

WHITE PAPER RECOMMENDATIONS

IMPROVED DATA NEEDED TO FUEL ECONOMIC GROWTH IN ORGANIC SECTOR



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KEY MESSAGES

- **Canada lacks publicly available data on basic organic production, sales and trade. This hinders growth, competitiveness, and partner trust for a market that exceeds \$9 billion.**
- **Trust in the organic label and maintenance of organic integrity, both domestically and internationally, relies on publicly available operator data.**
- **Canada's organic sector is missing out on business and trade opportunities.**
- **High quality data supports sound government policy, smart on-farm and business decisions, more efficient ingredient sourcing, market development and trade, foreign business attraction and investment, and benchmarking to evaluate risks and opportunities.**
- **Businesses and national and provincial organic associations urge provinces and the federal government to develop publicly available data tools to support industry growth.**

RISING LOCAL AND GLOBAL DEMAND FOR ORGANIC FOOD

The global organic sector has seen unprecedented growth, with consumers demanding transparency, quality, and safety in organic products. In 2022, the global organic market was worth \$182 billion with 96 million hectares of land certified as organic, representing a growth of nearly 800% since 1999. Canada is the fifth largest and the fastest growing consumer market for organic products, with \$9 billion in sales and 1.5 million hectares of land under organic management.¹

To sustain this growth and maintain consumer trust, organic integrity must be protected. Organic integrity refers to the strict adherence to organic standards throughout production, distribution, and retail processes. A key part of safeguarding organic integrity is government oversight, which relies on accurate data to monitor and assess imports and production. Without comprehensive data, it is difficult to detect potential fraud, assess market needs, and ensure that all organic products meet the standards expected by consumers and producers alike.

ORGANIC INTEGRITY

When consumers pay more for organic products, they are paying for a set of quality attributes related to how those products were produced, handled, and processed. 'Organic integrity' refers to the suite of controls that ensure organic products are not contaminated or replaced with non-organic products during production, processing, transportation, warehousing, and at retail. Assuring organic integrity is essential for maintaining markets by reassuring consumers that products carrying an organic label are grown, handled, and processed according to strict federally regulated standards.

Consumers and ingredient buyers play a role in maintaining organic integrity. Organic integrity is a set of invisible attributes; to verify that a product has these attributes, purchasers must have a way to

¹ Helga Willer, Bernard Schlatter, and Jan Travnicek, 2024. The World of Organic Agriculture. Statistics and Emerging Trends 2024, Research Institute of Organic Agriculture FiBL and IFOAM Organics International, [The World of Organic Agriculture - Statistics and Emerging Trends 2024](#)

confirm that an operation has had a recent site inspection and is under the oversight of an accredited organic certification body (CB). Canada does require organic packaged food labels to list the CB responsible for certification on packaging, but without a national list of organic operators, it is challenging to find information about a specific operation and verify current certification.

There are several reasons why data are crucial for organic integrity:

1. Detecting Fraud and Preventing Non-Compliant Imports:

Good data allows regulatory bodies to detect inconsistencies in supply chains that may indicate fraud. By tracking import, domestic production and export volumes, product origins, and products traded under equivalency arrangements, the government can identify unusual patterns and verify that all products with organic claims sold in Canada are certified. Preventing fraud is essential for maintaining consumer trust and fair competition for domestic organic operators.

2. Supporting Fair Competition and Market Health:

Reliable import data helps to ensure fair competition for domestic organic producers by monitoring import levels and market saturation. These data inform policymakers about the volume and types of organic products entering Canada, which can impact local markets. This informs decisions on trade arrangements/agreements, tariffs, and support programs that protect Canadian organic farmers and prevent unfair market pressure.

3. Supporting Equivalency Arrangements with Accurate Market Insights:

Export data provide invaluable insights into the volume, type, and destination of organic products exported from Canada. These insights are essential for determining and negotiating organic equivalency arrangements with other countries. By understanding what Canada exports and to which markets, the government can enter into targeted equivalency arrangements that prioritize high-demand products and reduce unnecessary trade barriers. This data-driven approach ensures that equivalency arrangements are relevant and beneficial to Canadian organic producers, facilitating smoother and more profitable trade, while upholding organic standards.

4. Assessing Supply and Demand for Organic Products:

Import data provides insights into the demand for specific organic products that may be underrepresented in domestic production. This information can be used to inform policies that support the expansion of organic farming in areas where there is a high demand for imported organic goods. By understanding which organic products are heavily imported, the government and private sector organizations can encourage local production, supporting both economic growth and the resilience of Canada's organic sector.

5. Enhancing Transparency and Traceability in the Organic Supply Chain:

Transparency and traceability are essential components of organic integrity, assuring consumers that products labeled as organic meet high standards from farm to table. Import data provides a foundation for tracking organic products throughout the supply chain, allowing regulators to trace products back to their origin and certification body. This process not only ensures compliance but also enhances consumer confidence in organic labels, helping to maintain demand for organic products.

6. Monitoring and Responding to Global Demand for Organic Products:

Export data allows the government to track shifts in demand for organic products across various markets. By analyzing export trends, policymakers can identify emerging markets and assess the potential for new equivalency arrangements. For example, if export data shows increasing demand for a particular Canadian organic product in a region without an equivalency arrangement, this information can guide the government in pursuing an arrangement with that country. This proactive approach not only opens up new opportunities for Canadian organic operators but also ensures that Canada remains at the forefront of the global organic industry.

The United States Department of Agriculture (USDA) has made some recent changes to protect organic integrity. The *Strengthening Organic Enforcement* rule came into force in 2024. The rule strengthens organic control systems, and improves farm to market traceability and government oversight. A key piece of the control system is a national Organic Integrity Database (OID) that enables consumers, ingredient buyers, regulators, and others to quickly verify the certification status of individual operators. The USDA has recently extended the utility of this tool by adding organic acreage data for all farms in the database. This field is not currently mandatory, but over time, acreage will become a mandatory part of CB reporting requirements. Knowing the total volume of crops produced on a particular farm is a crucial part of the control system. CBs and buyers use acreage and sales information as an anti-fraud 'mass balance' audit to ensure that organic growers do not sell more 'organic' product than they produce or purchase.

Because a large share of organic food sold in the U.S. comes from other countries, the USDA is also exerting pressure on its major trading partners to strengthen their own organic control systems. As Canada is the largest U.S. organic trading partner overall, ranking as the top export destination for U.S. organic products and the fourth largest source of imports, it makes sense that the U.S. would want to ensure that similar protections against fraud are in place both north and south of the border. With the 2009 negotiated US-Canada organic equivalency arrangement being reviewed by both parties in 2025, this is an area of concern that the USDA's National Organic Program (NOP) has raised in discussions.

In this context, the Canadian Food Inspection Agency (CFIA) is implementing significant changes, including adding new requirements for organic importers. However, Canada does not yet have a public registry of organic operators equivalent to the U.S. OID. The CFIA organic website links to those of the CBs it accredits (38 in total), some of which have searchable client directories. However, some CBs make it difficult, if not impossible, to find operations, requiring searchers to use exact company or farmer names, including correct punctuation. Even if these search engines were improved, it would still be a daunting task to search all 38 accredited CBs' websites for a company without knowing the name of the company.

Through the Partners channel of the OID, Canadians can now find more information about Canadian organic operations certified by some CBs than they can find on the CBs' websites, even though CFIA requires them to maintain public lists of organic operators. The USDA's *Strengthening Organic Integrity* rule requires CBs with clients that export organic products to the U.S. to maintain a current list of those operators on the OID. Each time an operator's status is changed, the CB must upload the changes to the OID.

While the Government Canada has cited privacy concerns as a reason to avoid sharing information about individual companies (the Quebec government does provide operator details), at least one Canadian CB has reported that some organic operators listed in the OID have said they have benefited from the public exposure to buyers in the U.S.

ORGANIC AS A STRATEGY BY GOVERNMENTS

Canada's trade competitors are investing heavily in organic agriculture as a strategy to deliver multiple environmental and economic goods and services. While Europe already has a large share (10%) of land managed organically as compared to North America, the European Commission has set a goal of 25% of their farmland to be organic certified by 2030 under its latest Farm to Fork strategy. Following years of investment in organic farming and research initiatives, in 2022, the United States Department of Agriculture (USDA) made its largest single investment, allocating \$300 million (USD) to a five-year Organic Transition Initiative.

Why are some countries banking on organic as an environmental, economic and rural development strategy? On a continuum of environmentally friendly practices, regenerative organic practices are at the apex. Organic agriculture relies on systems that work with nature, rather than against it. While scientists continue to debate other benefits such as health and nutrition, the environmental benefits of organic farming systems are well-established and include:

- **Improved biodiversity.** Organic farms have greater plant and faunal diversity (insects, soil fauna and microbes, birds) and often more habitat and landscape diversity. ^{Reviewed in 2 3}
- **Reduced greenhouse gas (GHG) emissions.** Organic farming systems produce similar crop calories to conventional systems per acre but use 40% fewer fossil fuels. They also produce 30% less nitrous oxide per bushel of wheat produced.⁴ Organic crops grown in Canada produce on average 35% lower GHG emissions per acre and 15% lower emissions per unit of production.⁵
- **Improved long term storage of carbon in soils.** Soils contain roughly twice as much carbon as the earth's atmosphere, so storing carbon in soils can buy time to retool energy systems away from fossil fuels. Soils managed using organic farming methods can sequester more carbon in the soil than conventionally managed soils.⁶ Organic farms were found to have over twice the percentage of soil organic matter in a study comparing 30 organic mixed vegetable farms with 10 conventional benchmark farms in Michigan.⁷
- **Reduced risk of nutrient loading and leaching.** Organic management can reduce the risk of off-farm nutrient losses to air and water.⁸

² John P. Reganold and Jonathan M. Wachter, 2016. Organic Agriculture in the Twenty-First Century. *Nature Plants*, 2. <https://www.nature.com/articles/nplants2015221>.

³ Gong S, Hodgson JA, Tschardtke T, Liu Y, van der Werf W, Batáry P, Knops JMH, Zou Y. Biodiversity and yield trade-offs for organic farming. *Ecol Lett.* 2022 Jul;25(7):1699-1710. doi: 10.1111/ele.14017. Epub 2022 May 11. PMID: 35545523.

⁴ Hoepfner, J.W., Entz, M.H., McConkey, B.G., Zentner, R.P. and Nagy, C.N., 2006. Energy use and efficiency in two Canadian organic and conventional crop production systems. *Renewable Agriculture and Food Systems*, pp.60-67.

⁵ Canadian Organic Growers' Organic Task Force. Data adapted from: Boschiero, M., De Laurentis, V., Caldeira, C., & Sala, S. (2023). Comparison of organic and conventional cropping systems: A systematic review of life cycle assessment studies. *Environmental Impact Assessment Review*, 102, 107187. <https://doi.org/10.1016/j.eiar.2023.107187>.

⁶ Elham A. Ghabbour, Geoffrey Davies, Tracy Misiewicz, Reem A. Alami, Erin M. Askounis, Nicholas P. Cuzzo, Alexia J. Filice, Jennifer M. Haskell, Andy K. Moy, Alexandra C. Roach, Jessica Shade, 2017. Chapter One – National Comparison of the Total and Sequestered Organic Matter Contents of Conventional and Organic Farm Soils, *Advances in Agronomy*, 146: 1-35.

⁷ Kaufman, M.M., Steffen, J.M. & Yates, K.L. Sustainability of soil organic matter at organic mixed vegetable farms in Michigan, USA. *Org. Agr.* 10, 487–496 (2020). <https://doi.org/10.1007/s13165-020-00310-6>.

⁸ Roberts, C. J., Lynch, D. H., Voroney, R. P., Martin, R. C., & Juurlink, S. D. (2008). Nutrient budgets of Ontario organic dairy farms. *Canadian Journal of Soil Science*, 88(1), 107-114. DOI:10.4141/S06-056.

Additionally, forthcoming research demonstrates that organic farming can yield significantly higher long-term net returns to farmers.⁹

LACK OF DATA REDUCES ECONOMIC POTENTIAL AND COMPETITIVENESS

Outside of Quebec, there are no publicly available data on basic organic production provided by the government. Organic ingredient buyers lack information on acreage and the location of specific organic crops and livestock, which are fundamental to making investment decisions. Thus, Canada risks forfeiting economic opportunities associated with organic food production and processing. With its strict standards, government oversight, and international harmonization, organic is one of the few market claims associated with demonstrable premiums in the marketplace. This means higher prices and profits for farmers, traders, processors, and retailers.

Business planning in the organic sector is hampered by lack of data.

From a sourcing and procurement perspective, identifying market trends for organic commodities has always been challenging. Tracking market trends for conventional commodities is relatively easier. When assessing market trends, we consider factors such as crop yields, prices, and supply chain stability. Over the years, we've had to rely on information from our vendors when contracting for organic commodities, which could be biased. In some instances, we had to use the conventional commodity trend to assume what the trend for the organic market would be like. Having access to unbiased market trend analysis would be highly beneficial for buyers and sourcing professionals.

Renuka Rane, Senior Sourcing Specialist, Riverside Natural Foods, Ontario

Although we have a good connection with our grower base, there is still a need for better data to help with our supply chain planning. There was a good Canadian organic market overview done a few years ago that showed trends of acres, number of producers, farm size, crop types produced, breakdown of production by province, etc. It was extremely valuable to know the trends and how that may impact our ability to source our supply. Those reports may be costly and time consuming to put together, but it's extremely helpful information to understand how the production supply is evolving.

Clarence Shwaluk, Director of Farm Operations, Manitoba Harvest, Manitoba

I see a big gap in visibility on organic acreage year over year in Canada – what areas we are gaining and more importantly, what we are losing. I would presume this information is available given that organic companies need to report that for certification. I would love to have visibility on our current landscape.

Salma Fotovat, Co-Founder & Director of Sourcing and Procurement, Riverside Natural Foods, Ontario

Lack of basic public information about organic agriculture adds business risk to a sector already seen as a high-risk investment. Manufacturers considering new processing facilities in Canada cannot find the detailed information on organic ingredient supplies and costs they need for business planning.

⁹ Canadian Organic Growers' Organic Task Force. <https://cog.ca/>.

Without this information, they cannot raise the capital for investment. Lack of processing capacity is a major barrier hampering the growth of the organic sector in Canada.¹⁰

Over the past few years, I have received requests for information from a U.S.-based organization with clients in the oat processing sector. Since Canada is a leading global supplier of organic oats, it makes sense for oat processors to locate near that supply. However, on two separate occasions, businesses chose not to do business in Canada because information about the location of organic growers, yields and volumes was not available.

Laura Telford, Industry Development Specialist, Manitoba Agriculture, Manitoba

Recently, a food processor began construction of a new facility in Ontario. The business plans to use Ontario-grown organic ingredients but they have been unable to find information about production volumes, locations of potential suppliers or co-processors needed to develop a comprehensive supply plan.

Carolyn Young, Executive Director, Organic Council of Ontario, Ontario

When a new organic processor sets up, it can take a long time to transition producers near the facility to organic since the Canadian Organic Standards require land to be farmed organically for three years before certification can be granted. While growing local supply, processors need to procure ingredients from further afield. Lack of information about organic producer locations represents increased costs for processors and lost economic opportunities for the producers that could fill that supply gap, while Canada misses out on the environmental and economic benefits of organic production.

Due to lack of available data, a new food processor in the Prairie region is considering importing organic grains even though it is likely that there are organic farmers in the region that could supply the orders.

Laura Telford, Industry Development Specialist, Manitoba Agriculture, Manitoba

For some Canadian businesses, lack of data has meant saying no to new market opportunities.

Recently we had to turn down a request to list our organic beef products in Costco Canada due to supply challenges. We have been unable to scale up quickly enough to meet the needs of the market because we can't find producers with certified organic beef.

Bryce Lobreau, co-founder 8-Acres, Manitoba

MULTIPLE AUTHORITIES CREATE DATA GAPS

Expansion within the Canadian organic sector has been rapid, in no small part due to the many federal and provincial government departments and agencies that have provided regulatory oversight, strategic advice, funding, market support, and other services over the years.

¹⁰ Canada Organic Trade Association. (2018). Organic Food Processing in Canada. <https://canada-organic.myshopify.com/collections/coming-soon-organic-food-processing-in-canada/products/organic-food-processing-report-state-of-the-industry-2018>.

When it comes to data, however, multiple government agencies with different mandates can create significant gaps and hamper growth.

The **CFIA** is the competent authority for organic agriculture. It administers the Safe Food for Canadians Act (SFCA) and Regulations and the Food and Drugs Act and Regulations. Organic agriculture and aquaculture are covered by these instruments and oversight of the Canada Organic Regime (COR) is elaborated through internal policies and guidance documents. CFIA oversees enforcement of these rules, accredits Conformity Verification Bodies (CVBs) and CBs, manages Canada's international Organic Equivalency Arrangements, and verifies that imported organic food complies with Canadian rules. As part of its enforcement mandate, it collects data from CBs on organic operators and acreage. Other than information about the CVBs and CBs that it accredits and canceled certifications, **CFIA does not publish data on organic agriculture.**

Agriculture and Agri-Food Canada (AAFC) supports market growth and market access, works with the provinces and territories to promote Canadian agricultural products, develops risk mitigation tools, and supports science and technology. It plays a role in the organic data ecosystem by working with Statistics Canada on specialized organic harmonized series (HS) codes, publishing market information about organic, and funding the industry to undertake special data projects.

Statistics Canada is Canada's national data agency. It administers a multitude of survey-based agricultural instruments, as well as a detailed agricultural census every five years. These tools provide a wealth of information on crops and livestock that businesses use to track the volume and location of crop and livestock production across the country. Statistics Canada also tracks food processing, imports and exports, and other information that helps Canadian agri-businesses compete internationally. Currently, there are few specialized data tools for the organic sector. The Census does track the number of organic farm operations every five years, but acreage information is not collected. Of the hundreds of HS codes, only 68 specialized organic HS import codes are available and only 18 export codes.

In the U.S., which has a comprehensive organic data system compared to Canada, the USDA is the single competent authority responsible for regulatory oversight and compliance, marketing, and data collection. This unified approach allows for streamlined and consistent data collection and dissemination, building on the same primary data for enforcement, market, and trade activities.

Lack of cross-Government planning and internal policies limits access to organic data.

Competing mandates of Canadian Government departments and agencies means that they are often working at cross purposes. This is not an efficient use of resources. CFIA does collect information of great value to the sector, but the agency's mandate is enforcement and the data that it collects is used to advance that mandate. The agency does not have a mandate to collect high quality data or to analyze those data for reporting purposes. This is the mandate of Statistics Canada, which currently has access to very little, or incomplete, data sets on organic agriculture.

Recently, as part of its mandate to maintain organic integrity, CFIA has begun to develop specialized organic codes within its Automated Import Reference System (AIRS) to ensure that imported organic food meets Canadian requirements. The system builds on existing HS codes used to track imports. With greater cooperation between federal departments, this system could have been designed with multiple functions in mind. A comprehensive picture of how much of the organic food sold in Canada is imported is critical to the business planning of Canadian companies which currently have access to import information from 68 HS codes.

Other internal policies, such as Statistics Canada’s desire to reduce costs and move away from respondent-collected data through its recent AgZero Project, limits Canada’s ability to collect the type of in-depth information about organic production that the USDA collects by survey.

PUBLIC ORGANIC DATA IN QUEBEC AND THE UNITED STATES

While growth has stalled in many areas of Canada in recent years, the organic sector in Quebec (QC) continues to flourish. Between 2019 and 2023, QC organic acreage grew from 242,163 acres to 259,664 acres, representing 7% growth. While that growth is likely attributable to financial support to farmers from the provincial government, the province’s investment in organic data allows for an analysis, review and discussion of the area under organic production that is not possible in other regions. Quebec is the only Canadian jurisdiction that collects and publishes detailed data on acreage by crop and other operator data used to benchmark the organic sector’s success (<https://portailbioquebec.info/>). Through provincial regulation, *Loi sur les appellations réservées et les termes valorisants*, CBs accredited to operate in the province are required to provide information about numbers and types of operations, acreage by crops and number of livestock on an annual basis. This information is made publicly available in order to improve transparency and provide the necessary business data required by businesses and policy makers.

The USDA collects detailed production information from primary operators every two years via a census process. These data are also made publicly available as soon as they are analysed. As noted earlier, the USDA also maintains an *OID* that is continuously updated with the input of the CBs.

BUILDING AN ORGANIC DATA ECOSYSTEM

Data needed to stimulate economic growth and assure organic integrity include:

- An annually updated list of organic operators in Canada, including:
 - name or business name, operation type, type of certification, and contact information as well as name of organic certification body.
 - for terrestrial and aquaculture farms: a list of crops and livestock produced, acreage for each crop, and livestock head.
- List of processed products produced by farms, handlers and processors.
- Up-to-date list of cancelled certifications, including reasons for cancellation.
- Up-to-date list of suspended operators at the time of data collection (to help verify if an operator came out of suspension and their acreage/livestock units should be included in the data or not)

Recommendations for achieving these steps:

The Canadian Government should:

1. Establish an interdepartmental and coordinated approach to:
 - Develop a standardized list of livestock (including aquaculture species) and crops.
 - Collect data in the standardized format through mandatory annual surveys from all CBs accredited to operate in Canada.

2. Design an electronic platform to house publicly available data. The database should include:
 - Searchable fields that include:
 - Operation (company name, contact last name)
 - Scope/operator type
 - Services (storage, broker, distributor, private labeler, slaughterhouse, restaurant, co-packer, farm, processor, trader)
 - Product (processed food, crop, livestock)
 - COR Certification Body
 - Province
 - City/town
 - Postal code
 - Certificate number
 - Operator fields should include certification status, legal name, certificate number, products grown or processed, CB, phone number, email address, mailing address.
 - Farm operations should also include acreage for each crop type produced and numbers of each livestock type produced.
 - The database should include an option to download data summaries related to search items.
 - Number of certificate cancellations by cancellation type for each province.
3. Allocate resources for ongoing management and maintenance of the data and database.
4. Make necessary modifications to the HS-OGD code system used by AIRS to extend the utility of the data to track the volume and value of organic products that are imported to Canada.
5. Publish annual reports that provide a detailed analysis of production (by product type, by province, with crop acreage and operators), manufacturing and trade volumes and product types, and sales data (domestic, import and export by volume and value) to assess data and trends in organic agriculture, aquaculture, trade and food processing in Canada.

AN OPPORTUNITY TO COLLABORATE TO ENHANCE CANADA'S DATA ECOSYSTEM

The organic industry is not alone in requesting more data. Canada is developing a national Sustainable Agricultural Strategy (SAS). This strategy recognizes that any shifts in production methods designed to meet our government commitments to enhancing diversity and decreasing greenhouse gas emissions, must be accompanied by appropriate data and tools to track and quantify the changes. AAFC is in the process of identifying sources of data to track progress in meeting the strategy goals. Organic agriculture forms an important part of the strategy and AAFC needs access to high quality data to benchmark the performance of the sector.

The agricultural sector as a whole also has concerns about Canada's agricultural 'data ecosystem'. On July 17, 2024 the Canadian Federation of Agriculture (CFA) hosted an industry-Government Roundtable in conjunction with a Federal Provincial Territorial Agriculture Ministers meeting in Whitehorse, Yukon. The goal was "the development of an agricultural data ecosystem that supports improved policymaking, farm level decision-making, and market development opportunities is crucial in enabling further growth in the agriculture sector that is environmentally, financially, and socially sustainable. Data will serve as the foundation for that growth." A significant outcome from the roundtable discussion is the CFA's release of a comprehensive report *Data as a Foundation for*

*Sustainable Productivity Growth*¹¹ which outlines key recommendations for a pan-Canadian data strategy, standards development and capacity building within the agriculture industry.

To fully address the growing demand for improved data across all sectors of agriculture, it is essential to adopt a comprehensive and inclusive approach, integrating organic farming and other sustainability practices into a broader data framework.

¹¹ Canadian Federation of Agriculture. (2024). Data as a Foundation for Sustainable Productivity Growth. <https://www.cfa-fca.ca/wp-content/uploads/2024/09/Data-as-a-Foundation-for-Sustainable-Productivity-Growth-2.pdf>.