

CASE 4: ANOLEI CAMEL MILK COOPERATIVE



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1.0 INTRODUCTION

1.1 The Camel

The camel is a hardy animal and perhaps the hardiest in the drought-ravaged northern Kenya – but for one of its lesser-known benefits, its milk. The camel is able to produce milk all year round and to endure conditions that would halt the milk production of, or even kill, other livestock. It is therefore being touted as a drought-resistant alternative to traditional livestock in the Horn of Africa.

Kenya is estimated to have the fifth largest camel herd in the world after Somalia, Sudan, Ethiopia and Mauritania, in that order. All camels found in Kenya, estimated to number 1.06 million in 2007 are of the dromedary (one-humped) type. Historically, Somalis have primarily drunk camel milk, as camel herding is part of their traditional lifestyle. For this reason the majority of current customers are relocated Somalis in Kenya and Kenyans of Somali descent. These communities are concentrated in the Garissa area, the Dadaab refugee camp and the Eastleigh district of Nairobi.

There is a growing interest in the nutritional and therapeutic properties of camel milk so there is a small but growing market for higher quality camel milk among non-Somali populations. Recent research in camel milk has proven that it has properties applicable to treating several ailments including autoimmune diseases, allergies, and juvenile diabetes among others (Ulrich Wernery, Central Veterinary Research Laboratory, UAE).

However, there are more than just financial benefits to this unusual product. The UN Food and Agriculture Organization rates camel milk as rich in iron, unsaturated fatty acids and B vitamins, while containing three times as much vitamin C as cow's milk.

1.2 Background of the Anolei Women's Cooperative

The Anolei Women's group is registered with the ministry of culture and social services, and to date has 64 members and a Coordinator. The main purpose of the group is to collect milk and send it to Nairobi's Eastleigh Area- the terminal market.

The group owns two freezers, each with capacity to store 360 litres. It was recently given equipment for a milk bar from the Kenya Livestock Marketing Council (KLMC). Additionally, the group receives milk collected from Gibsing, Mlango and Kulamawe, which are about 40 kms away from Isiolo town.

Camel milking is done three times a day with an average of 4000 litres produced daily during the dry season and approximately 6500 litres during the rainy periods. The milk is brought to Isiolo by 4 land



Figure 1 – Picture by Morgan Siloma, SNV

cruisers but in some tough terrains, donkeys are needed to get the milk to the main roads. During the rainy season the supply of camel milk is high; however, the demand is low because Garissa town also supplies the Eastleigh market. It should be noted that the group members carry out business as individuals. A part of the group's profits is dedicated to fund social welfare (e.g. sickness, school fees, etc.).

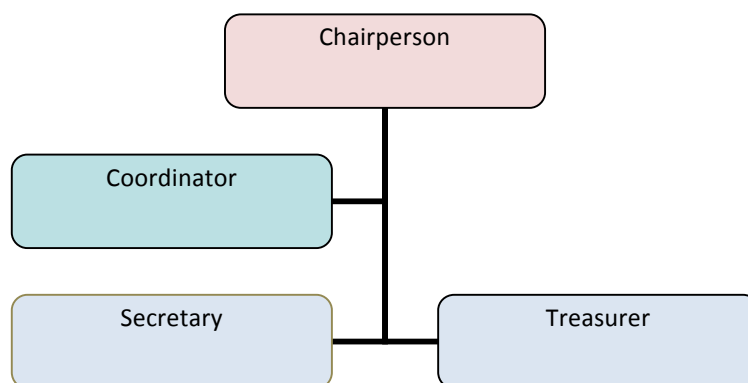


Figure 2 – Picture by Morgan Siloma, SNV

Due to hygienic issues the group has been advised to use aluminium containers, which are expensive. However, with the support of VSF Suisse, about 80 of the producer groups have received aluminium cans. In the future, Anolei is keen to expand their supply to target new non-traditional markets, and envisions selling fresh milk in large volumes. Finally, the group has joined a lobbying and advocacy organization -the Kenya Camel Association.

Box 1 presents the organizational structure of Anolei

Box 1: Anolei – Organization Chart



The group's objectives are shown in Box 2, below:

Box 2: Anolei's Objectives:

- ☞ To enhance business efficiency of the producer/bulker and the Isiolo/Nairobi (Eastleigh) camel milk chain;
- ☞ To penetrate and retain new markets within Nairobi and other towns;
- ☞ To support the camel producers and traders to improve camel milk's hygiene;
- ☞ To facilitate the opening of new camel milk markets to increase supply of camel milk;
- ☞ To enhance coordination of stakeholders in the camel milk chain.

The cooperative was officially founded in 2010. However, it had been operating for fifteen (15) years as producer self-help group selling milk to members' relatives in Nairobi through the effort of 5 women.

The following is a brief time line of Anolei's history:

| | |
|-------------------|--|
| 1997 | 5 women started marketing milk to their relatives in Nairobi. By November, the number of members had increased to 18. |
| 2005 | Registered with the Ministry of Social Services as a self help group and started providing social assistance to members – school fees, health etc. |
| 2010 | The membership increased to 33 and the group was registered as a cooperative. |
| 2008- 2010 | Started making linkages for development support with partners like the Netherlands Development Organization (SNV), Kenya Livestock Marketing Council (KLMC), VSF Suisse, and the Ministry of Livestock Development (MoLD). |
| 2012 | Membership rose to 64. |

The development of the innovation has been aided by the participation of various partners:

- 1) Kenya Camel Association - advocacy, lobbying and research;
- 2) SNV Netherlands Development Organization - business capacity and efficiency of business processes, value chain upgrading and marketing;
- 3) VSF – Suisse- hygiene related support and advise;
- 4) UN Food Agriculture Organisation (FAO) – improved herd management;
- 5) Kenya Agricultural Research Institute (KARI) - research on camel milk hygiene.

With support from SNV and the above mentioned partners, the Anolei women of Isiolo -in northern Kenya- have clearly demonstrated that camel milk has the potential not just to help feed families, but to build businesses. The Anolei women's cooperative now purchases and markets milk from local herders, enabling them both to meet the local demand and to send up to 5,000 litres of milk to Nairobi on a daily basis. Many Anolei women are now earning up to 60,000 Kshs (about €560) per month from camel milk, with traders in Isiolo county bringing in more than 19 million Kshs (€176,000 euros) annually from the trade.

2.0 THE INNOVATION

The innovation is aimed at alleviating poverty and improving the living standards of women from former conservative cultures- through the provision of ***financial independence***. The innovation is specific to commercialization of camel milk as a ***cash cow*** for Anolei.

This is achieved through ***producer organization and capacity building, partner support, establishment of bulking and cooling facilities, coordinated input supply (drugs, food etc), quality assurance, pooled transport, increasing market outlets and efficient (risk-free) transaction systems.***

This innovation has been enabled by:

- 1) The growing demand for camel milk, especially within the Somali community in Nairobi's Eastleigh area.
- 2) The cooperative's ability to play the pivotal role of commercial hub- bulking milk (through application of sound hygiene practices) from range based camel herders, pooling transport and penetrating a niche market.
- 3) Initial high returns of the products and the piloting of camel milk in non camel traditional areas.
- 4) The division of the ownership of camel resources: the camel belongs to the man, while the milk belongs to the woman.

Camel-owning culture traditionally places the man as the owner of the camel, which has given men a route to high earnings through selling camels to neighboring Ethiopia, where they are shipped to more lucrative Middle Eastern markets. But the milk belongs to the woman, and this is now fuelling an avenue of commerce that has seen some of the women out-earning their men. The milk is put in a freezer until the following day, when it is transported to Nairobi by bus.

2.1 How the Innovation Works

The following are the key steps of the innovation's process:

- 1) Anolei maintains a commercial hub in Isiolo.
- 2) The group makes daily contacts with range-based camel herders (the owners) who are as far as 70 kms away.
- 3) The Anolei Women's Group hires a Land Rover, which moves through the unforgiving terrain collecting the milk from farmers, which it then delivers to members in Isiolo. In addition to the collection of milk and delivery of payment, the Land Rover supplies camel drugs and provides important market information.

- 4) The milk is bulked at the Anolei Milk Bar in Isiolo, a few meters away from the public transport bus terminus. The milk is then stored in freezers for preservation and marketing reasons.
- 5) The milk is taken to Nairobi, through the pooled transport arrangements with the local bus operators and the customer contacts in the city.
- 6) Once the milk is purchased, money is sent back in the bus. More recently, there has been an increased use of the ICT method -MPESA- to complete transactions between buyers and sellers.

The literature available demonstrates that the Anolei business is a robust commercial venture due to the efficiency so far established by the chain. The women sell camel milk by the liter, for 60 Kshs in Isiolo and 100 Kshs in Nairobi. The venture has proven to be lucrative for group members, who are earning an average monthly salary of 60,000 Kshs a month, clearly improving their life standards¹.

2.2 Lessons Learned

- 1) There is a link between camel science, hygiene and marketing.
- 2) Anolei is a powerful example of how, if the right mix of factors is in place, camel milk can be commercially developed and up scaled.
- 3) With climate change, camels can become an alternative for livestock producers in Africa.
- 4) Gender roles in the ownership of livestock resources need to be taken into consideration and mainstreamed within the value chain.
- 5) Marketing camel milk and meat to non-traditional camel areas is a viable business opportunity.
- 6) Efficient and cheap systems of reaching consumers in distant rural areas can be achieved through pooled transport arrangements.
- 7) Modern money transfers and risk free mechanisms and services -such as MPESA- guarantee greater speed in buyer-seller transactions and should therefore be adopted.
- 8) Producer organizations facilitate advantageous collective bargaining.

¹ Source: <http://webarazafarmer.com/index.php?option=com>

3.0 SUCCESSES AND ACHIEVEMENTS

The current operations of the Anolei Camel Milk Cooperative have so far proved that this enterprise is a successful venture. The following elements have played a key role in its success:

- 1) Increased group cohesion among the Cooperative's members due to the steady growth of the enterprise.
- 2) The value chain became more efficient in linking all of the actors involved, including producers and terminal markets -located as far as 150 kms away. This is due to the intervention, the Cooperative's strength and the role of its main partners.
- 3) Increased income for members and their households. As a result, women have an increased ability to cover costs related to school fees, health and housing. Additionally, some members have ventured into different businesses and made more returns. For instance, Safia -the Chairlady has invested in real estate and constructed rental housing in Isiolo².
- 4) The group has been able to link ethno-indigenous knowledge with veterinary departments and organizations interested in camel health, such as VSF Suisse. In addition to conquering and establishing a marketing standing in Eastleigh Nairobi, the commercialization of the product has established camel milk outlets in other parts of Nairobi—South C, Fedha Estate, and also in Nakuru town.
- 5) The increase in the array of activities around the milk trade is attracting new actors and partners, resulting in more and improved project benefits. These activities include: involvement of new members, camel treatment and husbandry, milk pasteurization, transaction security and management, bulking and cooling processes, retailing and managing the milk bar, pooling transports, trading, sales and marketing and insuring milk hygiene.

Given its success, this intervention continues to attract different stakeholders including partners from the developmental and private sectors, producers, bulkers, transporters, traders, consumers and local, regional and international customers.

In brief, the greatest success and achievement of the innovation is the creation of a commercially viable model that efficiently links various actors within the value chain and the terminal market for a product that was not, until recently, commercially developed in Kenya.

² Source: <http://www.afrol.com/articles/370740>.

4.0 CHALLENGES

The major challenges faced by the Cooperative in commercializing camel milk include:

- 1) High cost of the transportation services to Nairobi, which undermines financial returns.
- 2) The cooperative is still in an initial stage and is therefore vulnerable.
- 3) The value and attributes of camel milk are not yet well known.
- 4) There is a security issue in Isiolo because the area is very unstable.
- 5) Growing scarcity in pasture fields, which forces herders to travel deeper in-land during times of drought.
- 6) Difficult access to market.
- 7) The informal nature of the camel milk sector dynamics.
- 8) Lack of coordination in the approaches of various partners.
- 9) Poor infrastructure -especially in terms of bad roads, lack of dairies and cooling plants, etc.

The Cooperative's partners have singled out transport as the greatest challenge that the group and other producers and bulkers of similar products face. According to SNV³, Anolei Women's Group daily transports between 5,000 and 6,000 litres of camel milk from Isiolo to Eastleigh Nairobi. The buses charge a transportation fee of 100 Kshs per each can of 20 liters -5 Kshs per liter. As a result, 33 to 35 women will jointly pay a sum of 25,000 Kshs to 30,000 Kshs per day in transportation costs. Finally, Anolei spends approximately 450,000 Kshs per month during the low season on hiring trucks to take the milk to the terminal markets⁴. This sum goes up to 750,000 Kshs a month during the high season.

To tackle this challenge, Anolei has put in place the following strategies:

- 1) To organize trading with producers mainly through field logistical support and arranged transportation.
- 2) To establish bulking and refrigeration at Isiolo town, a few meters away from the Nairobi-bound bus terminus.
- 3) To establish pooled transportation arrangements with daily commuter buses plying the Isiolo- Nairobi route.

³ Source: http://m.snvworl.org/sites/www.snvworl.org/files/publications/case_study_

⁴ Source: <http://webarazafarmer.com/index.php>

- 4) To initiate negotiations with financiers who can assist Anolei in purchasing its own truck.

It is however necessary to find a long lasting solution to the transport challenge. Looking at the gross figures, a promising scenario would be for Anolei to buy a 7-toner truck for milk transportation (see box 3).

This scenario creates a high level of efficiency, as well as a number of risks. Assuming that members plan to pay off the loan in 3 years, they would therefore be required to pay approximately 150,000 Kshs per month. Additionally, they would also be paying approximately 350,000 Kshs in operational costs.

The total cost of the truck, including loan repayment and operational costs, would therefore be about 500,000 Kshs per month. In such case, during the low season when they transport about 5,000 liters, they could save up to 250,000 Kshs a month. During the high season, when the volume increases to about 6,000 litres, they could save up to 400,000 Kshs per month.

The risk elements are related to: a) group unity, b) trust dynamics among group members and c) truck breakdowns.

Box 3: Calculations on the scenario of a 7 toner truck

Maintenance/Servicing:

What would be the full operational cost of a truck on a daily basis i.e. fuel, hiring a driver and tout; wear and tear?

Cost of a truck 7 toner:

Truck: 5,500,000 Kshs

Insurance (4% of the value): 220,000 Kshs

Total: 5,720,000 Kshs

Other costs for operation will include;

Fuel: $10,000 \times 30 = 300,000$ Kshs

Employment: $10,000 \times 2 = 20,000 + 30,000$ (500*30*2 allowances) = 50,000 Kshs

Total monthly cost of operation: 350,000 Kshs

Payment of the loan:

The group must make a 20% contribution of the value i.e. 1,100,000 Kshs

The remaining amount for monthly contribution would be 4, 400,000 Kshs plus 12% profit rate i.e. 5,280,000 Kshs (according to First Community bank)

Payment in 2 -3 years scenarios:

2 years: 220,000 Kshs per month

1 year: 146,700 Kshs per month

In the near future, in order to overcome the challenges, Anolei will need to consider the following points:

- 1) To develop a cooling plant, and eventually pack and sell milk to supermarkets.
- 2) To take advantage of the Isiolo airstrip as a marketing facility for Nairobi and beyond.
- 3) To take advantage of the Great North Road that will open possibilities in the Ethiopian market.
- 4) To use the local abattoir that will be commissioned in May as a facility for meat processing.
- 5) To continue fostering relationships with partners.
- 6) To raise shares through equal participation.

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