

# TANGA FRESH



Swahili quote:

“Kwa mkoa wa Tanga, afadhali ngombe wa maziwa kwa wajane badala ya mume, kwa wanajipatia kipato ambacho wasinge pata kwa mume’

*‘A Heifer in Tanga is like a husband to a widow*



## Project Overview

Before independence Tanga town was an industrial centre and the world's largest sisal producer. *'Tanga is Sisal'* can be read on hotel tiles and there is a feel of decaying-splendour about this ex-colonial town. Once the second most powerful economic region in Tanzania, Tanga fell to sixteenth place with the collapse of the sisal market after the Second World War.

However, Tanga still boasts of a large flour mill and several cement factories. It is still the country's second busiest port and with Tanga Fresh, it is enjoying something of an economic revival: villages and small towns in the Tanga region come alive with vibrant markets every 15 days after Tanga Fresh's payday for the smallholder farmers that supply its milk. There has been an increase of \$3.8m into the region in 2010<sup>1</sup>.

The coordinated dairy value chain of milk collection, processing and marketing combined with growth opportunities offered to small-holders through heifer availability and cattle credit, is known as 'the Tanga Model', and is copied by other regions.

Smallholder dairy farming was introduced in the Tanga region from 1985 by a bilateral Tanzania –Dutch dairy development programme. Dairy farmers are organised in 11 co-operative societies under the umbrella organisations Tanga Dairies Cooperative Union (TDCU). Tanga Fresh Ltd started in 1997 with a modest milk processing factory with capacity of 15000 litres a day.

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<sup>1</sup> Based on 4500 farmers each with a net benefit of \$850 per year.

Thanks to collaboration with micro-finance institution, Farm Friends Tanzania, and livestock company, Holland Dairies, Tanga Fresh has stimulated local milk production sufficiently to justify major investment in a large milk processing plant. It has capacity for 50,000 litres a day and Tanga Fresh is now the main supplier of fresh milk products to Dar es Salaam.

AECF has invested in Tanga Fresh to support modernisation of the milk collection system and communications systems to support this.

## Project metrics (spending, match funding, produce, profit)

In 2008 Tanga Fresh developed a new project – the Modern Dairy Service Network (MDSN) – to improve the milk collection system following a retarded milk supply in 2007. This involves improving milk quality assurance, providing a market guarantee for farmers’ milk, and the establishment of a Dairy Farmers Information Service. It also involves constructing new milk Collection Centres (MCCs) as part of a cold chain to implement commercial milk collection, processing and marketing. Tanga Fresh secured a matched-fund grant of \$700,000 from AECF in 2009 for 3 years to 2012.

### The ‘Tanga Model’

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The MDSN should enable many more subsistence farmers to take up dairy farming, partly by extending the reach of Milk Collection Centres that provide a guaranteed cold chain to market, and partly through the technical support provided by Tanga Fresh’s information system. Funding for the heifers is from Farm Friends.

Metrix Box	
AECF repayable grant	US\$ 420,000
AECF Non-repayable grant	US\$ 280,000
Matching funds from Tanga Fresh	US\$ 700,000
Annual turnover	US\$ 4,045,816
Number of contracted dairy farmers	4500
Jobs created in 2010	240
Milk processed initially in 2008	15,000 litres
Milk processed by end 2010	31,000 litres
Target milk to be processed by 2012	50,000 litres

## AECF Contribution to the Modern Dairy Service Network

- 18 milk collection centers to be modernized as new ones are constructed.
- Dairy Farmers Information Service (SMS) and radio programmes to be implemented.
- Vehicles to be procured, including a 12,000 litre truck

In Muheza district, there were only 36 dairy farmers in 1993, 222 in 1999 and now 390 in 2011. The demand for milk in Dar es Salaam alone is not yet met by Tanga Fresh (it meets about 70% of current demand) and the capacity of Tanga Fresh's processing factory is at about 60% so there is plenty of room for growth in numbers of dairy farmers supplying Tanga Fresh with milk. Furthermore, Tanzania produces about 75,000 litres of milk per day compared with Kenya's 1,200,000 litres. 1.426 billion litres in 2006/07

## Tanga Fresh Project objectives:

1. To increase efficiency of milk collection through new Milk Collection Centres (MCC)
2. Increase the numbers of cattle through cross-breeding programme of Holland Dairies and cattle credit facility of Farm friends Tanzania
3. Promotion of reproductive performance and milk quality management for smallholders through the Dairy Farmers Information Service.

## Milk Collection Centres (Kituo Cha Kukusanya Maziwa)



Tanga Fresh's aim is for one MCC to serve 3-5 villages. Milk is usually brought in buckets by the farmers secured to bicycles and motorbikes, twice a day. Once it arrives at the MCC it is tested – for freshness – smell, acidity and also for density (to ensure that water has not been added). If the milk passes the test, it is weighed then decanted into the cooling tank. The volume of the milk is recorded in a book by the farmer's name. These records are collated and farmers are paid twice a month.

The milk collection lorry from Tanga Fresh pumps the milk twice a day from the tanks at MCCs and delivers it to the factory where it is pasteurised and packed. The MCC also acts as a one-stop-shop for farmers by providing animal feed, medicine and advice for farmers all on the same premises. The premium for the farmer is time and Tanga Fresh tries to minimise the time spent delivering milk by farmers.

### Profitability of dairy farming

Farmers receive around Tsh485 per litre

Largest cost is usually medicine for cows and feed.

A supermarket in Dar Es Salaam usually re-sells the milk for Tsh800- 1000 per litre.

Farmer costs (Tsh):

Tanzania Dairy Cooperative Union levy – 10

Transport -23

Centre levy – 10

Factory costs:

Staff

Cooling facilities

Pasteurizing process

Transportation to and from market

## Automating the milk collection recording and payments through Virtual City

Tanga Fresh is investing in the service of Virtual City, another AECF grantee, to automate the recording of milk collection and payments to farmers. Their devices will link the digital scales at the Milk Collection Centres to the accounts records at Tanga Fresh. This will increase transparency of recording and payment and will ensure the farmer gets paid the right amount. It is also likely that farmers will soon be paid via their mobile phone accounts through a mobile money arrangement with Tigo Pesa.

## Innovation: The Dairy Farmers Information System (DFIS)

This is an SMS service run by Tanga Fresh since April 2010 for farmers, Milk Collection Centre leaders and operators. It addresses the information gap faced by farmers. Around 2000 out of Tanga Fresh's 4500 farmers access the service. Tigo Pesa, a mobile provider, is offering free phones to those farmers without, and payment for milk will also soon be accessible through the mobile network.

The DFIS informs milk producers about the market, sector developments, animal husbandry practices and local news. It also puts farmers in touch with vets and extension support.

### *Examples of messages out:*

"Milk price from Tanga Fresh is going up by Tsh40 as of January 2011"

"Animal feed is now available at Pangami MCC"

"There will be a meeting of the Cooperative Society on 2 October"

"Foot and mouth is a disease caught by virus caused by climatic change especially after the rain season."

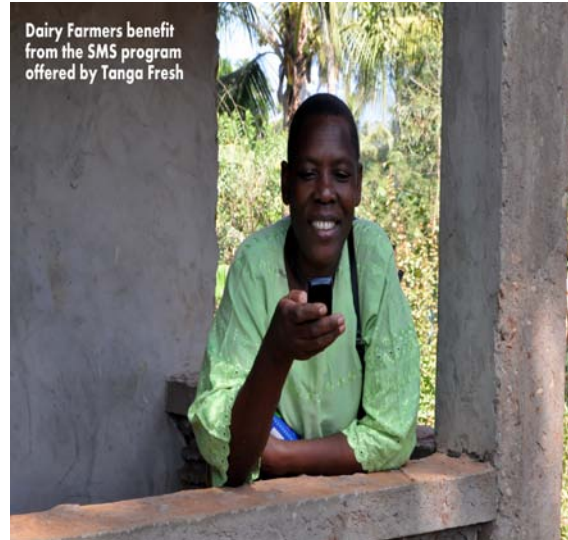
"Milk from xx MCC was acidic yesterday. Make sure you clean the cows thoroughly."

### *Examples of responses from farmers:*

"Private MCC is not raising the price of milk per litre – whereas Tanga Fresh has risen by Tsh40. Please advise."

"Driver was late to come and pick up milk from MCC [a site with no cooling facilities] please ask drivers to come promptly."

## Jane Magawa-Holding up her mobile phone with her brick house in background



Jane is a 53 year old widow with 4 children. Her husband died 10 years ago when she was a Municipal worker earning only Tsh7000 per month (less than \$7). She had to increase her income if her family were to survive let alone be educated. She had received some compensation on her husband's death that she added to a loan from Farm Friends to buy a cow. Since then she has sold 10 cows and now she has 7. She employs one worker (who she pays Tsh70,000 per month – around \$70) to milk the cows and she earns around Tsh450,000 per month, (around \$450).

All four of her children have completed secondary education at boarding school, one in Kenya, three at a Catholic Seminary and she has built a brick house with a new roof. She is delighted with the DFIS and is one of the most prolific respondents, which entitles her to incentive opportunities for training and for prizes from Tanga Fresh.

## Smallholder dairy farmer Said Mohamed



Said has been a dairy farmer since 2002. He says he would never go back to crop farming again – ‘it’s in the blood now’. He raises Tsh400,000 a month on average (around \$400) from Muheza MCC for his milk. He lives in a village that now has a duka, several bicycles, brick houses (whereas before they lived in grass-roofed mud huts) and he also has a donkey cart with 2 donkeys – signs of disposable income way beyond a subsistence income.

Said tells us that dairy farmers are respected in the local town – Muheza – they are given credit in shops, since it is known that Tanga Fresh pays on the 15<sup>th</sup> and last day of every month. His children are all at school or have finished secondary school. He also employs one worker for Tsh70,000 per month.

## Smallholder dairy farmer, YUSUF MOHAMED



Yusuf Mohamed has 2 wives and 13 children. He owns two bicycles, a motorbike and a mini-tractor (a farming award). He also estimates bringing home Tsh400,000 (US\$400) per month from the milk from his 3 cows. This is significantly more lucrative than his other farming activities which are grains and poultry. He is able to employ 3 workers who help on the farm and also live there. They are paid Tsh40,000 (US\$40) a month and have their board and keep paid for too.



### The AECF

The Africa Enterprise Challenge Fund (AECF) is a US\$100m private sector fund, backed by some of the biggest names in development finance and hosted by the Alliance for a Green Revolution in Africa (AGRA)

### Sectors funded by AECF

AECF aims to encourage private sector companies to compete for investment support for their new and innovative business ideas in agri-business, rural financial services, renewable energy and technologies to assist small farmers to adapt to climate change.

### Criteria for funding

To qualify for funding a project should be commercially viable and have a positive impact on the rural poor in Africa, delivering increased incomes and employment for poor people, through reduced costs and improved productivity.

### Contact details

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