RESEARCH PROGRAM ON Livestock

CGIAR

*More meat, milk and eggs by and for the poor*

PROMISING IDEA

# Better hygienic milking practices to improve goat milk quality

## Key messages and solutions

- Milk quality is compromised by goat diseases as well as poor product handling and hygiene.
- Contaminated milk can cause foodborne diseases but also make the milk unsuitable for further processing such as fermentation.
- Training farmers on sources of milk contamination including recognizing udder infection, and simple good hygienic practices can lead to benefits.

## Benefits

Training leads to:

- Improved personal hygiene, milking and milk handling practices at goat farms.
- Better quality products attract better prices, provide safer food, and lead to less waste in the chain.

## Problem statement

- Both raw and fermented goat milk in Abergelle carried bacteria conducive to poor handling and mastitis in goats.
- Poor personal hygiene as well as unhygienic milking and handling practices were reported in the sites and can lead to milk borne infection and intoxication as well as milk spoilage.
- Assessments of knowledge, attitude, and practice of goat farmers in Ethiopia revealed that most people: do not boil goat milk prior to consumption and do not believe that raw milk can cause disease; believe that fermented products do make people sick; that milk safety can be judged by sight alone; do not wash hands, clean or dip teats before milking and do not check for mastitis in their goats.

Goat milked in Borana, Ethiopia. Photo credit: Zerihun Sewunet/ILRI

## Evidence

Training on good hygienic practices of meat handlers in Ethiopia proved very efficient in the short term; therefore, we are confident that training of farmers can be equally effective.

| Sources of contamination | Measures to limit contamination |
|---|---|
| Goat skin and udder | • Remove dirt and manure from skin and udder before milking<br>• Wash and dry udders before milking<br>• Dip the teats before milking* |
| Goat diseases, mastitis | • Check teat for swelling, redness, heat and pain<br>• Do not consume milk from a sick animal<br>• Do not consume abnormal looking milk (bloody, stringy, watery)<br>• Keep the milk of sick animals separately and discard it safely (i.e. bury)<br>• Always boil or pasteurize raw milk before consumption |
| Milk utensils | • Frequently wash and disinfect milk equipment daily<br>• Keep equipment covered in a clean area |
| Personal hygiene | • Wash hands with soap before milking and in-between animals during milking<br>• Wash hands with soap before handling milk utensils |
| Environment | • Keep milking area clean and free of manure<br>• Clean up manure from yard daily<br>• Do not allow animals to stand or sleep in manure<br>• Do not share areas for sleeping or eating with your goats |

## Suitability

The intervention is suitable if men and women are invited to the training as most commonly, men are responsible for milking while the women are in charge of processing of goat milk and the sales of these products. Knowledge and skills is the primary resource requirement and training should be hands-on.

The intervention contributes especially to human nutrition (safer food) and market linkages (consumer demand).

| Resource requirements (low to high) | |
|---|---|
| Land |  |
| Water |  |
| Labour |  |
| Cash |  |
| Access to inputs |  |
| Knowledge and skills |  |

| Impact areas (low to high) | |
|---|---|
| Food security |  |
| Human nutrition/ food safety |  |
| Employment and livelihoods |  |
| Natural resources base |  |
| Gender empowerment |  |
| Market linkages |  |

## Value chain focus



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### Acknowledgements

This is a product of the CGIAR research program on Agriculture for Nutrition and Health through the BMZ/GIZ-funded Safe Food, Fair Food project, and the CGIAR research program on Livestock and Fish (2012-2016). The study was implemented by Barbara Szonyi (formerly ILRI), Tizeta Bekele (formerly ILRI), Aklilu Feleke (Addis Ababa University) and Minister Birhanie (Abergelle Agriculture Research Center). The Project thanks all donors and organizations who globally support its work through their contributions to the CGIAR system. Organizations contributing to this work are: ILRI, AAU, ICARDA, AARC.





May 2017