

Investment Readiness Case Study

Nectar Technologies

Author

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This case study is part of a social finance case studies series on investment readiness. Through a partnership with Investment Readiness Program (IRP), SI Canada is working with ten entities SPOs (non-profits, co-operatives, for-profit social enterprises) that have achieved investment readiness and provide them with an opportunity to share their journey and profile this work through a case study and a virtual event.

nectar

Background

Nectar helps beekeepers raise healthier bees to secure our food supply.

An increasing amount of our diet relies upon honey bee pollination. Meanwhile, various causes are making it more challenging to raise healthy honey bees, as research points to a decline in insects that may lead to the extinction of 40% of the world's insect species over the next few decades. Approximately 40% of American bee hives die each year, up from a historic average of 15%.

With an increased demand for honey bee pollination in agriculture, and an ever growing list of challenges faced by beekeepers to raise healthy bees, there is a need for solutions. The lack of innovative tools accessible to the beekeeping industry is holding back its ability to respond.

Nectar is a fast-growing social purpose organization that equips beekeepers with data-driven tools that help give their bees a voice in an agriculture system that sometimes can't hear them. The goal of Nectar, which has been attracting investment, is to disrupt conventional agriculture and build a sustainable food system where pollinators are seen as having an essential role in feeding our planet.



Social finance project timeline

Nectar received early investments of patient capital from the Upper Canada Equity Fund, a place-based social impact fund headquartered in rural Prince Edward County, Ontario.

The initial impact investments were made from 2019 to 2021, as Nectar reached milestones that demonstrated its investment readiness.

At the outset, the impact fund judged that Marc-André Roberge, the CEO of Nectar, had assembled a core team and roster of advisors with the scientific knowledge and technical know-how to analyze the problem and develop practical solutions.

For the fund, a key test of investment readiness was whether the early-stage team was ready to step out of the lab and test their solution in the field.

The investor wanted to know if Nectar was ready to:

- Meet beekeepers, farmers, and rural communities where they were at;
- Co-create solutions with the intended customers and end-beneficiaries;
- Gain market validation for its products and services;
- Demonstrate traction in the sector;
- Identify intended outcomes and measure impacts.

As Nectar hit these milestones, the investor made follow-on investments.

By 2021, Nectar had demonstrated market traction and was achieving measurable impacts. Beekeepers and farmers using its solutions were able to improve bee health significantly and show return-on-investment. The data and consultations with growers and communities were also making it increasingly clear that there was a strong case for complementary changes in wider agricultural practices and shifts in the food supply chain to make it less hostile to pollinators.

This marked a turning point in the relationship between the investor and portfolio company, as the pupil turned teacher. By 2022, the insights provided by Nectar were pushing the investor to tackle a series of questions:

- What would a bee-friendly local food supply chain look like?
- What were the gaps in access to capital to finance this shift?
- What would a bee-friendly investment strategy look like?
- How could communities and entrepreneurs be mobilized to lead a transition?



Government involvement in the impact investing journey

The investor was able to leverage crucial support from government to assign seasoned entrepreneurs to coach Nectar on commercialization of innovation and impact measurement, which helped prepare the venture to take on new capital.

At the fund level, the investor also received support from the Government of Canada through the Investment Readiness Program (IRP) to turn the insights provided by Nectar on pollinator health into actionable steps to make the food system more bee-friendly. IRP supported the impact investor, Nectar, and partners to:

- Engage beekeepers, farmers, Indigenous-led organizations, and conservation groups on the changes needed to make the food supply chain more bee-friendly;
- Mobilize rural communities to support a shift to more regenerative local economies.

By 2022, this engagement had yielded actionable findings. Making the local food system less hostile to pollinators meant driving diversification at each link in the food supply chain - including who has access to capital, how land is stewarded, which crops are grown, what food is produced, and how it is distributed and consumed - so that it becomes more circular and regenerative and is better informed by Indigenous ways of knowing.

The emphasis on mobilizing communities was informed by work on responding to adaptive challenges that pose an existential threat to communities by scholar Marshall Ganz, a former farm worker organizer, and his colleagues at the Harvard Kennedy School Ronald Heifetz and Christopher Robichaud. The approach was also influenced by research on community-centred economies by Professor Audrey Jamal from the Laing School of Business and Economics at the University of Guelph.

How the initiative unfolded

Armed with findings from community engagement and insights from working with Nectar, the investor set about:

- Designing and launching a net new place-based impact fund to invest in food system transformation, a just transition, and economic reconciliation;
- Building relationships and partnerships with Indigenous-led organizations;
- Enlisting coaches, impact investors, and underrepresented entrepreneurs in a series of accelerators to get sustainable food and agriculture ventures investment-ready, with mentorship from Nectar CEO Marc-André Roberge.

When the Upper Canada Equity Fund made its original investment in Nectar, the fund was sector agnostic. The new fund, the [Bloom Local Food Fund](#), had a strong thematic focus on the food and agriculture, and was part of a network of more than a dozen aligned funds that make up the [Catalyst Community Finance Initiative](#), a collaborative building shared infrastructure for community investment, that was also backed by the Investment Readiness Program.



Types of financial support sought out

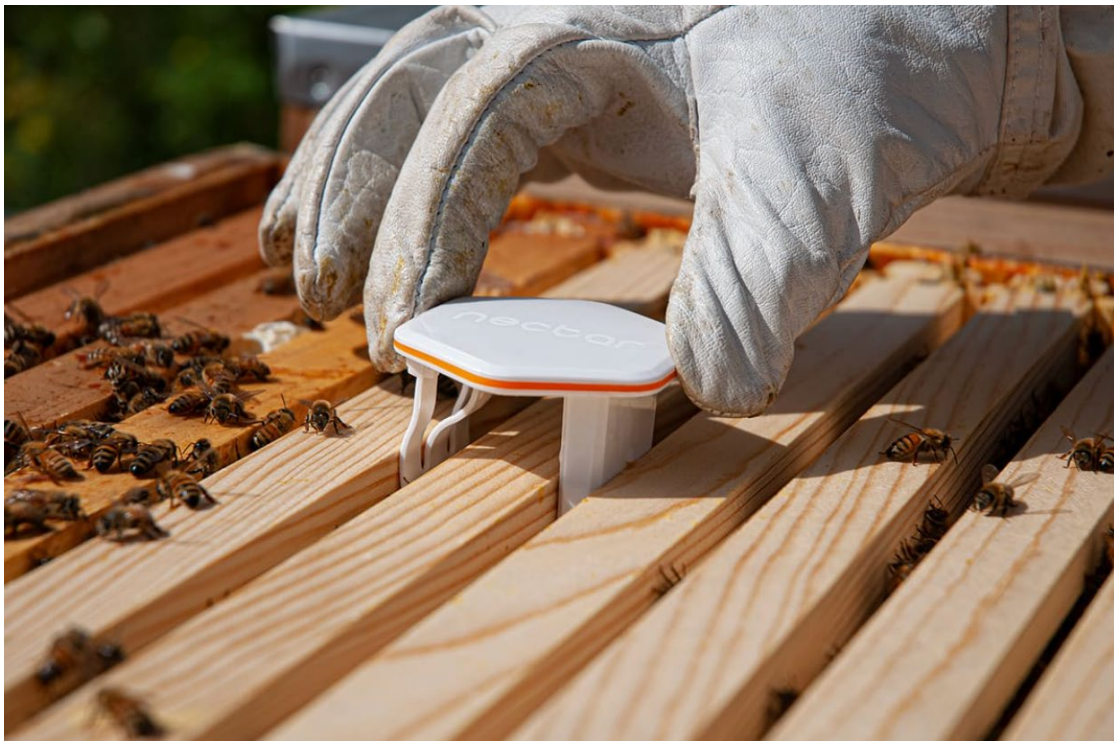
A historic landmark in the development of social finance in Canada came in the first half of 2023 with the roll out of the federally-backed \$755-million Social Finance Fund, and the selection of three wholesalers: Boann Social Impact LP, Realize Capital Partners, and CAP Finance, which will deploy an initial \$400-million in public capital to be matched 2:1 by private capital for a total investment of \$1.2-billion.

Boann and Realize will each function as a fund-of-funds and invest in existing and emerging social finance intermediaries, which will in turn invest in social purpose organizations, with the overall goals of: building a resilient social finance market; creating positive social and environmental impacts; and advancing social equity by providing access to capital to underserved populations and regions, including rural areas.

In anticipation of this injection of capital into the market, the Investment Readiness Program was designed to support preparation by ventures like Nectar Technologies and funds like the Bloom Local Food Fund, plus the communities they serve.

At the intermediary level, the new fund is seeking from the Social Finance Fund matching repayable investment that will be used to provide patient values-aligned capital in the form of equity and debt to social purpose organizations like Nectar. This capital will be co-invested in social enterprises - for-profit and non-profit - with the aim of shifting the local food system to be more bee-friendly and fostering an inclusive economy. The investments will seek to lower barriers to economic participation by equity-deserving populations and advance [economic reconciliation](#).

At the venture level, Nectar has relied to date on a mix of equity investment and some venture debt for financing. Typically, technology-enabled startups are asset-light in the early stages, meaning most of their value is in intangibles like intellectual property, and so they do not have the collateral required for conventional secured credit. Most high-potential ventures turn to equity investors willing to provide capital in return for a stake in the enterprise, and then access more credit later as they grow. The roll out of the Social Finance Fund is expected to increase the availability of these types of financial supports for social purpose organizations like Nectar, plus nudge more use of innovative tools like revenue-based financing and employee-ownership models.



How impact was measured and demonstrated to investors

The social innovation and social finance ecosystem in Canada are increasingly converging around the Common Approach to Impact Measurement, which allows for flexible, shareable impact measurement for social purpose organizations. The initiative is committed to centering impact measurement on the needs of social-purpose organizations and those they serve rather than investors.

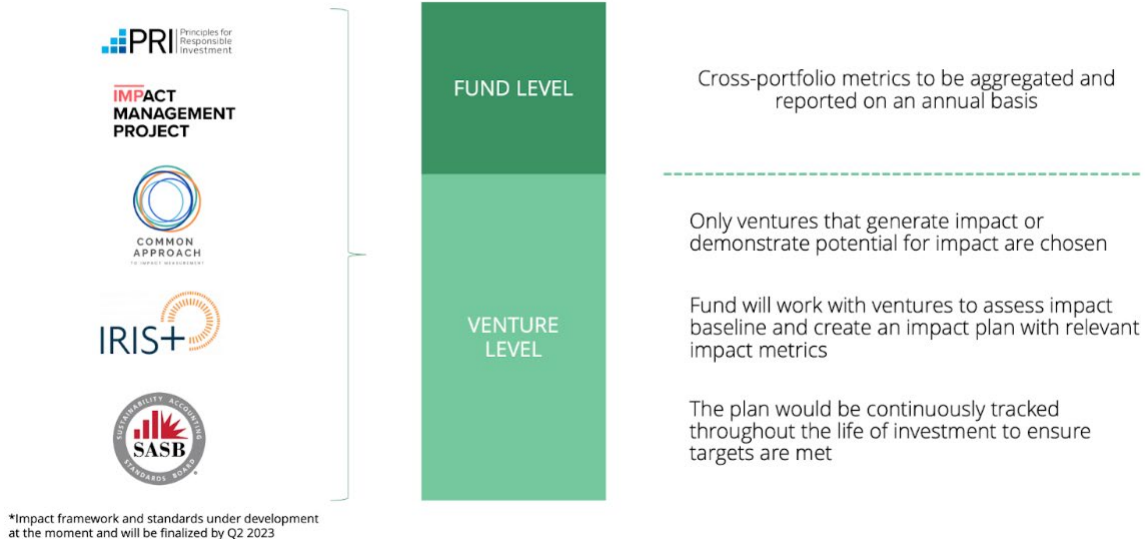
One way that Nectar finds it useful to measure and report on impacts is at the level of the hive, tracking the number of hives on its platform and the health of each hive from season to season. Ultimately, the unique array of data that Nectar is able to gather by placing trackers and sensors in hives means it is well-positioned to measure the level of biodiversity and report on how friendly a landscape is to pollinators, which is a marker of health for the wider ecosystem.

At the fund level, the Common Approach is used alongside a set of frameworks that include the Sustainability Accounting Standards Board, IRIS+, the Impact Management Project, and the UN Principles for Responsible Investment.

Bloom Local Food Fund

Impact Approach

FRAMEWORKS & STANDARDS*



How diversity and inclusion are included in the work

At the venture level, Nectar has established an internal diversity and inclusion policy shared with every team member. As a “mostly heterogeneous company”, Nectar makes deliberate and conscious efforts to build an inclusive culture and to promote equity. Recognizing the value of diverse perspectives and experiences, Nectar has implemented inclusive hiring practices that foster equal opportunities for candidates from different backgrounds. These policies emphasize the importance of treating every team member with respect and dignity, irrespective of their race, gender, sexual orientation, religion, disability, or any other characteristic.

At the fund level, justice, equity, diversity, and inclusion (JEDI) are at the centre of the work. In addition to internal JEDI policies, the fund is seeking to knock down barriers to access to capital historically faced by equity-deserving groups. This means shifting power, and making changes to who makes decisions about how capital is allocated. This approach is reflected in the fund signing up to Canada’s 50-30 Challenge to have at least 50% gender parity and 30% representation from equity-seeking groups in the governance of the organization, according to Ameeta Vijay, Chair of the Board.

Next steps for Nectar

The next steps are scaling Nectar’s solution, both in terms of market shares and in terms of impact on the farm, to help beekeepers provide a predictable supply of healthy colonies for sustainable crop pollination and honey production. A key driver of the product’s impact will be the embedding of proprietary Artificial Intelligence (AI), using a dataset that is without precedent, into the Nectar platform to augment beekeepers’ intelligence when it comes to raising healthy bees and maximizing their own business profitability. Another key driver will be to properly communicate the success stories Nectar has been able to achieve with early clients in recent years.

After that, Nectar is going to be working further on how predictive insights on honeybee populations can help improve the resilience of pollination and honey production markets. Nectar sees its platform as the operating system of the bee industry, and is going to be evaluating hosting third-party offerings, whether they are technology-driven or more traditional inputs (feeds, treatments, queen bees, etc.).

Finally, Nectar is keen to explore how its honeybee health dataset can be leveraged as biosensors for pollinator health in various landscapes at a global scale. Already, the company is uncovering measurable effects of environmental events on the health of the bees it monitors, such as locations in proximity to recent massive Canadian wildfires being correlated with hosting weaker colonies across parts of the continent.



Lessons learned

A key lesson is the importance for a social purpose organization of having access to patient capital and investors that are values-aligned. Early-stage ventures can face pressure from traditional venture capital for a quick exit, and this can create tensions over a path that pursues long-term value creation and impact. Traditional investors can lose patience with efforts to build a sustainable supply chain or foster equity, and can lean on portfolio companies to cut corners.

Before an investment is made, there is a due diligence process when the investor evaluates the readiness of a company for investment. This is also a chance for the company to judge if the investor is a fit and can add value. Traditionally, due diligence examines factors like deal terms, revenues, competition, management experience, and risks. For impact investments, this is also a moment to consider whether there is an alignment on core values and purpose. For a social purpose organization like Nectar that is scaling rapidly, it will face a series of inflection points when strategic choices have to be made. Having values-aligned investors means it can consistently make those decisions based on the health of people and the planet.

Hopes for the future with regard to social finance

Nectar's investment journey has mirrored somewhat the evolution of social finance in Canada. Early on, Nectar tapped a small circle of impact investors who provided access to mentorship on how to become investment ready, including from organizations like [SVX](#), a social finance platform. As Nectar started seeing breakthroughs in the lab and in the field, demand started to spike. Given the global scale and breadth of the problem of bee mortality, Nectar needed to increase its reach. This meant finding larger investors that were aligned behind pursuing impact. In Canada, this was not an overly long list. With impeccable timing, this was the moment the Telus Pollinator Fund for Good launched a \$100-million fund, and selected Nectar as one of its first 10 investments.

In the wider social finance market, there is a parallel evolution underway from a tight network of investors that include family offices and private endowments to a growing number of institutions ready to invest for impact. Meanwhile, we've seen the emergence of a generation of social innovators and entrepreneurs who are putting purpose at the center of their work and the enterprises that they are building. Those are two developments that point to the health, vibrancy, and potential of the social finance ecosystem in Canada.

However, there is a gap between the scale and complexity of the challenges entrepreneurs and communities are tackling and the available capital. There isn't yet a fully functioning, self-sustaining social finance market where supply is being matched with demand. Plus, there is a shortage of Black- and Brown-led social finance intermediaries. The roll out of \$400-million from the federal Social Finance Fund and

work to match that 2:1 with private capital and inject more than \$1.2 billion into the market is designed to address these gaps and catalyze a resilient and diverse market for investments that have a positive impact on people and planet.