
ETH Zurich food engineer operates a dairy in Mali

Pump priming for milk culture

Measured by their per capita gross domestic products, Mali is one of the poorest and Switzerland one of the richest countries in the world. No matter how different the two countries may be, they share one thing: their love of milk.



Djom Kossam's milk stand in Bamako.
([more pictures](#))

commitment and has founded milk collection depots in the neighbourhood of Bamako, the capital of Mali.

Whereas in this country the calcium-rich drink can be bought chilled and pasteurised everywhere, fresh milk in Mali is offered mainly in the market and its quality is doubtful. The consumption of unpasteurised raw milk products represents a major health risk. ETH Zurich has participated with targeted research projects to improve the local milk industry since 2000. The Swiss organisation Vétérinaires sans Frontières (VSF) has expanded this

An inter-cultural project

Stephan Wullschleger, a doctoral student at the Institute of Food Science and Nutrition, became familiar with Mali's milk industry during research visits as part of an ETH Zurich project. The aim of his doctoral thesis is to develop a bacterial culture for the safe and high-quality production of *fènè*, a local soured milk product. In the course of this he got to know Aguibou Sall, a local veterinary surgeon who told him about the problems of Mali's milk industry. Together they founded "Djom Kossam", a sales outlet for milk products in Bamako, in May 2005. In Peul, one of the local national languages, "Djom Kossam" means "woman who sells milk". Traditionally the men are herdsmen while their wives sell the milk and make *fènè*.

Although agriculture is an important component of Mali's culture, the milk industry has been developed to only a limited extent. The four largest producers process almost exclusively imported milk powder and are therefore heavily dependent on the international market price. The latter has risen rapidly because of the strongly growing demand in China and India. Based on his estimates, Wullschleger sees a large and sustained potential market for the sale of pasteurised home-produced milk. Farmers from the surrounding district bring their milk to a Vétérinaires Sans Frontières collection point where it is heated and packed. Djom Kossam sells its milk products directly to consumers at a milk stand and uses a bicycle courier to deliver them in cool-boxes to the districts of Bamako. However, larger deliveries are also sent to the capital's first supermarkets. Six months after its foundation, the project is already self-supporting. As the general manager on the spot, Aguibou Sall can employ two full-time staff and can make small capital investments from the profits earned.

A different kind of development assistance

Thanks to the stable political situation in Mali, Wullschleger und Sall hope to be able to expand their business further. Their aim is to expand their market

leadership further in the sale of milk products exclusively from Mali by 2013. By that deadline they want to employ 20 staff in Djom Kossam, sell more than 1500 litres of milk per day and thus earn an annual turnover equivalent to 0.82 million Swiss francs. However, there are still limits to this growth. Djom Kossam currently sells 75 to 90 litres of milk a day. There are large seasonal fluctuations in the quantity of milk because of the dry season. Irregular deliveries make milk purchasing more difficult and are an obstacle to the growth of Djom Kossam. The demand for home-produced milk is bigger than its availability. To obtain regular supplies of milk, Stephan Wullschleger had the idea of buying cows in Mali with donations from Switzerland. He regards this as help for self-help. The 27-year-old doctoral student provided the initial capital of about 4000 Swiss francs to found Djom Kossam out of his own pocket. Wullschleger says "On personal principles I did not want to make a gift of money to anyone in Mali, but instead to enable young, motivated people in Mali to earn their own money."



Djom Kossam's milk stand in Bamako.



One of Djom Kossam's employees processing milk.



Stephan Wullschleger with his business partners from Mali.



Farmers in Mali can be supported through the purchase of a Zebu cow like this.

Links and references:

- [Web site of the Institute du Sahel](#)
- [Web site of the Laboratoire Central Vétérinaire of Mali](#)
- [Web site of the Swiss Tropical Institute](#)

Readers comments:

Author: Florian Wehrli | Published: 07.08.07