

## Site Briefing

### Bigogwe Milk Collection Center (MCC)

#### (USAID Rwanda Dairy Competitiveness Program II- Land O' Lakes)

<b>Location</b>	Nyabihu District, Musanze area
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<b>Sector</b>	Agriculture
<b>Rwanda Dairy Sector Profile</b>	<p>The dairy sector contributes about 33% to Rwanda's agricultural GDP and 6% to the national GDP. With a population of 11.1 million people, Rwanda has a per capita milk consumption of 40 litres per annum which is below those some East African countries such as Kenya but aims to reach an annual per capita consumption of 80 litres by the year 2017. In-country milk production steadily increased from about 112.5 million litres in 2003 to about 445 million litres per year in 2012 now estimated to be 503 million litres. Consistent with this increase has been the growth of the cattle herd size which is now close to 1.5 million (2013). The proportion of improved dairy breeds has also increased and 82% of milk marketed is from improved breeds that make up 28% of the total cattle herd. The national herd increase has been from cattle imports and a massive state subsidized artificial insemination campaign in which hundreds of thousands of cows have been bred.</p> <p>The Rwanda National Dairy Strategy seeks to increase per capita milk consumption from 40 litres/year to 80 litres/year through promotion of consumption by current milk consumers and the one third of the Rwanda population that does not consume milk. In addition, it seeks to formalize the dairy value chain and, considering the health benefits, orient consumers to consume processed milk instead of the raw milk currently being consumed. The NDS further envisions, improved value addition (e.g., through product diversification) that is expected to use the anticipated milk surplus</p> <p>The Rwanda dairy sub-sector contributes to regional milk supply largely through informal exports to Burundi and the Democratic Republic of Congo. The informal milk exports can be as much as one million litres of fresh and fermented milk per month. Because the price of milk from Rwanda is high, Rwandan milk cannot compete in milk markets in Uganda and Kenya. However, opportunities for export of value added products, particularly cheese, to all East African countries exists because of lower product prices. Challenges that have precluded formal exports include the poor quality of raw milk and weak enforcement of milk standards. However, this challenge is being tackled through the introduction of milk and dairy products certification programs and milk quality regulations for the whole dairy value chain. The cold chain is being extended and improved to assist in maintaining milk quality along the whole dairy value chain.</p>

	(abridged from “Rwanda” in <i>White gold: Opportunities for dairy sector development collaboration in East Africa.</i> ” Centre for Development Innovation, Wageningen (Netherlands), March 2014 <a href="http://edepot.wur.nl/307878">http://edepot.wur.nl/307878</a>
<b>RDCP II Project Overview</b>	<p>The Rwanda Dairy Competitiveness Program II (RDCP II) is designed to reduce poverty through expanded marketing of good quality milk that generates income and employment, and improves nutrition of rural households. RDCP II aims to achieve this by linking existing and new smallholder dairy producers to expanding market demand driven by improved quality, reduced transaction costs and increased investment all along the dairy value chain. A key implementation approach for RDCP II is support to milk cooperatives, as in the case of Bigogwe. Benefits of cooperative membership include:</p> <ul style="list-style-type: none"> <li>• Superior prices on stock feeds</li> <li>• Veterinary services- Animal treatment on credit and recover payment from milk sales from farmers</li> <li>• Market linkage</li> </ul>
<b>Bigogwe MCC Operations</b>	<p>Operations started in 2013. Farmers purchase cows privately. Four cooperatives with approximately 400 people each bring milk to the Milk Collection Centre before 7 am each day. Between 600 and 700 litres/day are collected and processed into yoghurt, cheese or sold as fresh milk.</p> <p>Milk collected from farmers is tested for freshness, and mastitis.(see endnote) It is stored in tanks cooled to 3°C by an engine that is run for 3-4 hours a day before being switched off until the next day.</p> <p>After the bulk milk is collected, tanks are cleaned using a detergent and the floor is mopped up. The effluent is collected into a septic pit about 50 meters away.</p> <p>The centre also serves as a veterinary drugs store, including antibiotics, dip, de-wormers, and vaccines. (dipping is done at the farmer’s homestead, not on MCC premises.)</p>
<b>Mastitis</b>	<p>Mastitis is the inflammation of the mammary gland and udder tissue, and is a major endemic disease of dairy cattle. Milk-secreting tissues and various ducts throughout the udder can be damaged by bacterial toxins, and sometimes permanent damage to the udder occurs. Severe acute cases can be fatal, but even in cows that recover there may be consequences for the rest of the lactation and subsequent lactations. Practices such as close attention to milking hygiene, the culling of chronically-infected cows, good housing management and effective dairy cattle nutrition to promote good cow health are essential in helping to control herd mastitis levels. Mastitis is most often transmitted by contact with the milking machine, and through contaminated hands or other materials, in housing, bedding and other equipment.</p>

Mastitis treatment and control is one of the largest costs to dairy industries worldwide. Losses arise from:

- Milk thrown away due to contamination by medication or being unfit to drink.
- A reduction in yields due to illness and any permanent damage to udder tissue.
- The extra labour required to tend to mastitic cows.
- The costs of veterinary care and medicines.
- The cost of reduced longevity due to premature culling.

(abridged from <http://www.dairyco.org.uk/technical-information/animal-health-welfare/mastitis/#.VPZFzOGMC60>. DairyCo is non-profit UK dairy producer organization funded by statutory levy on all milk sold.)

## Photos



