



DRAFT TANZANIA STANDARD

Subsistence milk production — Code of hygiene practice

DRAFT FOR PUBLIC REVIEW

TANZANIA BUREAU OF STANDARDS

This Tanzania Standard was published under the authority of the Board of Directors of Tanzania Bureau of Standards on

Tanzania Bureau of Standards (TBS) is the statutory national standards body for Tanzania established under the Standards Act No. 3 of 1975, repealed and replaced by the Standards Act No. 2 of 2009.

The Agriculture and Food Divisional Standards Committee, under whose supervision this Tanzania Standard was prepared, consists of representatives from the following organizations:

Sokoine University of Agriculture (SUA)
Ministry of Agriculture (MoA)
Tanzania Food and Nutrition Centre (TFNC)
Small Industries Development Organization (SIDO)
Tanzania Industry Research and development Organization (TIRDO)
Tanzania Chamber of Commerce, Industry and Agriculture (TCCIA)
Tanzania Commission for Science and Technology (COSTECH)
Agricultural Council of Tanzania (ACT)
Government Chemist Laboratory Authority (GCLA)
Tanzania Private Sector Foundation (TPSF)
University of Dar es Salaam (UDSM).

The following organizations were directly represented on the Technical Committee entrusted with the preparation of this Tanzania Standard:

Tanzania Dairy Board (TDB)
TAMU Milk Limited
Ministry of Livestock and Fisheries (MLF)
Heifer International Tanzania
Livestock Training Agency – Tengeru
Shambani Milk Limited
Tanzania Milk Processors Association (TAMPA)

Tanzania Bureau of Standards
P O Box 9524
Dar es Salaam
Tel: +255 (22) 2450206/2450949/2450298
Fax: +255 22 2450298
E-mail: info@tbs.go.tz
Website: www.tbs.go.tz

Subsistence milk production — Code of hygiene practice

0. Foreword

This Tanzania Standard has been prepared to enable subsistence milk producers to ensure satisfactory standards of cleanliness and appropriate precautions to safeguard the milk from risk of contamination which may reduce its keeping quality and render it unfit for human consumption.

Milk provides an ideal medium for rapid proliferation of micro-organisms. It is essential therefore, that milk is protected from all possible sources, likely to cause contamination by micro-organisms and any other type of disease organisms. Through improved hygienic practices, the potential health hazards can be avoided.

1 Scope

This code prescribes hygiene practices for the subsistence production of milk, usually consumed within 48 hours of its being drawn from the udder.

2 Terms and definitions

For the purpose of this Tanzania Standard, the following definitions shall apply:

2.1 Subsistence Milk Producer

the individual cattle keeper producing milk for own family consumption and the excess for the respective village market

2.2 milk

The normal clean and fresh secretion, obtained by emptying the udder of a healthy, properly fed and kept lactating domestic farm animal but excluding that obtained during the first five days of parturition.

3 Animal health

3.1 Animal Management

3.1.1 The care and management of healthy animal is the starting point in hygienic milk production.

3.1.2 Animals shall be properly fed, watered and rested. Unhealthy animals shall be segregated from healthy ones.

3.1.3 The milk for human consumption shall not be drawn from animals which have undergone treatment by drugs which may pass through the milk, until after the withdrawal period as per manufacturer.

3.1.4 The milk for human consumption shall be drawn only from healthy animals.

3.1.5 Milk animals shall be screened for diseases like TB, Brucellosis and such other diseases.

3.2 Animal shed or 'boma'

3.2.1 The animal shed or 'boma' shall be so designed, constructed and situated as to be comfortable, clean and healthy housing for animals.

3.2.2 The animal shed shall be situated in open and clean surroundings far away from sources of noise, dust, obnoxious fumes, smoke, odours, garbage dumps and open sewage drains.

3.2.3 The shed shall be well ventilated, lighted and supplied with proper and adequate water and feed troughs.

3.2.4 The planning and layout shall be such as to provide easy and controllable movement of the animals, easy cleaning and adequate drainage and waste disposal.

3.2.5 No animals other than the destined animals shall be allowed in the animal shed or boma, and its infestation with rodents, birds, insects and any other vermin shall be prevented.

4 Milking

4.1 Milking parlour

4.1.1 The milking parlour shall be separated from animal shed or boma, and shall be situated in clean surroundings away from any possible source of milk contaminants.

4.1.2 The design and construction shall provide for easy movement and restraint of animals during milking, where animals are fed supplementary feeds at milking, the parlour shall have adequate feed troughs so placed as to prevent milk contamination by feed particles. The floor shall be cleanable and dust free.

4.1.3 Most of the lactating animals in the traditional production systems require the presence of their calves in their vicinity for proper milk let down, the parlour should provide for proper restraint of calves in front of their dams to avoid contamination of the milk.

NOTE: Pail milk feeding of calves is advisable from the hygienic and economic point of view.

4.1.4 The planning and layout shall be such as to provide for adequate light, ventilation, drainage and waste disposal.

4.1.5 Only the milking animals and their suckling young animals shall be allowed in the milking parlour. Infestation with birds, rodents, insects and any other vermin shall be prevented.

4.1.6 Only the milkers shall be allowed into the milking parlour.

4.2 Milking equipment

4.2.1 All the utensils used during milking shall be cleaned and sanitized. They shall be constructed from acceptable, non absorbent and corrosion resistant materials and shall be easily cleanable. Such utensils may include sanitized milk containers, fore milk receptacles, milk measures, milk cans with properly fitting lids and strainers (or straining cloth).

4.2.2 The milking utensils and any other milking equipment shall be thoroughly cleaned and sanitized after each milking. Sanitization can be carried out by using acceptable, non-toxic and non-corrosive cleaning and bactericidal agent or by boiling in water after thorough washing with water and soap.

4.2.3 After cleaning and sanitization, the utensils and any other equipment shall be stored in such a manner and in such location as to prevent recontamination from insects, dust, rodents or any other vermin. They should preferably be stored on racks in inverted position to facilitate drainage of wash water.

4.3 Milking practices

4.3.1 Milking shall be done in a clean, dust free and quiet milking parlour. The parlour and its surroundings shall be cleaned by removal of dung, sweeping and flushing or wetting the floor with water before and after milking.

4.3.2 Healthy animals shall be allowed into the milking parlour first, followed by the sick ones.

NOTE: Only milk from healthy animals shall be used for human consumption.

4.3.3 The milker shall be healthy and free from contagious and infectious diseases. He/she shall be clean, should not spit, eat, smoke or clean his nose or mouth during milking. He/she should have his finger nails well-trimmed. He/she should preferably be medically examined once every year.

4.3.4 Adequate amount of lukewarm water (with permissible udder wash) shall be available for washing the udder and teats.

4.3.6 The animal is quietly allowed into the milking parlour and restrained if necessary. Where supplementary feeding is practised at milking, the feed should be filled in the feed trough when the cow has been prepared for milking.

4.3.7 The teats and udder of the animals shall be effectively washed and cleaned by lukewarm water (with permissible udder wash) and dried with clean cloth.

4.3.8 Before milking, the milker shall wash his/her hands with soap and water and dry them. He/she shall wear clean protective gears and keep the head properly covered.

4.3.9 The foremilk shall be drawn into separate containers provided for the purpose without soiling the hands or dropping on the floor. The receptacles should preferably be black in colour for easiness of detecting any change in the milk. The rest of the milk should be drawn into the milking container as fast as possible.

4.3.10 Animals shall be milked in as quiet and comfortable manner and surroundings as possible. Milking jelly can be used on the teats to render milking easier and prevent the practice of wet milking.

4.3.11 Immediately after milking, the milk shall be measured and filtered into clean carrying or storage containers and hygienically the containers properly sealed.

5. Carrying of milk from milking parlour to producer's dwelling

5.1 The producer's dwelling place will include his own place of residence and the respective village market.

5.1.1 Milk from the parlour shall be carried in clean and sanitized containers with well-fitting lids, so as to ensure that the quality of the milk remains the same.

5.1.2 The milk filled containers shall be protected from sunshine, dust, rain water and drippings from vegetation or from any other dirt.

5.2 Milk bought from the respective village market shall be carried in clean and sanitized containers with well-fitting lids. Similarly, the milk filled containers shall be protected from any source likely to cause contamination of the milk.

6 Treatments of milk before being consumed

6.1 Boiling

6.1.1 Milk from the milking parlour or from the village market shall be boiled in clean and sanitized containers made of acceptable non-absorbent and corrosion resistant materials.

6.1.2 Milk can be taken straight as boiled milk, or as soured milk or as an adjunct to other meals.

6.2 Butterfat separation

6.2.1 This is done as soon as the boiled milk has cooled. It shall be done in clean and sanitized utensils made of acceptable, non-absorbent and corrosive resistant materials.

6.2.2 When the butter has formed, it shall be collected in similarly clean and sanitized containers. The milk from which the butter has been removed shall be consumed within 48 hours of its being milked.