



Investing in Kenyan Co-operative Development for Education, Health, and Economic Vitality

Highlights of 2023

Cooperative Dairy Development Project

2023 has been a busy year for the Dairy Farmers of Cherangany and our KKFC Ag team. We have been meeting twice a week via zoom. Typically, our Tuesday meetings bring together our Agricultural Extension staff in Kenya with members of our Ag team in Canada to discuss issues related to improving milk production at the farm level. On Thursdays, we focus on issues related to business management and improving the operations of the milk cooling plant. It has been nothing short of amazing to see how our Dairy project, which started with a visit to Cherangany in June 2014, has grown. Nine years ago, on Dec. 24th 2014, we shipped a forty-foot container with four milk cooling tanks and two diesel generators to Kenya. That equipment was unloaded and installed in newly constructed buildings in the summer of 2015. The facility in Mwaita has been enlarged a number of times. This year, with the financial support from the World Bank, equipment (shown above) was installed so that milk can be processed, packaged and sold as long life (UHT) milk.



Dairy/Agricultural Extension Services Officers:

Thanks to our donors and the Gaylea Foundation, we now support three Agricultural Extension Officers who provide education and advice to dairy farmers in Cherangany Kenya. Carolyn started working with us in July of 2022 as our first female Extension Officer. Shem and Faith joined her this November. Recently this team of well-educated and talented dairy specialists has been focused on improving milk quality. Many farmers lack the knowledge of how to prevent diseases such as mastitis, which leads to their milk being rejected. The team has been working hard to test milk and provide much needed advice to farmers. In order to give our supporters an insight into the work done by Carolyn, Faith and Shem, we have shared some information taken directly from their weekly reports (see inside this Newsletter).

Ag - Extension with Carolyn:

Carolyn has a B.Sc. in Agricultural Extension Education from the University of Kabianga. She returned to work in June after a three-month maternity leave. Carolyn often brings together small groups of farmers for training sessions. As a result, many farmers have made significant improvements to their dairy production. For example, they have built shelters that help keep their cows/calves clean and dry. She continues to encourage farmers to prepare silage so that they have nutritious feed available for their cattle during the dry season. The following notes from Carolyn's reports provide insight into a typical day for her as an Extension Officer.



- 1) Discussion with seven members of Bwake Farmer Field School (FFS) on importance of mineral supplements, different types of minerals and cow behaviors that show mineral deficiency in dairy animals. We also discussed animal welfare and how it's important to keep the animal comfortable and in a clean environment.
- 2) Discussion with fourteen members of Geta FFS on methods of pest and disease control. This included vaccination, de-worming, spraying, rotational grazing, dusting, proper hygiene, imposing quarantine, isolation of sick animals and burying of dead carcass. I also discussed types of record that a Farmers should have on their farms.
- 3) Discussion with nine members of community FFS on breeding. This included animal breeds, advantages of AI (Artificial Insemination), corrective mating, heat signs, breeding diseases and inbreeding. We also discussed using an animal calendar to record the day of AI servicing, any repeats, steaming up and date of calving.
- 4) Had a group discussion with eleven members of Makutano FFS to discuss animal nutrition. This included animal pasture and forage, their maintenance, palatability, percentage of crude protein, water requirements, planting density, soil requirements and time of harvesting. We also discussed concentrates, mineral supplements and water requirements.



Ag - Extension with Shem:



Excerpts from Shem's weekly report:

I arrived on November 1, 2023, at the Dairy Farmers of Cherangany office, eager to begin my extension work. I met with the team and was given a warm welcome. My first day was primarily focused on administrative tasks and familiarizing myself with the office environment. I met my colleagues who provided valuable insights about the work culture and expectations. A few days later, I embarked on a series of farm visits at Ekegoro aimed at acquainting myself with the local dairy farmers. These visits provided a firsthand understanding of the diversity of dairy farming practices in the region. I had the privilege of interacting with farmers from different backgrounds, each with their unique challenges and aspirations. These visits allowed me to observe their dairy management practices, from milking routines to animal husbandry and nutrition. I made it a point to engage in conversations with farmers, actively listening to their concerns and goals. In my first Field training session, I provided training and guidance to the participating farmers on best agronomic practices for planting and managing Brachiaria grass for improved forage production. I guided participants in the correct seeding rate and planting depth. We discussed common pests and diseases affecting Brachiaria grass. In another training session with members of the Bondeni FFS, we discussed calf-rearing management whereby I talked about colostrum management, hygiene and sanitation, calf-feeding, housing, health monitoring, and the weaning process. We also discussed the significance of high milk quality in terms of marketability. We identified and discussed common mistakes made during milking, handling, and storage that could compromise milk quality and offered solutions and alternative approaches to prevent these mistakes.

I also conduct comprehensive assessments of individual farmers. This includes evaluating the overall condition of the facilities, herd health, and management practices. I engage in a one-on-one consultation with farmers to discuss their current challenges, goals, and issues they are facing in dairy farming and practical solutions and strategies for improvement.

(Photo – Silage in plastic bags)



Ag - Extension with Faith:

Faith started working with us on November 15, 2023. In her first report she listed some of the following **Issues and Challenges** faced by many Cherangany Dairy Farmers:



- 1) Farmers lack the knowledge of how to maintain thorough hygiene. For example, they don't fully understand that milk is very susceptible to contamination from various sources, and that every milking tool should be disinfected before milking, storage and after cleaning.
- 2) Many farmers grow napier grass, but they lack the knowledge on when to harvest, so some napier is left to overgrow, losing its nutritive value. She teaches them that napier is ready for harvesting 3 to 4 months after planting and that it can help increase milk production due to its crude protein of 8-12% and crude fibre 26-28%.

- 3) Farmers have insufficient knowledge on when to start giving calves water and solid feeds. Faith encourages them to buy starter feeds and introduce water to calves as early as possible. She also recommends keeping good records and ensuring that hygiene of calf housing is maintained.
- 4) Most farmers are using red salt that has not been verified as healthy for animals. Faith carried out a demonstration to show farmers that the red salt is full of foreign materials and advised farmers to use other products.
- 5) One issue that has affected milk quality, and thus causes milk to be rejected, is the use of plastic jugs to store milk that is sold to DFC. Ideally, farmers would use stainless steel milk cans, which are easier to keep clean, but they are expensive. Farmers often re-use plastic jugs such as the one shown here. These sorts of jugs are very difficult to clean, particularly if they have an embedded handle as shown. Our Extension Officers are working hard to educate farmers about the importance of thorough cleaning procedures and how to choose more suitable milk containers.



Education Programs:

Early Years Programs:



Ensuring that young children get support in the early stages of learning continues to be important for KKFC. Our Early Years programs in Cherangany and Ngong (near Nairobi) continue to grow.

Kenyan Kids Foundation Canada provides funding for staff, including teachers, cooks, and security, as well as for nutritious food.

We were delighted to receive photos of our young graduates from the Cherangany Early Years program!

Transcend Talent Academy:

Providing scholarships so that high school students can earn an education has been a major focus of KKFC since we were established in 2013. That focus began in 2010 when Wesley and Tarah Korir (our co-founders) were married. They encouraged their friends and family to donate money to help pay school fees for impoverished students that were living in Cherangany Kenya, where Wesley grew up. Over the years, KKFC has seen this initiative grow as we have supported numerous students, providing them with a quality education as well as a training program to develop their athletic talents. In the past two years, largely due to the support of American donors, a new school has been build near Biribiriet. With classrooms and a science lab, it now operates as the Transcend Talent Academy Secondary School.



The school now has more than one hundred full-time students.
KKFC provides scholarships to some of these students.

Agricultural Scholarships:

We are pleased to announce that Joan Cheleting (shown here) from the Taito area in the Cherangany region, graduated this year after completing a two-year certificate program in agricultural studies at the Kitale National Polytechnic.

Meshack Kipruto from Biribiriet, also in Cherangany, is nearing completion of his three-year diploma at the same school.

KKFC plans to continue offering scholarships so that Form 4 (grade 12) graduates can pursue further education specializing in agricultural studies.

Congratulations to Joan and Meshack.



Volunteer Opportunities:

KKFC has no paid staff in Canada and relies entirely on volunteers.

We invite you to consider helping us in some of the following ways:

- Provide one-to-one Zoom tutoring for a Kenyan high school student
- Develop fundraising contacts in Canada with individuals and/or corporations
- Help organize a fundraising event
- Make presentations (virtual or in person) to schools, churches or other organizations
- Help develop learning resources/presentations for use in Canada
- Assist with the writing of stories for our website or newsletters
- Edit video content for our website and social media
- Provide support for updating our social media platforms

For more information or to donate, please visit: www.kenyankidsfoundation.ca/donate

Kenyan Kids Foundation Canada
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We invite you to consider volunteering on one of our committees
(Agriculture, Administration, Education, and Water).

Please contact us at info@kenyankidsfoundation.ca