

Making good farms better

The story of developing a medium-scale farm in Karatina, Central region



Imani Farm.

Imani Farm is located in Ihwagi, Karatina, 130 kilometres North of Nairobi. The owner, Mr Maina, 'rediscovered' dairy farming as a profitable business more than ten years ago by increasing his herd size from three to 38 cattle on a four-acre piece of land. He also owns Imani Milk Café in Karatina town, which to date has been a profitable business. Over the past two years, Mr Maina's farm has been visited by KMDP dairy advisors from Perfometer Ltd and PUM. Mr Maina received valuable advice that has enabled him to make changes to his buildings and dairy operations to improve efficiency and profitability. Mr Maina's story is an example of the positive impact advisors can have when working with farmers.



Popular Imani Milk Café sells raw milk and lucrative processed products.

The establishment of Imani Farm

Imani Farm is a well-managed farm. It is owned by Mr Maina Muthuma, a ‘telephone farmer’ who visits regularly and spends on average two days a week there, depending on the activities on the farm. At 47 years of age, Mr Maina says he is retired. He lives in Nairobi with his wife and two daughters where he also breeds dogs. He was born and raised in Nairobi by his father and visited his mother on her farm in Karatina during the holidays. This is where Mr Maina developed his interest in dairy farming. At that time, Mr Maina’s father had Ayrshire and Guernsey cows, cattle breeds that were producing between five and ten litres a day due to poor dairy management practices. He was convinced that if his parents kept better breeds and improved animal husbandry practices, the cows would produce more milk.

‘I kept pushing my father to improve the farm. One day, he told me: ‘You claim to have so much knowledge about cows, yet you don’t even have one cow. Why can’t you buy your own cow and practice all the things you tell me?’

Motivated by his father’s challenge, Mr Maina bought three cows and set up a dairy farm on one of their family properties. That’s how his journey in dairy farming began.



The narrow silage pits result in less wastage; the challenge is to buy good quality feeds.

The dairy farming journey

Since the start of his journey in dairy farming, Mr Maina has focused on implementing modern dairy practices. When he needs information on how to solve his problems on the farm, he consults advisors, the internet, input suppliers, service providers, and friends involved in dairy farming. His original plan was to produce between 50 and 100 litres of raw milk daily and to sell it through his shop in Karatina town. This approach changed when the market started demanding a wider range of milk products. Customers at the shop wanted cups of boiled milk, so the shop became a milk café. Then customers started asking for yoghurt in different flavours, Mala (a traditional cultured milk product), cakes, and even ugali (a dish made of maize flour) as an accompaniment. Mr Maina ventured into processing to make the requested value-added products for the Nairobi market, such as Greek yoghurt, quark, kefir, and buttermilk, but also needed to increase his milk production to meet the growing demand. He gradually increased his herd and milk volumes, but did this according to his own guiding principles: there had to be sufficient (quality and quantity of) services, feed, water, and housing space available for all cows on the farm and enough labourers to take care of them. Most importantly, there had to be a market for the extra milk produced. Mr Maina balanced the supply and demand for his milk and dairy products well. Imani's Milk Café is now a successful business and a popular meeting place for locals.

The obstacles of a medium-scale farmer

The journey of expanding Imani Farm brought along challenges varying from feeding, housing, and supply of inputs. Currently, Mr Maina's main challenge is how to guarantee purchasing good quality feeds and minerals. He had encountered unscrupulous business people who buy quality feed and minerals from manufacturers, adulterate it, repackage it, and then sell it on to farmers as the original product. Mr Maina found a way to overcome this challenge by buying directly from a maize flour miller in the neighbouring district and by purchasing protein-rich ingredients, such as soya, cotton seed, and sunflower cakes from importers. He has now expanded his cow sheds to hold 60 cows. His third difficulty was finding contractors who were willing to cut the hay he grows on his other 15-acre farm in Nanyuki when it is at its optimum quality. Contractors are normally paid per hay bale. So, when grass is overgrown it generates more income for them. This year Mr Maina wants to pay the contractor a higher price per hay bale to be sure that his grass is harvested and baled at the point of optimal nutritional value.

Learning within the country

Mr Maina is an avid self-learner, but he also attributes his steady farm improvements to the visits that his farm receives from various advisors. In 2014, Mr Maina met KMDP and Perfometer advisors at the Eastern and Southern Africa Dairy Association



Mr Maina consulting with a PUM dairy expert.

(ESADA) exhibition in Nairobi. Since then, local consultants from Perfometer Ltd have been visiting Imani Farm regularly and have advised Mr Maina and his staff on various dairy management issues. On their advice, for example, he raised the roof on his cow sheds to improve ventilation, opened up the milking parlour to improve lighting and reduce heat, and expanded pathways to improve the cow flow from the cubicles to the parlour. Mr Maina acknowledges that these experts have helped the farm to improve the quality of silage. He is now making his silage pits narrow and long, which makes compaction easy. This matches the feeding rate based on the herd size, thereby reducing bunker losses of maize silage. He also received advice to eliminate uncrushed grains from maize silage and to limit spoilage by reducing the amount of time that silage remained in bags before feeding. Advisors from PUM and Perfometer Ltd still visit Imani Farm to either use the farm as a training venue or to follow-up on the implementation of the advice provided.

Learning overseas

In October 2015 Mr Maina was among the 11 medium-scale dairy farmers who were selected by KMDP to attend a two-week dairy management training in the Netherlands. Mr Maina said that the trip helped him to reach a higher level of farm productivity, because he was able to implement most of the advice provided during the training sessions. Each farmer paid his own ticket and visa, while KMDP and NABC facilitated the training process and accommodation. During these training sessions, the farmers learned how to increase their volume of quality feed by managing grass



Mr Maina learned to manage grasses after coming back from training in the Netherlands.



Imani Farm's most important asset: the young stock.

as a crop and using manure for fertilization. Mr Maina says that he learned from Dutch farmers that the quantity of feed he produces should be the deciding factor for his herd size. Furthermore, he learned how to manage young stock, a key factor for his future production potential.

'I'm no longer excited about milk production only, because I was taught that problems with milk production could be seen in the records. The performance of my calves gives the true indication of the state of my farm; I improved the management of my calves so they can develop faster and I can use them to expand my herd or sell them for an extra income when they are fifteen months.'

He further notes that his calves are now born weighing between 40 and 48 kilos and that they give birth to their own calves between 24 and 26 months of age: even according to Dutch standards, he has a well-managed farm (see box).

Mr Maina has taken on the role as peer trainer for other medium-scale dairy farmers. As a member of the Nyeri Chapter of the Medium-scale Farmer Forum (MFF), a forum established by Perfometer Ltd under the auspices of KMDP, Imani Farm hosts study group sessions. The MFF coordinates its own training courses and promotes peer learnings for its members. This study forum, as well as the visit to the Netherlands, has helped Mr Maina to increase his peer network as well as given him additional sources of skills and inputs.

Accomplishments and future plans

Imani Farm is a progressive dairy farm with most of the good dairy farming practices well implemented (see box). The latest development is the contract between breeders and the Government Agency KAGRC who will supply bulls for semen. KAGRC now has four quality bulls at the station with a high breeding value. Currently, Mr Maina owns 30 healthy pedigree cows, of which 15 are lactating. The cows produce an average of 20 litres of milk per day, with a total milk production of approximately 300 litres per day. Currently, Imani Farm is an open learning centre that hosts other training events and delegations, even outside KMDP supported groups. The farm has hosted dairy trainees from Tanzania and other counties, due to the farm's ability to maintain good practices and Mr Maina's ability to articulate the farm's practice. Over 300 farmers have visited Imani Farm through KMDP so far. Mr Maina continues investing in his dairy farm based on the advice he receives and what the market demands. He uses the money generated by the dairy farm to make other investments. He says that, while he cannot tell when he will stop building up investments, his focus is now on how to overcome challenges by finding solutions and by continuously thinking of new ideas to expand the farm. For now, the telephone farmer is in an advanced stage of setting up a cottage industry to process all the products on his farm before packaging them for Nairobi niche markets. This makes him happy and helps him to stay focused. Mr Maina concludes:

'Investing in a medium-scale dairy farm is a journey full of ups and downs, but it is a really exciting journey. The ability to grow our own food, feed our own cows, produce our own milk, process and market our own value-added to products to a niche market in the Capital City, is a dream come true.'

Changes at Imani Farm

1. Calf rearing: grouping of calves, feeding, weighing, and taking Body Condition Score (BCS).
2. Feeding and nutrition improved due to increased capacity for fodder production.
3. Veterinary bills are low, as cows are healthy.
4. Value addition of produce has increased.
5. Cow shed modification to increase cow comfort.
6. Adjustments to silage bunkers.
7. Breeding of quality heifers increased the number of milking cows to 50.
8. Imani Farm has become a learning farm.



One of the well-fed cows is being milked.