

# Economic and Social Impacts of FarmWorks Support for Food Related Businesses in Nova Scotia 2020 Survey Results

The authors wish to acknowledge the thoughtful and informed responses to this survey by FarmWorks Clients. This information, provided by people who are bringing about solutions, increases awareness of challenges and opportunities to improve outcomes for all Nova Scotians.

Funded by Friends of Agriculture in Nova Scotia, Mentoring Plus, and FarmWorks





#### **Notes for Readers**

FarmWorks Investment Co-operative Limited, incorporated in 2011, operates as a Community Economic Development Investment Fund (CEDIF) that enables Nova Scotians annually to purchase common shares in a diversified portfolio of businesses. These investments provide loans to farms, food processors, and value-added food producers, helping to increase the viability and sustainability of agriculture and the security of a healthy food supply. To learn more please visit www.FarmWorks.ca

Friends of Agriculture in Nova Scotia is a not for profit society that aims to provide education about the security and sustainability of Nova Scotian food and the economic, health, social and cultural benefits of producing food locally, and to facilitate networking among citizens, farmers, economists, politicians, academics and others who contribute to solutions that ensure food for the future.

Mentoring Plus Strategy is an initiative of Dalhousie University College of Continuing Education to draw upon the skills and knowledge of retirees and others 55+ to help support young adults connect to career paths that relate to the future of work, by implementing Team Mentoring Initiatives.

#### **Prepared for**

FarmWorks Investment Co-operative Limited

#### **Analysis**

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#### **PREFACE**

Reading about the successes of FarmWorks always fills me with hope. Its achievements illustrate what can happen when an organization with sound and committed leadership encourages community to support good food. Reading about these successes at the end of 2020, is particularly poignant.

By most accounts, 2020 has exposed many social, environmental, and economic vulnerabilities around the globe. These vulnerabilities are not new, and FarmWorks itself came into existence in response to them, but they are that much



more visible this year. The COVID-19 pandemic has affected everyone, but has done so unequally. The lower a person's income, the more likely they are to be infected with the virus, and more likely to experience severe illness from it. In marginalized neighbourhoods, the infections rates have consistently been above averages, creating risky environments for their racialized and low-income residents. Food workers, especially temporary migrant workers, those working in meat-packing plants, and those staffing grocery stores, have seen high rates of infection. Restaurants have seen unprecedented drop in revenue, while foodbank use has increased dramatically, and the World Food Program is predicting a "catastrophic" 2021 with an expected 40% increase in need for humanitarian aid. At the same time, grocery chains and non-local e-commerce platforms are earning record profits.

Yet, not all 2020 news have been grim. As these imbalances become more visible, eaters seem more aware of the food systems vulnerabilities. Border closures in particular have produced new anxieties regarding food supply and a new appreciation for local food. A significant majority of participants in a recent interprovincial consumer survey expressed support for robust local/regional systems as more reliable, and wanted to see provincial governments better support local food systems (https://www.kpu.ca/isfs/covid19-consumer-survey). Communities have rallied in support of local enterprises. Food businesses have been innovating by implementing new safety measures, partnering up, and selling on line. FarmWorks clients are playing an important role in these developments and they are an essential safety net for all Nova Scotians.

As we reimagine our food systems, established organizations like FarmWorks play a critical role. A decade in existence, FarmWorks is well versed in providing financial support and mentorship that are crucial for innovative food businesses and – more broadly – thriving local and regional food systems. As a food systems researcher, I am proud of my continued collaboration with FarmWorks as a beacon of hope and a model for other jurisdictions. FarmWorks contributions, so carefully documented in this report, offer a promising future for Nova Scotia and beyond. This is a welcome bit of good news at the end of a difficult year.



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#### 1. EXECUTIVE SUMMARY

FarmWorks Investment Co-operative Limited was established in May 2011 by community leaders concerned about Nova Scotian agriculture and food: economic issues, security of supply in a changing world, cost, health, social and cultural issues and the environment<sup>1</sup>. FarmWorks' mission is to promote, and provide, strategic and responsible community investment in food production and distribution in order to increase access to a sustainable local food supply for all Nova Scotians.

Finding financial and other support to establish and operate food-related businesses can be difficult, especially for younger entrepreneurs or those who are not eligible for financing through existing lending agencies<sup>2</sup>.

Recognizing the benefits of investments in local businesses, the Government of Nova Scotia established a program in 1999 to enable private investment in Community Economic Development Investment Funds <sup>3</sup>. FarmWorks established a CEDIF that started selling shares in 2012<sup>4</sup>. By the middle of 2020, FarmWorks had raised \$3,226,600 and loaned \$5,166,000 to client entrepreneurs in various sectors of the Nova Scotian food supply chain including farmers, processers, retailers and restauranteurs who qualified to receive loans.

A survey was completed by 50 of 72 (69%) clients currently supported by FarmWorks at the middle of 2020 to gauge the economic and social impacts of their businesses, FarmWorks' support for them, clients' access to mentoring, their assessment of opportunities and challenges and the effects of COVID 19. The survey does not quantify outcomes for 27 businesses that have repaid their loans and continue successfully to operate, 6 businesses that are in transition, 7 that have ceased to operate and 4 that have been written off. Quantifying the economic and social impacts of FarmWorks' clients helps gauge the role of FarmWorks CEDIF in helping to grow rural and urban food-related businesses.

The importance of FarmWorks loans is clear as 61% indicated that their business would not have succeeded, and 37% considered success would be only somewhat likely without the loan. Thirty two percent of businesses used funding from FarmWorks to get started, 22% were doing poorly prior to the loan and 42% borrowed to improve their businesses. Most loans were multiple-purpose, used for equipment purchases, working capital and leasehold improvements. In response to questions about promotion, 98% of clients indicated that FarmWorks' assistance was very or somewhat helpful.

The survey results demonstrate that FarmWorks-supported businesses are creating significant positive economic and social impacts. The 50 respondents (of 72) are generating approximately \$14,250,000 in annual gross business revenues with annual business expenditures of about \$12,900,000 (Note 1). It can

<sup>&</sup>lt;sup>1</sup>FarmWorks Investment Co-operative Limited: <a href="http://farmworks.ca/home/">http://farmworks.ca/home/</a>. FarmWorks Investment Co-operative Limited was incorporated as a for-profit Co-operative in May 2011 by an association of community leaders concerned about food related issues. FarmWorks mission is to promote and provide strategic and responsible community investment in food production and distribution in order to increase access to a sustainable local food supply for all Nova Scotians. FarmWorks collaborates with other organizations, departments, agencies and individuals that share the vision of Healthy Farms and Healthy Food.

<sup>&</sup>lt;sup>2</sup> Jennifer Scott Consulting, with Silver Donald Cameron and Chris Benjamin. (2010). *Opportunities in Atlantic Agriculture*. Report Submitted to Newfoundland and Labrador Federation of Agriculture. Available online at <a href="http://nsfa-fane.ca/wp-content/uploads/2011/06/CrisiOpportunity">http://nsfa-fane.ca/wp-content/uploads/2011/06/CrisiOpportunity</a> SCREEN.pdf.

<sup>&</sup>lt;sup>3</sup> https://farmworks.ca/wp-content/uploads/2012/04/CEDIF-Program-history-and-overview.pdf

<sup>&</sup>lt;sup>4</sup> https://farmworks.ca/about/business-plan/

be estimated that 72 businesses are generating approximately \$20,500,000 in annual gross business revenues with annual business expenditures of about \$18,500,000 (Note 1). Multiplier effects ranging from 1.8 to 2.6 for food-related enterprises indicate that FarmWorks' clients' annual monetary impact in Nova Scotia may range from \$40,000,000 to \$60,000,000<sup>5</sup>.

The 50 businesses indicated that prior to COVID 19 they had 233 full-time and part-time employees and by the middle of 2020 they had 217 employees. COVID 19 has affected businesses differently: 12 businesses lost a total of 32 employees and 11 businesses gained 21 for a net loss of 16 jobs, and based on the location of the respondents, only 4 of those were on farms. Extrapolation to 72 businesses would indicate 335 positions pre-COVID and 310 mid-year. Hourly wages ranged from the Nova Scotian minimum wage of \$12.55 to \$38.00 with an average of wage of \$15.47 and 84% of clients paying above the minimum. Every 100 direct jobs in agriculture is estimated to generate another 228 jobs, and in food service 161 jobs, as reported by the USA Economic Policy Institute<sup>6</sup>.

In conjunction with Mentoring Plus<sup>7</sup>, clients were surveyed with respect to their access to mentoring, and 47% said they had access, and 22% had some access to a mentor. Of the 30% who did not have a mentor, most indicated that they didn't know how to access one or that they hadn't found someone they trusted.

FarmWorks-supported businesses are providing local employment and purchasing goods and services in their area or the province, they're providing good food and are raising awareness of the benefits of supporting the local economy, they're supporting community endeavours, the restaurants have become hubs for their communities and those that are restaurants, cafés and markets are contributing to year-round tourism from near and far.

FarmWorks clients contributed many thoughtful comments about FarmWorks, on Nova Scotia's ability to be more food-secure, and on the contributions of their businesses, such as the following: "Farmworks has been incredibly supportive and helpful in assisting us start up our business and with checking-in to see if there's anything we need along the way. We're very grateful that such a program exists for Nova Scotians! Thank you for keeping up with the important work everyone - N.S. has wonderfully hard-working and clever food producers under your umbrella:)"

"Now to also keep focusing on closing the gaps between the producers and their markets... let's work hard to build a strong & comprehensive distribution network!".

"Supporting Local Growers, Providing exposure to our local area and driving up tourism, helping to educate the public on the importance of eating and purchasing local food, volunteering opportunities and greater capacity to give back"

"Creating meaningful employment, providing additional revenue for farmers and other small businesses and social enterprises, creating a business that our community is proud of."

"Purchasing inputs for the farm (parts, fencing, fuel). Selling hay locally. Making the farmland visually appealing."

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<sup>&</sup>lt;sup>5</sup> Meter, K. (2008). *Local Food as Economic Development*. Minneapolis: Crossroads Resource Center. Retrieved from http://www.crcworks.org/lfced.pdf

<sup>&</sup>lt;sup>6</sup> https://www.epi.org/publication/updated-employment-multipliers-for-the-u-s-economy/

<sup>&</sup>lt;sup>7</sup> https://www.dal.ca/news/2020/02/11/-mentoring-plus--program-to-help-seniors-and-youth-through-new-f.html

FarmWorks provides much-needed support for entrepreneurs who are creating and expanding food-related businesses in Nova Scotia. The multiplier effects of CEDIF investments generally, and FarmWorks specifically, require additional analysis beyond the scope of this report.

#### 2. FARMWORKS

#### 2.1 Operational Overview of FarmWorks CEDIF

Nova Scotians purchase shares in FarmWorks Community Economic Development Investment Fund which lends capital to a diversified portfolio of businesses that yield meaningful financial and social returns. Loans are made to entrepreneurs who start or operate farms, value-added food and beverages, or operate distribution, retail and restaurant businesses. By supporting food-related businesses FarmWorks aims to help increase the viability and sustainability of agriculture and the security of a healthy food supply for all.

Shares in FarmWorks are sold through Public Offers overseen by the Nova Scotia Securities Commission and the NS Department of Finance<sup>8</sup>. During the 90-day period while offers are open all documents are available on the FarmWorks website and from Directors and at information sessions held across the Province. Each share is worth \$100 and the minimum purchase is one share. The average annual investment by shareholders increased from \$2,198 in the first to \$5,078 in the ninth offer. Between January 2012 and the close of the Ninth Offer in 2020 offer there were 868 investments by 450 Nova Scotians (includes multiple investments by individuals) in one to nine offers.

YEAR	INVESTMENT CAPITAL RAISED	NUMBER OF INVESTMENTS	AVERAGE INVESTMENT	TOTAL OF ALL INVESTMENTS
2012	\$224,200	102	\$ 2,198	\$ 224,200
2013	\$225,300	78	\$ 2,888	\$ 449,500
2014	\$271,500	78	\$ 3,481	\$ 721,000
2015	\$312,400	86	\$ 3,633	\$ 1,033,400
2016	\$372,400	105	\$ 3,547	\$ 1,405,000
2017	\$378,900	100	\$ 3,789	\$ 1,784,600
2018	\$444,000	91	\$ 4,884	\$ 2,226,800
2019	\$483,300	125	\$ 3,866	\$ 2,711,900
2020	\$523,000	103	\$ 5,078	\$ 3,226,600

Redemptions over the nine years amount to \$85,800, or 2.7% of total investments, primarily due to age 71 RRSP withdrawals and the demise of several shareholders.

Share purchases are non-refundable for five years, are eligible for a 35% Nova Scotia non-refundable Equity Tax Credit that can be carried forward 7 years and backward 3 years, and are eligible for further Equity Tax Credits of 20% and 10% at the 5 and 10-year investment anniversaries, respectively, provided the CEDIF meets Department of Finance conditions. CEDIF shares are eligible RRSP investments<sup>9</sup>.

FarmWorks is operated by a 15-member volunteer Board of Directors elected by the Shareholders. FarmWorks Directors provide mentoring and promotion and closely monitor clients to help safeguard

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<sup>&</sup>lt;sup>8</sup> Regulations Respecting Community Economic-Development Corporations https://nssc.novascotia.ca/sites/default/files/CEDIFRegsApril 13 2011.pdf

<sup>&</sup>lt;sup>9</sup> Community Economic-Development Investment Funds <a href="https://nssc.novascotia.ca/corporate-finance/community-economic-development-Investment-funds">https://nssc.novascotia.ca/corporate-finance/community-economic-development-Investment-funds</a>

these non-collateralized loans. Currently 43% of the clients are farmers, 21% are restaurants or cafes providing local food and 36% are processors and other food-related businesses.

FarmWorks provides loans to qualifying agricultural and food-related businesses in Nova Scotia to help them increase sustainable production and profitability through value-adding, marketing and related activities. Businesses seeking funding send a preliminary application to FarmWorks. If the business fits with FarmWorks principles and objectives, the applicant is asked to submit a business plan including current financial information and projections. Directors and Advisors evaluate the plan, meet with the applicants and visit the site and complete a Comprehensive Review. Successful applicants repay loans within two to five-year and occasionally ten year terms at an interest rate, currently 6%, that reflects both the unsecured nature of the loan and the patience of investors. As repayments to FarmWorks are made, money is loaned to other qualifying enterprises. Guidelines for measuring and reporting outcomes are in place for enterprises receiving loans and for the Board.

### 2.2 Report Background and Overview

In Nova Scotia food-related businesses face challenges and opportunities. Food production in the province is a key to rural and urban economic development and provides multiple benefits. Increasingly, challenges resulting from global and commodity production together with increasingly stringent regulations and lack of support can be overwhelming for food producers. Geopolitical issues, including climate change and COVID 19, affect every aspect of citizens' lives and it is becoming clear that it is no longer appropriate to outsource responsibility for about 85% of Nova Scotians' food requirements.

As FarmWorks seeks to support businesses addressing these issues, it is important to understand the role and impact of the loans and support provided by FarmWorks to these enterprises.

In the United States extensive research has been carried out on the role of local food businesses in local economies. These benefits include:

- Job creation e.g., in Iowa it costs almost \$69,000 of public investment to create one full-timeequivalent retail job, and only \$18,000 to create a job in local food<sup>10</sup>
- Economic "multiplier" factors local businesses tend to spend locally to purchase inputs and services, resulting in significant economic contributions beyond the revenue they generate one study found that local food hubs in the United States have a "a gross output multiplier of 1.82, indicating that for every dollar of final demand for food hub products, an additional \$0.82 is generated in related industrial sectors"<sup>11</sup>. Scale makes a difference as the multiplier factor for *small* farms in the United States can be as high as 2.6 compared to large farm multiplier factor of 1.4<sup>12</sup>.

Social benefits of locally-focused food businesses include peer-to-peer knowledge sharing, community economic development, building the sense of community, promoting places and creating an avenue for

<sup>&</sup>lt;sup>10</sup> Bregendahl C, and A Enderton. (2013). 2012 Economic Impacts of Iowa's Regional Food Systems Working Group. Ames, Iowa: Leopold Center. Retrieved from <a href="https://www.leopold.iastate.edu/">https://www.leopold.iastate.edu/</a>

<sup>&</sup>lt;sup>11</sup> Schmit, TM, BBR Jablonski, and D Kay. (2013). Assessing the Economic Impacts of Regional Food Hubs: the Case of Regional Access. New York: Cornell University, pp. 3.

<sup>&</sup>lt;sup>12</sup> Meter, K. (2008). *Local Food as Economic Development.* Minneapolis: Crossroads Resource Center. Retrieved from <a href="http://www.crcworks.org/lfced.pdf">http://www.crcworks.org/lfced.pdf</a>

"reclaiming sustainable rural spaces"<sup>13</sup>. Local food systems have the potential to improve both human and environmental health through shortening the supply chain and the manner in which they change social relations and how we understand accountability.<sup>14</sup> Finally, small, locally-focused food businesses are associated with improved food security and can potentially contribute to community *resilience* as opposed to *dependence* on far-flung suppliers.

In 2015, FarmWorks founding Director, Linda Best, was a keynote speaker at the SIBAC *Keeping it Rural 2015* Conference in Salmon Arm, British Columbia<sup>15</sup>. The Southern Interior Beetle Action Coalition/BC Rural Centre has been actively researching successful community investment models and partnered with FarmWorks in 2016 to survey FarmWorks clients. A companion report was prepared by the BC Rural Centre based on the survey results<sup>16</sup>.

In 2016, after four years in operation, FarmWorks clients were surveyed regarding their contributions to the Nova Scotian economy and to their communities throughout the province. Results from the survey quantified the relative amounts of capital provided to businesses, the number of jobs created and the support FarmWorks was providing to clients. The results indicated that FarmWorks support was making a significant difference in business outcomes<sup>17</sup>. Plans were made for this follow-up survey that has been carried out to determine outcomes in 2020 years.

#### 3. METHODOLOGY

#### 3.1 Data Collection

At the middle of 2020, a survey was completed by 50 of 72 (69%) businesses currently supported by FarmWorks to gauge the economic and social impacts of these businesses, FarmWorks' support for them, clients' access to mentoring, their assessment of opportunities and challenges and the effects of COVID 19. The survey does not quantify outcomes for 27 businesses that have repaid their loans and continue successfully to operate, 6 businesses that are in transition, 7 that have ceased to operate and 4 that have been written off. Clients were contacted by email with information about the purpose and relevance of the survey and were invited to participate using a Google Forms link, and were contacted a second time as a reminder. Clients were assured that all information would be confidential with no identifying information associated with the survey responses. Clients were broadly surveyed regarding aspects of their business, quality of life, financial stability, income and expenditures, job creation, challenges and obstacles and overall social and economic impacts. Recognizing that many clients might be hesitant to provide specific exact revenue, expenditure and payroll figures – the survey questions provided ranges (e.g. \$100,000 to \$150,000) for responses.

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<sup>&</sup>lt;sup>13</sup> Marsden, T, & E Smith. (2005). Ecological entrepreneurship: sustainable development in local communities through quality food production and local branding. *Geoforum 36*, 440–451. See also Renting, H., T Marsden, & J Banks. (2003). Understanding alternative food networks: exploring the role of short food supply chains in rural development. *Environment and Planning A*, *35*(3), 393-411.

<sup>&</sup>lt;sup>14</sup> Martinez S, M Hand, M Da Pra, et al. (2010). *Local Food Systems: Concepts, Impacts, and Issues*. ERR 97, U.S. Department of Agriculture, Economic Research Service.

<sup>&</sup>lt;sup>15</sup> The purpose of this conference is to highlight some of the most successful rural development initiatives and organizations in Canada and the U.S. that many of us may not be aware of or have the opportunity to visit. These are regions that face many of the same rural social and economic challenges we do and have developed new approaches and initiatives to facilitate the rural economic revitalization of their regions. For more information, please see <a href="http://www.sibacs.com/keeping-it-rural-2015-conference/">http://www.sibacs.com/keeping-it-rural-2015-conference/</a>

<sup>&</sup>lt;sup>16</sup> https://www.bcruralcentre.org/wp-content/uploads/2017/11/BC-Rural-Centre-FarmWorks-CEDIF-Final-Report.pdf

<sup>&</sup>lt;sup>17</sup> https://farmworks.ca/wp-content/uploads/2012/04/Impacts-of-Local-Investment-%E2%80%93-Survey-of-FarmWorks-Clients-2016.pdf

#### 3.2 Data Analysis

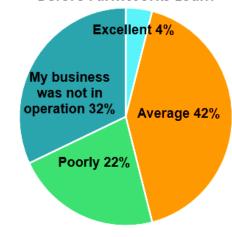
Fifty of 72 clients currently supported by FarmWorks participated in the survey – a response rate of 69%. For the quantitative analysis of multiple choice responses to income and expenditure questions, the Google Forms software groups and displays the data visually in charts for interpretation. This software automatically groups all responses together without identifying information. Further analysis was carried out using the Excel spreadsheet generated by Google Forms. Quantitative and qualitative analysis of the survey data provide information about the cumulative social and economic impacts of businesses FarmWorks has supported over the past five years.

# 4. RESULTS

# 4.1 Importance of FarmWorks Financing and Support

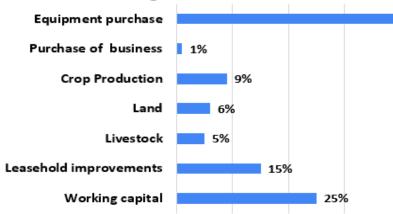
The survey results show that 32% of businesses used funding from FarmWorks to get started, 22% were doing poorly and 42% borrowed to improve their businesses (Figure 1). Seven businesses had been in operation for one year or less, one for 36 and the average was 8 years. There are 23 corporations, 15 sole proprietorships, 8 partnerships and 4 registered farms. The primary use of funds was for equipment, leasehold improvements and working capital (Figure 2).

Figure 1. How Was Your Business Doing Before FarmWorks Loan?



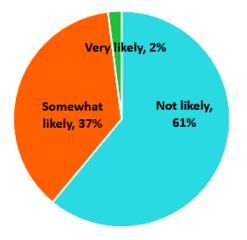
39%

Figure 2. Use of Funds



The importance of FarmWorks loans is clear as 61% indicated that their business would not have succeeded, and 37% considered success would be only somewhat likely without the loan (Figure 3).

Figure 3. Would Business Have Succeeded Without Requested Loan?



When FarmWorks loans were not the sole source of required capital they helped leverage other loans. These loans helped 22 businesses needing additional funds to leverage other loans, and 21 did not need additional funds (Figure 4). FarmWorks loans over nine years averaged \$25,000 and to date in 2020 average \$35,000 within a range of \$6,000 to \$100,000.

Promotion of the client's business was considered to be very or somewhat helpful by 98% and promotion of local production was considered helpful by all clients (Table 1).

Figure 4. FarmWorks Funding Relative to Other Sources

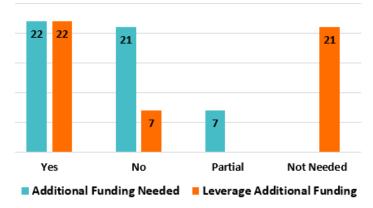
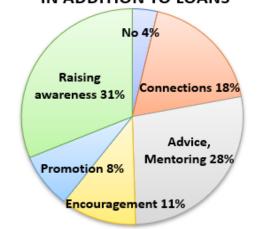


Table 1	Very Helpful	Somewhat helpful	Not helpful
<b>Promotion of Client's Business</b>	58%	40%	2%
<b>Promotion of Local Production</b>	80%	20%	

In the 2016 survey almost all the clients surveyed indicated that FarmWorks provided more assistance than just loans. This additional assistance came in the form of business advice, mentorship, networking opportunities at FarmWorks events, encouragement and business promotion through social media and positive word-of-mouth (Figure 5, 2016).

Clients note that "FarmWorks has gone above and beyond the call of duty by providing support in numerous ways including expertise, emotional support and a positive attitude"; "FarmWorks has been fantastic with networking opportunities, sales connections, and moral support as they truly believe in the need for local industries"; "FarmWorks leaders work hard to stay in touch with me and my business. They have supported me when I needed some direction with suppliers or businesses"; "Advice, contact, promotion ... the most genuine and sincere interest in helping us succeed. It's their selfless acts, positive energy, stamina and most importantly they believe in us"; "Supplies and equipment

Figure 5. FARMWORKS ASSISTANCE IN ADDITION TO LOANS

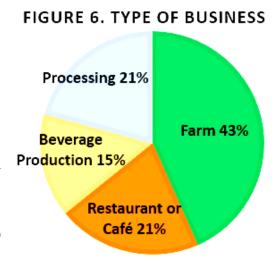


we purchased with FarmWorks money allowed us to grow and take advantage of opportunities that would not have been there otherwise".

The 2016 information is included because the comments shared in the current survey closely reflect that the CEDIF program assists businesses holistically, providing business mentorship and connections to help ensure a greater return on loan investments by contributing to client success. The legislation enabling the CEDIF program requires that loans be for subordinate debt. Since no security for the loan is taken, a high level of due diligence prior to lending and support and relationships formed with clients are the most reliable insurance against loan loss.

#### 4.2 Business Overview

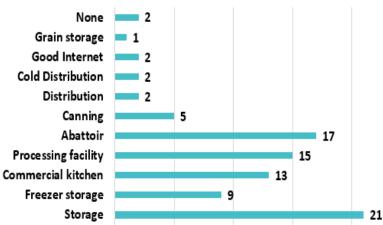
FarmWorks aims to support the interconnection of sectors of the food system from primary production to consumers (Figure 6). Therefore 57% of loans are provided to sectors complementary to the 43% of primary producers. Thirty six percent of businesses supported by FarmWorks process food and beverages and 21% serve local food, but many of the businesses have several operations, such as cafés that sell groceries and prepared foods, breweries with food service, onfarm processing facilities and other combinations. We did not survey direct sales at this time because of the rapidly evolving distribution challenges and opportunities resulting from COVID 19. FarmWorks' clients are widely distributed across Nova Scotia with a range of businesses across the areas (Figure 7).





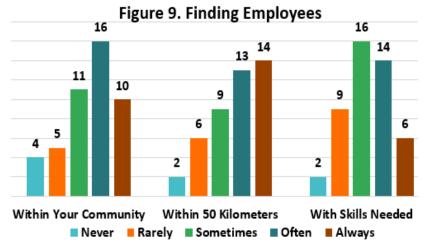
Respondents across the Province identified significant infrastructure needs, many of which currently are beyond FarmWorks ability to fund (Figure 8). These needs negatively affect the ability of primary and value-adding farms and businesses to increase the amount of food available for consumers in Nova Scotia and for export. Loans have been made to a business that provides a commercial kitchen, processing facilities, storage and freezer space and soon it will become a distribution hub.

Figure 8. Commmunity or Regional Infrastructure Needs

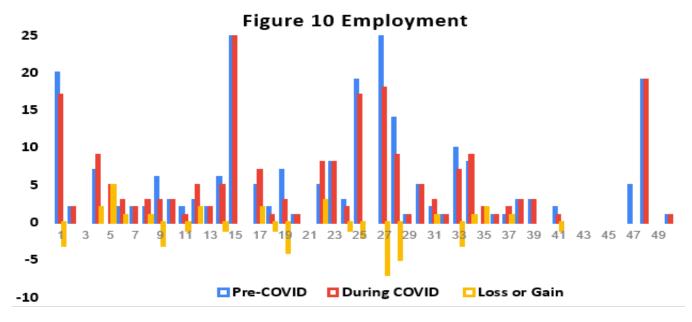


#### 4.3 Job Creation

FarmWorks loans to rural and urban businesses help create employment across Nova Scotia. Of the 233 employees prior to COVID 19, 64% were in rural areas and 36% in CBRM and HRM and some of the HRM jobs are in rural areas. Figure 9 indicates that the majority of businesses are able to find employees relatively close to their location and that many are



able to find employees with the needed skills. COVID 19 has affected businesses differently: 12 businesses lost 32 employees and 11 businesses gained 21 for a net loss of 16 jobs and based on the location of the respondents, only 4 of those were on farms (Figure 10).



Provincial employment since February 2020 was 3.2% (5,900) lower in August (494,500) with losses in agriculture of 1,000 and in accommodation and food service of 9,500 jobs<sup>18</sup>. There are approximately 10,000 food-related jobs (not including accommodations) in Nova Scotia<sup>19</sup>. The 233 jobs with FarmWorks clients account for approximately 2.3% (or all 72 businesses 3.5%) of the food sector workforce. These jobs are supported in part by FarmWorks loans of approximately \$1,750,000 (\$2,500,000) which may be considered the equivalent of \$7,500 per job relative to \$18,000 reported by Bregendahl and Enderton <sup>20</sup>. More specifically, 65 jobs were created by 16 clients who indicated they would not exist without FarmWorks, thus approximately \$560,000 supports 65 jobs at \$8,600 each.

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<sup>&</sup>lt;sup>18</sup> https://novascotia.ca/finance/statistics/topic news.asp?id=16118

<sup>&</sup>lt;sup>19</sup> https://novascotiabusiness.com/business/agri-food

<sup>&</sup>lt;sup>20</sup> Bregendahl C, and A Enderton. (2013). *2012 Economic Impacts of Iowa's Regional Food Systems Working Group*. Ames, Iowa: Leopold Center. Retrieved from https://www.leopold.iastate.edu/

Of 50 respondents, 73% indicated that they or other members of their family were working in the business (Figure 11). There were 25 who were fully or partially paying themselves and 19 with fully or partially paid family members. It is of interest that there was not a direct correlation between remuneration and quality of life, with 15 of 16 not paying themselves, or family, reporting they were somewhat or very satisfied with the quality of life the business affords them (Figure 12).

#### 4.4 FarmWorks Clients' Business Revenues and Expenses

Survey results indicate a diversity of business revenues, with 40% of businesses earning under \$50,000, 30% earning between \$50,000 and \$300,00, 16% between \$300,000 and \$900,000 and 14% earning over \$900,000 (Figure 13). Expenditures under \$50,000 were reported by 30%, between \$50,000 and \$300,00 by 42%, between \$300,000 and \$900,000 by 18% and \$900,000 by 10% of businesses (Figure 13). The 50 respondents (of 72) are generating approximately \$14,250,000 in annual gross business revenues with annual business expenditures of about \$12,900,000 (Note 1). It can be estimated that 72 businesses are generating approximately \$20,500,000 in annual gross business revenues with annual business expenditures of about \$18,500,000 (Note 1).

Figure 11. Pay for Owner and Family

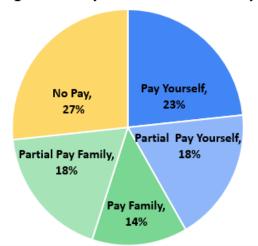
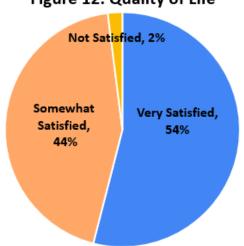
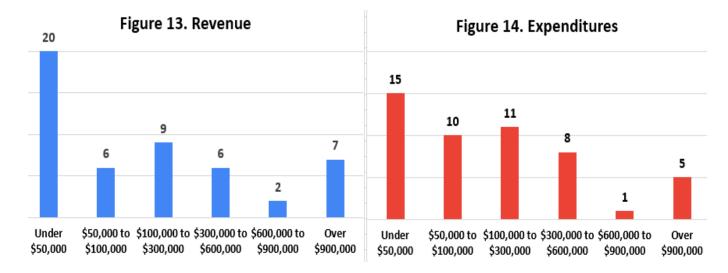


Figure 12. Quality of Life



Three farms and two start-up businesses reported expenditures in a bracket above revenue, and seven reported expenditures in a bracket below revenue.



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Figure 15 shows clients' estimated total annual Payroll and Owners' Draw over the past 12 months. The surveyed businesses have paid approximately \$5,000,000, and extending these results to 72 businesses suggests that gross annual payroll and owner's draw could be approximately \$7,000,00 (Note 2).

Hourly wages ranged from the Nova Scotian minimum wage of \$12.55 to \$38.00 with an average of wage of \$15.47 and 84% of clients paying above the minimum (Figure 16).

It is of note that the 2020 wages as shown in Figure 16 are significantly higher than in 2016 (Figure 16a). The minimum wage increased in 2019 to \$11.55 and on April 1st, 2020 from \$11.55 to \$12.55.

COVID 19 affected the number of employees as shown in Figure 10 and the negative impact of job loss is potentially \$300,000 on wages paid by the 36 of 50 (72%) businesses with employees or may be \$520,000 if extrapolated to consider

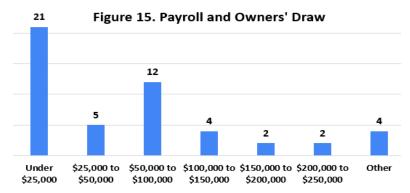


Figure 16. Wages, Average \$15.47



Figure 16a. 2016 WAGE - AVERAGE \$12.53

2

\$14.00

\$15.00

2

\$16.00

2

\$18.00

wages paid by 50 of 72 clients with employees (Table 2).

Table 2	36/50 Clients with Employees	50/72 Clients with Employees		
	Full and P/T Jobs	Wages	Full and P/T Jobs	Wages
Pre-COVID	233	\$4,500,000	335	\$6,500,000
COVID	217	\$4,200,000	308	\$6,000,000
Decrease	16	\$300,000	27	\$520,000

\$12.00

\$13.00

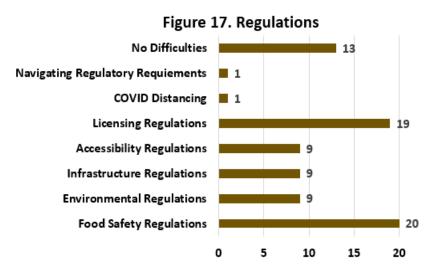
\$10.70

#### 4.5 Regulatory Constraints and Barriers

A number of clients (73%) highlighted challenges and barriers with regards to compliance with provincial and federal regulations (Figure 17). No client takes issue with the absolute necessity for safe food and facilities, but increasing regulatory burdens, together with loss of infrastructure, are affecting output and business success. Many clients cited the impact of increasingly rigorous application of food safety regulations on their businesses. They indicated that regulations are becoming prohibitive at the scale of smaller businesses that do not have the capacity for mass production. Standardized regulations without assistive information limits potential viable opportunities to produce for local consumers, including products which consumers are seeking. Safety will not be compromised by producers who have the right information and the right assistance, including financial, to produce in approved facilities.

Obtaining permits for community food events is a challenge. The turnaround time can be slow and costly and limits opportunities for such events, especially since regulations for commercial kitchens are increasingly rigorous.

Building regulations, particularly pertaining to change of use, can present major challenges. Every business seeks to accommodate



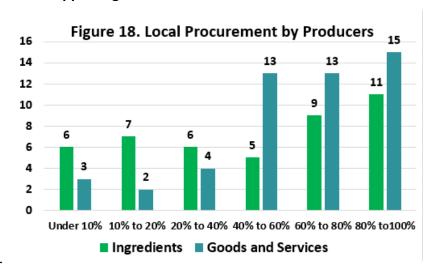
customers, but there is little assistance for businesses that need to make changes. Issues include short timelines, lack of clarity and lack of funding and assistance with planning. Clients who rent retail space must get permission from building owners to alter entrances as well as washroom spaces, and regulations stipulate that if ramps are installed, other requirements for accessibility must be met, including washroom and parking lot size.

There are significant infrastructure deficits and remedies are becoming more urgent (Figure 8). Storage is an issue for 21 clients, with freezer storage specifically identified by 9, lack of abattoirs by 17, processing facilities by 15 and commercial kitchens by 13 clients. Businesses of all sizes are limited by lack of crucial local infrastructure, especially facilities that would enable them to meet food safety regulations. Financing from FarmWorks is helping clients to make some of the upgrades or modifications required for continuation and growth of their business.

#### 4.6 Sourcing and Selling Local Products and Supporting Other Businesses and Communities

FarmWorks clients source significant amounts of ingredients, other than those they produce themselves, and goods and services from within the province, which means that a large percent of the gross annual business expenditures (Note 1) are invested back into other Nova Scotia businesses.

Half the clients reported that they're able to source over 50% of their ingredients and 51 clients obtain over



80% of their goods and services within NS (Figure 18). Clients list requirements which may indicate opportunities for existing and new businesses to meet these demands: cheese, mushrooms, clothing, printing, more produce, more berries and mushrooms, pasteurized eggs, pasteurized Cream, picking bins, netting, trellis, seeds and grain, oats, sunflower seeds, pumpkin seeds, bottles, specialty grains, specialty hops, more tomatoes, ginger, garlic, packaging material, bags and boxes, malted grain, free range eggs, environmentally friendly containers/takeout supplies, large volume local vegetables such as onions not already packaged In

smaller quantities, good quality organic seed, small farming tools, irrigation equipment, sausage casings, seeds, plant pots, more grapes, interesting apple varieties, organic honey, organic raspberries, printed aluminum cans, pelletized straw, beef. Packaging, cheese, grain/flours, IT tech, greenhouse structures and covers, more year round produce, Cape Breton apples, apparel, flax seeds, organic corn, gluten free oats, hay, barley, livestock feed, exotic ingredients, local food distribution system, marketing and technical support services,

Figure 19. Sourcing Local Inputs
No Issues 3

Cost of Imported Inputs 5

Distribution 12

Cost of Inputs 18

Access to Markets 5

Seasonality of products

Availability of products 29

skilled farm labour, gardener/farmer, carpentry, electrician, cattle handling equipment, more livestock and livestock feed, abattoir, packaging for value added products.

Clients indicated specific challenges with sourcing the inputs they need: sufficient quantity of specific produce in their region, seasonality, cost of local and of imported ingredients, access to, and delivery to them, of the goods and services they need for their production (Figure 19).

It is beyond the scope of this report to fully describe the challenges faced by FarmWorks clients specifically, and food producers generally, with getting products to consumers (Figure 20). Money

needed by local producers to advertise, and the options for getting information to potential purchasers, are limited or expensive or narrowly targeted. Direct sales through farmers' markets, farm markets, local stores and farm gate may provide acceptable return on investment but may be costly in terms of the optimal use of producer's time at sales the location or in transit. Product placement in wholesale locations is primarily at the discretion of store

Figure 20. Challenges with Marketing Products None = 1 Scalability Finding Employees Access to Markets Mode of Transport Distance to Market Competing with Imports Distribution 19 Marketing Infrastructure 10 0 5 15 10 20

managers, and local goods are lost on shelves stocked with imported products, sometimes at lower prices that do not reflect the quality of the local product.

Significant shared resources need to be available to market products and to inform potential customers about the long and short-term benefits of purchasing foods and beverages produced close to home. As indicated by clients, FarmWorks' promotion of clients' businesses is considered to be very or somewhat helpful by 98% and promotion of local production was considered helpful by all clients (Table 1). This is accomplished by informing shareholders and clients through facebook posts, events and share offering sessions, and paid advertising when feasible. Much more marketing support is needed to get more Nova Scotian food and beverages on local tables.

"There are marketing/sales channels that require more investment but my time is split between many different areas and I feel I don't dedicate the time to marketing/sales that's required. However, I am also fearful to hire someone because I want to keep our expenses low with this unknown COVID climate."

Small businesses play an important role in the social fabric of rural and urban communities. Family owned businesses provide a sense of ownership and pride-of-place in communities that may otherwise be dominated by non-place specific corporations. When surveyed in 2016 about their perceived

contributions to their own local communities, FarmWorks clients cited a multitude of services and benefits over and above job creation and income (2016, Figure 21). Especially in rural communities with smaller populations, having central locations where community members can gather informally is very important in preventing social isolation and improving quality of life, and while gathering together is limited at this time when COVID 19 is affecting everyone, FarmWorks businesses have adapted to serve their customers and their communities.





FarmWorks' clients describe the ways in which

they support their communities: Employment, supporting community organizations, providing a gathering space and social space for community, source of community pride; Providing food, products and services they can access locally; Education, unpublicized support for families in need, providing local availability to certified organic foods and products; supporting local growers, providing exposure for our local area and increasing tourism, helping to educate the public on the importance of eating and purchasing local food, volunteering opportunities and greater capacity to give back; good paying jobs for youth, donations to charities, emphasis on buying local; growing food that fits well with climate change, there is a lot of land available that could grow high value fruit; providing local fresh greens year round, offering employment, offering work placement for persons with intellectual disabilities; wellness, employment, modest financial contribution; offering a finer dining experience; community meeting place, community events, food bank support; providing jobs; providing local food and eventually employment; providing 2 full time and 3 part time jobs, our brewery has become a meeting place for locals and a tourism draw for visitors, we contribute to the local economy by direct purchases of goods and services; feeding an underserved community with scratch made locally sourced food; we are contributing to the health of our community by introducing them to new and nutritious food; building community foundation. meal donation; providing local food, knowledge about growing, and encouraging other small producers; my business has become a community hub, we are very much a part of our customers day to day lives, and they ours; producing a healthy food alternative; providing infrastructure and supports; providing customers with local produce and a number of ways for them to be able to receive it; creating unique and innovated takes on an age old style, creating a healthier option for craft beverage consumers; leading by example and creating fun and down to earth business practice, making my passion apparent and being open to sharing information; purchasing and leading with ethical and resilient business practices; act as a secular community hub, safe place for minors, supporter of arts community; my business is fairly new however as we continue to grow we will create new jobs; a quality place to dine, helping to increase desirability of the area, supporting local producers; I shop local and refer others to local whenever possible; providing access to local products and creating a community centre; jobs,

community presence, work with not for profits, support other locally sourced and produced goods from Nova Scotia; providing our community with products and activity that families enjoy at a very affordable price, we also chose a fundraiser to support that had an awesome outcome; creating meaningful employment, providing additional revenue for farmers and other small businesses and social enterprises, creating a business our community is proud of; providing employment to local youth, providing an authentic wellness product, fundraising for local non-profits; employment, taxes, financial support for local organizations; growing sustainable food and farm-to-table dining experience that builds a strong food and community culture, our retreat offerings also allow guests to appreciate and connect to food and the environment; purchasing inputs for the farm (parts, fencing, fuel), selling hay locally, making the farmland visually appealing; we are selling an alternative to conventional product thereby demonstrating viability for a unique product that other producers could make; we provide employment and training to many local unskilled or partially skilled workers, we promote and provide access for urban consumers and restaurants to local products and consequently support the local economy; providing local food for the community.

FarmWorks clients provide fresh, healthy, locally grown food and beverages, places for people to work and socialize, jobs and support for their communities, and they contribute to public awareness of the multiple benefits of the local food economy.

# 4.7 Mentoring

In response to a question about access to a trusted advisor or business mentor with whom to discuss challenges and opportunities they face, 35 of 50 FarmWorks clients had access, or some access, to mentors or advisors (Figure 22). Four did not need one, but 16 with no or some access potentially could benefit from more assistance (Figure 23). A comparison was made between 50 FarmWorks clients and 198 respondents to the 2020 Mentoring Plus Survey (MPS) carried out by Sonia Mota<sup>21</sup>. When responses from FarmWorks clients who participated in the MPS were

No 31%
Yes 47%
Somewhat 22%

Figure 23. Mentor Comparison

47%

43%

39%

31%

18%

Yes Some Mentoring No

FarmWorks Mentoring Plus

Figure 23. Reasons for not Having Mentor

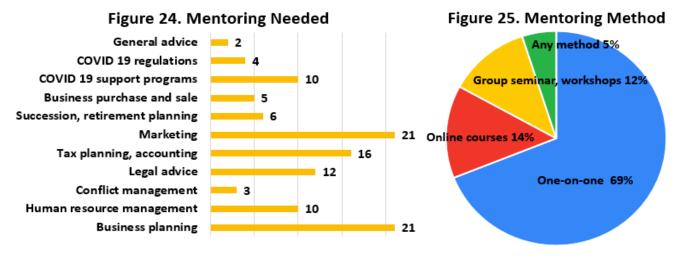


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<sup>&</sup>lt;sup>21</sup> The Mentoring Plus Nova Scotia 2020 Survey of Agri-food, Food & Beverage Businesses. Sonia Mota. October 2020.

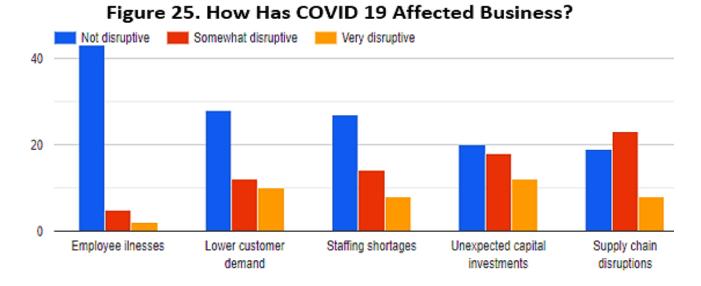
removed, 18% of non-FarmWorks MPS respondents had mentors compared to 47% of FarmWorks clients but twice as many non-FarmWorks respondents as FarmWorks clients had some mentoring (Figure 23).

FarmWorks respondents described their current and long-term requirements for mentoring (Figure 24). The MPS results were quite similar with business planning, marketing, tax planning and accounting, retirement planning and succession most frequently mentioned. The majority of clients would prefer one-to-one mentoring (Figure 25).



#### 4.8 COVID 19

The survey included questions about the effects of COVID 19 on clients' businesses. Changes in employment were quantified as shown in Figure 10 and Table 2, but other indicators were difficult to measure. Overall, the effect were less disruptive in the first wave of COVID 19 than might have been expected due to the immediate adaptation of clients to changing realities (Figure 25). Clients who were able to do so pivoted from sit-down to take-out, from farmers' market sales to online, from in-store to home delivery. Clients put their customers and their communities first and their sales reflected that commitment, with mid-year revenue for many businesses being stable and in some cases increasing.



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The diversity of types of businesses accounts for the wide range of uptake by clients of the Canada Emergency Programs (Figures 26, 27, 28, 29).

Pigure 26. CE Wage Subsidies

Yes

Waiting to hear back on my application

My business is not eligible

Not sure if my business is eligible

Not aware of the program

No

No, not eligible as we did not have any employees, other than local contractor...

I did not feel the need to apply.

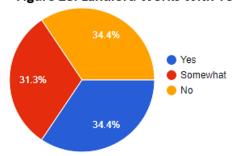
No employees, so no.

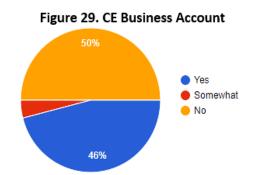
Figure 27. CE Rent Assistance

Yes

Waiting to hear back on my application
My business is not eligible
Not sure if my business is eligible
Not aware of the program

Figure 28. Landlord Works With You





In response to the question whether their business would still be operational by December 31st, 2020, 40 said very likely, 4 said somewhat likely and 3 said they would need financial support or mentorship.

#### 4.9 Client Comments

It's been a challenging year all around, and covid has tipped the scale. I've been quite steady with orders still going out and that wholesale is really picking up the last couple weeks. I have been missing the sales and talking to the people at markets I would normally be at. And hope soon to be up and running with on-line sales. I appreciate the supports FarmWorks offers, including the diverse community support.

I need a mentor:)

Farmworks Connects was a great event that provided knowledge support and networking.

Farm Works has been instrumental in allowing our startup business to succeed in establishing a branded product and customer base. Farm Works has shared informative and timely information regarding grants, funding and pertinent information whereas provincial Agricultural bodies tend to appear non-existent! Farm Works has excellent insight into what producers require to become sustainable, furthermore, they have an integral hand in the future of feeding Nova Scotians with high quality, nutritious, locally produced foods!

Thank you for all of your support!

Thank you for all you do! I love FarmWorks:)

As always, thank you for the opportunity to provide feedback!

Due to my business expansion I do not qualify for many of the government programs since my revenue has increased. It is overwhelming trying to figure out if you qualify since the rules are so vague. For example, they changed the CERB so small business owners qualify but it is still based on wages. Regardless what sole proprietors pay themselves monthly "wages" for, SP aren't calculated until the end of the year when you have a positive or minus in your taxes. So you can make an argument both ways. Digging yourself into more debt right now isn't the

solution because in 2 or 3 years if all the money dries up and the economy crashes we will all be struggling hard enough to makes ends meet not worrying about paying back the CRA.

I would encourage better ways to access information for assistance. Sometimes if you don't know the questions to ask or the direction to look, it is impossible to find valuable information

Farm Works has helped my business thrive and I couldn't have done it without them

Of all of our lenders, Farmworks has been the most approachable, easiest to work with and helpful. We greatly value everything you do!

Farmworks has been incredibly supportive and helpful in assisting us start up our business and with checking-in to see if there's anything we need along the way. We're very grateful that such a program exists for Nova Scotians! Thank you for keeping up with the important work everyone - N.S. has wonderfully hard-working and clever food producers under your umbrella:)

Now to also keep focusing on closing the gaps between the producers and their markets... let's work hard to build a strong & comprehensive distribution network!

My business wouldn't even exist without the assistance and ongoing support of Farmworks. I can't say enough good things about the program, and how vital it is to upholding our local food economy, and small producers in our region.

I love Farmworks. You are the shining light in new age and local development. Thank you all.

We are thankful for the support Farmworks has provided us.

We are grateful for the support

Very grateful to be part of the Farmworks community

We value being part of the FarmWorks community of Nova Scotian agri-food businesses for the promotion of "Buy Local"

Thanks for all the good work you do!

In these difficult times, the program has been a great benefit to us & our future goals & dreams Thanks for all your support FarmWorks!

#### 5.0 Information from 2016 Survey – Client Comments

Responses to a question asked in the 2016 survey are included below as this shorter survey did not ask How do we achieve the community of interest needed to support entrepreneurs generally, and food entrepreneurs particularly, in rural Nova Scotia?

Many indicated that education – about the qualities and benefits of local products – is crucial for future success. Education about good food needs to start with children – that's a key to better health for future generations. Clients said that local businesses should support and promote one another, collaborate and celebrate what is being accomplished. Clients indicated that they would appreciate opportunities to increase their business knowledge. FarmWorks was considered part of the solution.

"I think that what you are doing is amazing. I often hear of the Gentle Dragon events, and the value that they bring to entrepreneurs, and the awareness that they bring is also very valuable! I think the events that you host as well in the spring in and the fall bring awareness. Whenever we have the opportunity, I think that entrepreneurs should boast about the support that we receive and where we receive it. Too often I see an article on a start-up entrepreneur and they do not mention the support that they received early on, and I think that it is very important that they do, so that others can be aware of it!"

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"FarmWorks is going in the right direction by trying to help businesses all over NS by supporting them, promoting them, doing advertising and when it comes down to rural areas – local shops. Hard in rural areas, lots of people moving out but the wheel is starting to change. Making restaurants and shops that are linked to the farms. Push people to buy local. An effort from everyone to support our farmers."

"Man, oh man. I believe it will come down to dollars. ... encouraging local is a culture shift.

- Because "Walmart" can "buy" their customer and "bully" community and convince them that they have the best for cheapest we need to compete there. Why not tax breaks for those who buy local?
- Suppliers have to get on board. It is actually difficult and a lot of work to buy from really local suppliers at times. Fact- the local producer has to be great to compete. Some people will buy into the story but lots buy on price, let's be honest. Customers don't want to pay for producers' inefficiencies. It is a big bad business world out there! May sound harsh but every wasted minute is wasted opportunity and profits!
- Just singing the song isn't enough, we need to get out there and prove it. Let's get into schools and help children to understand that they can actually produce their own food. Fun and way better.
- Let's start making the links between health and food in a tangible way...with the kids
- With NS being so small is it not a great place to be a pilot project to demonstrate the link between health and food? Government wake up and put some \$\$\$\$\$ into food and watch the health budget shift. Not rocket science. But all at the grassroots level. "

"Some thoughts - continuing to promote the importance of food security and sustainability locally, providing information on how to access said food, creating a BUY LOCAL campaign with maybe a list of local businesses that support local...."

"Keep doing what you are doing. Success breeds success and everyone wants to be on a winning team...including the government. Continue giving the support needed to encourage those with ideas whether financially or just that pat on the back when it is deserved!"

# The question What are your thoughts about Nova Scotia's ability to be more self-sufficient in terms of food production? also prompted useful commentary from respondents.

"We have a long way to go, but are moving in the right direction. We need more support of younger and new farmers. Many programs are set up to support existing farmers, or second-generation farmers, but less for new."

"It is entirely possible, but it requires prioritizing this as the most desirable outcome by business, consumers and the government. If people perceive local food self-sufficiency as just costing them money and convenience in the short term with no offsetting short term benefit that aligns with their real values (such as saving money or access to better quality products), it will be hard to convince them that the long-term benefit is worth it (or even likely)."

"We as a province were mainly self-sufficient in the past and can be again in the future though re-educating people about the social, economic and environmental benefits of eating with the seasons."

"We can be much more self-sufficient and with the situations developing throughout the world we should be trying to be more self-reliant as quickly as we can. It is disappointing to hear that in mid-March we must be purchasing carrots from PEI and by May we will be buying Israeli carrots. Something as simple as carrots and potatoes we need to import is simply unbelievable. I think that people should be made aware of these situations. Milk production being "owned" by a giant business in Quebec...what is wrong with this picture? We have the resources, people and some infrastructure required... soften the rules and regulations for local food production and watch it grow. Only recently a situation has come to light that a large seafood facility may have to rethink their production plans when the Trump "Buy America" comes into effect. The product that they are producing for the American market doesn't meet the stricter food safety rules of Canada, and in light of this, product which is being produced would have to be destroyed instead of being sold here. Does this make sense? I don't think so!"

"I think it is the only way forward. Our small size is not a deterrent but our biggest asset. We need to stop focusing on export and focus on keeping food and production here. We need tax breaks and reasonable and attainable small business financing from the government and we can create jobs and income for the province."

"Larger institutions need to get on board with this. It's great when small businesses are working to support local food production but we need the big players on board too. For example, universities could be integrating food production on campuses with food service for students and food courses (check out what Brock university is doing with campus gardens!), same goes for other institutions. All of this requires that we start to relearn the basics of how to process whole ingredients and cook without processed ones. Wouldn't it be amazing if all schools had gardens and taught food production and preparation as part of the NS curriculum?"

"I think awareness is slowly building that we were far more self-reliant in the past and we need to be so again. It's a sentiment we hear expressed more and more at the farmers markets and the people who actively engage in supporting local food producers say they feel like they have stronger community ties."

"I think Nova Scotia could be much more self-sufficient in terms of food production. I think legislation should be introduced that requires government institutions and other large organizations to buy food locally whenever possible. This would of course increase costs, which would increase taxes, but that money would go directly back into the pockets of Nova Scotians. This, as well as more consumer education when it comes to the importance of buying food locally would go a long way."

"I think we have the ability to do this, we just need to work together to continue to create awareness and make it accessible. We need to work towards local sustainability, more distribution within our communities and less imports. We will always have to import some items, but if we can reduce importing things that we can grow locally, it will have a huge impact! Buying local, allows us to eat fruit and vegetables closer to the time that they are actually pulled from the ground, allowing us to benefit from the nutrients that they have!"

"No brainer. We need to get out of our own way and hustle. We chose to live in NS and are delighted with our choice. My thoughts are based on what I have seen so far. I have found an enormous amount of disjointed \$\$\$\$ allocated to a variety of projects. How about we start pulling our efforts together...like what FarmWorks is doing. Come on NS this is the best place in Canada to live with potential up the yin yang. What are we waiting for?!!! If buying local is the best way to go let's exchange the kid gloves for boxing gloves and make that so...cause we know it is!! Imagine being the example to show Canada. Health is everything: personal, community, global. That starts with food!"

"Nova Scotia has a tremendous amount of potential to be more self-sufficient. There are so many ways to have creative entrepreneurship with just what can be grown or created in NS, not to mention all the other supportive businesses that go along with that. There are so many things that people want in NS, and have to get from outside the province, we could be doing/creating those things right here."

"We think that NS has a ton of potential when it comes to producing more food for its' residents. It's important that restaurants, grocers and institutions take extra steps to ensure that they are buying local whenever possible. It's also important that local food producers find a way to get their products to market in an efficient and reliable way. This would likely involve event more collaboration when it comes to distribution. Consumer education is also an important component of increased demand in restaurants and at retail."

"Realize that the overall goal is producing local not just harvesting local. The best example of what can be accomplished is in the explosion of craft breweries. Why can't this be expanded to include any food product that is available at grocery stores? Global warming needs to be addressed globally. Imports need to be addressed locally. A good example in my opinion is "Dijon Mustard" from France. Dijon is a little town that added white wine to mustard and people loved it. Initially all the mustard was grown locally and the mustard produced locally. But, it

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would not be a table staple globally without the government backing that took it to the world's stage. Today Dijon cannot grow enough mustard to fill the need to produce the amounts required for global exporting. So, today 90 % of the mustard seed used to make Dijon mustard comes from Canada. It is still seen as a French product. Good for them I say. There is no reason the same can't be done for a N.S. product."

"100% possible. With more technology and innovation and new ways of growing things we can become much more self-sufficient. We have so much land, access to information. Also, we need to be able to keep and attract people here - having food / drink / culture / music / arts does that! Sustainable food production needs to be first priority ... and customers paying a little for it so at the end of the day we can create higher quality of life!"

"Love FarmWorks and what they do and the way that they do it. Fantastic thing to get started. Keep supporting businesses."

"Continued public awareness and programs like FarmWorks that see the bigger picture."

#### 5. DISCUSSION

FarmWorks has attracted as clients some of the most intelligent, energetic, enthusiastic and motivated entrepreneurs to be found in the Province. The aim of this Impact Report is to publicize outcomes achieved by small and mid-size businesses that are providing food and beverages and food-related services. An unexpected outcome is the treasure-trove of suggestions from some of the people best-placed to identify solutions – those who are in the business of resolving challenges and producing goods.

These businesses have made tremendous contributions to rural and urban economies through job creation, purchasing and providing local goods and services, raising awareness of the benefits of local businesses, supporting their communities and investing in a sustainable future.

The report describes the results achieved by clients who have received "money, mentoring and marketing" support from FarmWorks. The outcomes provide indisputable proof that providing capital and assistance to qualified entrepreneurs multiplies economic and social benefits.

Clients reported that 32% of businesses used funding from FarmWorks to get started, 22% were doing poorly before borrowing, 4% were doing well and 42% borrowed to improve their businesses. Seven businesses had been in operation for one year or less, one for 36 and the average was 8 years. There are 23 corporations, 15 sole proprietorships, 8 partnerships and 4 registered farms. The primary use of funds was for equipment, leasehold improvements and working capital and 62% said it was not likely they would have succeeded without completion of the projects for which they borrowed funds.

The 50 respondents (of 72) are generating approximately \$14,250,000 in annual gross business revenues with annual business expenditures of about \$12,900,000 (Note 1). It can be estimated that 72 businesses are generating approximately \$20,500,000 in annual gross business revenues with annual business expenditures of about \$18,500,000 (Note 1).

Economic multiplier effects range widely, as noted in the introduction, and approximately \$14,250,000 in gross annual revenue could generate from \$20,000,000 (multiplier 1.4) to \$37,000,000 (2.6) in the provincial economy. If revenues reported by 50 clients are extended to 72 clients it is possible that gross

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annual revenue may range from \$29,000,000 (multiplier 1.4) to \$53,000,000 (2.6). This is a significant return on \$3,226,000 of shareholders' investments in FarmWorks

Business expenditures of about \$12,900,000 by 50 or \$18,500,000 by 72 clients support owners and their families, their employees and the providers of goods and services, keeping money in Nova Scotia except for the leakage that occurs when goods and services are not locally available<sup>22</sup>.

Half the clients reported that they source over 50% of their ingredients and all clients obtain over 80% of their goods and services within Nova Scotia. They indicated a strong desire to purchase more goods from local producers.

The gross annual payroll and owner's draw for 50 clients is approximately \$5,000,000, and extending these results to 72 businesses suggests that could be \$7,000,00 (Note 2). Hourly wages ranged from the Nova Scotian minimum wage of \$12.55 to \$38.00 with an average of wage of \$15.47 and 84% of clients payed above the minimum. It is of note that the 2020 wages are significantly higher than in 2016. The minimum wage increased in 2019 to \$11.55 and on April 1<sup>st</sup>, 2020 from \$11.55 to \$12.55.

Clients reported that prior to COVID 19 they had 233 full-time and part-time employees, with a decrease by October of 11 and a decrease of \$200,000 in wages paid. Only four of the jobs lost were on farms. The extrapolated figures for 72 clients would be a loss of 16 jobs and \$300,000 in wages paid.

Thirty seven of the clients were able to find employees sometimes, often or always within their communities and 35 were always able to find employees with the required skills. Twenty six clients paid themselves fully or partially and 20 had family members working in the business.

The 233 jobs with FarmWorks clients account for approximately 2.3% (or all 72 businesses 3.5%) of the food sector workforce. These jobs are supported in part by FarmWorks loans of approximately \$1,750,000 (\$2,500,000) which may be considered the equivalent of \$7,500 per job relative to \$18,000 reported by Bregendahl and Enderton <sup>23</sup>. More specifically, 65 jobs were created by 16 clients who indicated they would not exist without FarmWorks, and thus approximately \$560,000 supports 65 jobs at \$8,600 each.

Mentoring is provided by FarmWorks Directors and advisors to the extent possible and there is increasing need for both holistic and specific mentoring to assist clients and food producers generally to deal with the increasing complexity of production. COVID 19 adds to the challenges and it is reassuring that FarmWorks clients have pivoted to adapt to turn these challenges into opportunities to provide even more services to their customers and their communities.

Clients continue to face barriers with regards to compliance with provincial and federal regulations, especially food safety regulations, and for many this is a limiting factor for growth. In the past, when significantly more food was being produced in Nova Scotia, more infrastructure and support was available. The loss of most abattoirs and processing facilities and the level of regulations being applied across the board are significantly affecting local producers' ability to meet demand. Most clients cited

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<sup>&</sup>lt;sup>22</sup> Leakage Definition (investopedia.com)

<sup>&</sup>lt;sup>23</sup> Bregendahl C, and A Enderton. (2013). *2012 Economic Impacts of Iowa's Regional Food Systems Working Group.* Ames, Iowa: Leopold Center. Retrieved from https://www.leopold.iastate.edu/

the need for abattoirs, processing, freezing and refrigeration and other facilities that would enable them to increase production. Remedies are becoming ever more urgent with the shift by the public to greater appreciation for, and trust in, local production.

In the U.S. while net farm income is declining, sales of food produced locally are growing at a higher percentage than other food and beverage sectors – from \$5 billion in 2008 to \$20 billion in 2018. "Everyone needs food—and we can tell you something that American consumers want with increasing fervency: local food. They want to know where their food comes from, how it was made and by whom. They want the transparency that is required to know its source. They're even willing to pay a little more for the confidence that their food purchases help to create jobs and promote local economies; safeguard the environment, protect groundwater and preserve American farmland; and support proper animal treatment. As a result, there's a huge investment and business opportunity sitting right under everyone's noses"<sup>24</sup>.

FarmWorks clients described a multitude of services and benefits provided by their businesses: creating jobs and generating income; purchasing and supporting other local businesses; providing healthy food and raising awareness of the benefits of local food; supporting community and in some instances becoming a de facto hub or gathering place; adding to local amenities that attract residents and tourists. Many FarmWorks clients are at the forefront in their sectors as outstanding food and beverage producers, retailers and restauranteurs. Shareholders' investments will continue to improve the long-term outlook for sustainable food production and healthier food for the future.

FarmWorks occupies a unique space where relationship lending brings many people to the table: investors, directors, clients, other food-related businesses, other lenders, organizations and the public. The Directors and Advisors are volunteers representing a wide range of businesses, skills and interests who work with potential and current loan recipients. The recipients are multi-skilled, enthusiastic, energetic and collegial contributors to their businesses and the economy of the Province. The Shareholders are interested, involved and supportive. Everyone who purchases a \$100 share in FarmWorks becomes a promoter, not only of FarmWorks clients, but of other food producers and other local businesses. From a provincial government perspective, the Nova Scotian CEDIF program as operated by FarmWorks can be seen as a successful public policy instrument. CEDIFs provide individuals with the opportunity to invest in businesses in their own province rather than supporting businesses in other jurisdictions (for example, in 2014 of the \$730 million invested in RRSPs by 123,000 Nova Scotians about 98% left Nova Scotia)<sup>25,26</sup>.

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Hesterman, OB and D Horan. (2017). The demand for 'local' food is growing — here's why investors should pay attention. *Business Insider*, April 25, at http://www.businessinsider.com/the-demand-for-local-food-is-growing-2017-4

<sup>&</sup>lt;sup>25</sup> Statistics Canada. (2016). *Registered retirement savings plan contributors*. At <a href="http://www.statcan.gc.ca/daily-quotidien/160226/t001b-eng.htm">http://www.statcan.gc.ca/daily-quotidien/160226/t001b-eng.htm</a>

<sup>&</sup>lt;sup>26</sup> Centre for Public Impact. (2107). *Community Economic Development Investment Funds in Canada*. At https://www.centreforpublicimpact.org/case-study/community-economic-development-investment-funds-canada/

#### Note 1.

Since the survey asked businesses to estimate their total Gross Business Revenue for 2020 in a variety of range options, it is necessary to use a calculation to estimate the total Gross Revenue created by the responding businesses. Estimates were made on an amount of \$40,000/year for survey respondents selecting under \$50,000 and \$1,000,000 for those over \$900,000 and the average of the remaining category options. Revenue for 50 businesses was approximately \$14,250,000 and extrapolated to 72 businesses would be approximately \$20,500,000. Expenses for 50 businesses were approximately \$12,900,000 and would be approximately \$18,700,000 for 72 businesses..

Gross Revenue Range	# of Client	Gross	Gross Expense Range	# of Client	Gross
option from Survey	Responses	Revenue	option from Survey	Responses	Expense
Under \$50,000	20	\$800,000	Under \$50,000	15	\$600.000
\$50,000 to \$100,000	6	\$450,000	\$50,000 to \$100,000	10	\$750,000
\$100,000 to \$300,000	9	\$1,800,000	\$100,000 to \$300,000	11	\$2,200,000
\$300,000 to \$600,000	6	\$2,700,000	\$300,000 to \$600,000	8	\$3,600,000
\$600,000 to \$900,000	2	\$1,500,000	\$600,000 to \$900,000	1	\$750,000
Over \$900,000	7	\$7,000,000	Over \$900,000	5	\$5,000,000
TOTALS	50	\$14,250,000		50	\$12,900,000
Extrapolated	72	\$20,500,000		72	\$18,250,000

#### Note 2.

Since the survey only asked businesses to estimate their total Payroll and Owners Draws in the past 12 months; it is necessary to use a calculation to estimate the total Payroll and Owners Draws created by the responding businesses. A very conservative method to estimate this was to use a flat \$15,000/year for those survey respondents selecting the Under \$25,000 category and then the average of each of the remaining category options, other than for 4 actual amounts. The surveyed businesses could have paid approximately \$5,000,000 and extending these results to 72 businesses suggests that gross annual payroll and owner's draw may be approximately \$7,000,000.

Gross Payroll and Owner's Draw	# of Client	Revenue Figure Used for	Estimate
Range from Survey	Responses	Estimate	
Under \$25,000	21	\$15,000	\$315,000
\$25,000 to \$50,000	5	\$35,000	\$175,000
\$50,000 to \$100,000	12	\$75,000	\$900,000
\$100,000 to \$150,000	4	\$125,000	\$500,000
\$150,000 to \$200,000	2	\$175,000	\$350,000
\$200,000 to \$250,000	2	\$225,000	\$450,000
Actual	4	\$572,000	\$2,300,000
TOTALS	50		\$4,990,000
Extrapolated	72		\$7,185,600

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#### References

- <sup>1</sup>FarmWorks Investment Co-operative Limited: <a href="http://farmworks.ca/home/">http://farmworks.ca/home/</a>. FarmWorks Investment Co-operative Limited was incorporated as a for-profit Co-operative in May 2011 by an association of community leaders concerned about food related issues. FarmWorks mission is to promote and provide strategic and responsible community investment in food production and distribution in order to increase access to a sustainable local food supply for all Nova Scotians. FarmWorks collaborates with other organizations, departments, agencies and individuals that share the vision of Healthy Farms and Healthy Food. FarmWorks Community Economic Development Investment Fund (CEDIF) lends money to for-profit food-related businesses that meet stringent requirements and whose values and goals align with FarmWorks. A broad-based portfolio is carefully chosen by the Board to balance risk and achieve strategic goals. The invested capital is loaned to entrepreneurs starting businesses, improving equipment and technology, developing new products, increasing food safety, adding value, decreasing costs, increasing sales, improving margins. Payment of the principle and interest at six percent commences three months after the loan is approved. No fees are charged for applications or early repayment. Directors and Advisors provide mentoring and promotion to support and strengthen food producing businesses in the portfolio as well as others across the Province.
- <sup>2</sup> Jennifer Scott Consulting, with Silver Donald Cameron and Chris Benjamin. (2010). *Opportunities in Atlantic Agriculture*. Report Submitted to Newfoundland and Labrador Federation of Agriculture. Available online at <a href="http://nsfa-fane.ca/wp-content/uploads/2011/06/CrisiOpportunity\_SCREEN.pdf">http://nsfa-fane.ca/wp-content/uploads/2011/06/CrisiOpportunity\_SCREEN.pdf</a>. To maintain a steady flow of products, and to hold prices down, the food chains scour the world for the low-priced food to which consumers have become accustomed. Atlantic Canada's farms, being relatively small and restricted by a short growing season, are ill-placed to compete on price and volume though they can compete very strongly on quality and, most importantly, on security and reliability. The result of these trends is that Canadian consumers—especially Atlantic consumers—have little access even to products that their own farmers can readily supply. In a supportive regulatory environment, with governments committed to the security of provincial food supplies, many innovations are possible that could re-shape agriculture and marketing, creating a vibrant and sustainable local food supply. The report identifies promising new directions in other jurisdictions, and suggests approaches that would bring farmers, consumers and governments together in a common dedication to the goal of a secure, sustainable, and just food system.
- <sup>3</sup> <a href="https://farmworks.ca/wp-content/uploads/2012/04/CEDIF-Program-history-and-overview.pdf">https://farmworks.ca/wp-content/uploads/2012/04/CEDIF-Program-history-and-overview.pdf</a> and New Market Funds Society. (2014). Eight Tracks: Impact Investing in Canadian Communities. Available online at <a href="http://newmarketfunds.ca/pdf/Eight-Tracks.pdf">https://newmarketfunds.ca/pdf/Eight-Tracks.pdf</a>, page 33. Community Economic Development Investment Funds (CEDIF) are pools of capital formed through the sale of shares to persons in a defined community, which is invested in the creation or expansion of a local business. They exist as a result of an enabling structure adopted by the Province of Nova Scotia. The CEDIF model is a highly effective mechanism for supporting local investment in economic development. The cost to the Province (as of 2014) of this tax credit is estimated at approximately \$20 million. The impact on the communities which have started a CEDIF have been significant and the multiplier from these investments would certainly take the overall impact closer to \$100 million. The magic in the CEDIF approach is that no person inside government decides where investment goes. The role of government is to ensure there is clear disclosure and that investors know what they are investing into. It is a major paradigm shift to have government let go and let communities make these decisions for themselves and the results have proven this to be the better course of action.
- <sup>4</sup> Regulations Respecting Community Economic-Development Corporations https://nssc.novascotia.ca/sites/default/files/CEDIFRegsApril 13 2011.pdf
- <sup>5</sup> Community Economic-Development Investment Funds <a href="https://nssc.novascotia.ca/corporate-finance/community-economic-development-Investment-funds">https://nssc.novascotia.ca/corporate-finance/community-economic-development-Investment-funds</a>
- <sup>6</sup> Bregendahl C, and A Enderton. (2013). *2012 Economic Impacts of Iowa's Regional Food Systems Working Group*. Ames, Iowa: Leopold Center. Retrieved from https://www.leopold.iastate.edu/
- <sup>7</sup> Schmit, TM, BBR Jablonski, and D Kay. (2013). Assessing the Economic Impacts of Regional Food Hubs: the Case of Regional Access. New York: Cornell University, pp. 3.
- <sup>8</sup> Meter, K. (2008). *Local Food as Economic Development.* Minneapolis: Crossroads Resource Center. Retrieved from <a href="http://www.crcworks.org/lfced.pdf">http://www.crcworks.org/lfced.pdf</a>
- <sup>9</sup> Marsden, T, & E Smith. (2005). Ecological entrepreneurship: sustainable development in local communities through quality food production and local branding. *Geoforum 36*, 440–451. See also Renting, H., T Marsden, & J Banks. (2003). Understanding alternative food networks: exploring the role of short food supply chains in rural development. *Environment and Planning A*, *35*(3), 393-411.
- <sup>10</sup> Bregendahl C, and A Enderton. (2013). 2012 Economic Impacts of Iowa's Regional Food Systems Working Group. Ames, Iowa: Leopold Center. Retrieved from <a href="https://www.leopold.iastate.edu/">https://www.leopold.iastate.edu/</a>
- <sup>11</sup> Schmit, TM, BBR Jablonski, and D Kay. (2013). Assessing the Economic Impacts of Regional Food Hubs: the Case of Regional Access. New York: Cornell University, pp. 3.

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- <sup>12</sup> Meter, K. (2008). *Local Food as Economic Development*. Minneapolis: Crossroads Resource Center. Retrieved from http://www.crcworks.org/lfced.pdf
- <sup>13</sup> Marsden, T, & E Smith. (2005). Ecological entrepreneurship: sustainable development in local communities through quality food production and local branding. *Geoforum 36*, 440–451. See also Renting, H., T Marsden, & J Banks. (2003). Understanding alternative food networks: exploring the role of short food supply chains in rural development. *Environment and Planning A*, *35*(3), 393-411.
- <sup>14</sup> Martinez S, M Hand, M Da Pra, et al. (2010). *Local Food Systems: Concepts, Impacts, and Issues*. ERR 97, U.S. Department of Agriculture, Economic Research Service.
- <sup>15</sup> The purpose of this conference is to highlight some of the most successful rural development initiatives and organizations in Canada and the U.S. that many of us may not be aware of or have the opportunity to visit. These are regions that face many of the same rural social and economic challenges we do and have developed new approaches and initiatives to facilitate the rural economic revitalization of their regions. For more information, please see <a href="http://www.sibacs.com/keeping-it-rural-2015-conference/">http://www.sibacs.com/keeping-it-rural-2015-conference/</a>
- <sup>16</sup> https://www.bcruralcentre.org/wp-content/uploads/2017/11/BC-Rural-Centre-FarmWorks-CEDIF-Final-Report.pdf
- $^{17} \underline{\text{https://farmworks.ca/wp-content/uploads/2012/04/Impacts-of-Local-Investment-\%E2\%80\%93-Survey-of-FarmWorks-Clients-2016.pdf}$
- <sup>18</sup> https://novascotia.ca/finance/statistics/topic news.asp?id=16118
- <sup>19</sup> https://novascotiabusiness.com/business/agri-food
- <sup>20</sup> Bregendahl C, and A Enderton. (2013). *2012 Economic Impacts of Iowa's Regional Food Systems Working Group.* Ames, Iowa: Leopold Center. Retrieved from https://www.leopold.iastate.edu/
- <sup>21</sup> The Mentoring Plus Nova Scotia 2020 Survey of Agri-food, Food & Beverage Businesses. Sonia Mota. October 2020.
- <sup>22</sup> Leakage Definition (investopedia.com)
- <sup>23</sup> Bregendahl C, and A Enderton. (2013). 2012 Economic Impacts of Iowa's Regional Food Systems Working Group. Ames, Iowa: Leopold Center. Retrieved from <a href="https://www.leopold.iastate.edu/">https://www.leopold.iastate.edu/</a>
- <sup>24</sup> Hesterman, OB and D Horan. (2017). The demand for 'local' food is growing here's why investors should pay attention. *Business Insider*, April 25, at <a href="http://www.businessinsider.com/the-demand-for-local-food-is-growing-2017-4">http://www.businessinsider.com/the-demand-for-local-food-is-growing-2017-4</a>
- <sup>25</sup> Statistics Canada. (2016). *Registered retirement savings plan contributors*. At <a href="http://www.statcan.gc.ca/daily-quotidien/160226/t001b-eng.htm">http://www.statcan.gc.ca/daily-quotidien/160226/t001b-eng.htm</a>
- <sup>26</sup> Centre for Public Impact. (2107). *Community Economic Development Investment Funds in Canada*. At <a href="https://www.centreforpublicimpact.org/case-study/community-economic-development-investment-funds-canada/">https://www.centreforpublicimpact.org/case-study/community-economic-development-investment-funds-canada/</a>

#### **Publications of interest**

- 1. Pinchot, A. (2014). The economics of local food systems: A literature review of the production, distribution, and consumption of local food. University of Minnesota: Extension Center for Community Vitality. At <a href="https://www.extension.umn.edu/community/research/reports/docs/2014-Economics-of-Local-Food-Systems.pdf">https://www.extension.umn.edu/community/research/reports/docs/2014-Economics-of-Local-Food-Systems.pdf</a>
- 2. Committee on a Framework for Assessing the Health, Environmental, and Social Effects of the Food System; Food and Nutrition Board; Board on Agriculture and Natural Resources; Institute of Medicine; National Research Council; Nesheim MC, Oria M, Yih PT, editors. (2015). A Framework for Assessing Effects of the Food System. Chapter 5: Social and Economic Effects of the U.S. Food System. Available at: <a href="https://www.ncbi.nlm.nih.gov/books/NBK305168/">https://www.ncbi.nlm.nih.gov/books/NBK305168/</a>
- Food security Research Network and Faculty of Natural Resources Management, Lakehead University. (2013). The Workforce
   Multiplier Effect of Local Farms and Food Processors in Northwestern Ontario. Available at

   https://www.nswpb.ca/application/files/8914/6427/0132/the workforce multiplier effect of local farms and food processors
   in northwestern\_ontario.pdf We found that the workforce multiplier effect of Northwestern Ontario for the year 2011 was 1.4,
   which means that every 1000 jobs in local farms and food processing sector in Northwestern Ontario support 400 extra jobs
   indirectly with suppliers and retailers.
- 4. Trejos, R, J Arias, O Segura and E Vargas. (2004). More than food on the table: agriculture's true contribution to the economy. San José, C.R.: IICA. Directorate of Strategic Planning and Institutional Modernization; Area of Trade and Agribusiness. At <a href="http://www.fanrpan.org/documents/d00766/Food\_Crisis\_Report\_Jan2004.pdf">http://www.fanrpan.org/documents/d00766/Food\_Crisis\_Report\_Jan2004.pdf</a>. The analysis of multipliers shows that each additional unit demanded from the primary sector produces strong impact on other sectors, generating a multiplier effect on the total output of the economy. This effect ranges from 3.076 additional units in Canada. It was also estimated that every additional

- unit produced in the primary agricultural sector, significantly increased production in the food sector (from 0.16 in Canada to 0.73 in Argentina) as well as in the agroindustrial sector (from 0.10 in Canada to 0.56 in Argentina). Every additional unit of primary agricultural production demanded also has a very positive effect on factor payments (labor, capital and land): from US\$ 1.421 in Canada, to US\$ 3.34 in Argentina.
- 5. Schmit, T. (2014). The Contribution of Agriculture to the New York Economy. Research and Policy Brief Series, #61. Cornell University. Available at <a href="https://cardi.cals.cornell.edu/sites/cardi.cals.cornell.edu/files/shared/documents/ResearchPolicyBriefs/Policy-Brief-Aug14-draft02.pdf">https://cardi.cals.cornell.edu/sites/cardi.cals.cornell.edu/files/shared/documents/ResearchPolicyBriefs/Policy-Brief-Aug14-draft02.pdf</a> The implied output multiplier for all agriculture in NYS (i.e., the sum of the direct, indirect, and induced effects divided by the direct effect) is 1.43, meaning that for every additional dollar generated in agriculture \$0.43 is generated in backward linked (nonagricultural) industries (Table 1). If we decompose the multiplier effect into its indirect and induced components, the indirect effect is 0.27 (from business-to-business activity) and the induced effect is 0.16 (from labor income spending). Indeed, the agricultural manufacturing employment multiplier (2.83) is well above either the agricultural production (1.45) or support services (1.12) sectors and, in part, reflects strong linkages (indirect effects) to agricultural production activity in NYS; e.g., dairy manufacturing in NYS sourcing milk from NYS dairy farms. In total, an additional job generated in agriculture supports another 0.80 jobs in backward-linked non-agricultural industry sectors.
- 6. Gabe, TM, JC McConnon Jr., and R Kersbergen. (2012). Economic Contribution of Maine's Food Industry. Maine Policy Review 20 (1): 36 -45, at <a href="http://digitalcommons.library.umaine.edu/mpr/vol20/iss1/7">http://digitalcommons.library.umaine.edu/mpr/vol20/iss1/7</a>"...every \$1.00 in revenue to Maine's food makers is associated with an estimated \$1.82 in total statewide economic activity. This \$1.82 in sales includes the "original" \$1.00 in revenue to food makers and an additional \$0.82 in sales activity in other sectors of the Maine economy ... for each person employed as a food maker in Maine, there are an estimated 1.20 additional workers in the state whose jobs are supported by the activities of food processors or producers.
- 7. Budgetary summaries at <u>estimates-supplementary-detail-budget-2020-21-en.pdf (novascotia.ca)</u>
- 8. Centre for Public Impact. (2107). Community Economic Development Investment Funds in Canada. At <a href="https://www.centreforpublicimpact.org/case-study/community-economic-development-investment-funds-canada/">https://www.centreforpublicimpact.org/case-study/community-economic-development-investment-funds-canada/</a>

# **Organizations and Authors**

- **a.** FarmWorks Investment Co-operative Limited, 70 Eden Row, Greenwich, NS, B4P 2R2 http://farmworks.ca/home/
- b. Food, Locally Embedded, Globally Engaged Partnership: a research and knowledge sharing partnership committed to fostering food systems that are socially just, ecologically regenerative, economically localized and that engages citizens. Research questions explore territorial integration, scaling up opportunities, innovative governance, agro-ecology and metrics. The collaboration includes seven Canadian regional nodes of practitioners and researchers, and three international working groups. FLEdGE is hosted by the Centre for Sustainable Food Systems at Wilfrid Laurier University. https://fledgeresearch.ca/
- c. Linda Best, BSc: FarmWorks Director and Founder; Chair Friends of Agriculture in Nova Scotia; Medical Researcher Gastroenterology, QEII
- d. Irena Knezevic, PhD: Assistant Professor (Communication, Culture, and Health) at Carleton University; Research Associate - Centre for Sustainable Food Systems at Wilfrid Laurier University
- e. Sonia Mota, BS Marine Biology and Biological Oceanography; Community Economic Development Researcher; Entrepreneur; Consultant

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