The golden Udder: Marketing milk from camels in Puntland, Somalia

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WIIl IYO CAANO!

“Sons and milk” are what Somalis wish someone they have not seen for some time. And when parting for a long period, they wish each other “nabad iyo caano”, or “peace and milk”.

Milk is important in Somali culture. Much comes from dromedaries, of which Somalia has more than 6 million – almost half the world’s total. They are raised almost exclusively for their milk, and camel milk is staple food for much of the country’s human population.

Like in some other areas of the Horn of Africa, buying and selling camel milk used to be taboo: Somali families drank the milk from their own camels, or gave it to friends and relatives. But the growth of cities has created a strong demand for milk among urban residents who have no camels of their own. In Puntland in northeastern Somalia, an elaborate system of trading the milk has emerged since the early 1990s. An interesting feature of this system is that milk and its marketing are managed mainly by women, even though men own the camels and are responsible for managing, milking and selling them.

The information in this chapter is drawn largely from a food security programme run by UNA (a consortium of Italian NGOs) and the Milking Drylands research initiative, both funded by the European Commission and implemented in 2001–7.

CAMELS IN SOMALIA

Pastoralism is the traditional backbone of the Somali economy. About 70% of the population are pastoralists, with camel herding prevalent in the north, cattle more common in the south, and large herds of sheep and goats all over the country.

Camels are ideal milk producers in the drylands of Puntland. They can go without water for long periods. They browse in loose groups, moving slowly through an area to feed on grasses and tree leaves. The browse is sparse, forcing the herd to be continually on the move.

Even in very dry conditions, camels produce milk continuously for 18 months before production drops. Fresh camel milk keeps better in hot weather than milk from other animals. Without refrigeration, it becomes slightly sour (forming a product known as suusaac) or very sour (karuur). For home use, this fermented milk is kept in traditional containers, which are smoked to reduce the number of bacteria.

According to one UNA survey, the average camel herd in Puntland has some 72 animals. Overall milk production depends on various factors. The main one is the number of animals
in milk: about a quarter are lactating at any one time, though this number can be much lower if a drought prevents females from getting pregnant. Or it can be higher: in 2006, when herds were recovering after a drought, about 60% of the animals were in milk. It takes at least 2 years for production to recover after a lengthy drought. Other important factors are the season, access to pasture, the condition of the pasture, the stage of lactation, the calving rate and the health of the mother and calf.

At birthing, a female gives an average of 3.5–4 litres per day, falling to about a litre during the long dry season. The calf needs about one-third of the milk, leaving the remainder for human consumption or sale. The number of milkings depends on the stage of lactation and the season: the animals may be milked twice or even three times a day during the wet season, or just once during the morning at the peak of the dry season. A lactating camel gives milk only in presence of her calf. If this has died or been culled, the herders keep its skin to show to the mother to stimulate milk letdown.

There are three main breeds of camel: the Coastal or Bari, the Guban from the mountain plateau, and the Hawd from the Nugal and Mudug regions and nearby parts of Ethiopia (Figure 30).
PART 3: Milk

MEN’S CAMELS, WOMEN’S MILK
Patchy, unpredictable rain makes pastoralist life a risky business. If rain falls on the other side of the valley, a herder family needs to be able to bring its animals there so they can graze, even if that area is controlled by another family or group. A complex set of social mechanisms, managed by the elders, governs who can use what resources at which time.

The Somali clan system is a traditional organizational structure that binds together people who are related. It runs through the male line: people are members of their father’s and grandfather’s clan. But men normally marry women from outside their clan, creating ties and alliances that cut across clans. Such cross-ties are important to allow people from one clan to use resources controlled by another.

In such a system, men are strongly attached to their clan, while women have a more ambiguous status: they are the natural interface between two groups, as a woman’s father and brothers will belong to one clan, while her husband and sons to another. This dual status lets them move freely and means they are often involved in negotiations and managing conflicts between groups.

It is the men who are responsible for managing and milking the camels, which represent the family’s wealth and prestige, and are its most reliable insurance against drought. But the ownership of camels is attached to the clan structure: they are considered a corporate asset of the clan. So if a man wants to sell a camel, he has to consult other men in the clan.

Women look after the house, care for children, and manage and milk the family’s herd of sheep and goats. These small livestock are secondary assets: they can be sold if the family needs cash quickly. They are not seen as clan assets: a family can decide to sell a sheep or goat without consulting the clan.

Marketing tasks are divided among men and women: the men sell livestock, while women are mainly responsible for selling milk. Men milk the camels, so decide how much milk goes for the calf and how much is left for family use. This is an important role, as it decides how much milk is used to reproduce the herd, and how much to maintain the household. But once the milk is extracted from the animal, the women take charge of it. They decide how much to give to children, how much to use for other needs, and recently, how much to sell.

MARKETING MILK
The civil strife that began in 1991 in Somalia has had little direct impact in the northeastern region, but has led to a massive increase in urban populations there as people have fled the conflict-torn south. Some women organized small but effective networks to collect, transport and sell milk to the cities in Puntland. Two things have helped them: the construction of a major tarmac road that cuts through the region, and the lack of a central government to control and tax them.

Little by little, the marketing of camel milk has expanded. Nowadays hundreds of litres of milk are traded every day from production areas inland to markets in cities over 100 km away.

The value chain involves five sets of actors, from the producers to the retailers who sell to consumers (Figure 31).
The herders milk the animals and store it in traditional containers, known as haruub, which are treated daily with charcoal to keep them hygienic. This practice gives a typically smoky taste to the milk. The herders walk an average of nearly 9 km each day to bring their morning milk to the primary collectors. They carry it in plastic jerry cans that originally held food oil.

The primary milk collectors (known as kaameley in Somali) are women in mobile camps who follow the herders as they migrate. They pour the milk into their own jerry cans, which they keep clean somehow with special stones and very small amounts of water, which is scarce in the bush. Most require their trading partners in the towns to clean the jerry cans before sending them back to them.

As a rule of thumb, each primary collector serves some 8–20 herding households, though in a good season one collector may serve up to 40 herders. Collectors have various types of ties with the herders they serve: the mobility of the herds and the collectors forces these ties to be loose and flexible.

The primary collectors exchange the milk for cash, basic staples or other items, so they earn not only from their mark-up on the milk, but also by selling goods. They order these goods from their trading partners in town, or direct from wholesalers. They also provide credit to the herders if needed, for example during a lengthy dry season or period of economic hardship. This petty trade and the capacity to buffer their clients’ short-term financial difficulties is a vital livelihood support for many pastoralist households.

Transport companies are hired by women collectors to carry milk, related information and goods between rural and urban areas. Their Toyota pick-ups bring milk from the production areas to the urban markets, and carry commodities from urban stores and markets to rural communities. At least six companies operate from the town of Qardho, about 200 km south of Boosaso, the Puntland capital. During good rainy seasons, the numbers increase.
The companies, which are run by men, typically have at least three vehicles, and each driver stays overnight in the bush for one or two nights. Each driver drives around different collection sites according to routes negotiated with the primary collectors, delivering water and goods and collecting milk. Each car serves 10–12 primary collectors. All three drivers meet at an agreed place and load their milk onto one of the pickups, which then heads to town. Bringing the milk from the herder to the market can take 9–10 hours or more.

The drivers are vital to ensure that the milk arrives on time and in good condition. With no refrigeration available, they have to drive fast over rough terrain to make sure the milk does not spoil in the heat. While partially fermented milk can still be consumed, it fetches a lower price.

Secondary milk collectors (aanoley in Somali) are based in markets in the towns of Qardho, Garowe and Boosaso. They receive the milk sent each day and sell it directly or distribute it to market retailers. The next day they send the empty jerry cans and a share of the money back to the primary collectors through the same route. Sometimes they also supply imported commodities to their primary collector partners. An average of 2.35 primary collectors supply milk to each secondary collector.

Market retailers take the milk from the secondary collectors and sell it to consumers in the market. They add their own mark-up to the price, and pay the secondary collectors at the end of each day.

RELATIONSHIPS IN THE CHAIN
Besides delivering milk, containers and money, the transport companies enable a continuous circulation of people and news about rain, pasture conditions, animal health, market prices and events. A majority of the drivers belong to the Midgaan, a minority group in the area.
If the transport companies are the lifeblood of the system, the women collectors’ networks are its backbone. These networks hinge on the personal relations between the primary and the secondary milk collectors. These partnerships are fairly stable: they do not change from one season to another. The women are not necessarily related by blood or marriage; instead they talk about “friendship” or “business”, and there are cases where “we only know each others’ names though we don’t know the faces”. Family ties are often important for newcomers to the business, when sisters often form a partnership as primary and secondary collectors. But such ties become less important in the longer term.

Many women who head households are involved in milk marketing: in a survey, about 44% of the women said they were from such households, compared to an average of 35% for the region as a whole. On top of that, another 11% of secondary collectors said their husbands were out of work. This underlines the importance of the milk trade to vulnerable households.

In 2006 the primary milk collectors paid an average of 5 000 Somali shillings for a galaan (about $0.20 for 0.75 litres) of milk. Prices may fall to a low of 4 000 shillings per galaan in the wet seasons (April–June and October–November) when camels produce more milk, rising as high as 7 000 shillings in the dry seasons. Other factors affecting price include transport problems and insecurity.

Transport costs about 1 200 shillings per galaan, though prices may vary markedly depending on distances and road conditions – which are highly related to seasonality.

The secondary collectors typically charge a standard rate of 600 to 1 000 shillings per galaan. The final retail price averages 7 200 shillings, varying from 6 500 shillings in the wet season to 11 000 in the dry.

IMPROVING THE SYSTEM?
This remarkable marketing system developed without any external support. But can it be improved? External interventions have been limited to a project by UNA, a consortium of Italian NGOs, through a project funded by the European Commission. This tried to contribute to improving milk quality in local markets. Its small-scale, low-budget community-based investments have shown a degree of success. For example, the project provided aluminium containers through a revolving fund to improve milk hygiene, strengthened local capacities of involved stakeholders, and built basic market facilities in Qardho where milk could be stored and sold in improved conditions.

But the project’s effort to establish a big processing plant to prolong the shelf life of camel milk by pasteurizing and packaging it has faced a number of technological and institutional constraints. Notably, the ownership and control of such big investment, which came from external funding, created a number of problems, which have eventually made it of little relevance to local people. Nowadays it works during some seasons and shuts down or converts to packaging juice in others. Its main failure lies in its inability to establish links and obtain milk from the existing networks of women.

Other interventions, mainly by international NGOs, address animal health in the area. This is indeed a critical matter affecting milk production and the pastoral economy.


**SUSTAINABILITY MATTERS**

Marginal lands, an erratic and drought-prone climate, a scattered and very mobile population, no central government, widespread insecurity, minimal infrastructure and non-existent public services: these are not very promising conditions for sustainable development. Despite these factors, Somali pastoral society has developed a sustainable and expanding system for marketing milk, one that supplies the cities with a basic food, and supports the livelihoods of many people in both rural and urban areas.

**Food security**

For the herders, selling sheep and goats is a major income source. But animal sales follow seasonal patterns, and are disrupted by Arab countries’ bans on livestock imports from Somalia. For many herders, the daily income from milk marketing is a vital complement to livestock sales, as well as enabling them to buy staple foods and other items. It also enables them to cope better with hazards such as drought, epidemics and conflict, due to the credit system that is attached to milk marketing. By exchanging milk for grain, the women can better feed their families. Milk marketing also serves the nutritional needs of urban residents, who are in dire need of animal proteins.

Milk sales are normally related to the need to earn money; when milk prices are low, many herders stop selling their milk and consume it themselves instead. That explains why in the dry season, 30% of the milk produced is sold, while in the rainy season, when more milk is available, only 27% is sold. It also explains why poorer households market a greater share of their milk: they are in more need of money. Exchanging milk for cereals is a good strategy in caloric terms; milk is rich in protein but low in calories: one kilogram of camel milk has only about 700 calories, while a kilo of rice or wheat has about 3,300–3,500 calories. Changes in terms of trade between these two products are critical, but are generally favourable to herders.

**Environment**

From an environmental perspective, the milk marketing system stimulates rather than constrains livestock mobility, which is vital to allow the natural vegetation to recover. The producers’ herds are not tied to one location, but move in search of forage and water. The primary collectors follow them. In the long dry season, many camel herds are to be found along the eastern coast, far away from the main towns. Milk marketing remunerates productivity, and thus provides incentives to herd mobility.

A new pattern of herd management seems to have emerged. Previously, young herders would take milking camels far away from the hut, leaving flocks of sheep and goats to graze nearby. Now, the lactating camels are being split into two groups: one sent to distant pastures, and the other kept near the hut to produce milk for sale. In addition, herders are increasingly using cement-lined reservoirs to water sheep and goats, so these animals are less likely to be herded as far as the coastal belt.

**Gender**

The marketing system is also sustainable because it builds on and reinforces the social capital of Somali pastoral society. The clan system governs resource access, camel management,
Adding value to livestock diversity

stock trading and other important aspects of Somali pastoralism. Men, with their strong clan affiliation, cannot easily buy and sell milk from other clans’ camels without detailed negotiations between the clans involved. This does happen, but only to a limited extent. Both men and camels are embedded in clan-related mechanisms, so arrangements for milk trading have to be continuously renegotiated between the clan leaders of the different herds grazing in an area. This would imply very high transaction costs.

Women, on the other hand, face none of these problems. Their affiliation to the clan system is weak: they do not belong to a clan, so do not embody its interests. They cannot be seen as “competitors” by members of other clans. The only arrangements they have to undertake with local pastoralists are purely commercial: the purchase price, the form of payment, and options for credit. For them, transaction costs are minimal.

We can thus see a clear dualism between production and marketing. Men manage camels, but women sell the milk. Women manage sheep and goats, but men buy and sell them. These complementary roles share power and responsibility within the household and give the system a series of checks and balances that are critical to ensure its sustainability.

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