



Tropentag, September 14-16, 2010, Zurich

“World Food System —  
A Contribution from Europe”

## Effect of Improved Technology and Substitution of Traditional Transport Containers on Food Safety and Milk Marketing in Somalia

SAMUEL OGOLLA, ASILI BARRE, ANDREAS JENET

*Vétérinaires Sans Frontières Germany (VSFG), Programmes East Africa, Kenya*

### Abstract

Camel milk plays an important socio-economic role in Somalia not only because of its high nutritional value but also as an important source of income. Hygiene and marketing of milk also influences not only the human health but income and food basket. An evaluation was carried out assessing data of a EU-funded project implemented in Somalia that recorded the transformation from the prevalence of the use of plastic milk containers towards aluminium milk cans, and its effect on food safety and marketing.

Large volumes of raw milk were handled by the informal market and supplied daily to urban consumers. However, milk transporters and milk traders lacked the technical skills and basic understanding of milk hygiene to be able to provide quality fresh milk to the markets. Milk that has gone sour fetched a lower price by between 25 % and 40 % compared to fresh milk, thus reducing the incomes of both traders and producers. Findings indicated that raw milk collection and marketing is characterised by absence of hygiene and cooling, the use of plastic containers for transport that cannot be sanitised and poor retail practice by street vendors. The influence of pooling of different camel milk batches along the collection and marketing chain is illustrated by the increase in prevalence of *Streptococcus agalactiae*, a mastitis pathogen that originates from the udder. The pathogen was found in 50 % of transport containers coming from producing herds, in 62 % of milk containers sampled at primary collection sites and in 70 % of milk containers sampled from an urban market of the same region. The constraining factors for the milk production sector are listed as 1) loss in milk quality due to rapid spoilage during transport and marketing, 2) reduced profit on milk sales, 3) milk production areas often become inaccessible during the rain, 4) low milk prices during rains and lack of milk processing leaves producers unable to utilise seasonally increased yields to build food and cash reserves, 5) periods of milk surplus are rapidly followed by periods of food scarcity.

**Keywords:** Camel milk, contamination, critical control points, food safety, quality assurance system