

# Biovision

Newsletter December 2019

## Underway on the Milky Way

The adventurous journey of camel milk in Kenya



A future for all, naturally

Sofia Kulow

President of the Camel Milk Cooperative Anolei, Isiolo



"Demand for our products has risen sharply since the project started. I'm proud of that."

## Camels for drought areas (project since 2010)

Kenyan shepherds' living conditions are being improved through camel husbandry, hygienic camel milk production and animal disease monitoring.

### Goals of the current project phase:

- Improve food security in pastoral communities
- Expand marketing and value chains
- Increase the income of livestock farmers
- Improve hygiene and marketing of milk production
- Improve farm animals' health

• Project budget 2019: CHF 184,774

• Donation account: PC 87-1933093-4

### Sustainable development goals (Agenda 2030):

This project directly contributes to objectives 1, 2, 3 and 13 of the 17 Sustainable Development Goals (SDGs):



# Milk expressway from the savannah to the city

Thanks to camels, hundreds of shepherd families in barren north-east Kenya now have a better life. But it's not just them – the women of the Anolei Milk Cooperative also benefit.

By Peter Lüthi, Biovision

Once milk couriers reach the gravel road to Isiolo on their motorcycles in the remote north-east of Kenya, the most difficult part of their journey is behind them. Their journey usually begins by collecting plastic canisters of milk from camel herders' camps, far from any roads. Then they must drive the canisters through the rugged countryside (see cover picture).

In Isiolo, a town of around 30,000 in north-eastern Kenya, members of the women's Anolei Milk Cooperative impatiently await the couriers. The cooperative's collection and processing centre for camel milk has been supported by Biovision and Veterinarians without Borders (Vétérinaires sans Frontières, or VSF) Switzerland since 2013. The dairy is an important link in the processing and value chain being established as part of the Camels for Drought Areas project.

### Tension at the collection point

The project started by promoting camel farming in drought-prone Isiolo County – especially among ethnic groups that traditionally kept cattle. Camels are much more resistant to drought than cattle. The new camel owners have been trained in keeping camels, animal health and hygienic milking.

As soon as the motorcycle couriers arrive in Isiolo, the women of the Anolei cooperative

carry the milk canisters into a large building. The air inside is hot and stuffy, and the mood is tense. The milk – up to 3,000 litres on any given day – urgently needs to be cooled before it sours. But it must first be checked and admitted. Deliveries containing too many germs or an excessively high water content will be rejected.

At 3 am the camel milk is loaded onto a refrigerated truck and taken to Nairobi, 300 km away. It arrives at Eastleigh Market by morning. Many Kenyans of Somali descent who live there prize camel milk.

### Bus transport denied

The cooperative bought a refrigerated truck with Biovision's support. Before that, milk had to be transported on the roof of public buses. When the crowds were too large, drivers would refuse to transport goods, leaving women with their perishable milk at the roadside. Camel milk had often soured by the time it arrived in Nairobi after hours of travelling under the hot sun.

The proceeds from selling the milk go to the Anolei cooperative to cover storage and transport costs. The camel owners receive approximately 60 to 80 Kenyan shillings (KES) per litre of milk. Each animal can produce around 3 litres of milk daily, with the precise amount depending on the animal, its health and the season. During the approximately one-year lactation period of a mare, an owner can earn 40,000 to 80,000 KES (approx. 380 to 760 Swiss Francs) per camel. The owner's family also drinks some of the milk, which contributes to a healthier diet.

[www.biovision.ch/milkyway](http://www.biovision.ch/milkyway)



1 Selling camel milk and dairy products brings additional income to Anolei Group members.

2 Female shepherds and camel owners trained in hygienic milk production stand at the beginning of the "Milk Street".

3 The dairy produces various camel milk specialties and tests them to see how customers respond. Yoghurt and sweets are particularly popular.

4 Milk processing hygiene and regulated cold temperatures for all products are a high priority in the project

## No food waste!

How can it be that we produce more than enough food worldwide while the number of malnourished and starving people is increasing? The World Agricultural Report already insisted 10 years ago that the entire food system be realigned with principles of sustainability. Simply aiming to produce more food is the wrong way to go. As long as food is wasted uninhibitedly in industrialised countries, tropical areas for cultivating animal feed are squandered, and fertile soil is leached by chemical fertiliser use, there will be no food security for humankind.

The poorest people in the global South need more and healthier food. Large post-harvest loss is no longer tolerable. Reducing these losses requires research and development projects and up-to-date training programmes for farmers. Sustainable solutions are well known – but their implementation is slowed by agrochemical industries and hesitant governments.

We too face an urgent need for action. Wasteful eating and consumption habits exploit both people and nature. We can change that: sustainable shopping promotes sustainable production systems, and avoiding food waste preserves resources and the climate. We need to take this step together to respect our Earth and create a world without hunger.



Because suitable storage facilities in sub-Saharan Africa are limited, pests such as weevils repeatedly destroy large portions of the corn harvest.

## Food loss

For decades, international development cooperation has mainly focused on increasing production. According to the Food and Agriculture Organization, one central factor in the fight against hunger has been ignored: food loss.

By Florian Blumer, Biovision

The world's population is continuing to grow – from 7.7 billion today to an estimated 10 billion by 2050. Despite progress, one in nine people does not have enough to eat, and hunger is on the rise.

How can we produce enough food to feed everyone? The question is obvious – but looks at the wrong source of the problem. According to the Food and Agriculture Organization of the United Nations (FAO), humans already produce much more food than they consume, but approximately 30 per cent of all food is thrown away.

### People starve because food spoils

The problem of food waste is well known. More and more people are realizing that we can no longer afford to throw food away in

the face of scarce resources and climate change. What is less known, however, is that much food is lost in poorer countries. This does not happen among consumers, but rather among producers during storage and transport. Here, too, about a quarter of the food ends up as food loss: food that people in hunger need.

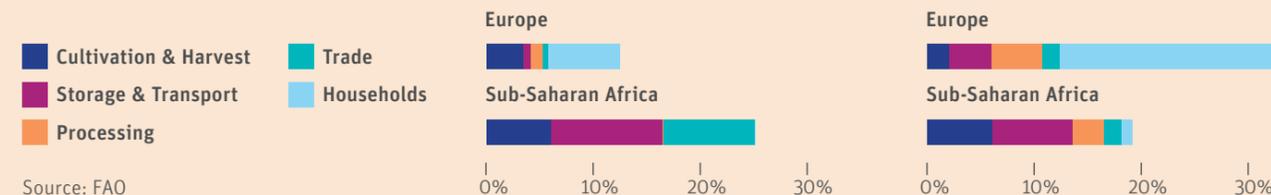
Food waste is a problem everywhere, but the reasons for it couldn't be more different. For consumers, food waste results from abundance – rejecting imperfect goods in shops, wasting food in households. But food waste for producers often results from infrastructure: improper roads and insufficient cooling and storage possibilities, to name a few of the reasons.

### Solutions are often simple and inexpensive

A 2015 study by the African International Centre of Insect Physiology and Ecology *icipe* and ETH Zurich showed that around a quarter of the maize harvest in sub-Saharan Africa is lost due to mould or insects. Dr. Michael Brander, ETH scientist and former Biovision employee, has been researching post-harvest losses for years. The solutions are often simple and inexpensive. In Tanzania, for example, airtight harvest bags were introduced to protect maize from infestation. A field experiment that Brander co-ordinated showed that these bags could reduce the

## Food losses in Europe and sub-Saharan Africa

A large proportion of the entire harvest gets lost between the field and the plate:



proportion of families suffering from hunger in the months before the next harvest by around 40 per cent.

Brander's conclusion: "The potential to combat hunger by reducing post-harvest losses is high – and it is underestimated." The FAO also stresses the importance of this approach in the fight against hunger. Brander says that in the last 20 to 30 years,

development cooperation and policy has focused above all on increasing production: "Rarely has the agricultural system been regarded as a whole – and post-harvest losses belong to that."

### Milk transport in uncooled canisters

This is different from the Biovision project "Camels for drought areas" (see pages 2–3). Valuable camel milk must travel long

distances from the savannah to the consumer. The milk used to be transported uncooled and often soured along the way: bad for producers and traders who sold less milk, and bad for consumer health due to the risk of infection and numerous diseases that drinking spoiled milk can cause. Biovision and its project partner VSF-Suisse now train producers about hygienic production from milking to sale at all levels.

Today, a refrigerated truck ensures rapid, refrigerated milk transport all the way to the capital city. The next step will be to set up hygienic sales stands in Nairobi and a solar-cooled milk collection point at the producers' premises. Transporting milk in plastic canisters on motorcycles – as shown in the cover photo – will soon be a thing of the past.

## The 5 CLEVER tips against food waste

- 1. Only buy what you really need:** stick to your shopping list, don't go shopping hungry, don't let yourself be seduced by advertising and special offers.
  - 2. Don't be a perfectionist:** buy vegetables and fruits that are in good shape but don't look flawless (such as the Ünique line from Coop or from the Gmüesgartle in Bern). If you are likely to consume it before too long, buy things that will expire soon. Don't just eat choice pieces of meat – follow the nose-to-tail principle, using the whole animal.
  - 3. Store food well:** store potatoes in a dark cellar; store apples separately to prevent germination and rapid ripening; pour muesli and cereals into airtight glasses.
  - 4. Share instead of disposing:** pass on food that you cannot eat to neighbours and friends.
  - 5. Be creative:** make jam from overripe strawberries turn old vegetables into soup.
- Many initiatives exist to avoid food waste. See the list at: [www.foodwaste.ch/lokale-initiativen](http://www.foodwaste.ch/lokale-initiativen)
- CLEVER is a Biovision project aimed at raising awareness of sustainable consumption in Switzerland, particularly among young people. [www.clever-konsumieren.ch](http://www.clever-konsumieren.ch)*



Florian Blumer  
Reporter and Editor at Biovision



Andreas Schriber  
CEO of Biovision

## Order the 2020 calendar now!

Reserve your 2020 Biovision wall calendar. Each photo taken by our reporter Peter Lüthi stands for a personal story of the people he met in our projects. Orders placed by 17 December will be delivered before Christmas.

1 copy costs 35 Francs. 2 copies or more cost 29 Francs each (plus Fr. 7.90 for postage).

www.biovision.ch/calendar2020  
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As part of a Biovision Citizen Science project, Susanne Cetkovic listened to the soil at various locations in her garden – including in the compost.

## “It sounds incredible!”

**Hobby gardener Susanne Cetkovic listened to her soil – and was impressed.**

By Peter Lüthi, Biovision

The sound safari began in the vegetable patch. That's where Susanne Cetkovic switched on her recording device, gently pushed the sound sensor into the loose soil and turned up the volume. “There I heard this croaking and creaking”, she says. “It sounds incredible!” And that was only the beginning. In the compost, the variety of sounds was even greater. “I imagined what was nibbling, crawling and digging in there,” she says. The biggest highlight was the soil under the plum tree. “I had left this soil alone for years and never changed anything”, says Cetkovic. That's where she recorded a 24-hour sound clip.

### Taking better care of the soil

Other people have also made full-day recordings. Last summer 80 people participated in the Citizen Science campaign of Biovision's Sounding Soil project. Their results are now available for further exploration.

“Through this project, we want to draw public attention to the importance of soil as the basis of life, a water and CO<sub>2</sub> reservoir and the foundation of our nutrition”, explains Sabine Lerch, who is responsible for the

project at Biovision. “We want our society to care much more for the soil”, she says, “from their gardening and shopping to voting at the polls”.

For Cetkovic, it is clear: “Today, the soil is more important to me than the lettuce that grows from it”, she stresses. This idea had occurred to her a whole 36 years ago, when she tackled the mites in her lettuce bed with an insecticide. She was alarmed that the package instructed her to avoid direct skin contact with the product and to refrain from eating the lettuce treated with it for three weeks. The amateur gardener attended courses in organic farming and radically changed her approach. “The sounds I now hear from my soil are living proof that all those years without poison – but full of manual labour, compost and mulch – have been worthwhile,” she says.

*Would you like to hear how your soil sounds? Register now for next spring by sending an email to Sabine Lerch: s.lerch@biovision.ch*

*At [www.soundingsoil.ch/zuhoeren](http://www.soundingsoil.ch/zuhoeren) (german), you can listen to recordings of different soils all over Switzerland.*



Five decades of commitment to the environment: new Managing Director Frank Eyhorn (left) with Andreas Schriber, co-founder of Biovision, who will be leaving his position as CEO.

## “Is our hope for a better world realistic?”

On 1 January 2020, Dr. Frank Eyhorn will take over the operational management of Biovision as the new Managing Director. Andreas Schriber, long-time CEO and co-founder of Biovision, met his successor for a talk.

### Frank, not everyone likes us because we demand a change of course in agriculture. Do you think Biovision is too radical?

Biovision is not radical. It is resolute. The facts can simply no longer be ignored, and Biovision faces these facts. With concrete projects, in important global debates and here in Switzerland, Biovision shows that much can be changed if we want it to.

**As a scientist with a doctorate, you have long been familiar with the connections between climate change, the destruction of biological diversity and dwindling food security. On the other hand, supporters of new, ecological solutions are still not in the majority – why is that?**

Scientific facts about agricultural and climate policy do indeed seem academic and far removed from everyday life for many people. But we all eat – and so we are at the heart of the debate! Biovision succeeds in making socially and environmentally relevant solutions tangible and comprehensible, both here in Switzerland and in the global South. That is why I see Biovision as an important player in the implementation of central sustainability goals, now and in the future.

### Many conflicts of interest will continue to escalate. Is our hope for a better world realistic?

I am a scientist, but I am also an incurable optimist. Over recent years I have noticed that more and more people are talking about our topics – even on the train or at the playground. Of course, change is happening much too slowly, but I am convinced that our work will enable us to gain a critical mass of like-minded people who can help break current trends. If you pursue something with determination, so much is possible!

### What future do you hope for your 5-year-old daughter?

That she will live in a world that her parents could leave behind with a clear conscience – a world in which my daughter, and as many

other people as possible, can live their lives freely and in dignity. I am dedicating all of my efforts towards that aim. I know that with Biovision, we can make a decisive contribution to this goal. That is why it will be a great privilege to be the managing director of this organization.

**Dr. Frank Eyhorn,** 45, is an established expert in organic agriculture with more than 20 years of experience in international cooperation. He is passionate about sustainable agriculture and nutrition. With a PhD in environmental science, he has conducted extensive research and published various educational materials and scientific articles. From 2000 to 2005, Frank Eyhorn headed the Asian projects of the Research Institute of Organic Agriculture FiBL. In 2006, he joined Helvetas, where he headed the Organic and Fair-trade Competence Centre and the Rural Development Advisory Team. Frank Eyhorn has been a board member of the global organic movement IFOAM since 2011 and vice president since 2014. He lives with his family in a community house in Zollikon, where he can often be found in the garden.



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## From the life of Annab Kassim, camel owner in Isiolo, Kenya “Camels are almost like humans”

By Peter Lüthi, Biovision

Shepherds respectfully make way when Annab Kassim approaches to greet her camel. The 36-year-old from Isiolo, Kenya, is chairwoman of the Wabera Group, which participates in the Camels for Drought Areas project, which was founded in 2016 and is jointly operated by Biovision and Veterinarians without Borders (Vétérinaires sans Frontières, or VSF) Switzerland.

The 18 members of the group belong to two different ethnic groups, the Somali and the Meru. Tensions between shepherd groups are increasing in Kenya. In addition to reducing poverty and improving food security, peacebuilding is therefore also a project objective.

Annab Kassim grabs her camel by the neck, caresses it lovingly and looks at it with a knowing eye. She then addresses precise questions about the health of the camel mare and her foal to the lead shepherd.

As a member of the Somali ethnic group, she is familiar with the tradition of keeping

camels, she explains later in her apartment house in Isiolo Town. “Camels are almost like humans,” says Kassim, smiling. “We would do well to observe them closely and learn from them.” These animals sense danger quickly and avoid it, she explains. “For me camels are a symbol of suffering and resistance.” This symbol also seems to apply to her own life.

In 2015, Kassim’s husband died. Since then, she has had to support herself and her six children. Luckily, county authorities chose her to be a camel owner as part of the Biovision and VSF Suisse project. “The mare came along at exactly the right moment,” she says. “The animal gives two to six litres of milk every day, depending on the rain and the amount of food.”

She keeps one or two litres of milk for her family’s consumption and sells the rest to a distributor who sells the milk in Nairobi. She is desperately dependent on the income.

The cost of high school alone for her two oldest children is 85,000 Kenyan shillings per year (approximately 800 Francs). Then there is also rent and household expenses.

“I benefit greatly from this animal,” says Annab Kassim. “But to always have enough milk and a sufficient income, I would need three – or better, five – mares.” Camels only give birth to their first foal at the age of five, and Kassim stresses that the gestation period is a very long 12 to 15 months.

Annab Kassim plans to sell her male foal to buy a young mare. This is how she wants to increase her number of animals. Hope-

fully she will be able to continue to build up her endurance and resilience – and that of her camels.

“The camel came along at just the right moment.”

