storage tank again if milk is stored for more than 24 hrs. (alcohol/ Resazurin/acidity)	1yr.
	Cleaning rejection and disposal	
18	Cleaning (CIP) the empty bowsers to prevent biofilm buildup just after transferring milk (ref SOP cleaning and disinfection) - Seal bowsers after CIP - If the clean bowser is not used for the transportation of milk for more than 24 hrs. clean and wash again before using it for the next transportation	1yr.
19	Cleaning the storage tanks as per the cleaning schedule to prevent biofilm buildup	1yr.
20	Cleaning and sanitizing of the working area, milk filters, pipes, horses, and testing equipment as to the schedule	1yr.
21	Rejection from milk from bowser in noncompliance with milk quality testing results	1yr.
22	Rejected milk at MPP is sent to the gully bowser or discarded in the MPP premises if the facility is available and ensured not to contaminate surface water or grounded water	1yr.
23	Proper disposal method for waste/by-products to avoid contamination	1yr.
24	In the case of receiving milk from another MPP or any other bulk milk from a third party, the receiving MPP ensures to transfer milk only in compliance with testing parameters	<2yrs.
	Record keeping and training	
25	Record keeping - Bowser receiving (source of origin up to MCC level/Volume/ temperature/time duration) - Milk storage records (storage tank no., date, time, quantity, label, temperature, etc.) - Milk testing results - Deviations of any milk-receiving issues and action taken (corrective measures)	1yr.

26	Conduct training in hygienic milk handling practices, equipment cleaning/ sanitization, sample testing for MPP receiving staff, and laboratory testing staff and transporters	1yr.
27	Provide guidelines in MPP for the milk-receiving staff in both Sinhala and Tamil languages	1yr.

2.5 Guidelines/Standard Operation Procedure for hygienic milk handling and transportation from farm to household consumers or to the retail market

Objective -To ensure the proper handling, storage and delivery of raw milk to household consumers and the retail market with the maintenance of its quality

Scope-This SOP applies to a milk collector who delivers raw milk to household consumers and the retail outlet

*Milk collector: In this, a milk collector is a farmer or any person who collects milk and delivers it to household consumers or the retail market

**Retail market; who sells raw milk to household consumers (fresh milk consumers)

Milk collector - registration and monitored by DAPH

	Guidelines/Standard Operation Procedure	Timeline
	General	
1	Milk collectors or farmers who supply raw milk to the retail market/ household consumers are registered in DAPH	1yr.
2	Collect milk into cleaned dried milk bucket (SS 304G or aluminum, food grade (20L/40L)	<2yrs.
3	Milk collectors wear clean clothes and are free from any illness, wounds/cuts on their hands	1yr.
4	Milk collector tests milk for Organoleptic tests Alcohol test (minimum 68%) LR/Fat randomly (optional)	<2yrs.
5	Make sure the transport vehicle	

	Stage 1 - Top covered with insulation to make sure bottles/containers are not directly exposed to sunlight or high environmental temperature If milk cans are used to transport milk to the retail market, make sure not to expose to direct sunlight or high environmental temperature Stage 2 -Use cooling containers (cooling mechanism) during the transportation of raw milk to household consumers and the retail market	1yr. <2yrs.
	Household consumers	
6	Strain and pour milk into washed and dried glass bottles /milk containers (farmer /milk collectors who supply/deliver raw milk to consumers)	1yr.
7	Load bottles or milk containers to transport the vehicle and properly packing	1yr.
8	Deliver to household consumers immediately (within 1-2 hrs. of milking) -Transport in cool conditions temp at 4^0C	2yrs.
9	Aware consumers (milk receivers) - Immediately chill the milk to a temperature of 4^0C -If milk is not prepared for consumption at the time of reception, it should be stored in the refrigerator for a few hrs. (not more than 1-2 hrs.) -If milk is not prepared within 1-2 hrs. freeze milk immediately at receiving, but not to store more than 1 day in the freezer (Make sure to use/consume milk with in the 24hrs of milking) - Wash empty glass bottles immediately after milk is used (initial washing)	1yr.
10	Empty glass bottles (initially washed by the consumer) are collected by the milk supplier and washed/dried as directed (refer. cleaning and washing of bottle)	1yr.
	Raw milk retail market	
11	Strain milk into cleaned milking cane (SS 304G or aluminum, food grade) by the farmer /milk collectors who supply/deliver raw milk to the retail market)	1yr.
12	Load milk cans to transport the vehicle	1yr.
13	Deliver to retail market/retail outlet immediately - Within 1 hr of milking - If it takes more than 1 hr of milking, transport in cool conditions temp at 4^0C	1yr.

14	Ensure retail outlet personnel (milk receivers) to store milk at 4^0C immediately after receiving	1yr.
15	Maintain milk storage temperature at 4^0 C, keep records and sensors for temperature	1yr.
16	Raw milk is sold in bottles or in containers or bottles brought by the customer	1yr.
17	Milk is bottled and labeled (date of collection, instructions for consumers)	1yr.
19	Aware customers/consumers - If milk is not prepared for consumption immediately, chill the milk to a temperature of 4^0C (not store for more than 1- 2 hrs.) -If milk is not prepared within 1-2 hrs. freeze immediately but make sure not to store it for more than 1 day - Wash empty bottles immediately, after milk is used (initial washing)	1yr.
20	Empty bottles are collected by the retail outlet and washed and sanitized at the retail outlet (availability of a separate place to wash bottles and required detergent) Or Use disposable milk containers	1yr.
	Record keeping and awareness	
21	Keep records on - Farmer/collector/ retail market -records on milk selling, delivery, receiving, storing etc. - Milk testing data - Any complaint about milk quality (household consumers, retail market)	1yr.
22	Farmer/retail market - testing of milk samples randomly for quality/food safety issues	1yr.
23	Conduct awareness programs for farmers, personnel in the retail market and collectors on hygienic milk collection, delivery, and storing Public (fresh milk consumers) on handling and storing raw milk before preparation.	1yr.

2.6 Guidelines/Standard Operation Procedure for hygienic milk collection and transportation of raw milk to regional small-scale milk processors

Objective -To ensure the proper collection and transportation of raw milk to a small-scale milk processing plant with the maintenance of its quality for milk processing

Scope -This SOP applies to small-scale milk processors, including farmers who are involved in small-scale milk processing

*Small-scale milk processors are either dairy farmers who produce and collect raw milk for their own processing and/or collect milk directly from other farms to produce milk products

Or a person who (not a dairy farmer) collects raw milk directly from other farms or receives milk from milk collectors, and produces milk products

The small-scale processors produce milk products from day-to-day milk collection and do not store milk for processing

**Small-scale processors - The responsibility of registration and monitoring - DAPH

	Guidelines/Standard Operation Procedure	Time line
1	Collect milk into cleaned and dried milking buckets (SS 304G or aluminum, food grade	<2yrs.
2	Strain and pour milk into washed and dried cans/containers (SS /aluminum) and top covered until start processing	<2yrs.
3	-If milk is collected either from other farms or collected by a milk collector, the milk should be transported to the small-scale processor as soon as possible Ensure processing is initiated within 2 hrs. of milk collection	<1yrs.
4	If milk cannot be used for processing within two hrs. the small-scale processor makes sure to store milk at 4^0C (immediately) until processing Stored milk at 4^0C is used for processing within 1 day of the collection	<1yr.
5	At the reception of the milk for processing, the milk is subjected to a test for Organoleptic tests COB/Alcohol test Resazurin test (random) Fat/SNF randomly (random)	<2yrs.

6	Empty cans are cleaned, washed, sanitized, drained, and dried in the processing plants The processor and/or collector make sure to collect milk into clean cans (refer. SOP for cleaning, washing, and disinfection utensils)	<1yr.
7	Keep records on -Details of collected milk (source of origin/date/time/store details/volume) -Testing results	<1yr.
8	Conduct awareness/training for small-scale processors on hygienic milk collection and handling of raw milk before processing	<1yr.

2.7Guidelines/Standard Operation Procedure for milk transporters to transport raw milk from farm, to MCP, MCC, MPP and bulk milk collector

Objective: To ensure safe and hygienic practices in transporting raw milk from the farm to Milk Collection Point (MCP), Milk Chilling Center (MCC), and Milk Processing Plant

Scope: This SOP applies to all milk transporters involved in the transportation of raw milk (from farm to MCP, MCC, MPP and bulk milk collectors)

*Transporter - anyone who transports raw milk to the Milk Collecting Point (MCP), Milk Chilling Center (MCC), Milk Processing Plant (MPP) and bulk milk collectors, except milk collectors or farmers who deliver milk to household consumers or the retail market (ref. retail market SOP)

**Transport vehicle - any vehicle used for raw milk transport in ambient temperature or chilling conditions

***Bulk milk collectors - milk collected and transported to either chilling centers of their own or directly to MPP They are not involved in milk processing

Bulk milk collectors - The responsibility of registration and monitoring - DAPH

Transporters attached to bulk milk collectors –The responsibility of registration, inspection and monitoring of the transporters - bulk milk collectors

Transporters attached to the MPP - The responsibility of registration, inspection and monitoring- MPP

Other milk transporters (collectors) - The registration, inspection and monitoring by the milk receiver (either MCP/MCC/MPP/bulk milk collector)

	Guidelines/Standard Operation Procedure	Timeline
	General	
1	The transporter may transport milk to MCP, MCC, MPP and bulk milk collectors The transporter is directly attached to MPP or bulk milk collectors or to any milk receiver	1yr.
2	The transport vehicle should be Milking cans transport vehicles - Cans transport to MCP from farms by farmers (push bicycle/motorcycle /Three-wheeler /van/lorry) - Cans transportation from MCP (Three-wheeler/ van/lorry/truck) - Milk transportation from MCC (bowser) Maintained clean and free of odor Cans are top covered and not directly exposed to sunlight or high environmental temperature Milk bowsers are managed with proper insulation to maintain a cool temperature	1yr.
3	Transporter makes sure - Milk collecting cans and utensils used for milk collection and transportation are food-grade aluminum or SS 304G -Transport cans/equipment (measuring/mixing/strainers) are thoroughly cleaned, sanitized, and are free from odors, milk residues, or any contaminant (ref. 2.8 cleaning and disinfection SOP)	2yrs.
4	Stage 1- If the transport vehicle is used for other purposes, the transporter makes sure to clean and disinfect the vehicle with special attention (ref. SOP for cleaning, washing and disinfection) Stage 2- Milk cane transport vehicles are not used for other purposes	1yr. <5yrs.
5	Transporter	1yr.

	Stage 1- Wear clean clothes, and be free from any illness, wounds/cuts on their hands Stage 2- Wear protective clothing (clean uniform, gloves, boots, and hair cover) and conduct a health monitoring program (annually)	<3yrs.
	From farm to MCP or MCC – Primary Transportation (un-chilled milk transportation)	
6	Transporters ensure the transport vehicle is - Locked during transport - If the transport vehicle is a push bicycle, or motorcycle or a three-wheeler, make sure not to be exposed to the hot environmental temperature - Milk cans are securely placed in the vehicle to avoid spills and contamination - The vehicle is inspected by MCC staff for the required milk transport condition	1yr.
7	Transporters keep two sets of transport cans and hand over one set of washed and dried transport cans to - MCP - Farmers, if a transporter/collector collects milk from farms	1yr.
8	Testing of samples -If the transporter is a milk collector from a farm, test milk for Organoleptic tests Alcohol test (min of 68% alcohol) Sample collection for Fat/SNF (optional) Adulterants (optional) Milk collectors' milk cans are tested again by the milk receivers (MCP/MCC) as to their sampling plan -If the transporter is a farmer, the milk receiver (MCP/MCC) test received milk (ref. 2.1 milk transportation from farm).	<2yrs 1yr.
9	Strain and pour milk to transport cans from the milk cans by the collector	1yr.
10	Load milk transport canes to transport vehicles to transport cans either from farm to MCP or MCP to MCC or directly to MCC	1yr.

11	-Deliver transport cans to MCP within 1 hr. of milking if milk is collected from the farmer -If milk transport cans are delivered to MCC, deliver within 2 hrs. of milking (either from the farm or MCP or milk collector)	1yr.
12	If the collectors'/transporters' milk is rejected (milk collected from the farm) - If the milk is rejected by the MCP, the milk collector/transporter returns the milk to the farmer (to be discarded by the farmer) - If milk collector rejects milk during milk collection at the farm (with noncompliance with test results based on the tests performed by the collectors or any quality issues), the farmer discards the milk	<2yrs.
13	If the transporter transports milk canes from MCP, the transporter ensures -To provide cleaned, washed, sanitized and dried empty transport cans to MCP - Make sure to store cans properly after washing properly - Washed cans are transported in a cleaned and washed transport vehicle	1yrs
	From MCC or MCP with chilling facility to MPP -secondary transporter (chilled milk transportation)	
14	MCC ensures - Milk temperature sensors or/and the GPS of the bowsers are functioning - No leakage/damage in the bowser - To provide milk transport dispatch note to the transporter (time/volume/sources/ temperature just after loading) - The bowser is sealed properly	1yr.
15	Milk is loaded into the bowser and then handed over to the transport dispatch note by MCC	1yr.
16	MPP ensures - The tanks /bowsers are according to standards (SS 304/ food grade fabrication quality and insulation) - Facilities available for bowser Clean In Place (CIP) and monitor for the sanitary standards in MPP	1yr.

	- Milk temperature monitoring mechanism in place or/and GPS	
17	Unload milk to MPP after confirmation of the quality parameters of receiving milk The MPP makes sure to receive milk within 48 hrs. of the milk collection in farms	1yr.
18	If a milk bowser is rejected, the transporter supports the MPP to discard the rejected milk to a gully bowser	1yr.
19	The empty milk bowser undergoes CIP at MPP (ref. 2.8 SOP bowser CIP)	1yr.
	Record keeping and training	
21	Keep records on - Milk receiving data, delivery data (time/volume /sample details etc...) - Milk rejection data if the transporter is involved in milk rejection	1yr.
22	Conduct training for personnel involved in the transporting of raw milk from farm to MCP, MCC and MPP on hygienic milk handling practices, equipment cleaning and sanitization and transporting	1yr.
23	Transporters are provided guidelines on milk handling and transportation of raw milk in both Sinhala and Tamil languages	1yr.

2.8 Guidelines/Standard Operation Procedure for cleaning, washing and disinfecting of utensils, equipment, and tanks used in the milk collection chain

Objective -To ensure proper cleaning and disinfection of milking equipment to maintain hygiene, prevent contamination, and ensure the quality and safety of milk.

Scope -This SOP applies to the personnel who are involved in cleaning, washing and, disinfecting milking buckets, cans, strainers, milking machines, other utensils/equipment, chilling tanks, and milk storage tanks in the milk collection chain.

*Detergent (alkaline) –teepol, caustic soda, (detergent use in dishwash)

** Acidic detergents – nitric acid, phosphoric acid

*** Sanitizing agents -chlorine, peracetic acid, or hydrogen peroxide)

	Guidelines/Standards Operation Procedure
A	**Utensils (milking bucket/cans/strainers/glass bottles)**
1	Rinse all utensils immediately after dispatching the milk Use clean water for washing (water used for washing in farms/MCP/MCC/MPP is supposed to be tested for microbiology routinely)
2	Clean all surfaces thoroughly using non-abrasive brushes or sponges to remove milk residues, fats, and other deposits Make sure not to damage utensils (especially the inner surface) by scrubbing
3	Wash with cleaning agent/detergent (food grade) hot water after every milking - Prepare detergent solution Use hot water (about 70^0C) with detergent - Scrub, and clean smoothly inner surface and discard the water
4	Rinse again to remove the remnants of the detergent with clean water
5	Keep all the utensils to drain water and air-dry in a clean, dust-free area
6	Store the dried utensils in a clean, dry, and covered area to protect them from contamination until use Ensure to use dry utensils for milk collection/transportation
B	**Milking machine - All parts of the milking machine (teat cups, claw, liners, milk pipelines, vacuum lines, and receiver jars.** ****** Follow the manufacturer's instructions for cleaning and disinfection of milking machines
1	Rinse the milking machine immediately after the dispatch of milk - Detach the machine from the cow, and run hot water through the machine to remove milk residues. - Ensure all milk contact surfaces are rinsed
2	Check the milking machine for any damage (cracks, worn-out rubber parts, etc.) and any residues Take action to correct and replace damaged parts and components
3	Wash with detergent hot water after every milking

	- Prepare detergent solution (Use hot water -at about70^0C, add recommended detergent) - Circulate the solution through the machine for 10–15 minutes to break down fat and protein residues. - Manual cleaning (scrub) of non-circulating parts using brushes (hoses and law bowels)
4	Flush the machine again to remove the remnants of detergent with clean water
5	Use an acid cleaner to remove mineral deposits once a week - Circulate the acid solution as instructed in the product - Wash thoroughly with clean water
6	Use disinfectant to disinfect the machine -Prepare disinfectant solution: Use an approved disinfectant and prepare the solution following the label instructions -Circulate the disinfectant solution through the milking machine for 5–10 minutes and allow the machine to air dry
7	Re-assemble the parts and store in a clean place
8	Inspection of the milking machine in detail for any repair or replacement
9	Maintain record of inspection, repairs/replacement
C	**Chilling tank**
1	CIP or manually clean chilling tank
2	Ensure - Rinse, wash with detergent, and disinfect every day after dispatching milk to the milk bowser -Perform acid cleaning on a weekly basis - Inspect chilling tanks for damages or any requirement for repairs according to the schedule
3	Make sure the personnel handle cleaning agents or disinfectants. -Ensure proper ventilation in the cleaning area to avoid inhaling fumes. - Follow all instructions given by the product producer for cleaning agents and disinfectants.

4	Disconnect the tank from any power source and milk supply system
5	-Drain the tank completely to remove milk and residue/ debris (manually) -Detach the parts such as lids, valves, and agitators (if CIP is used, no need to detach parts)
6	Rinse the tank with warm water interior thoroughly with warm (40–50°C) water to remove milk residues (run water for 5-10 min in CIP)
7	Wash the tank using a detergent solution -Prepare a detergent solution -Circulate the solution • For manual cleaning, scrub the internal surfaces of the tank using a non-abrasive brush. (make sure to wash corners, welds, and joints) • For automated systems, circulate the detergent solution for 10–15 minutes -Rinse the tank with clean water to remove all detergent residues
8	Acid cleaning of the tank (once a week) -Circulate or manually apply the acid solution to remove any mineral deposits or scaling that may have formed -Run 10-15 min in CIP -Rinse the tank thoroughly with clean water to remove all acid residue
9	Disinfection of the tank -Prepare disinfectant (use an approved food-grade disinfectant and prepare the solution according to the manufacturer's instructions) -Circulate or apply disinfectant solution through the tank for 10–15 minutes -Drain and allow to dry (Do not rinse unless specified by the disinfectant manufacturer) -Allow the chilling tank to air dry
10	-Inspect the tank for cleanliness, ensuring no residues or deposits remain -Inspect gaskets, valves, and other fittings for damage or wear and replace (if needed) -Re-assemble all removable parts
11	Record-keeping on cleaning date, time, materials used etc.

E	**Milk bowser**
1	Availability - bowser cleaning and disinfection area - functional cleaning equipment and materials
2	Preparation of milk bowser for cleaning and disinfection -Park the milk bowser in the designated cleaning area -Wear appropriate personnel protective equipment (PPE) - Inspect the milk bowser for any residual milk or debris
3	Drain any residual milk completely from the bowser into a designated waste container
4	Rinse the interior of the bowser with potable water at room temperature to remove loose debris
5	Cleaning and washing -Prepare the detergent - Apply the cleaning solution using brushes or a high-pressure washer (ensure to clean and wash the interior well) and allow the remaining recommended contact time -Scrub thoroughly to remove all residues -Rinse with clean water to remove detergent
6	Disinfection of the milk bowser -Prepare the disinfectant solution - Apply the disinfectant evenly, to cover all surfaces and allow the recommended time -Rinse with clean water to remove the disinfectant
8	Allow the bowser to air-dry completely before use or store with lids open to prevent condensation.
9	Record keeping - Cleaning and disinfection details - Inspection findings
F	**Milk storage tank in milk processing plant – CIP**

1	Preparation of cleaning and disinfection of milk storage tank -Ensure the tank is empty of raw milk -Detach the tank from processing lines and secure all valves and ensure CIP spray balls are properly installed
2	Make sure the personnel handle cleaning agents or disinfectants - Wear appropriate PPE to handle cleaning chemicals safely - Ensure proper ventilation to avoid inhaling fumes (follow all instructions given by the product producer for detergents and disinfectants)
3	-Make sure the tank is empty (drain the tank completely to remove milk and residue/ debris)
4	Rinse the tank with warm water interior thoroughly with potable water for 5 - 10 min to remove milk residues and drain the rinsed water completely
5	Wash the tank using a detergent solution -Prepare detergent solution and heat the solution to 50–70°C -Circulate the solution detergent solution through the tank for 15–20 minutes
6	-Rinse the tank with clean water to remove all detergent residues
7	Acid cleaning of the tank -Prepare the acid solution -Heat the solution to 50–60°C -Circulate or manually apply the acid solution to remove any mineral deposits - Run CIP for 10-15 min -Rinse the tank thoroughly with clean water to remove all acid residues for 10-15 min and drain completely
8	Disinfection of the tank -Prepare a disinfectant solution -Circulate or apply the disinfectant solution through the tank for 10–15 minutes -Drain and allow to dry (Do not rinse unless specified by the disinfectant manufacturer)
9	Inspect the tank visually for cleanliness. Perform swab tests to ensure microbial control

3. The procedure for the registration and monitoring of the premises and personnel involved in the raw milk collection chain in the Department of Animal Production and Health

The premises and personnel involved in the raw milk collection chain are registered and renewal of registration annually after the inspection with a checklist.

If the premises or personnel are not in compliance with the basic requirement, the Government Veterinary Surgeon (GVS) provides recommendations in written to take action for correction. A one-year gazing period is offered by the GVS to address recommendations (until the next annual inspection). The gazing period depends on the severity of the problem identified by the GVS.

The action for continuous noncompliance with premises and personnel is decided by the team of DAPH.

GVS issue a registration /renewal of registration No. and a certificate and maintains a register in the office.

3.1 Registration of farmers who sell raw milk to household consumers or retail market or small-scale processing plants and who own small-scale processing plant

- Dairy farmers who sell raw milk to household consumers or raw milk selling points or small-scale processors and farmers who own small-scale processing plants should register in the Government Veterinary Office (GVO) separately in addition to the dairy farm registration program conducted by PDAPH.
- The Government Veterinary Surgeon (GVS) communicates with those farmers separately and visits them with a checklist provided and registers in GVO.
- The renewal of registration is done annually after inspection with the checklist.
- The Government Veterinary Surgeon issues a certificate with registration No/renewal No.
- The farmer should provide registration no. to raw milk selling point, or small-scale processors or household consumers when necessary.
- Raw milk selling points should receive raw milk only from a registered supplier (farmer or milk collector).

Registration No

Examples

- Registration no -**ABCD/S/ 4 /2025** - seller (household consumers/ raw milk retail market/small scale processor)

  ABCD/P/4/2025 - Own small-scale processing unit

  ABCD/P/4/2025 - selling raw milk to household or retail market

  ABCD/SP/4/2025 -both sell and own a small-scale processing unit

  ABCD- farm identification (as to the relevant Province/Vs office)

  S- If the farmer sell milk to household consumers/ raw milk retail market/small scale processor

  P –If the farmer has his own small-scale processing unit (curd/yogurt producers)

  SP- if the farmer has his own processing unit and sell milk to household consumers/ raw milk retail market/small-scale processor

  4 - Given no to the farmer by VS eg.1..2..3..4….5

  2025 – year of registration

3.2. Registration of *regional raw milk collectors

*Regional milk collectors are the milk collectors who collect and transport raw milk to household consumers, regional retail markets and small-scale processors in the veterinary range and do not include those who supply milk to milk collecting points, milk chilling centers or milk processing plants. If the milk collector is involved in both activities, register them with the VSO based on their involvement in the first category.

- Registration of milk collectors who supply milk to raw milk selling points, household consumers and small-scale processors should be registered with GVO.
- The milk collector should mention/provide registration no. to milk selling points, household consumers and small-scale processors.
- Milk collectors should collect milk only from DAPH registered farmers.
- The renewal of registration is done annually after inspection with the checklist
- The Government Veterinary Surgeon issues a certificate with registration No/renewal No.

- Small-scale milk processors should receive milk either from registered farmers or registered milk collectors.

Registration No.

Example

ABCD/MC/4/2025

ABCD - identification of the VS office as to the PDAPH

MC - Milk Collector (who collects milk locally and supplies raw milk for raw milk selling to the retail market, consumers, and small-scale processors)

4 - no given to the relevant milk collector by VS

2025 – year of registration

3.3 Small-scale processors who are not farmers but produce dairy products with daily milk collection and selling to the regional market

- Small-scale processors who are not farmers but produce dairy products with daily milk collection and sell them to the local market are registered in GVO.
- GVS visits them with a checklist provided before registration.
- The renewal of registration is done annually after inspection with the checklist.
- The Government Veterinary Surgeon issues a certificate with registration No/renewal No.
- All small-scale processors in the relevant veterinary range should have a registration No. of DAPH.
- Small-scale processors should follow the recommendation given by GVS.

Registration No.

Example

ABCD/SMP/4/2025

ABCD- identification of the VS office as to the PDAPH

SMP- small-scale milk processor

4 - no given to the relevant small-scale processing unit by VS

2025 – year of registration

3.4 Registration of Milk Collecting Points (MCP)and Milk Chilling Center (MCC)

- MCP and MCC are registered with the Government Veterinary Office (GVO)
- MCP and/or MCC may belong to a Milk Processing Plant/factory or a cooperative society or bulk milk collectors.
- MCP and MCC should apply for registration with the application form available in GVO (application form is annexed with the DAPH circular No. 07/2025).
- It is the responsibility of the Milk Processing Plant/factory (MPP) or a cooperative society or bulk milk collector to get MCP and MCC registered in GVS.
- Government Veterinary Surgeon registers MCP and MCC after the inspection of the premises, with a checklist, provided by DAPH.
- Government Veterinary Surgeon issues a certificate with registration No/renewal No.
- MCP provides monthly milk collection information to the VS office.
- MCC sample collection is performed by relevant Veterinary Investigation Officer (VIO) before registration.
- VIO collects samples from MCC annually and tests samples in Veterinary Investigation Center (VIC) according to the checklist and sampling plan, provided by AHD/DAPH
- VIC performs laboratory testing of samples and the laboratory report with recommendation is sent to relevant GVS and MCC.
- VIC maintains records on laboratory testing results.
- If laboratory test results are noncompliance with the recommended quality parameters, VIO provides recommendations to improve the quality (advices for corrective actions)
- If further recommendation is necessary, the VIO communicates with Director Animal Health DAPH.
- If there is any situation/complaint about raw milk quality at any time, it is recommended to collect samples from MCP or MCC by relevant VIC.

Registration No

Example

ABCD/MCP/4/2025

ABCD - identification of the VS office as to the PDAPH

MCP - Milk Collecting Point

4 - no given to the relevant MCP by VS

2025 – year of registration

Example

ABCD/MCC/4/2025

ABCD - identification of the VS office as to the PDAPH

MCC - Milk Chilling Center

4 - no given to the relevant MCP by VS

2025 – year of registration

3.5 Monitoring of Milk Processing Plant (MPP)/factory at milk receiving

- A team from Central DAPH inspects and monitors raw milk receiving, testing and storing areas in MPP.

  The team is appointed by DAPH (Team leader - Dairy Engineering Specialist).
- MPPs /factories are inspected/monitored annually with a checklist and raw milk samples will be collected from bowsers and storing tanks on the day of inspection.
- The testing of samples is performed in the Dairy Technology Laboratory/Veterinary Research Institute (VRI). The type of tests is based on the SOP.

  If laboratory testing results are noncompliance with the recommended quality parameters, provide recommendations to improve the quality (advices for corrective actions).

Registration No.

Example

ABCD/MPP/4/2025

ABCD - identification of the Dairy Technology Laboratory as to VRI/DAPH (eg.VRI/DTL)

MPP - Milk Processing Plant

4 - no given to the relevant MMP by Dairy Technology Laboratory

2025 – year of registration

4.Check list for the registration and monitoring of premises and personnel in the Department of Animal Production and Health

4.1 Checklist for the registration and annual renewal of registration of farmers who sell raw milk to household consumers or retail market or small-scale processing plants and/or own a small-scale processing plant and provide milk products to the regional market

- Name and address of the farm - Date -
- Registration of the farmer as milk seller/processor in Government Veterinary Office (GVO) in the area
    - New registration (√) -
    - Renewal of registration (mention registration No)-

		Yes	No
1	Milk buckets and milk collecting/transporting cans//buckets/containers bottles are made of SS 304G or aluminum, food grade material - cans/buckets/containers Glass – bottles		
2	Functional and availability of racks/place to drain and dried for washed buckets, cans and bottles		
3	a. Availability and use of cleaned strainer to stain milk into bottles/transport cane b. Use of lids to cover the top of the buckets/cans/containers /bottles after transferring milk		
4	The milk transport bottles/cans are cleaned and dried		
5	Farmer/processor tests milk sample for - Organoleptic test - Alcohol test - Boiling test - Lactometer reading - Any other (mention the test)		
6	Milk transport vehicle is maintained clean and free of odor		

7	Cans/bottles are not directly exposed to sunlight or high environmental temperature during transportation		
8	Milk processing is started within 2 hrs. of milking (from the cow) (either from own farm collection or from other farms or collected by a milk collector)		
9	a. Store milk 4^0C immediately if unable to initiate processing within 2hrs b. In such case, milk is processed within in 24hrs of milking (from the cow)		
10	Availability of record on Milk collection Testing Processing data Selling data (to household consumers or retail market or small-scale processing plant)		
11	General cleanliness of the milk collecting, transporting and processing practices including utensils and place (poor/good/very good/excellent)		

Recommendation (aware farmer)

Team visited

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Signature of the Veterinary Surgeon

4.2 Checklist for registration and annual renewal of registration of regional raw milk collectors

- Name/Address and contact No. of the milk collector- Date -
- Registration of *regional raw milk collector in GVO in the area
    - New registration (√)
    - Renewal of registration (mention registration No.)

*regional raw milk collector-who collects milk regionally and supplies raw milk for raw milk selling retail market, consumers, and small-scale processors

		Yes	No
1	Milk transporting cans are made of SS 304G or aluminum, food grade material		
2	Availability of cleaned and dried milk collecting cans		
3	Adapted a method to wash, drain and dry milk collecting cans by the collector		
4	Availability of utensils (cleaned, sanitized and free from odor and milk residues) - Cleaned strainer - Measure volume or weight - Hand mixer - Any other		
5	Availability of milk testing facilities/practices for - Organoleptic tests - Alcohol test - Lactometer reading/Fat/SNF - Any other (mention the test)		
6	The collector -Wear clean clothes, and be free from any illness, wounds/cuts on their hands - Availability of medical records (any health monitoring)		
7	Milk transport vehicle is maintained clean and free of odor		
8	Vehicle is used for - Only milk collecting purpose - Use for other purposes (mention the purpose)		
9	Vehicles are facilitated - Milk cans are securely placed in the vehicle (avoid spills) - Milk collecting cans are top covered - Not directly exposed to sunlight or high environmental Temperature during transporting		

10	Keep record on - Milk collection, selling and rejection data - Milk testing results		
11	General cleanliness of the milk collecting and transporting practices, including utensils (poor/good/very good/excellent)		

Recommendation

Team visited

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Signature of the Veterinary Surgeon

4.3 Checklist for the registration and annual renewal of registration of small-scale processors who are not farmers but produce dairy products with daily milk collection and selling to the regional market

- Name and address of the milk processing unit- Date –

- Registration of a small-scale milk processor at GVO in the area
    - New registration (√)
    - Renewal of registration (mention registration No) -

		Yes	No
1	Milk receiving buckets/cans are made of SS 304G or aluminum, food grade material		
2	Buckets/cans/containers (collection /receiving) are cleaned and dried		
3	Functional and availability of racks/place to drain and dried for washed buckets/cans/containers/pots		
4	a. Availability of cleaned strainer to stain milk after receiving/collection b. Use of lids to cover the top of the buckets/cans/ container/pots etc		
5	Milk processing is started within 2 hrs of milking (from cow)		

6	a. Store milk 4^0C immediately if unable to initiate processing within 2hrs b. In such case, milk is processed within in 24hrs of milk collection		
7	Test milk sample for - Organoleptic - Alcohol test - Fat/SNF - Any other (mention the test)		
8	Keep record on- Milk collection Testing Processing data		
9	General cleanliness of the milk collecting, transporting and processing practices, including utensils and place (poor/good/very good/excellent)		

Recommendation

Team visited

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Signature of the Veterinary Surgeon

4.4 Checklist for the registration and annual renewal of registration of Milk Collecting Points (MCP)

- Name and address of the MCP - Date
- Name of the milk receiver/company/processing plant -
- Registration of MCP in GVO in the area
    - New registration (√)
    - Renewal of registration (mention registration No)

		Yes	No

1	Milk is collected only from the DAPH registered farm		
2	Location easily accessible for farmers and milk collectors • Road access and space for vehicle parking • Suppliers are closed by (receive milk within one hr of milking) • Availability/access to electricity • Availability of clean water and proper drainage system		
3	Proper premises with the following basic facilities - Availability of functional hand/utensil washing facilities - Availability of functional a place for the initial washing of milk cans of the farmers - A place to keep milk transport cans until dispatched to transport lorries/trucks - A place to store the other set of transport cans (washed and dried) brought by the transporter from MCC/collector		
4	Milk collecting cans are made of SS 304G or aluminum, food-grade		
5	Working staff/milk collectors wear clean clothes and are free from any illness, wounds/cuts on hands		
6	Washed and cleaned areas/instruments/items - Floors, walls, - Milk cans storage area - Weighing instruments, filters, measuring tools, milk testing instruments		
7	Inspect milk cans for cleanliness visually at receiving		
8	Availability of cleaned filter/strainers		

9	Testing of milk for • Organoleptic test • Alcohol test (minimum 68%) • LR/Fat • COB • Acidity • Resazurin Any other test (mention the test) Collect milk samples to send to MCC for LR/Fat		
10	Rejected milk is sent back to the farm to discard		
11	Practices of initial washing of empty cans at MCP		
12	Transport chilled milk a. Under chill conditions b. Room temperature but separate cane		
13	Daily cleaning and sanitizing of working area, equipment		
14	Availability of records on - Source of milk (farm/supplier). - Date/time /temperature of milk receipt and storage - Test results (fat/SNF/Alcohol/adulteration) - Milk rejection data with reasons for rejection - Visitors log book		
15	Availability of any waste disposal method		
16	Any training received for the staff within 1 year		
17	General cleanliness of the MCP (poor/good/very good/excellent)		
18	The SOP/guidelines are displayed in MCP		

Recommendation

Team visited

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Signature of the Veterinary Surgeon

4.5 Checklist for registration and annual renewal of registration of Milk Chilling Center (MCC)

- Name and address of the MCC - Date –
- Name of the milk receiver/company/processing plant -
- Registration of MCC in GVO in the area
    - New registration (√)
    - Renewal of registration (mention registration No)-
    - The latest laboratory testing report (performed by VIC)

is available -Yes/No

If 'Yes' the date of laboratory report -

		Yes	No
1	Milk is received from a registered MCP		
2	Location for milk transporters (MCP or milk collectors) - Road access and space for vehicle parking - Whether milk cans are received within two hrs. of milk collection from the farm or within one hr. from the MCP		
3	Availability of - 24 hrs. electricity supply (availability of generator) - Potable water, hot water facilities, and proper drainage system - Storage facilities for utensils, testing equipment, cleaned/dried transport cans, etc. - Working places to receive, weigh, collect samples and transfer milk etc. - Proper ceiling and lighting - Keep rubber matting in the milk unloading area - The chilling area is separated from other areas of the MCC - Pest control program - Waste management system		
4	Milk transport cans are made of SS 304G or aluminum, food-grade		

5	Cleanliness of working staff/milk collector a. With clean clothes and free from any illness, wounds/cuts on hands b. Provided protective clothing (clean uniforms, gloves, and hairnets)		
6	Testing of milk samples at MCC • Organoleptic test • Alcohol test (minimum 68% alcohol) • Acidity /PH (optional) • COB (optional) • Resazurin/methylene blue (random) • LR/Fat • Adulteration • Antibiotic residues • Any other -Water quality testing (microbiology/PH/salinity)		
7	a. Availability of clean filters b. The practice of transferring of milk to chilling tank immediately		
8	Discard rejected milk to a waste pit at MCC premises		
9	a. Monitor chill tank temperature b. Maintain temperature at 4^0C c. Practice storing milk in chiller tank overnight		
10	Practice sealing the bowser tank after transferring		
11	The empty milk transport cans are cleaned and washed at MCC		
12	Chilling tanks are subjected to a. Clean In Place (CIP) b. Manual washing c. Both		
13	Availability of functional cleaning facilities (place/detergents/disinfectants etc..) for working area and equipment		

14	Record keeping - Traceability records (source of the milk (MCP/collector/farmer). - Milk dispatch and storage records (date/time /weight/temperature of milk at receiving/storage) - Temperature monitoring/breakdown record of the chilling tank - Water quality testing and milk quality testing results - Cleaning and disinfection records		
15	Any training received for MCC staff within one year		
16	General cleanliness of the MCP (poor/good/very good/excellent)		
17	The SOP/guidelines are displayed in MCC		

Recommendation

Team visited

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Signature of the Veterinary Surgeon

4.6 Checklist for monitoring of raw milk receiving at Milk processing Plant (MPP)/factory at milk receiving

- Name and address of the Milk Processing Plant/factory - Date –

- Names of milk receiving areas/districts/ -
- Year of previous visit by VRI/DAPH-

A. General Information

		Yes	No
1	Milk is received from registered MCC		
2	Location of MPP -Easily accessible for milk bowsers -Road access and space for vehicle park		

	-Ensure no unauthorized personnel enter the milk processing plant		
3	Availability of - Sufficient facilities to store milk or to initiate processing directly without storing - Laboratory facilities to test samples as to the sample plan - Working place to weigh (weighbridge or to measure volume) and collect samples - Clean water, proper drainage system, and waste management - Traceability system for identifying the source of milk - Cleaning schedule, and procedure		
4	Cleanliness of working staff and are provided protective clothes to the staff		
5	Testing of samples Routine testing • Organoleptic test • Composition SG/TS/SNF/Fat • Keeping Quality test, Resazurin/methylene blue • Titratable acidity • Alcohol test • Microbiology/TPC (optional) Risk-based testing • Adulterants • Residues (antibiotic residue) Periodic • Protein (optional)		
6	Cleaning (CIP) the empty bowsers and storage tank as to schedule		
7	Rejected milk at MPP is sent to the gully bowser or discarded in the MPP		
8	Record keeping		

	- Bowser receiving (source of origin up to MCC level/Volume/ temperature/time duration) - Milk storage records (storage tank no., date, time, quantity, label, temperature, etc.) - Milk testing results - Deviations of any milk-receiving issues and action taken (corrective measures)		

B. Samples collection for laboratory testing

Raw milk samples collected from bowsers, storage tanks

Place	Test	No. of samples	Sample No.

Recommendation (please provide a copy to the MPP authority)

Team visited

……..

Signature of the Dairy Engineering Specialist

Registration No

Example

ABCD/MPP/4/2025

ABCD - identification of the Dairy Technology Laboratory as to the VRI (eg. VRI/DTL)

MPP - Milk Processing Plant

4 - no given to the relevant MPP by VS

2025 – year of registration