

Value Chain Upgrading and Women's Empowerment Can Sometimes Be A Mixed Bag

By Lydia Mbevi, Nairobi, Kenya

Based in Northern Kenya's Isiolo township, the **Tawakal Women's Group** is a vibrant social and economic network for women doing business in a marginalized region. The regular meetings the women hold are not just for socializing but are also where their members get information to deal with public and private sector actors. Tawakal members are traders who are buying, chilling, processing, transporting, and selling camel milk to a steady customer base in Nairobi.



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We visited Isiolo as part of the field research for **USAID's Energy Opportunities for Agricultural and Food Security Systems Project (E4AS)**. Our site visit was to find out how the dairy sector in Kenya uses energy and what opportunities exist for medium and large-scale dairy processors to improve on energy efficiency. We were also interested in seeing how those energy opportunities, and other value chain upgrades, could potentially impact women, both for good and for bad.

The Tawakal members' camel milk trading is an informal process, with multiple food safety challenges. The women send out motorbikes to collect milk from as far as an eight-hour ride away – *talk about stamina!* Though these bikes do not have coolers, the milk containers are smoked by the herders to preserve it and minimizing spoilage. Imagine how the quality of milk would be improved if the group used solar powered portable coolers such as those designed by [Savanna Circuit](#). Once the motorbikes arrive back and the camel milk is collected, it is boiled on wood stove burners. Firewood costs reduce the women's profit margins and burning further contributes to deforestation in an arid region. On the other hand, some have installed solar panels to heat their water, which they use for cleaning the milk containers.

Tawakal collects and chills their milk at their facility in Isiolo, freezing it overnight so it will stay cool during the next day's journey by bus to the bustling informal market in Nairobi's Eastleigh Estate.

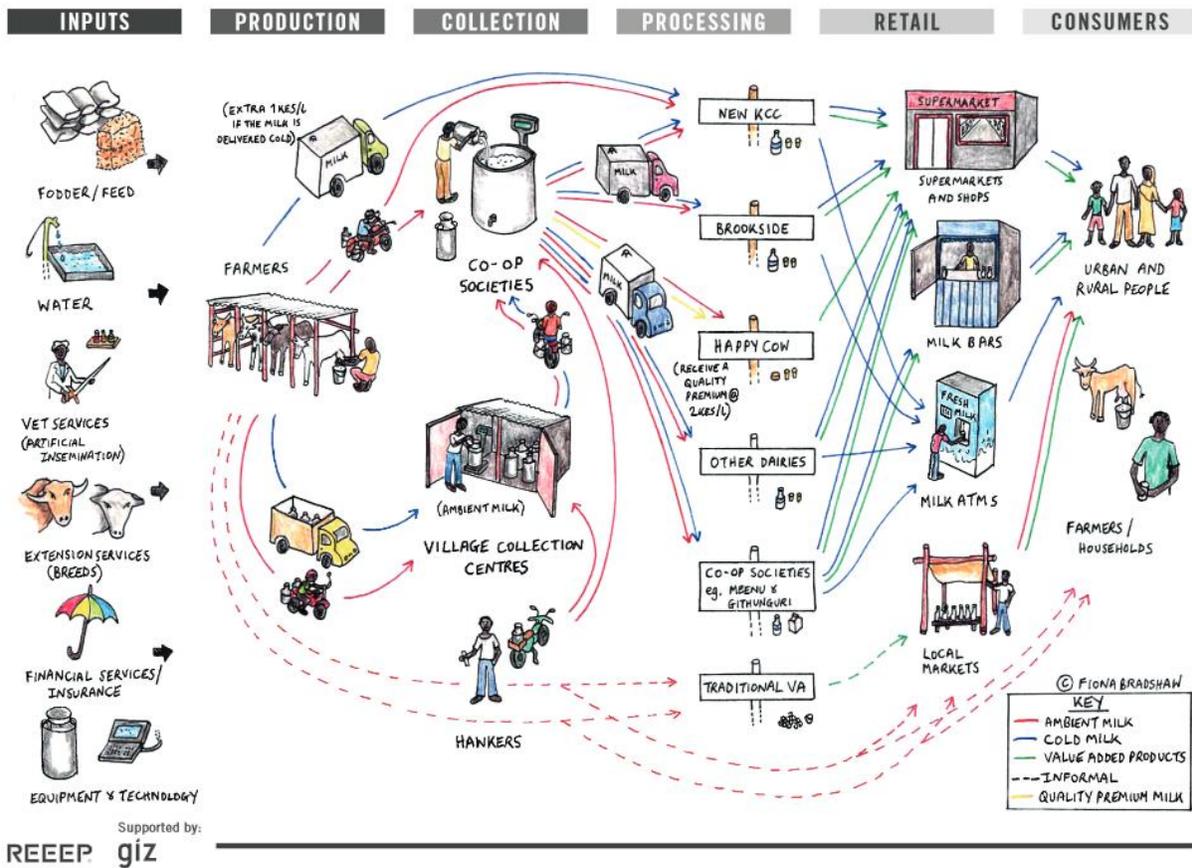
The government of Kenya is increasingly cracking down on the informal milk market, including milk found on buses headed to Eastleigh estate because of food safety concerns. Food borne illness is a serious challenge in Kenya, and the best way to protect the health of consumers and producers is to ensure milk and other perishable foods are marketed through standardized, tested channels.

Yet these upgrades to the value chain are making Tawakal's current business model unsustainable, as the milk market shifts towards larger actors who use modern food safety methods. They want to make their own product safer, but they have a harder time than their larger competitors accessing the capital and technical expertise necessary to get there. This is why Tawakal partnered with USAID's [REGAL-AG](#) activity. REGAL-AG helped them to diversify their operations by developing multiple ventures, such as camel milk ice cream and camel meat. Tawakal now hopes to remain competitive as the market evolves.

Across Africa, we see business models continually changing to adapt to new opportunities, innovation, constraints (e.g., in informal sector), and other contexts. I suppose my Tawakal women friends will have to change too!

Find out more about energy efficiency and renewable energy opportunities in the dairy sector in Kenya and Senegal on the E4A project site: www.agrilinks.org/post/clean-energy-4-post-harvest-vcs

DAIRY VALUE CHAIN KENYA



An illustration of Kenya’s dairy value chain, with informal actors connected by dashed lines. (Figure prepared under the GIZ’ Renewable Energy and Energy Efficiency Program, REEEP.)