

## INNOVATION FUND

### Leveraging the benefits of multi-stakeholders partnership to support rural women and youth in the dairy sector in Kenya

Parent project: Strengthening agricultural knowledge and the innovation ecosystem for inclusive rural transformation and livelihoods in Eastern Africa (AIRTEA)

#### PROJECT COORDINATOR

Co-operative Alliance of Kenya (CAK)

#### PARTNERS

Kenya Animal Genetic Resource Centre (KAGRC)  
Kenya Agricultural and Livestock Research Organization (KALRO), Dairy Research Institution  
New Kenya Cooperative Creameries Ltd.  
Co-op Consultancy & Bancassurance Intermediary Ltd (CCBI), Kenya

#### LOCATION

Nyandarua, Nyeri, Kirinyaga and Embu Counties, Kenya

#### PERIOD

March 2022 – August 2024

#### EU FUNDING

EUR 200,725.52

#### SECTOR

Agriculture - Dairy

#### KEYWORDS

Knowledge, innovation, technology transfer

#### PROJECT CONTACT

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## CHALLENGE

The livestock sector is a major driver of the Kenyan economy contributing about 15% of the Gross Domestic Product (GDP) and accounting for nearly 50% of the agricultural sector. The resource base for the sector is valued at Ksh.795 Billion while the total annual livestock products value was estimated at Ksh 1,891 Billion in 2016. Dairy is a strategic commodity and the dairy sub-sector is crucial for rural development and food and nutrition security for Kenya. It offers a pathway out of poverty for the large number of households keeping livestock and for those who provide services and value addition throughout the supply chain.

While the growth of the dairy sub-sector in Kenya has been impressive, the performance of the sector is still lower than those of emerging and competing economies in the region with challenges still to be addressed, such as: low milk productivity; limited organisation of farmers; limited access to finance for smallholder dairy farmers and other dairy value chain actors, especially women and youth; and lack of policy discussions on the sector's specific policy, laws and regulations.



Lucerne plot and Napier-Desmodium intercrop at Wakulima Dairy, Nyeri County

A combination of rapid growth in population, urbanisation, per capita incomes, formalisation of wholesale and retail industry, shifting diets, and tighter food safety requirements point to a future where the consumption of milk and milk products will exceed its production. Sustained increase in per capita incomes and urbanisation is driving the transition of the country from predominantly grain-based diet to a higher value diversified basket that includes more animal protein, 80% of which is dairy products.

## PERSPECTIVES

The Kenya Dairy Board (KDB) seeks to formalise the dairy value chain, increase production, improve value addition (e.g., through product diversification), increase the number of improved breed cows and further improve their productivity through artificial insemination and improved feeding across seasons to ensure consistent milk supply, particularly during the dry season. Kenya further seeks to expand milk collection infrastructure including the establishment of more Milk Collection Centres (MCCs) and commercialisation of their operations, emphasising public-private-producer partnerships. The improved productivity and efficiency along the dairy value chain is expected to reduce costs, and hence make Kenya dairy products cheaper and more competitive in regional markets.

## JUSTIFICATION

By 2050 the population of Kenya is projected to double from 49 million to 96 million with 50% of people living in urban areas as GDP per capita rises to USD 6,500. Annual demand for cow milk is expected to grow from 4,736,000 tonnes in 2015 to 11,341,000 tonnes by 2050. Meeting this increased demand, with less land available for agricultural production especially in milk-producing zones in central Kenya, and without compromising food safety and environment, calls for accelerated shift from a traditional low-input-low-output subsistence production system to a more intensive high-input-high-output technology-driven and market oriented commercial system.



Training of farmers on a variety of newly introduced fodder crops on a demonstration site at Mburugu Dairy Farmers Co-operative Society, Embu County



## INNOVATION FUND

### METHOD

The project brings together industry practitioners, researchers, farmer cooperatives, dairy inputs and service providers, financiers and milk processors within the form of a multi-stakeholder partnership - called Dairy Innovation Platform - that will act as a platform for innovation, knowledge and dialogue exchanges, focused on the upgrading of the dairy value chain:

- Women and youth dairy farmers from Kirinyaga, Embu, Nyeri and Nyandarua Counties (representing 6 cooperatives with an estimated membership of over 60,000 dairy farmers) will be engaged in the platform through the delivery and receipt of economic support services.
- 120 trainer-to-trainers and 1,200 farmers will be trained in these services, as well as in improved animal nutrition and breeding.
- A knowledge-sharing mechanism for dairy farmers and other value chain actors will facilitate the exchange of experiences, link actors and develop dissemination strategies.
- Meetings with public authorities at county and national level will advocate for an improved policy and regulatory framework.



Demonstration plot lay-out and sharing surplus seeds and planting materials at Wakulima Dairy, Nyeri



Napier-Desmodium intercrop layout and fodder tree seedlings on a demonstration site at Mburugu Dairy Farmers Co-operative Society, Embu County

### INNOVATIVENESS

Multi-stakeholder partnerships play a vital role in providing a collaborative platform that connects all dairy value chain actors and addresses issues of low dairy productivity, limited economic service access and smallholder farmer involvement across the value chain (especially women and the youth), while also providing a channel for inclusive knowledge and technology transfer and policy dialogue.



Training-of-Trainers on hydroponic fodder production at Mburugu Dairy Co-operative Society, Embu County



Training-of-Trainers at Kirima Slopes Dairy Cooperative, Kirinyaga County

### EXPECTED RESULTS

#### Impact

- Improved livelihoods of women and youth smallholder dairy farmers in the counties of Kirinyaga, Embu, Nyeri and Nyandarua in central Kenya

#### Outcome

- Women and youth smallholder dairy farmers applying improved farming techniques.

#### Outputs

- Multi-stakeholder innovation collaborations along smallholder dairy value chains established.
- Improved technical capacities of youth and women smallholder dairy farmers involved in the multi-stakeholder Dairy Innovation Platform.
- A knowledge-sharing mechanism for smallholder dairy farmers and other dairy value chain actors updated and put in place.



**AIRTEA** is implemented by FARA in partnership with ASARECA and EAFF. **AIRTEA** fosters an inclusive research and innovation environment towards sustainable agrarian livelihoods and rural transformation, through: strengthening the production, processing and marketing capacities of youth and women in East Africa's multi-stakeholder value chain innovation platforms and women in East Africa's multi-stakeholder value chain innovation platforms and linking them to practical solutions within national, regional and global food systems; facilitating the transfer of technologies, knowledge and innovations, and their uptake through multi-stakeholder learning routes; and improving profitability and employment opportunities along agricultural commodity value chains by establishing national and regional Agricultural Business Learning Alliance (ABLA) platforms, business development services and mentorship.

**AIRTEA** supports 11 projects in Kenya, Rwanda and Uganda that focus on agricultural production, processing, marketing, agricultural digital application development, and extension (mainly aquaculture, dairy, and horticulture).