

Policy Briefing

Milk Markets in Agropastoral Areas of Africa

This briefing suggests how markets in artisanal milk products may contribute to agropastoralist livelihoods in semi-arid Africa. In some of these areas, milk plays important nutritional and cultural roles, but production is declining due to environmental changes. Very small-scale local markets have responded to demand for milk products, offering limited livelihood opportunities to groups with low capital, including women. Participation in small markets based on the perceived high value of heritage dairy products may be more realistic than high-volume sales. Yet, weak infrastructure and institutional frameworks impede agropastoralists' participation in any kind of market.

Key messages

- Although semi-arid zones do not support high-volume production, milk plays important nutritional and cultural roles in agropastoralist livelihoods.
- High-quality specialist dairy products, such as fermented drinks, may be marketable in small quantities nationally and internationally, with their cultural authenticity and specialist value commanding a premium.
- Engagement in markets requires public investment in roads, refrigeration, electrification, water, and communications. Where infrastructure is absent, small-scale producers, including less advantaged groups such as women, cannot engage meaningfully in markets.
- Schemes to support higher-volume production (e.g. improved breeds, processing equipment, pasture cultivation, encouragement of cooperatives) could be considered, but cannot support market participation without providing infrastructure.



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Culture and markets in agropastoralist livelihoods

Agropastoralists combine growing crops with rearing livestock, which they often move around to graze on open land. Traditionally, milk has played important nutritional and cultural roles in livelihoods where mobility provided some resilience to unpredictability and resource heterogeneity. As contemporary social and environmental conditions change in semi-arid agropastoralist landscapes such as northern Ghana and Baringo county, Kenya, livelihoods have changed: people have sedentarised, and local policy actors, among others, have suggested that livestock keeping should be modernised and further commercialised. This research project, Connecting Agropastoral Food Culture Research to Livestock Commercialisation Policy, investigated the potential for links between the commercialisation and modernisation agendas, and the cultural and traditional roles of milk in agropastoralist livelihoods. This included investigating conditions under which markets for cultural milk products exist, and whether policy actors could engage with research on the culture as well as economics of markets.

In Kenya and Ghana, we worked with agropastoralist groups in semi-arid areas. We conducted interviews and participatory photography activities, where policy actors reacted to photographs taken by and of agropastoralists. These are presented in an **accompanying photoset**.

Cultural and nutritional roles of milk in changing agropastoralist livelihoods

Milk has traditionally been an important component of food systems for agropastoralist communities, performing nutritional, religious, and ritual functions. Various types of raw milk play specific culinary, ceremonial, and aesthetic roles. Ethnically specific milk products, sometimes fermented or incorporating local herbs, have cultural,

nutritional, and medicinal value, and are still widely produced in homes and stored in traditional containers. These are used in journeys, battles, and rituals, and can be exchanged, increasingly for sale rather than barter.

Existing local, national, and international milk markets

Milk is produced and processed in large-scale industrial dairy enterprises in Kenya. Ghana has a more limited large-scale industrial processing sector. There are several medium-scale set-ups in Kenya, such as cooperative dairies and milk collection schemes where intermediary companies or non-governmental organisations support contract milk producers and buy up milk for wholesale. These are rare in Ghana, but are commonly found in other West African – and particularly Sahelian – countries. However, pastoralist communities in Baringo and northern Ghana are not linked to these market structures; the climate and environment do not lend themselves to high-quantity milk production. Also, large-scale dairying and, to an extent, medium scale milk production, involve very high-capital production and processing facilities. Furthermore, they rely either on reasonable road, electricity, and water infrastructure, or capital being available to compensate for their absence through purchasing items such as generators, water pumps, and offroad vehicles.

Small-scale agropastoralists in the study areas cannot fund these requirements to access wider markets. There is no comparative advantage for governments, intermediary companies, or non-governmental organisations to build infrastructure in areas such as Baringo or northern Ghana, because environmental conditions in other regions support higher milk yields that make such investment worthwhile for bulking intermediaries.

Milk production in the study areas has declined among many producers, largely due

to environmental changes – it is often hard for agropastoralists to produce enough milk for consumption and other local functions, let alone enter markets. To some degree, insecurity has impeded market development. Very small-scale local markets have emerged where those who can produce a small surplus of appropriate quality goods sell to others, to perform nutritional and cultural functions. These markets are characterised by a demand for milk with specific material and symbolic properties, which is perceived as authentic and high quality, and can perform specialist everyday nutritional functions such as being fermented, and thus be appreciated as a quality dietary and lifestyle component. These small-scale local markets are constrained by poor public infrastructure, including electricity for refrigeration and machinery; roads for transporting inputs and outputs; water, which is key for production in semi-arid locations; communications infrastructure to facilitate sales; and, to a degree, training and knowledge sharing. Access to finance also helps, but only if it is interest free. Such local markets have long existed in West Africa, where, for example, Fulani women have been known to traditionally hawk milk. These markets offer a low capital entry route for the smallest-scale actors, including women and those with small amounts of capital.

Aspirations to engage in wider markets for quality milk – infrastructural constraints to participation

Agropastoralists involved in our project aspired to engage in markets where they could sell high-quality milk products to consumers further afield, including internationally. They were inspired by the idea of marketing small quantities of milk as a specialist high quality product that would attract a premium due to its connotations of authenticity and cultural specificity.

Middle-class and rich consumers who appreciate professionally packaged versions of these products are a viable customer base. In areas where high-volume milk production does not exist and large-scale dairying is not an obvious livelihood option, it may be worth researching the viability of alternative markets that could valorise and add a premium for specific material or symbolic qualities. Cooperatives could play a role as they are helpful in marketing bulked volumes of milk and accessing loans.

If such markets require higher amounts of capital to enter, there is a risk that they could compete with existing markets to the detriment of actors that in West Africa include women. There is also an interaction between production and high quality markets: although the focus of high-value markets is on quality not quantity, a minimum level of production has to be sustainable, which may require a minimal level of supporting infrastructure. Agropastoralists said that they were aware of local policies to support intensified livestock production, but these policy ambitions had not been implemented, so the agropastoralists had never benefitted from support packages such as resilient or higher-yielding breeds, pasture cultivation, or extension services.

The key point is also that producers' ability to market surplus production is constrained by familiar infrastructural deficits, particularly because access to refrigeration in a cold chain cannot be guaranteed. The first step towards supporting any type of market would be providing viable and reliable roads, electricity supply, equipment (fridges), and water and communications systems. Simultaneously, higher-volume production techniques can be promoted, but are unlikely to be viable for farmers without giving them access to more capital. In the absence of functioning markets, excess volume will go towards supporting important nutritional and cultural functions of milk at household and local levels.

Policy recommendations

- **Appropriate infrastructural investment is a prerequisite for developing any market**, including those that circulate surplus locally, and support nutrition and cultural functions. This is more important than specifying what type of market should develop.
- **Existing small-scale markets may provide viable livelihood options for people with low start-up capital**, including women, and should be supported.
- **Measures to raise production can be helpful if there are realistic expectations about where surpluses can be channelled.** Intensification is not possible for all producers, but interventions such as water provision may help support less capable producers to intensify, creating surplus food.
- **Local-level interventions** can include support for value addition through processing, and encouraging cooperatives and small-scale milk companies to form.
- **General advertising, as well as cultural sites, fairs, events, festivals, and tourism can promote markets** based on cultural and heritage foods.

- **Standards authorities can train producers** to encourage high product quality.

Recommendations for producers:

- **Milk products** such as fermented drinks have high nutritional value.
- **It is worth considering investing in intensification technologies**, such as higher-yielding breeds and zero grazing, but only where producers consider risks to be low because they can afford the inputs such as higher labour requirements, veterinary assistance, and feed.
- **If there is demand for nutritious milk products in the local area, it is worth considering cooperative bulking and marketing arrangements**, but only where there are low risks of spoilage, due to poor roads and refrigeration facilities. Lower risk of spoilage makes fermented foodstuffs and other semi-processed dairy goods viable considerations for a marketable product.
- **It is also worth considering whether local willingness to pay** for semi-processed products makes it worth investing labour in their production. ■

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Further reading

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ISSN 1479-974X DOI: [10.19088/IDS.2023.018](https://doi.org/10.19088/IDS.2023.018)