



UNN PROGRAMMING/ PARTNERSHIPS

White gold

BUILDING A MILK VALUE CHAIN
IN BURUNDI



Tale 12

A network of community engagement has been growing in the western part of Burundi since 2015.⁴⁸ It starts with a gift of a pregnant cow, given to a rural farmer, one of 3,000 who will then pass on the calf to another farmer. This simple, effective model was the beginning of an extensive milk value chain that has extended into many facets of life with benefits, from more nutritious school feeding to family planning support to increased trade opportunities. What happened in Burundi was the result of joint efforts involving several United Nations agencies – the International Fund for Agricultural Development (IFAD), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Population Fund (UNFPA) and the World Food Programme (WFP) – as well as public-private partnerships. Not only is it a story about people working together across sectors and stakeholder groups, it is also a story of human ingenuity that found a way to thrive despite severe limitations.

'A forgotten crisis'

In 2015, Burundi faced a daunting number of nutrition, environmental, economic and political challenges. The media has called the situation 'a forgotten crisis' because of high levels of food insecurity, climate change factors and human rights abuses.⁴⁹ Burundi is ranked 185th out of 189 countries on the 2018 Human Development Index,⁵⁰ and its poverty rate is extremely high at over 70 percent.⁵¹ Limited agricultural production,

48 IFAD. 2015. *Adaptation for Smallholder Agriculture Programme (ASAP) Burundi Fact Sheet*. Rome. Available at <https://www.ifad.org/en/web/knowledge/publication/asset/39572144>.

49 Nantulya, P. 2019. *Burundi, the Forgotten Crisis, Still Burns*. Africa Center for Strategic Studies. Washington D.C. Available at <https://africacenter.org/spotlight/burundi-the-forgotten-crisis-still-burns/>.

50 UNDP. 2018. *Human Development Indices and Indicators: 2018 Statistical Update*. New York. Available at http://hdr.undp.org/sites/default/files/2018_human_development_statistical_update.pdf.

51 World Bank Group. 2018. *Republic of Burundi: Addressing fragility and demographic challenges to reduce poverty and boost sustainable growth systematic country diagnostic*. Available at <http://documents1.worldbank.org/curated/en/655671529960055982/pdf/Burundi-SCD-final-06212018.pdf>.

excessive rains, floods and drought are additional factors that Burundi faces. Conflict has reigned in the country except for the period between 2005 and 2015. When the European Union withdrew 50–60 percent of its funding in 2015, the private sector followed suit, alarmed by political instability.⁵² This was the same year that the exodus began, with over 400,000 refugees and asylum seekers fleeing to Tanzania, the Democratic Republic of the Congo (DRC) and Uganda.⁵³

From a nutritional lens, Burundi's child stunting prevalence is the second highest of all countries included in the 2019 Global Hunger Index.⁵⁴ Over 5 percent of children in Burundi experience wasting and 6.1 percent die before the age of five. Virginia Villar Arribas, WFP Country Director, began her post in 2015. She pointed to several 'layers', or situational factors, that account for the high levels of stunting. Food production is low. If you divide the amount of food available in Burundi by the amount of people, there are only 55–100 days of food per person per year. Affordability is another issue, as 67 percent of the population cannot afford to buy nutritious food.⁵⁵

"These long-standing problems challenge the country's development," she reflects. The milk value chain was designed to target each of these areas by increasing awareness about the importance of better nutrition and augmenting food supply simultaneously with income, so that families have increased buying power.

52 Interview with Virginia Villar Arribas, WFP Country Director. 4 June 2020.

53 UN News Center. 2018. *Without urgent funding, Burundi risks becoming a 'forgotten crisis'* – UN refugee agency. Available at <https://refugeesmigrants.un.org/without-urgent-funding-burundi-risks-becoming-%E2%80%98forgotten-crisis%E2%80%99-%E2%80%93-un-refugee-agency>.

54 Concern & Welthungerhilfe. 2019. *Global Hunger Index 2019: Burundi*. Available at <https://www.globalhungerindex.org/pdf/en/2019/Burundi.pdf>.

55 Interview with Virginia Villar Arribas, WFP Country Director. 4 June 2020.



First steps

The milk value chain begins with enriched animal fodder to improve the quality and quantity of cow milk. Provided by FAO, the feed was developed in response to community members' needs. The second link in the 'chain of community solidarity' is the cow, often pregnant, given to a rural farmer who qualifies for the programme. The milk produced from the cow is then brought to a local milk collection center, a cooperative, whose formation was supported by IFAD. By 2016, twelve cooperatives were collecting milk in Gitega.⁵⁶

⁵⁶ Kanova, L., Pronesti, N., Blankman, J. & Sebushahu, T. 2018. *Mission Report: Joint RBA visit to Burundi, 5–9 November 2018*. FAO, IFAD and WFP. Rome.

From there, milk is transported to The Modern Dairy, the country's single plant to sterilize the milk at ultra-high temperature (UHT). The long-life milk is then stored in Tetra Paks, impermeable paper containers that do not require refrigeration. Funding from the Netherlands focused on the factory itself, while WFP provided capacity building, from training farmers who milked the cows to the cooperative staff who collected the milk and transported it to the factory, to the workers who completed the final steps of testing and packaging.

The next question concerned the market. Consumers had limited buying power, scarce refrigerators and no cold chain to transport the milk. Instead of milking, some farmers killed their cows for meat, an outcome that threatened to stop the economic potential of the programme in its tracks.

School feeding

Once milk production increased, demand had to keep pace. WFP bought and supplied 420,000 liters of milk to nearly 37,000 school children in 2017 and 2018. One in four children in Burundi are fed at school, a total of 631,000 children. In rural areas, milk has not been widely available. Sensitization about its nutritional benefits, such as protein, calcium, B vitamins, potassium and vitamin D took place through the schools, with teachers and parents participating.

Liliane Bigayimpunzi oversaw the school feeding programme for WFP from 2007–2018. Children in 400+ schools were given milk three days per week, which supplemented the maize, beans and vegetables that are fed to the children for lunch. School gardens, jointly supported by the Ministry of the Environment, Agriculture and Livestock with WFP, were one aspect, where children helped to grow crops such as carrots, cabbage and onions; they were

also given seeds to take home and plant, another measure supported by FAO. Furthermore, nutrition was included as part of the life skills course in the school curriculum.

While milk in schools may not address stunting directly as it reaches children after they are two years old, it helps to shape eating habits that spill over into family life and the wider community. “Children who drink milk at school go home and demand it from their parents, who will then give it to all the siblings,” Virginia explains. In this way, “children can change the downward spiral of malnutrition and redirect it upwards.”



Nutrition-specific and sensitive interventions

The milk value chain is nutrition-specific because it addresses immediate causes of malnutrition, such as nutrient intake and disease. As highlighted above, the programme has improved food security and dietary diversity; strengthened the food value-chain through partnership; and promoted positive nutritional behaviour change in the community. Milk production has increased from 840,000 litres in 2016 to 1.2 million litres in 2018.

The milk value chain is nutrition-sensitive in that it tackles the underlying determinants of malnutrition, such as food insecurity, limited access to health services and a poor hygienic environment as well as basic causes, such as poverty, gender inequalities, low educational attainment and more. Impact assessments carried out by WFP show that between 2014 and 2016, 3,000 new jobs were created in the targeted rural areas. The benefit of more robust markets meant that farmers' revenue increased from US\$400 to US\$650 per year. In addition, the project has helped to develop the private sector and reduced milk importation from other countries, mitigating the loss of hard currency.

Family planning is yet another piece of the puzzle. WFP and UNFPA are collaborating with schools and health centers to educate young girls and women about delaying pregnancy for both nutritional and economic reasons. While UNFPA is not formally part of the project, its engagement in Burundi's nutrition scene has intensified following its decision to join the UN Network (UNN) in 2018 in pursuit of common goals.

Sustainability and expansion

The milk value chain continues to benefit farmers, families, traders, merchants, drivers and staff that run the cooperatives where milk is collected. With 630,434 cows provided since the start, the project is now integrated into the economy and supported by government ministries, such as the Environment, Agriculture and Livestock, Public Health, Finance, Trade and Good Governance.

Currently, funding for the school feeding programme is provided by the government itself. While nearly 300,000 litres of milk were purchased by WFP in 2017 and 2018, their contribution represents only 12 percent of the factory's annual sales today, versus 80 percent in past years. There are also other signs of growth. The original twelve milk cooperatives, or collection centers, have expanded to 54. The government runs a citizen association, called *fin-lait* to negotiate prices of milk. As the quality of milk has improved, new opportunities have presented themselves. Burundi now exports milk to neighbouring Tanzania.

The private sector in this chain is more than a contributor; it is a key player. Transport companies, Tetra Pak producers, merchants, truck drivers and agricultural workers are some of the businesses and jobs created as a result of this project. The Modern Dairy of Burundi is giving back to the community and has identified future activities that will strengthen ongoing collaboration, such as campaigns with over 4,000 women to raise awareness regarding the nutritional value of milk.

Going forward, several United Nations agencies are exploring how to scale up with the private sector. Possible opportunities include opening more milk processing factories (there is still only one in the country) and diversifying

the range of products, such as moving into yogurt production. Conversations about a partnership with Kerry Dairy from Ireland are also taking place. Furthermore, a local entrepreneur uses discarded UTH bags from the milk to plant trees. The Netherlands is looking for ways to translate the success of the milk value chain into other crops (e.g. bananas, rice, beans and maize).

Just as the COVID-19 pandemic has elicited new ways of coping and connecting, the value chain in Burundi shows that extreme circumstances can lead to innovation. This pattern is evident when we look at what happened in Burundi over the past five years: how improving nutritional options for the population has benefitted so many other aspects of the community.

