THE MONIESON CENTRE
TRANSFORMING BUSINESS IN THE KNOWLEDGE ECONOMY

Community Success Stories

Ontario Water Buffalo Company

www.ontariowaterbuffalo.com
Stirling, ON
Researched by Christopher Henry, Michael Portner-Gartke, Courtney Smith, Andrew Tiffin, Rosemary Waldmeier, Stephanie Whittamore, and Rachel Zimmer
August 2010

INTRODUCTION

This community success story case study is part of the Monieson Centre's Knowledge Impact in Society (KIS) Project, a three-year endeavour to connect academic knowledge with economic development needs in Eastern Ontario. This case study highlights best practices from a real business in Eastern Ontario. The KIS Project is funded by the Social Sciences and Humanities Research Council of Canada. For more information, visit www.easternontarioknowledge.ca.

In 2006, four years after switching from dairy to beef production, Martin Littkemann and Lori Smith were looking for a creative way to use their farm in Stirling, Ontario beyond cattle and cash crops. Following a friend's suggestion, they began researching the commercial potential of producing water buffalo milk, a product used around the world but virtually unheard of in North America. By 2008, they had purchased their first heifers, and today the Ontario Water Buffalo Company's production of water buffalo milk is thriving, supplying the region's fast-growing artisan cheese industry. This case study explores the key factors behind Ontario Water Buffalo Company's success and offers lessons other small rural businesses can learn from this innovative organization.

INDUSTRY OVERVIEW

Water buffalo are common in agricultural systems around the world, both as work animals and as sources of meat and milk. Indigenous to hot, humid climates like Thailand and India, about 97% of the world's 158 million water buffaloes are still raised in Asia.[1] Their milk is valued as a low-lactose alternative to cow's milk, richer in both protein and minerals. Likewise, water buffalo meat is lower in saturated fat than beef, offering a healthy protein source.

The North American water buffalo market, however, is influenced by European, particularly Italian, uses of the milk. In Italy, for example, over 300,000 water buffalo are used for milking. By comparison, the Ontario dairy industry draws on about 250,000 Holsteins.[2] Buffalo milk has become a central ingredient in Italian cheese-making, notably for "mozzarella di bufala" – buffalo mozzarella – a centerpiece of traditional Italian pizzas and Caprese salads.

---

[1] *Water Buffalo: An Asset Undervalued* (Bangkok: United Nations Food & Agriculture Organization, 2000).
[2] "Ontario Water Buffalo Company," *Harvest Hastings,* http://www.harvesthastings.ca/harvesthastings/producerprofile/littkemann-farms (Accessed Aug. 5, 2010).

Until the past decade, however, the Canadian market for *bufala* was composed entirely of Italian imports. Because the product is a fresh cheese, best consumed within 3 days of production, the Italian product is usually flown to Canada, making the cost significantly higher than Canadian-produced cow mozzarellas. Canadian chefs and connoisseurs also lament how even air-shipped imports cannot meet their desired freshness standards, as the transportation process from production in Italy through shelving in Canada takes a minimum 4-7 days.

Canada's first water buffalo farm began operations in British Columbia in 2000. Since then, a handful of producers have sprung up across the country. With only an estimated 5,000 water buffalo in the U.S., Martin and Lori's herd of over 100 head makes them a significant player in the North American market. The farms that have entered the market have succeeded by building alliances with cheese-makers supplying Italian restaurants and consumers. From this growing supply, a domestic *bufala* cheese industry is beginning to emerge in Canada.

COMPANY OVERVIEW

Ontario Water Buffalo Company's success has stemmed from being at the forefront of a new Canadian market. Because *bufala* cheese is a high-end product in Canada, Martin and Lori did extensive front-end research ensuring that the end result would meet the most stringent standards. This began with fact-finding trips to B.C., Vermont, and Italy to learn production methods and purchase a top-quality breed. After purchasing an initial 39 heifers and one bull, they are now developing their own custom breed.

As they built their herd, they concurrently networked with local cheese producers. They found greatest interest amongst Italian cheese producers in Toronto already producing cow-based mozzarella products. Ultimately, Ontario Water Buffalo Co. built a strong partnership with Quality Cheese in Vaughan, who were already importing buffalo mozzarella from Italy and had an established distribution network intact. Before bringing their product to market, they experimented with numerous recipes. With the support of University of Guelph researcher Art Hill, they settled on an artisanal recipe, as industrial techniques would not produce a high-quality cheese.

Two years later, Ontario Water Buffalo Company is one of two farms supplying Quality Cheese. Their milk is used to produce five different varieties of *bufala* cheese, including mozzarella, bocconcini, and ricotta. Their products are sold directly to restaurants, and to individual consumers through select grocers in Toronto and Quality's own factory store. Initially, transportation proved to be an issue; however, Quality invested in a refrigerated truck to transport the milk from Hastings to Toronto. With production now in operation four days a week, Quality's demand is outpacing supply and they would produce more cheese if more milk were available. Quality's willingness to develop the transportation infrastructure is a symbol of the long-term nature of the partnership between the two firms and the shared commitment to build this new local cheese market. Given that the less-fresh Italian product costs over $20/kg for transportation alone, this local network has significant competitive advantages in both cost and quality.

KEY SUCCESS FACTORS

Ontario Water Buffalo Co. offers several key lessons to other small rural businesses:

1) First Mover Advantage

In converting their farm from beef to water buffalo milk, Martin and Lori are true pioneers in Ontario's agricultural landscape. While one other farm has followed suit, Ontario Water Buffalo Co. has been able to develop a strong partnership with Quality Cheese, which has in turn led to the release of Ontario's first *bufala* cheese products. As others come to market, Quality's product will be the benchmark. Likewise, other cheese makers will likely look to Ontario Water Buffalo Co. as a first choice for their milk supply because of their established reputation. Because they have borne the risk of venturing into untested markets, they have a distinct advantage as the market grows.

2) Untapped Niche Market

Although no one in Ontario had produced *bufala* cheese products before, Ontario Water Buffalo Co.'s move into this market was a highly strategic one. Ontario's large Italian communities, combined with broader society's knowledge of and demand for quality Italian foods, meant there was already demand for buffalo mozzarella cheese. They were thus satiating an untapped niche market. The local Italian cheese production and distribution network meant that it would be relatively simple to get the end product into the customer's hands. By building the right partnerships, Martin and Lori were able to produce a high-quality domestic product that drastically undercut the price of existing imported products.

Their goal, however, is for this to not remain a niche product. While provincial policy does not yet regulate water buffalo milk according to the standards of cow and goat milk, Ontario Water Buffalo Co. already produces their products in compliance with stringent cow milk regulations. They are also engaged in lobbying the government to recognize their product under the Milk Act. In the meantime, they have done well to market and distribute this product as a niche product, while preparing themselves for more widespread adoption.

3) Premium Product

Critical to the success of their new venture has been the high quality of Martin and Lori's buffalo milk. Because the milk is used to create a high-end product it is critical to maintain stringent quality controls. Their business set-up was thus designed to maximize product quality. This involved attending global forums, integrating custom research from a leading agricultural university, learning from established international players, and working with supply chain partners to ensure quality throughout the process.

The product also offers unique health benefits compared to traditional cow's milk. This helps appeal to "foodies," a key target group composed of consumers interested in how their food is produced from "field to fork." This group tends to value foods produced locally and, because they associate local food production with quality, is willing to pay more for such products. Ontario Water Buffalo Co. thus benefits from this brand association. Foodies tend to be early adopters in food consumption and will help buffalo milk gain more mainstream recognition.

4) Capitalization of Existing Infrastructure

Martin and Lori overcame a significant barrier to entry by using their existing farm land and equipment to launch this new product. Although they ceased cow dairy production in 2002, they still had a great deal of equipment remaining unused, particularly their tie stalls, which are now being used for milking the buffalo. Their existing infrastructure thus significantly reduced the start-up costs. Further, their knowledge of farming and breeding has been an invaluable asset in launching this new venture.

FUTURE OPPORTUNITIES

While the water buffalo milk business has proved lucrative for Martin and Lori, buffalo must be bred regularly to continue milk production. Inevitably, Ontario Water Buffalo Co. ends up with male calves for which there is currently no use. This surplus does, however, offer an opportunity for additional growth.

There are currently no suppliers of water buffalo meat in Canada and only a small number in the United States. Compared to beef, water buffalo meat has approximately 32% less cholesterol, 93% less saturated fat, 55% fewer calories, and 9% more protein. In addition to the nutritional benefits of water buffalo meat, many prefer the product for its mild flavour and soft texture.[3] Water buffalo production further requires minimal pesticide use, antibiotics and growth hormones compared to beef production.[4] The market for buffalo meat has high growth potential as a result of the product's health benefits and superior production process in relation to beef. The physical composition of water buffalo meat is very similar to beef, so it therefore provides similar cuts useful for steaks, roasts, burgers and sausages.

Although there is currently no presence of a water buffalo meat market in Canada, substantial markets do exist in Italy and Brazil. The American market is also in early stages of development. The benefits of the product, as well as Ontario Water Buffalo Co.'s production methods make it an ideal product for several key target markets:

- ***Foodies:*** As with buffalo milk, foodies will be drawn to this unique food offering. These individuals tend to dine out more frequently than average and generally do so at higher-end restaurants. These consumers can be targeted in restaurants or specialty meat markets and are not typically price-sensitive.
- ***Health-Conscious Eaters:*** Non-vegetarian, health-conscious consumers would choose buffalo meat because of its many health attributes compared to beef, pork and chicken. Because these individuals dine out less often and prefer to consume familiar dishes, they can be targeted through online sales or health food stores. It would be important to clearly communicate the health benefits of water buffalo to this segment through packaging and retailer education.
- ***Environmentally Conscious Eaters:*** Environmentally-conscious non-vegetarians are interested in reducing their carbon footprint by consuming products grown locally. The recent "Buy Local, Share Local" campaign in Ontario has prompted many people to purchase food that has been grown within a short distance from their residences. This trend will give Martin and Lori a competitive advantage over any foreign farmers that attempt to enter the Ontario market.

CONCLUSIONS

In Ontario Water Buffalo Co., Martin and Lori have built an innovative rural farming enterprise. By developing a unique, high-quality product and working with an established partner to take it to market, this new venture has experienced steady growth. To continue their growth, they can explore the promising market for water buffalo meat in Ontario. By utilizing their core strengths and effectively targeting influential market segments, Ontario Water Buffalo Company will continue to be a key player in this emerging industry.

---

[3] "ME Water Buffalo Co," *Local Harvest*, http://www.localharvest.org/farms/M32328 (Accessed Nov. 28, 2009).
[4] Antonio, Borghese, *Buffalo Production and Research* (Rome: Food and Agricultural Organization of the UN, 2007).