

## Camel milk, capital, and gender: the changing dynamics of pastoralist dairy markets in Kenya

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### Abstract:

Valued for its medicinal properties, camel milk has been transformed from a food produced and consumed on a subsistence level by camel-owning pastoralist communities in northern Kenya and elsewhere in the Horn of Africa, to a highly valued commodity around which there is a booming trade and growing international interest. This paper looks at camel milk's commodification through the activities of three camel milk trading enterprises in Kenya. Rapid pastoral sedentarization and urbanization has created high demand for camel milk among townspeople. These new pockets of demand first prompted small-scale, informal trade run by women from camel-owning communities. The growth of Eastleigh, Nairobi, as an urban centre accommodating a large Somali population following the collapse of the Somali state has further fuelled the boom in the camel milk trade, leading to growing formalisation and consequently a shift in gender roles within the business. By tracking these changes, our study of the camel milk trade in Kenya illustrates how camel-owning pastoralists are adapting to political, climatic and demographic changes in northern Kenya.

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### Introduction

Known as *caano geel* in Somali, camel milk is a time-honoured good among pastoralists in the Horn of Africa. *Caano geel* is celebrated in Somali poetry and used as a symbol of identity and tradition among the diaspora.<sup>1</sup> It remains especially important for camel-herding communities in northeast Africa; in the arid areas of Northern Kenya, Somali, Boran, Gabra and Rendille have long been aware of the high nutritional value of the milk, especially important in times of drought. People commonly refer to the milk as medicine for a wide range of ailments.

Before the rise of urban settlements in pastoralist areas, milk was produced on a subsistence basis. Selling milk was a sign of desperation, a curse on the camels and a foretoken of bad times. Today in Northern Kenya, however, camel milk is a key commodity linking pastoralists to both the growing Northern towns and to urban centres in down Kenya. Since the late 1980s, female petty traders in particular have established a growing milk business, increasingly important for women who do not have easy access to capital or formal skills with which to build a livelihood. However, as market demand has grown and traders have sought ways to formalise the trade, new actors have entered the market and changed patterns of control over the production and supply chain. The market now operates at multiple levels, from petty traders selling a few litres a day to cooperatives of camel owners and even a camel milk processing plant run by a European with his own camel ranch.

This paper examines the growth of the camel milk business and the change from camel milk as a traditionally consumed product to a traded and transported commodity. We define commodification as a process whereby assets, goods and services gradually shift from having a use value purely in terms of subsistence to having an exchange value as well, meaning that they will be increasingly sold and acquired on the market.<sup>2</sup>

For this paper, we take the case of Northern Kenya, focusing particularly on the town of Isiolo. Isiolo lies on the road from Nairobi to Moyale, on the “frontier” between arid Northern Kenya and the more fertile southern “down Kenya”, and is thus a key transit town between Kenya’s North and the large urban market of Nairobi. The paper is based primarily on research carried out in Northern Kenya and Nairobi from April to September 2010.

We will first provide an overview of the history of the burgeoning urban landscapes in the midst of the arid North and the wider patterns of demographic change and migration in the region. The second section will then turn to the specifics of the changing camel milk trade. First, we will explain the traditional systems surrounding camel milk production and consumption and how changes in Northern Kenya promoted its evolution into a sellable product around which a petty trade developed. We will then look at how a group of women – the Anolei Women Group – seized the opportunity offered by the new urban market in Eastleigh to create a supply chain based on shared capital investment. Finally, we will examine two more recent dimensions of market formalisation: the formation of a camel owner cooperative, the Isiolo Dairy Milk Cooperative, as well as a foreign-owned company, Nanyuki-based Vital Camel Milk Limited, which mainly supplies the Nairobi market, but has sporadically supplied the international market as well. We will conclude by examining how commodification and then formalisation have created opportunities for different kinds of actors with varying access to capital and market strategies. While expansion and commodification have allowed some pastoralists more access to a wider market, increasing formalisation relies on access to a larger amount of capital; it risks cutting out the very people who have established the main infrastructure of the trade – pastoralist women with no formal education.

### **Northern Kenya: urbanisation in an arid land**

Popularly known as “Texas”, Isiolo is a dusty frontier town, a bustling gateway connecting markets in Nairobi and “down-country” Kenya to trading centres in Kenya’s more remote and arid northern provinces. Until 2008, the road from Nairobi north to Moyale on the Ethiopian border was only paved up to Isiolo,<sup>3</sup> after which trucks loaded high with goods and passengers faced a bumpy and dusty drive up to the towns of North-Eastern and upper Eastern Provinces. The town is a crossroads for people from very different walks of life; farmers and market women from the arable areas of “down-country Kenya” share roads with pastoralists from a variety of cultures from northern Kenya – Turkana, Rendille, Samburu, Boran, and Somali.

Isiolo town and most other towns in Northern Kenya began as British colonial projects, administrative centres for the vast areas inhabited by the different pastoralist groups of the region. The more significant market opportunities of these towns, such as providing food rations for soldiers and officials, were limited to Arabs, Indians, and the Isaq and Herti Somalis who had come with the British.<sup>4</sup> Towns were seen as places where non-pastoralists should settle. However, by the 1930s they did offer some opportunities for local pastoralists to provide meat and milk to colonial police posts and road crews.<sup>5</sup> During and after the Second World War, the British then altered their policies somewhat and took steps to open the economy to commerce and ease restrictions on local involvement in trade,<sup>6</sup> leading to a great rise in stock sales and the beginning of a large-scale commercialisation of the livestock trade which continues today.

Colonialism of course involved changes that went further than a process of economic reorientation; British rule greatly altered governance systems in the pastoralist areas of Northern Kenya, establishing processes which institutionalised the marginalisation and militarisation of the region. The British invested little in the arid North and their concern with controlling and taxing nomadic populations eroded systems of conflict resolution and other social mechanisms which had ensured more sustainable use of resources.

With the British exit, tensions over state formation in the Horn exploded in Kenya's *Shifita* War, when Somalis and their allies in north-eastern Kenya fought to secede from the newly independent nation.<sup>7</sup> The war dealt perhaps the biggest blow of all to pastoralist systems. In response to the guerrilla tactics of the secessionists, whole communities were forced into secure "villages",<sup>8</sup> the traces of which still remain today in the towns of Kenya's upper Eastern Province, and huge numbers of livestock were gunned down by government forces. After the *Shifita* War, the Kenyan government's policies of emergency rule and the ensuing militarisation of many parts of Northern Kenya only reinforced the move towards economic marginalisation and sedentarisation. Emergency rule was only lifted in 1991. Since then, the era of multipartyism has brought some benefits but also ushered in other problems that have continued to drive conflict in the region and hindered economic development.<sup>9</sup>

Specific government policies have been reinforced by more gradual trends. Since the 1970s, population densities have increased in the pastoralist areas of Kenya, both due to natural population growth and due to migration. These movements mean that while droughts have decimated herds at frequent intervals and mean population growth has been higher than livestock growth, there are still more livestock in Northern Kenya today than there were in the 1930s.<sup>10</sup> This increasing pressure on a delicate environment compounded by the lack of infrastructure development in northern Kenya has meant during the latter part of the 20th century, pastoralists have been forced to move to towns in search of market opportunities and wage labour.

Meanwhile, early development projects that worked to deal with the complex challenges presented by the political and economic context of northern Kenya often compounded the problem of sedentarisation and further undermined pastoralist systems. Religious organisations involved in famine relief such as the Catholic Relief Services encouraged poor pastoralists to settle permanently at famine relief posts to receive food and social services, as well as to disengage pastoral populations from their nomadic lifestyles.<sup>11</sup>

Today, across northern Kenya, populations of urban centres continue to increase.<sup>12</sup> However, trends of sedentarisation cannot be viewed simply as the gradual destruction of the livelihoods of pastoralists in northern Kenya. Many town dwellers remain connected with pastoral livelihoods and continue to own livestock, diversifying between livestock trade and town-based business.<sup>13</sup> Pastoralists have also adapted their livestock investments; a milk trader interviewed in Isiolo spoke of the "whole world" buying camels in response to drought and constant cattle rustling.<sup>14</sup>

Indeed, it is important to remember the agency of pastoralists within this shifting and challenging context. There are more subtle reasons for commodification, apart from general environmental and political pressures. Many of the women we interviewed explained that by selling milk they could generate income for school fees, or for the purchase of other foods.<sup>15</sup> We should not expect pastoralists to remain apart from growing national and transnational markets. However, we need to pay attention to how

they link into these markets and which actors benefit at different stages of integration. Thus, we now turn to focus on the camel milk market – starting from its roots in traditional subsistence production.

### **Camel milk traditionally**

Camels excel when it comes to dairy products: they have a longer lactating period than cows and produce milk under dry conditions. A camel can go for ten to fifteen days without water and still produce up to 10 to 20 litres of milk per day.<sup>16</sup> In addition, their milk is considered special by camel-herding pastoralists; our research informants attributed its medicinal properties to the herbs and plants the camel consumes. Indeed, camel milk has higher protein and lactose levels and yet a lower fat content than cow milk, and is richer in vitamins and minerals.<sup>17</sup> In harsh, drought-prone climates, camel milk is hence a vital food, a lifeline for pastoralists.

Among groups such as the Somali, Boran, Gabra and Rendille,<sup>18</sup> camel milk was traditionally produced on a subsistence level, utilised for household consumption, or exchanged as a gift as part of a system of maintaining family ties and mechanisms of social support.<sup>19</sup> Deep respect for camels has been manifested in the rituals traditionally surrounding their treatment, a series of rich cultural matrices which are outlined by Gunther Schlee in his analysis of the “camel complex” of camel-herding communities in Northern Kenya.<sup>20</sup>

Under this ritualised subsistence system, camel milk was not sold, and to resort to selling milk was considered a curse on the camels.<sup>21</sup> Indeed, Urs Herren’s research around Mogadishu found that camel pastoralists, although recognising the increasing importance of income from camel milk sales, felt that the business was to the detriment of the camels – as stated by one elder, “Selling milk is good for people, but it is bad for camels”.<sup>22</sup> Members of camel-herding communities we interviewed in Kenya also explained to us that even during their childhood in the late 1970s, for a camel herder to sell their animals’ milk implied desperation – and indeed a chance that they would have to sell the animal itself to make ends meet.<sup>23</sup>

### **Hawking milk: the beginning of the trade**

In light of these strong traditional views, how did camel milk transform into a commodity? Initially, the trade involved very small-scale and itinerant milk trade in early pastoralist settlements; nomadic women would bring the milk from their herds for sale in towns or other areas where there were people without access to herds, either because they did not own any or because their own were too far away. Selling milk is an attractive option for pastoralists who do not want or cannot afford to sell the few animals they still have. As Peter Little explains, diversification into dairy trade should not necessarily be understood as a business for accumulating capital, but as a survival strategy in response to deteriorating economic conditions.<sup>24</sup> Selling milk allows women to earn some income to meet household expenses, especially if they are widowed or single or if their husbands are in remote locations with their main herds or working as labourers in urban areas. Indeed studies have found that poorer households sell milk all year round, in spite of having fewer animals, and tend to stay near the milk collection points. Money from milk sales is often used to purchase grain which while favourable in terms of calorie content,<sup>25</sup> is not in terms of protein or nutrients.<sup>26</sup> At other times, though, camel pastoralists used the income from milk sales to purchase goods such as tea leaves and sugar,<sup>27</sup> popular goods in pastoralist areas, and, since colonial times, evermore-demanded commodities.<sup>28</sup>

In Isiolo the camel milk trade started with women selling milk from their families' camels on an itinerant basis, hawking it from plot to plot in Isiolo town for household consumption.<sup>29</sup> In other cases, a whole pastoralist camp cooperated to bring milk to town. This matches with patterns observed in parts of Somalia and Sudan: responsibility for collecting milk from the entire camp was shared between the women in the community, with one or two taking the milk for sale in the market but splitting transport costs between all the women involved.<sup>30</sup>

### **Emergence of urban-based traders**

Following in the footsteps of the itinerant traders, in Isiolo, town-based milk traders soon began to develop their business, consolidating the dairy trade established by nomadic women who were hawking milk from household to household. Founding members of the Anolei Women Group described meeting these nomadic milk sellers in Isiolo town and developing relationships with them as “customers” from whom they began to buy milk.<sup>31</sup> Town-based traders would also travel to where the camels grazed to collect the milk directly from the herders. These traders would then return to Isiolo to sell the milk they had purchased. These urban-based women traders thus acted as “middlemen” in the camel milk trade.

As with most petty trade, milk business was chiefly the domain of women, who tend to gravitate towards this work because they are unable to access wage employment in the formal sector, while large-scale business tends to be dominated by men.<sup>32</sup> A study by CARE Kenya found that 98 per cent of milk traders in Garissa District in North Eastern Province were women.<sup>33</sup> Often powerless when it comes to land rights and access to herds, women have limited options for improving their economic status.<sup>34</sup> Indeed, many milk traders interviewed in Isiolo and Eastleigh asserted that milk trade was all they could do to get a little money to provide for their families and pay their children's school fees. Requiring little start-up capital, milk trade is one of the most accessible businesses to poor women. It may be that increased poverty (or rather, “settled life”)<sup>35</sup> means women play increasingly crucial roles in income generating activities and thus participate more in decision-making at the household level.<sup>36</sup> Both Little and Herren found that in southern Somalia, a large proportion of town-based traders were heads of households, having been widowed, divorced or deserted by their husbands.<sup>37</sup> Nori *et al* argue that Somali women are in fact in a better position than men to engage in this trade as they “hold more “ambiguous” clan affiliations and maintain alternative forms of association based on solidarity and reciprocal support mechanisms that go beyond the family or the kin group”.

### **From individual hawking to organisation: Anolei and Eastleigh**

Since the mid-1990s, Isiolo has become the centre of coordinated trade networks that not only collect milk from surrounding rangelands for sale to consumers in Isiolo town but also transport milk to growing markets in Nairobi. The town hosts a growing number of milk storage facilities; buses leave Isiolo daily for Nairobi in the early morning, carrying jerry cans of camel milk marked for specific traders in the capital city. Every afternoon, buses arriving from Nairobi are greeted by women waiting to collect the empty jerry cans sent back by their associates in the city. The development of more organised networks out of what originally were groups of itinerant traders has happened in response to the mass migration to Kenya from Somalia by traditionally camel-herding communities. Most of the milk in Isiolo now goes to Eastleigh, an area of Nairobi with a concentrated community of Somali migrants.<sup>38</sup> In neighbouring

Garissa District, apart from demand from the increasingly large Garissa Town, a large proportion of milk produced is sold in the Dadaab refugee camp system, increasingly an “urban centre” in its own right,<sup>39</sup> hosting well over a quarter of a million refugees, mostly from neighbouring Somalia.<sup>40</sup>

Somalia has the highest camel population in the world, and more than sixty per cent of the milk consumed in the country is camel milk.<sup>41</sup> Somali refugees thus formed a concentrated pocket of demand for camel milk in Eastleigh where it is largely sold by women on the side of the road from jerry cans. These women buy the milk either directly from milk traders based in Isiolo (or towns on the way to Garissa, the other branch of this trade network), or from wholesalers in Eastleigh who buy large quantities of milk from the Isiolo-based traders and sell it on in smaller quantities. Camel milk is also commonly found in some Somali restaurants in Eastleigh, often favoured for making tea. Looking forward, business looks likely to grow with the continued expansion of the Somali community in urban areas in Kenya and internationally. At the time of writing, a small but increasing proportion of the milk sent to Eastleigh was being forwarded on for sale in other Nairobi estates as well as other urban areas in Kenya including Mombasa, Nakuru, and Kisumu; additionally, some was sent every night on a bus to Kampala, Uganda.<sup>42</sup>

Women in the Anolei Women Group<sup>43</sup> were the vanguard in expanding the camel milk trade networks from Isiolo to Nairobi. The group has existed informally for approximately fifteen years,<sup>44</sup> but it was generally agreed that it has operated officially since they registered with the government in 2004-2005. There are 33 members, plus one male member, Abdi, the husband of one of the members, who also acts as the group’s “coordinator”. Abdi described his role as mainly being to link the group with NGOs. All members of Anolei are Somali of different clans, the majority (about two thirds) being Garre. The group hold twice monthly meetings where any business issues are discussed.

The Chairwoman, Zahra, described her early involvement in trade in camel milk to Nairobi prior to the establishment of the women’s group. She said that she would send milk to a relative in Nairobi who would sell it on to the Eastleigh market, and they would split the profit between them. However, Zahra found that she was making a loss as the milk was often spoiling before it reached Nairobi.<sup>45</sup> Seeing other women involved in the camel milk business, Zahra felt that operating as a group would be more profitable.

Together the female traders from Isiolo started to form a group and soon realised that refrigeration was essential. A number of group members with livestock sold some of their animals in order to purchase fridges, which they then rented out to other members as well as to non-members dealing in camel milk. Now each member of the group owns at least one or two fridges<sup>46</sup> located in “cold storage hubs”.<sup>47</sup> Each member contributes 500 shillings per month (approx. £4 / \$6) which covers the rent of the hubs, and the remaining cash is saved with the intention of ultimately purchasing a vehicle by which the milk can be transported to Eastleigh.<sup>48</sup>

At the moment, milk is transported to Eastleigh by public bus. Women store the milk in plastic jerry cans on which the name of the buyer in Eastleigh is written. Women pay the bus company for transportation. When the group first formed, they would load all the milk onto the bus as one batch, but if problems arose, such as the bus breaking down and the milk spoiling, the question arose of who would take responsibility for the

losses. The group thus decided to operate on an individual basis, each holding responsibility for their own milk.<sup>49</sup>

Each member thus operates as an individual, buying milk from particular producers with whom they have established a “customer” relationship.<sup>50</sup> Each member also has wholesalers in Eastleigh to whom they sell the milk. These women may sell the milk directly to the public, in smaller quantities to other traders, or to particular restaurants to which they supply milk on a regular basis.<sup>51</sup> Wholesalers are often relatives of the Anolei members,<sup>52</sup> mostly from Mandera in North Eastern Province.<sup>53</sup> In total, women in Anolei handle about 100 to 150 litres per day.<sup>54</sup> Buying and selling prices of milk are standardised and regulated within the group.<sup>55</sup>

The story of the Anolei Women Group illustrates the growing formalisation of the camel milk industry since the surge in demand for the product in Eastleigh. This has also been catalysed by the input of NGOs and government institutions since the group’s official registration. These organisations tend to encourage the introduction of rules and regulations around camel milk trade, such as health and safety and hygiene, with the aim of expanding the camel milk market and optimising the profit made from it.<sup>56</sup>

### **Formalisation and new actors: Isiolo Dairy Camel Milk Cooperative**

While Anolei continues to dominate the camel milk market in Isiolo, in 2009, a new group formed in the town: the Isiolo Dairy Camel Milk Cooperative. Its most visible presence in the town is its camel milk bar where Isiolo residents can sit and sip a glass of milk or *susaac* (soured camel milk), an innovative adaptation of the cow milk and yoghurt bars in the town. The establishment of the cooperative represented another step in the formalisation of the camel milk trade; the group offers a drastically different idea of how the camel milk market should be structured. It was initiated by camel owners in response to what they felt were unfair prices from “middlemen” in the camel milk trade (“middlewomen” might be a more appropriate term, as this describes the female urban traders in Isiolo, many of whom are members of the Anolei group).

The founders of the Cooperative also cited concerns about the middlewomen’s lack of policy and regulation around hygiene of the milk.<sup>57</sup> They also cited the middlewomen’s focus on the Nairobi market as a detriment to customers based in Isiolo town. The Cooperative sells the majority of its milk from the Isiolo milk bar, sending only a small quantity south to Nairobi.<sup>58</sup> It has a standardised price at which they buy and sell the milk, and prioritise purchase from members before considering purchase from non-members.<sup>59</sup> Members must own at least one camel<sup>60</sup> and pay a membership fee of 10,000 shillings (approx. £79/ \$123) which can be paid all at once or gradually in milk.<sup>61</sup> This fee pays for shares in the cooperative, which cover the rent of the outlet from which they operate, the purchase of the fridges, and the polythene bags in which the milk is contained inside the fridges.<sup>62</sup> Thereafter, members donate around a litre of their milk per day to the cooperative to further fund the running of the organisation.<sup>63</sup>

Because it is a requirement of membership to the Cooperative to own camels, members remain directly involved in the traditional camel pastoralist way of life while simultaneously being directly linked with the camel milk market. The Cooperative effectively cuts out the “middlemen” that are so central to the model around which the Anolei Women Group operates. We observed the backgrounds of the founding members of the Cooperative and those who sit on the management committee with

interest. While they are indeed camel owners who are still very much connected to a traditional way of life, they are mainly middle class people who either are or were employed in the formal sector. Abdullahi, the Cooperative's Chairman, is a retired employee of the Kenya Wildlife Service. One founding member, Lela, is a civil servant. Another, Abdullahi, is a retired policeman who used his retirement benefit to expand the camel herd he was given by his father. This contrasts sharply with the members of the Anolei group. Although the Cooperative is as yet a small-scale organisation, it is important to notice that in institutions where some of the members may have sufficient capital, they can leverage it to challenge other actors for more formalised access to the market.

The differences in backgrounds of those behind the Cooperative and those involved in Anolei Women Group also elucidate the divergence between the two organisations' approaches. The Cooperative's concern with regulations around health, safety and hygiene may result from the founding members' backgrounds, particularly for those who have been employed as civil servants. Founding committee members were familiar with the language of NGOs and applied it to their descriptions of the Cooperative. They are keen to identify a market for camel milk beyond the Somali demand in Eastleigh, and to promote camel milk as a health food, opening up the market beyond traditional consumers. Rather than trying to steal business from the "middlewomen",<sup>64</sup> they are trying to further formalise and regulate the camel milk industry. Indeed, founding member Lela explained that the lack of a regulatory body like the Kenya Creameries Corporation for cow products to regulate the camel milk trade was part of the motivation behind the Cooperative's establishment.<sup>65</sup>

Further formalisation and regulation of the camel milk trade could potentially risk pushing out uneducated women involved in the informal trade to Eastleigh. Lela said that the Cooperative would like to absorb members of the women's group, arguing that this would ultimately benefit them as the current system does not insure them against losses, especially during the rainy season when there is an excess of milk and there is a tendency for Eastleigh traders to send unsold, fermented milk back to Isiolo.<sup>66</sup> A report by the Dutch NGO SNV on Kenya's camel milk trade also notes the risk that the industry's formalisation could pose to the informal trade, pointing to a pending bill on the regulation of the dairy industry in Kenya. However, they argue that regulations in milk handling standards are essential for growth in the subsector,<sup>67</sup> and hence the maximisation of profit. Members of the Anolei Women Group, on the other hand, may be more concerned with the daily income that the camel milk trade provides as part of a survival strategy, and have less concern with the wider market and capital-making opportunities which, as uneducated and small-scale traders, they may not be able to access.

### **Health foods, camel milk ice cream, and other horizons: Vital Camel Milk Ltd.**

At an international level, camel milk has in recent years been attracting attention as a health food. The FAO has been promoting the possibilities of increased investment to bring the product to wider markets while royal families from the Gulf States have been investing in dairies – both leading to more unusual specialities such as "camelbert" and camel milk chocolate.<sup>68</sup> This impetus from both the health food markets and diasporas is giving rise to new possibilities for camel milk marketing; according to recent estimates, over a million people from Somalia live abroad.<sup>69</sup> The international demand for camel milk is estimated at far higher than the 300 million litres produced in Kenya annually.<sup>70</sup> This is attributed to the widely acknowledged health properties of camel milk, especially in the treatment of diabetes, creating a "high-end health market



segment of consumers both in the national and international trade”.<sup>71</sup> In Kenya, this market has been seized by Vital Camel Milk Ltd, the most formalised operation of camel milk trade of the three organisations observed.

A private enterprise, Vital Camel Milk Ltd (VCML), is based in the town of Nanyuki, approximately 3 hour’s drive north of Nairobi. The proprietor, Holger Marbach, a German national, has been running the business since 2005 and operates a camel milk processing plant and a ranch of forty camels. VCML buys milk from local producers having trained them in hygienic milk production and provided them with equipment such as cans, buckets and sieves. Milk sourced from local pastoralists is consistently laboratory tested.<sup>72</sup> VCML has strict regulations around the milk which they purchase, and do not accept milk which is preserved in the traditional way,<sup>73</sup> their milk thus lacking the distinctive smoky flavour which characterises camel milk from the informal Eastleigh market. The VCML ranch acts as production security, particularly in response to livestock rustling in pastoralist areas that renders the milk supply unreliable.<sup>74</sup>

VCML’s main market is Nairobi and targets the well-off traditional camel milk consumer as well as the more recent, health-conscious consumer. The proprietor also has in the past sporadically supplied the US, United Arab Emirates and South Africa, though has faced challenges along the way.<sup>75</sup> Consumers of Vital Camel Milk pay for its high quality and hygienic production – at 260 shillings per litre it is more than twice as expensive as the milk traded by the likes of the Anolei Women Group which goes at around 120 shillings per litre (around 93p/ \$1.40). It is sold in shops in Eastleigh and in high-end supermarkets such as the Nakumatt chain..

Like the Isiolo Dairy Camel Milk Cooperative’s aim of absorbing the “middlewomen” urban traders in Isiolo, VCML has also had the vision of absorbing informal traders, provided they adhere to certain rules and regulations. VCML have encouraged the absorption of camel owners and small-scale milk traders via regular training, providing two sets of stainless steel buckets and cans on credit to every milk producer and by cleaning and sterilising buckets and cans following delivery for the producers who alternate between their two sets.<sup>76</sup> However, absorbing petty traders and camel pastoralists with low levels of capital in an enterprise such as VCML is not without its challenges, as an interview with the VCML proprietor revealed. Explaining that he pays a higher rate for quality milk, Mr. Marbach expressed concern that he would only make losses if he tried to absorb these petty traders, whom he was not confident would meet VCML standards. In addition, he feared petty traders would resist going to extra lengths to provide high quality, hygienic milk when they are able to buy milk at little cost and sell it at inflated prices to consumers who do not demand a higher quality product.<sup>77</sup>

### **Changing access to the market**

Comparative study of these three organisations dealing in camel milk reveals how the commodification and formalisation of the camel milk trade has led to a shift in who is accessing the camel milk market. One apparent change has been in gender roles within the industry; a trade traditionally handled almost exclusively by women is now attracting the involvement of men. Although Anolei Women’s Group was presented to us as a women-only organisation, at a later stage in the research we found that the group’s “coordinator” was male. His involvement with the group has been relatively recent, coinciding with the group’s efforts to formalise the trade by registering with the government. His role within the women’s group is to facilitate the group’s interaction

with NGOs to which, as a registered organisation, the group now has access.<sup>78</sup> In contrast, we observe that the Cooperative's managerial committee is almost equally divided between male and female members. Milk trader and member of the Cooperative, Sarah, commented that men had involved themselves in the trade since the opening of a "shop", in reference to the cooperative's milk bar outlet, which prompted men's "sympathy for milk". She reported that before, when women used to hawk the milk, men were not involved and were unable to operate on that basis.<sup>79</sup> Abdullahi, also a member of the Cooperative, asserted that men were not involved in milk trade when it was still considered "something small", but that since it has brought money, they have become involved in the business. He told us

Men used to do livestock business: they buy here [in Isiolo] and take them to KMC [Kenya Meat Commission] in Nairobi. They were never involved in milk business, you know milk was something small, but later after seeing these women had made good business out of milk, the men also decided to start doing the milk business.

Now the men also deal with milk very much. They have seen that the business has money. Now one litre is like 60 shillings so if you supply like 100 litres isn't that a lot of money?

They [women traders from the Anolei group] had complained by saying that the men were encroaching into their territory but who will leave anything that has money? So we told them we are very grateful to for showing us where money is.<sup>80</sup>

Interviews with milk traders in Eastleigh selling from the roadside emphasise that the petty trade in camel milk remains the occupation of women,<sup>81</sup> while the formalised trade is deemed acceptable by men. Our findings contrast with other studies of the camel milk trade by Little and Herren in Somalia, which report that the milk trade is still chiefly women's work.<sup>82</sup> We would suggest that this is due to the fact that, at the times of these studies, the camel milk trade in Somalia was still relatively informal, or at least had not undergone the processes of formalisation which we see in Kenya. Little finds that the dairy trade in Somalia is not a channel for accumulating high levels of investible surplus, but an activity that provides employment to a large number of women who thereby earn an income to meet household subsistence.<sup>83</sup>

Our study suggests that the trade may be shifting from that described by Little to a more lucrative industry with higher capital accumulation, which may risk cutting out some of the women who currently earn a relatively low income from the trade. Behnke et al point out that it is not necessarily to be expected that women will maintain their pre-commercial control over milk when pastoral households become specialised dairy producers. They point in particular to the role of formal dairy schemes for purchasing pastoral milk in prompting men to take over the milking and marketing of milk: "...once pastoral dairying and marketing is transferred to formal institutional channels, it ceases to belong to the domestic domain and men tend to take over, because of their greater familiarity with workings of the male-dominated public sphere".<sup>84</sup>

However, perhaps more clearly, the workings of the Cooperative involving women as well as men highlight that shifts in the key players in the camel milk industry are based on social background and education. A trade previously the preserve of uneducated, poor women has attracted the involvement of people from middle class, educated backgrounds who have better access to capital. It is important to note that within the less formal camel milk trade, less educated women traders are currently winning against the newly formed Cooperative which has struggled to purchase significant

quantities of milk, often monopolised by the female traders.<sup>85</sup> However, the increased formalisation of the trade, and potential introduction of legislation and regulation which it may incur, could see a shift in key players within the camel milk industry in the years to come. Recently there have been a series of news articles in the Kenyan press about plans for a camel milk processing plant funded by the Gates Foundation in northern Kenya and other formalised interventions in the camel milk market. In the rush to milk the most out of this market, it is important to consider who will benefit from the increased profits.

## Conclusion

Examining the journey of camel milk from a food produced and enjoyed on a subsistence level by camel-owning communities to a highly valued commodity around which there is a booming trade within Kenya and growing international interest, offers a window through which we can observe the responses of ordinary people to the changes taking place around them. Processes of sedentarisation and urbanisation, catalysed by political pressures and climate change have not necessarily rendered traditionally pastoral communities redundant or displaced, but have prompted shifts in livelihood systems which enable people to navigate through a changing environment. The expansion and formalisation of the camel milk trade following the development of Eastleigh emphasises the agency of people in northern Kenya to seize opportunities opened up by changing situations elsewhere. Analysis of the burgeoning camel milk trade hence challenges notions of pastoralist societies as passive victims to political and climatic upheaval. In addition, this study describes the rise of the businesswoman, illustrating the agency of women in northern Kenya in responding to these changes, who have all too often been silent in studies of pastoralist livelihoods and economies.<sup>86</sup> We also observe, however, that with formalisation there has been a shift in those who participate in the camel milk trade, and note that women operating within the less formal industry may risk being excluded should moves towards further formalisation and regulation continue.

## NOTES

<sup>1</sup> Indeed one of the most famous online forums for Somalis now is “Camel milk threads”, organised by Somalia Online. See <http://www.somaliaonline.com/cgi-bin/ubb/ultimatebb.cgi>.

<sup>2</sup> Dietz and Zaal, *Of markets, meat, maize and milk*, 163

<sup>3</sup> The road after Isiolo is now under construction, led by a Chinese company.

<sup>4</sup> Isiolo especially was meant in part as a leasehold given to “alien Somalis” who had worked for the British or fought in the Kings African Rifles.

<sup>5</sup> Fratkin and Roth, *As Pastoralists Settle*, 1; 8.

<sup>6</sup> Hogg, *The new pastoralism*, 320.

<sup>7</sup> During the Shifta War (1963-67), Somalis and other Muslim minorities of the Northern Frontier District fought to secede from Kenya and join the Republic of Somalia. See Whittaker, *Pursuing pastoralists* and Mburu, *Bandits*.

<sup>8</sup> Roba and Witsenburg *Surviving Pastoral Decline*, 5.

<sup>9</sup> See Fratkin and Roth, *As Pastoralists Settle*, 2; Mburu, *Bandits*, 152-4; De Waal, *Famine Crimes*, 40-42.

<sup>10</sup> Zaal and Dietz, *Of markets, meat, maize and milk*, 168.

<sup>11</sup> Fratkin and Roth, *ibid*, 2

- <sup>12</sup> Half the population of Isiolo district resides in Isiolo town – Goldsmith *Cattle, khat and guns*, 38.
- <sup>13</sup> Fratkin and Roth, *ibid*, 9
- <sup>14</sup> Zeinab, interview by Kochore and Lochery in Isiolo, July 2010.
- <sup>15</sup> Elsewhere in the Horn, other pastoralist communities have resorted to trade in camel milk. Many of the factors leading to the trade are similar as those we describe for Kenya though, as would be expected, some factors are context-specific. For example, in Somalia camel milk trade was one response to a severe livestock ban in 2001 whereby livestock sales to Arab nations, previously providing the main market for Somali livestock, were heavily restricted – see Nori et al, *Milking drylands*, 16; Nori et al, *Ungoverned markets*, 7. This is not to suggest that demand for camel milk arose from nowhere – indeed, the decline in the livestock business may have forced pastoralists to urban centres to seek alternative forms of income, thereby creating new pockets of demand for camel milk.
- <sup>16</sup> Musinga et al, *The camel milk industry in Kenya*, iv.
- <sup>17</sup> Nori et al, *Milking drylands* 17-18, citing Wemery.
- <sup>18</sup> Schlee, *Identities on the Move*
- <sup>19</sup> Nori et al, *ibid*, 8
- <sup>20</sup> For the Gabra, for example, Sunday is the *ayaana gala*, “the day of the camel”, and on this day camels should not be milked or bled, nor should they spend Sunday nights in an unfamiliar enclosure or be collected as gifts. – Schlee, *ibid*, 55.
- <sup>21</sup> Degen et al, *Market dependence* 32
- <sup>22</sup> Herren, *The commercial sale of camel milk*, 13. Informants commented that the disadvantage of the camel milk trade was that it pushed camels nearer to villages where pasture is less abundant due to fields, charcoal clearings and high livestock densities. Consequently, camels were weaker and more susceptible to disease, and their fertility was said to be lower.
- <sup>23</sup> Hassan and Dubow, interview by Lochery, August 2010, Nairobi.
- <sup>24</sup> Little, *Maidens and milk markets*, 179-180
- <sup>25</sup> Nori et al, *Milking drylands*, 22; Herren, *ibid*, 24 – notes that during dry seasons, 1 kcal of milk bought up to 8 kcal of grains, and during the wet seasons the rate was even better at 1:3.5.
- <sup>26</sup> Oba writes of the ill effect milk sales have had on young children in Borana households who traditionally had first claim over milk. See Oba, *Changing property rights among settling pastoralists*, 43. See Oba “The importance of pastoralists’ indigenous coping strategies”, 107 for a further account of the diminishing role of livestock foods in pastoralists’ diets.
- <sup>27</sup> Zahra and Amina, interview by Elliott, Kochore and Lochery, Isiolo, June 2010; See also Oba, *ibid*. 104.
- <sup>28</sup> Colonial reports from the period report how popular these goods were. Herren, *The commercial sale of camel milk*, 7-8 finds that informants explained the increase in camel milk trade as being down to the increasing demand of pastoralists for a number of goods which they needed capital to purchase, such as sugar (more common in the diet since the 1960s), cloth, medicine and other “things of the town”, likely to have come with sedentarisation.
- <sup>29</sup> Sarah, interview by Elliott, Kochore and Lochery, Isiolo, July 2010.
- <sup>30</sup> Behnke et al, *From subsistence to specialised commodity production*, 24. See also Herren, *The commercial sale of camel milk*.

- <sup>31</sup> Zahra and Amina, interview by Elliott, Kochore and Lochery, Isiolo, July 2010.
- <sup>32</sup> Little, *Maidens and milk markets*.
- <sup>33</sup> CARE Kenya, *A report on the camel milk marketing clusters in Garissa*, 5.
- <sup>34</sup> Little, *Maidens and milk markets*, 170; Fratkin and Roth, *As Pastoralists Settle*, 10. See Dahl, *Mats and milk pots*, 132 for a description of the Borana woman's traditional role as "milk manager", whereby "milk, in contrast to other pastoral products, constitutes a relatively autonomous female domain of decision-making", prior to dairy trading as part of a livelihood strategy.
- <sup>35</sup> Fratkin and Roth, *As Pastoralists Settle*, 10; see also Fratkin et al, *Pastoral sedentarization and its effects on children's diet*.
- <sup>36</sup> Oba, "The importance of pastoralists' indigenous coping strategies for planning drought management", 104.
- <sup>37</sup> Herren, *The commercial sale of camel milk*, 16; Little, *Maidens and milk markets*, 170; See also Hjort, *Town-based pastoralism*, 327 which describes many of the poor peri-urban families in Isiolo as headed by women who have been divorced widowed or abandoned by their husbands.
- <sup>38</sup> Eastleigh is at once a very crowded residential area as well as an increasingly busy business centre. It has two main avenues interconnected by over 12 streets. As well as Somalis, there are many Ethiopians, Eritreans and people from Northern Kenya as well as people from down Kenya. See Campbell *Formalising the informal economy*
- <sup>39</sup> CARE Kenya, *A report on the camel milk marketing clusters in Garissa*. Horst's *Transnational Nomads* 78 discusses the urbanisation of Dadaab refugee camp, likening it to a city with significant infrastructure compared with the rest of the region.
- <sup>40</sup> UN High Commissioner for Refugees, *Kenya: Dadaab*.
- <sup>41</sup> Nori et al, *Ungoverned markets*, 3.
- <sup>42</sup> Musinga et al, *The camel milk industry in Kenya*, 27. Also, news reports from 2007 explained that milk was being transported to Kampala on an *Akamba* bus nightly: see Jaramogi, *Uganda: Kisenyi*
- <sup>43</sup> "Anolei" means "milk people" in Somali – Zahra and Amina, interview by Elliott, Kochore and Lochery, Isiolo, July 2010.
- <sup>44</sup> Abdi, interview by Elliott and Kochore, Isiolo, July 2010.
- <sup>45</sup> Zahra, interview by Elliott and Shariff, Isiolo, June 2010.
- <sup>46</sup> Abdi, interview by Elliott and Kochore, Isiolo, July 2010.
- <sup>47</sup> A term used by Musinga et al, *The camel milk industry in Kenya*.
- <sup>48</sup> Abdi, interview by Elliott and Kochore, Isiolo, July 2010.
- <sup>49</sup> Zahra and Amina, interview by Elliott, Kochore and Lochery, Isiolo, July 2010. Fratkin and Roth note dramatic changes in terms of customs and relationships among settled townspeople, in spite of continued ties to pastoral communities. They describe in particular a departure from in-based relations in the pastoral communities to individualised identities in the towns, including the adoption of capitalist concepts of private property and individual gain – Fratkin and Roth *As Pastoralists Settle*, 10.
- <sup>50</sup> Zahra and Amina, interview by Elliott, Kochore and Lochery, Isiolo, July 2010.
- <sup>51</sup> Zahra and Amina, interview by Elliott, Kochore and Lochery, July 2010.
- <sup>52</sup> Zahra, interview by Elliott and Shariff, Isiolo, June 2010.
- <sup>53</sup> Zahra and Amina, interview by Elliott, Kochore and Lochery, July 2010.
- <sup>54</sup> Musinga et al, *The Camel milk industry in Kenya*, 46.

- <sup>55</sup> Abdi, interview by Elliott and Kochore, July 2010. At the time of the study, buying price in Isiolo was 50/- per litre, selling price to Eastleigh wholesalers 70/- per litre.
- <sup>56</sup> Musinga et al, *ibid*.
- <sup>57</sup> Abdullahi and Ali, interview by Elliott and Lochery, Isiolo, June 2010; Lela, interview by Elliott, Kochore and Lochery, July 2010.
- <sup>58</sup> Abdullahi and Ali, interview by Elliott and Lochery, Isiolo, June 2010.
- <sup>59</sup> Sarah, interview by Elliott, Kochore and Lochery, Isiolo, July 2010.
- <sup>60</sup> Lela, interview by Elliott, Kochore and Lochery, Isiolo, July 2010.
- <sup>61</sup> Abdullahi and Ali, interview by Elliott and Lochery, Isiolo, June 2010.
- <sup>62</sup> Sarah, interview by Elliott, Kochore and Lochery, Isiolo, July 2010; Mohamed, interview by Elliott, Kochore and Lochery, Isiolo, July 2010.
- <sup>63</sup> Lela, interview by Elliott, Kochore and Lochery, Isiolo, July 2010.
- <sup>64</sup> As appeared to be suspected by the Anolei coordinator, Abdi. Interview by Elliott and Kochore, Isiolo, July 2010.
- <sup>65</sup> Lela, interview by Elliott, Kochore and Lochery, Isiolo, July 2010.
- <sup>66</sup> Lela, interview by Elliott, Kochore and Lochery, Isiolo, July 2010.
- <sup>67</sup> Musinga et al *The camel milk industry in Kenya*, 82.
- <sup>68</sup> Fletcher, "Camel milk"; FAO, "The next thing".
- <sup>69</sup> Lindley, *The Early Morning Phone Call*, 31
- <sup>70</sup> Musinga et al, *The camel milk industry in Kenya*, iv
- <sup>71</sup> Musinga et al, *ibid*, 25.
- <sup>72</sup> Musinga et al, *ibid*, 49.
- <sup>73</sup> Traditionally, the milk is stored in containers smoked with a firebrand from a particular herb as a means of sterilisation where there is lack of water. See CARE Kenya, *A report on the camel milk marketing clusters in Garissa*, 10; 17.
- <sup>74</sup> Holger Marbach, interviewed by Kochore in Nanyuki, November 2010.
- <sup>75</sup> Holger Marbach, interviewed by Kochore in Nanyuki, November 2010.
- <sup>76</sup> CARE Kenya, *ibid*, 17
- <sup>77</sup> Holger Marbach, interviewed by Kochore in Nanyuki, November 2010.
- <sup>78</sup> Abdi, interview by Elliott and Kochore, Isiolo, July 2010.
- <sup>79</sup> Sarah, interview by Elliott, Kochore and Lochery, Isiolo, July 2010.
- <sup>80</sup> Abdullahi, interview by Elliott, Kochore and Lochery, Isiolo, June 2010.
- <sup>81</sup> Fatuma, interview by Lochery, Eastleigh, July 2010.
- <sup>82</sup> Little, *Maidens and milk markets*; Herren, *The commercial sale of camel milk*.
- <sup>83</sup> Little, *ibid*, 180.
- <sup>84</sup> Behnke et al, *From subsistence to specialised commodity production*, 27-8.
- <sup>85</sup> Abdullahi and Ali, interview by Elliott, Kochore and Lochery, Isiolo, June 2010.
- <sup>86</sup> Little, *Maidens and Milk Markets*, 165-166.

## REFERENCES

- Abokor, A. C. 1987 *The Camel in Somali Oral Traditions* Sweden: Motala Grafiska.
- Behnke, R. H., C. K. Kerven and Sikana, P. M. “From subsistence to specialised commodity production: Commercialism and pastoral dairying in Africa” <http://www.odi.org.uk/work/projects/pdn/papers/34d.pdf> [accessed 26 January 2011].
- Bederwanaag News Online, “Camel Milk: The Dairy Product of the Future” by Anthony Fletcher [http://www.bederwanaag.com/English\\_News/Camel%20milk.html](http://www.bederwanaag.com/English_News/Camel%20milk.html).
- Campbell, E.H. (2005) “Formalizing the informal economy: Somali refugee and migrant trade networks in Nairobi” in *Global Migration Perspectives* No. 47. Global Commission on International Migration.
- CARE Kenya 2009 “A report on the camel milk marketing clusters in Garissa” [http://www.elmt-relpa.org/FCkeditor/UserFiles/File/elmt/201003/Report%20on%20Camel%20Milk%20Hygiene%20and%20Business%20Skills%20Training\\_CARE%20Kenya.pdf](http://www.elmt-relpa.org/FCkeditor/UserFiles/File/elmt/201003/Report%20on%20Camel%20Milk%20Hygiene%20and%20Business%20Skills%20Training_CARE%20Kenya.pdf)
- Daily Nation “Focus shifts to the camel as next cash cow” by Mwaniki Wahome, 17 January 2011. <http://www.nation.co.ke/Features/smartcompany/Focus%20shifts%20to%20the%20camel%20as%20next%20cash%20cow%20/-/1226/1091116/-/item/0/-/2fqyxl/-/index.html>
- Dahl, G. 1990 “Mats and Milk Pots: The Domain of Borana Women” in Jacobson-Widder, A. and Van Beek, W. (eds.) *The Creative Communion: African folk models of fertility and the regeneration of life* Upsalla, Ata Universitatis Upsalensis pp. 129-136.
- Degen, A. A., A. Nunow, Zaal, A. F. M., D. A. Otieno and Hoorweg, J. C. 2001 “Market dependence for pastoralists in Kenya and Israel” *NIRP Research for Policy Series 8* <http://www.dprn.nl/drupal/sites/dprn.nl/files/file/publications/nirp/nirp08.pdf>.
- Dietz, T. and F. Zaal 1999 “Of Markets, Meat, Maize and Milk”, in Anderson, D. and V. Broch-Due (eds.) *The poor are not us: poverty & pastoralism in Eastern Africa* Oxford: James Currey Publishers pp. 163-198.
- de Waal, A. 1997 *Famine Crimes: Politics and the Disaster Relief Industry in Africa*. Bloomington: Indiana University Press.
- FAO, "The Next Thing: Camel Milk", 18 April 2006, <http://www.fao.org/newsroom/en/news/2006/1000275/index.html> [accessed 26 January 2011].
- Fletcher, A. Camel Milk: the Dairy Product of the Future, *Bederwanaag News Online*, [http://www.bederwanaag.com/English\\_News/Camel%20milk.html](http://www.bederwanaag.com/English_News/Camel%20milk.html) [accessed 26 January 2011].
- Fratkin, E. and E. A. Roth 2005 *As Pastoralists Settle* New York, Kluwer Academic Publishers.
- Goldsmith, P. 1997 “Cattle, Khat and Guns: Trade, conflict and security on northern Kenya’s highland-lowland interface” APPEAL-KENYA, Draft Version.
- Herren, U. J. 1990 “The Commercial Sale of Camel Milk from pastoral herds in the Mogadishu Hinterland, Somalia” <http://www.odi.org.uk/work/projects/pdn/papers/30a.pdf>.

- Hjort, A. 1990 "Town-based Pastoralism in Eastern Africa" in Baker, J. (ed.) *Small Town Africa: Studies in rural-urban interaction* Uppsala: Scandinavian Institute of African Studies.
- Hogg, R. 1986 "The new pastoralism: poverty and dependency in northern Kenya" in *Africa: Journal of the International African Institute* 56(3) pp. 319-333.
- Horst, C. 2006 *Transnational Nomads: How Somalis cope with refugee life in the Dadaab Camps of Kenya* Oxford: Berghahn.
- Kenya National Archives 1950 Isiolo Annual Report "Stock Marketing Methods" PC/NFD1/4/4.
- Lindley, A. 2010 *The Early Morning Phone Call: Somali Refugees' Remittances* New York: Berghahn.
- Little, P. D. 1994 "Maidens and Milk Markets: The sociology of dairy marketing in Southern Somalia" in Fratkin, E. K. A. Galvin and E. A. Roth (eds.) *African Pastoralist Systems: An integrated approach* Bolder Col. Lynne Rienner pp. 165-184.
- Mburu, N. 2005 *Bandits on the Border: The Last Frontier in the Search for Somali Unity*. Trenton, New Jersey: Red Sea Press.
- Musinga, M., D. Kimenye and Kivolonzi, P. 2006 "The Camel Milk Industry in Kenya" SNV Report <http://www.ebpdn.org/download/download.php?table=resources&id=2337>.
- New Vision "Uganda: Kisenyi – Haven for Somali Tranquility Or Scams?" by Patrick Jaramogi, Thursday, September 27, 2007. [http://www.hiiraan.com/news2/2007/sept/uganda\\_kisenyi\\_a\\_haven\\_for\\_somali\\_tranquility\\_or\\_scams.aspx](http://www.hiiraan.com/news2/2007/sept/uganda_kisenyi_a_haven_for_somali_tranquility_or_scams.aspx) [accessed 26 January 2011].
- Nori, M., M. B. Kenyanjui, Yusuf, M. A. and Mohamed, F. H. 2006 "Milking Drylands: The marketing of camel milk in North-East Somalia" in *Nomadic Peoples* Vol 10 no. 1 pp.9-28.
- Nori, M., J. D. Van de Ploeg and Omodei Zorini, L. 2004 "Ungoverned Markets: The emergence of camel milk markets in stateless Somali Areas" [http://milkingdrylands.ominiverdi.org/docs/MD\\_article\\_x\\_EEA.pdf](http://milkingdrylands.ominiverdi.org/docs/MD_article_x_EEA.pdf).
- Oba, G. 1989 "Changing property rights among settling pastoralists: An adaptive strategy to declining pastoral resources" in Baxter, P. and R. Hogg (eds.) *Property, Poverty and People: Changing rights in property and problems of pastoral development* Manchester, University of Manchester.
- Oba, G. 2001 "The importance of pastoralists' indigenous coping strategies for planning drought management" in *Nomadic Peoples* Vol. 5 Issue 1.
- Schlee, G. 1989 *Identities on the Move: Clanship and Pastoralism in Northern Kenya* Nairobi: Gideon S. Were Press.
- Somalia Online, "Camel Milk Threads" <http://www.somaliaonline.com/community/>.
- Vital Camel Milk Ltd: "Products" <http://www.vitalcamelmilk.com/products.html>.
- Whittaker, H. 2008 "Pursuing Pastoralists: The Stigma of *Shifita* during the 'Shifita War' in Kenya, 1963-8" in *Eras* 10.
- UN High Commissioner for Refugees, Kenya: *Dadaab – Weekly New Registration Population Composition – 25 Oct 2010 – 29 Oct 2010*, 2 November 2010, available at: <http://www.unhcr.org/refworld/docid/4cd106a02.html> [accessed 31 March 2011].