WATER ACCESS TRANSFORMS DAIRY FARMING FORTUNES, LIVELIHOODS IN KOBOKO DISTRICT

By Titus Kakembo

A recent assessment involving 100 dairy cooperatives across Uganda has reaffirmed a long-understood reality: reliable access to water is the backbone of dairy farming. According to the Dairy Industry Profile 2024/25, Heifer International Uganda (HIU) executive director William Matovu, despite the challenges encountered, national milk production continues to register an annual growth rate of 3%. This is at a time when water is no longer viewed as a basic necessity alone; it is a decisive factor that shapes herd health, milk quality and the profitability of rural cooperatives.

Across the country, particularly in districts such as Kiboga, communities are already seeing the benefits of improved water infrastructure that include a higher milk production, weight gain by animals, less time spent by children and women fetching water from distant places and better hygiene in processing.

"Farmers report that their cows maintain body weight and produce more milk when water is available near homesteads. Cooperatives, in turn, are using the improved supply to enhance hygiene, strengthen milk collection chains and expand services to members," Matovu noted.

This progress is driven by a partnership between the Government, HIU and local communities under the Aqua for All and Water for Dairy Business initiatives. The project, piloted in Buyende and Kiboga districts, which started in 2022 and concluded in December 2025, reshaped the future of dairy farming in these communities.

Solar-powered water systems provide clean and consistent water to more than 2,000 people in Kiboga district

CHALLENGES

Despite the gains, challenges persist. Access to affordable financing remains a major bottleneck for farmers seeking to install on-farm water systems. Representatives from Stanbic and Equity Bank acknowledged the need for loan products tailored to rural water infrastructure.

Women and children no longer walk long distances to fetch water

SOLAR-POWERED WATER SYSTEMS

A tour of Kiboga district was a revelation of a new narrative: solar-powered water systems providing clean and consistent water to more than 2,000 people, including farmers affiliated with the Dwaniro Dairy Cooperative.

Heifer International Uganda executive director William Matovu describes the initiative as a milestone in integrating renewable energy with agriculture.

"Farmers once relied on unsafe pond water, especially during dry spells. With solar-powered systems, water flows all-year-round. Milk quality has improved, livestock are healthier and the burden of fetching water, often borne by school children, has reduced, and they have more time to read," Matovu said.

True to his word, before the intervention, households paid between sh1,500 and sh2,000 per 20-litre jerrycan. Today, the cost has dropped to sh500, making water more accessible for homes, milk processing plants and farms. The Dwaniro water system generates about sh4.3m monthly, revenue that covers maintenance, repairs and operator wages. This self-sustaining structure has strengthened community ownership and increased the likelihood that the system will continue functioning even after the project ends.

COOPERATIVES AT THE CENTRE OF CHANGE

During a stakeholder symposium at Onomo Hotel in Kampala city on December 5, 2025, a participant, Eng. Joseph Waswa from the Ministry of Agriculture, Animal Industry and Fisheries encouraged cooperatives to shift their focus from herd size to productivity.

"Cooperatives should prioritise high-yielding, climate-resilient breeds and better water management," Waswa said.

He highlighted the remarkable growth of Dwaniro Dairy Cooperative, which has completed three credit cycles amounting to sh400m, sh800m and sh1.5b through the Uganda Development Bank. These funds have enabled farmers to acquire improved breeds, construct valley dams and strengthen grazing fields. This implies animals giving more beef and milk. These are achieved by processing hay for feeding during droughts. The grass cutting machines are solar-powered. This means constant water and feed supply, which boosts milk and beef quality and quantity.

Relatedly, Waswa said, the processing plant in Dwaniro, with a capacity of 4,000 litres a day, is stabilising prices, reducing spoilage and expanding the cooperative's revenue base.

In addition to Dwaniro, in Kiboga, milk bulking centres, cooling facilities and transport networks are revitalising the local economy.

Such investments, Waswa added, are generating an estimated 51,000 jobs in agriculture and agro-processing.

Buyende is located north of Lake Kyoga and in the proximity of River Nile in Busoga, but is crippled by soil degradation, effects of climate change and archaic farming practices. Kiboga shares some characteristics with Buyende, besides it being prone to dry spells that affect livestock quality and productivity. The residents in both districts are subsistence farmers.

This project aligns with Government policy on agro-industrialisation, climate resilience and rural service delivery under the National Development Plan and the Dairy Development Strategy. By investing in water for production, renewable energy and cooperative-based value chains, it advances Government priorities of boosting agricultural productivity, improving household incomes and reducing vulnerability to climate shocks.

The focus on solar-powered systems supports the clean energy transition, while strengthened cooperatives reflect the policy shift toward organised, market-oriented farming. Improved hygiene, milk quality and access to finance also reinforce national goals on food safety, enterprise growth and job creation across agriculture and agro-processing.

COOPERATIVES REAPING THE BENEFITS

For cooperatives, improved water access has been transformative. Jackson Katusiime, the commercial officer at Dwaniro Dairy and Livestock Cooperative Society, recalls their modest beginning.

"In 2009, we had 10 members and collected barely 2,000 litres a day. Today, we have 1,000 members supplying 50,000 litres every month. This growth is largely due to better hydration, improved pastures and higher hygiene standards," he said.

Dwaniro Dairy and Livestock Cooperative Society has also made strides in value addition. In 2024, it commissioned a mini-processing plant producing yoghurt and cheese, a step that reduced reliance on raw milk sales, created new markets and attracted youth into dairy entrepreneurship.

Residents echo similar experiences. Grace Namutekateka notes that milk remains central to household livelihoods in Kiboga. Children carry milk and steamed potatoes to school, families make ghee for consumption and sale and women have formed groups to pool milk for yoghurt production sold in trading centres.

The story of Kiboga demonstrates what becomes possible when communities gain reliable access to water. Herds grow healthier, productivity rises, cooperatives expand and families secure better livelihoods.