



## Opportunity to invest in a UHT milk processing plant in Ethiopia

Developing an ultra-high temperature (UHT) processing plant for long-life milk production in Ethiopia is a promising opportunity for dairy-related investors. Here we feature an example of an investment-ready business on the ground today, in which an investment of \$11 million in a new integrated UHT plant could establish the largest dairy processor in Ethiopia with an installed capacity of 80,000 liters per day and an estimated IRR of 25-35% over 5 years.

### 1 MARKET OPPORTUNITY

---

The global ultra-high temperature (UHT) processing milk market is expected to exceed \$137 billion by 2020, with a significant CAGR of 12.8% from 2013 to 2019. Recent estimates report the size of the market at \$84 billion in 2014. The average annual demand in Ethiopia for dairy products in the next ten years (2013-2022) is expected to reach \$1 billion.

In Ethiopia where cold-chain infrastructure is weak, UHT product has a significant advantage over fresh milk products due to the lack of need for refrigeration, addressing the issue of spoilage. Due to Ethiopian fasting days, demand for milk is also seasonal – it spikes and dips in relation to the religious calendar – creating variability in demand. Additionally, consumers are already importing expensive UHT and milk powdered products; domestic production could disrupt the current market. These factors create a unique market opportunity for the 6-12 month extended shelf life of a domestic UHT product.

Currently, Ethiopia's milk consumption is only 19 liters per person – 10% of Sudan's and 20% of Kenya's – but urbanization is driving up consumption: per capita consumption in Addis Ababa is 52 liters per person. In other developing markets, UHT milk has taken off as a substitute for milk – in China, it now accounts for 60% of total milk consumption and in 2012-13, the UHT market in India grew by 53%.

### 2 WHY INVEST IN ETHIOPIA?

---

**Dairy is a government priority** > Dairy has been identified as a priority area for the Government, which aims to increase Ethiopian milk production at an average annual growth rate of 15.5% during the GTP II period (2015-2020), from 5,304 million liters to 9,418 million liters. The government is actively encouraging the private sector to produce UHT milk and is making supporting investments in supply-chain infrastructure, training, and improved breeds, and dairy-focused Agricultural Commercialization Clusters (ACCs). ACCs that support commercialization of smallholder farmers in dairy have been identified in all four major regions (Tigray, Amhara, Oromia, and SNNP), and the government is particularly prioritizing genetic improvement through selecting premium indigenous breeds and introduction of exotic breeds.

**Lack of competition in a large consumer market** > Ethiopia is a 95 million person+ market with limited access to fresh dairy due to poor supply-chain infrastructure. Ethiopia spends approximately \$10 million annually in foreign powdered milk imports. Only 2% of milk is processed commercially in Ethiopia; 98% of production is driven by smallholders, and there is currently only one local producer of UHT milk. Furthermore, Ethiopia has close proximity to large regional consumers of milk such as Sudan and Kenya, as well as to the Middle East markets.

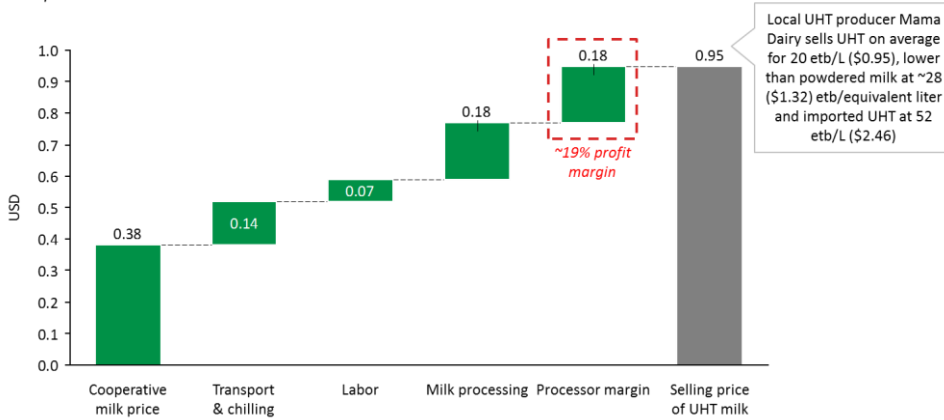
**Favorable environment for production** > Ethiopia has the largest number of milking cows in Africa, with 54 million cattle of which over 14 million are dairy cows. From 2001-2007 cow milk production grew at an average rate of 2.6%, equal to Ethiopia's population growth rate of 2.8%. Ethiopia's highlands, which are very well suited for dairy production, represent almost 50% of the total highland regions in Sub-Saharan Africa.

### 3 SPOTLIGHT ON A POTENTIAL GREENFIELD INVESTMENT

An \$11 million greenfield investment would create a UHT plant with the largest processing capacity in the Ethiopian market.

**Estimated cost breakdown of 1 litre of UHT milk from production to processing**

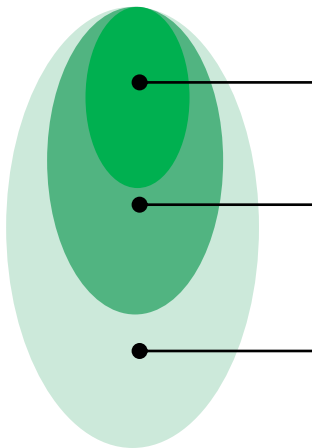
USD per litre



Investment description	
Total investment required	\$11 million
Installed capacity	10,000 liters/hour (80,000 liters/day, 24 million liters/year)
Employment	500-600 employees
Estimated return	IRR of 25-35% over 5 years

### 4 INVESTING IN SOCIAL CHANGE

Ethiopia is a unique market in which investment can contribute to improvement in incomes and livelihoods. With 42% of GDP and 77% of employment, agriculture is the lifeblood of Ethiopia and presents an opportunity for impactful investment.



**Direct impact.** In direct employment, the planned UHT plant will impact up to 600 people. For these employees, the investment will provide not only a steady income but training in a sophisticated technique new to Ethiopia.

**Indirect impact.** By providing consistent demand for milk from smallholder farmers, the UHT plant will conservatively impact up to 1,300 smallholder farmers and their families each year.

**Ecosystem impact.** UHT milk, unlike standard pasteurized milk avoids issues of adulteration and contamination, providing a nutritious solution that doesn't require cold storage. Increasing production will help to lower domestic prices; already domestic producers are providing goods at less than 40% of the price of imported options. With increased supply, lower prices, and year-round availability, UHT production could have significant impact on nation-wide nutritional outcomes.

### 5 INTERESTED TO LEARN MORE ABOUT ETHIOPIAN AGRICULTURE? WE CAN HELP.

In the coming decade, the private sector will play an even greater role in Ethiopia's agricultural transformation, creating markets for Ethiopia's farmers. The Private Sector in Agriculture Team engages early with serious investors to understand interests and concerns, works with them to identify promising opportunities, provides relevant market analysis, and helps navigate the local environment. With support from USAID's Investment Support Program, the ATA has developed detailed investment cases on opportunities in beef & dairy, poultry & feed, soybean, fruit & vegetable, wheat, and sesame.