

Agri-food regions in Canada: a transition lens

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Experience and research on agri-food¹ transitions globally indicates that building alliances between those anchored in mainstream and alternative approaches can help change unsustainable practices at scale. Such collaborations can be particularly potent when organized at local and regional levels, where they can connect regional suppliers and consumers, draw on local/regional identities, be linked to economic development activities, help maintain or revitalize diverse food processing and distribution infrastructure and build agency among reform-oriented actors.²

Building on recommendations in the September 2023 report, [Strategic Framework for Accelerating Sustainable Agriculture in Canada: Recommendations for Philanthropy](#) (Andrée, Hunter and Meadowcroft), FoodBridge undertook a process to identify factors in agri-food regions transitioning toward widespread adoption of sustainable and regenerative agricultural practices. Such practices can improve soil health and water quality, enhance biodiversity, and increase resilience to climate change. Methods include diverse crop rotations, cover cropping, reduced tillage, minimizing synthetic inputs, and integrated livestock management.

What is a region?

Canada is generally considered to contain five regions (Atlantic provinces, Central Canada, Prairies, West Coast, Northern Territories), but in the context of regional agri-food transitions, “regions” are typically geographically smaller, for example a municipality, a set of counties or a small province. From an ecological perspective, agri-food regions can be defined by the homogeneity of distinct biophysical attributes and consistent management approaches within a food production area. This way of defining regions is used in the “FoodScapes” approach fostered by The Nature Conservancy. An example of an

¹ The Food and Agriculture Organization of the United Nations' (FAO) definition of agri-food includes all the interconnected activities and actors involved in a system moving food from the field to the consumer's table.

² Sibylle Bui et al., Sustainability transitions: Insights on processes of niche-regime interaction and regime reconfiguration in agri-food systems, *Journal of Rural Studies* 48 (2016) 92e103; El Bilali, H. (2019). The Multi-Level Perspective in Research on Sustainability Transitions in Agriculture and Food Systems: A Systematic Review. *Agriculture*, 9(4), 74. <https://doi.org/10.3390/agriculture9040074>.

agri-food region not exclusively defined by provincial borders is the Aspen Parkland region, which spans portions of Alberta, Saskatchewan and Manitoba.³

A developing body of work refers to “landscape” approaches, which considers broad land management strategies that often involve multiple land uses and sectors. Such approaches emphasize multi-stakeholder collaboration to test locally relevant strategic approaches and scale those that prove successful.⁴ “Jurisdictional” approaches are a subset of landscape approaches that use human-defined administrative boundaries (municipalities, counties, provinces) rather than ecological ones (watersheds).

Agri-food regions can include larger-scale farms that supply companies, major retail outlets or export markets, as well as smaller farms that sell directly to consumers through local market channels.

Qualities of agri-food regions in transition

Four main characteristics help describe agri-food regions and their potential to engage in sustainability transitions. These qualities speak to the strength, resilience and collaborative nature of sustainable agriculture activity in these areas:

1. Strategic importance and identity

Agricultural production levels are closely tied to income for farmers as well as the larger food industry and surrounding communities. Export-oriented production systems provide sales volume, but regions which add value to agriculture through processing and manufacturing contribute to economic stability by supporting local employment, fostering innovation and mitigating the volatility of global commodity markets.

When considering regions of the most significant agricultural output, the Prairie region leads by far, with more than 80% of Canada’s total acreage of farmland. Ontario is the province with the highest number of farms and Quebec leads in number of organic farms, reflecting the province’s long-standing and robust support network and programs for organic production.

³ Representing a distinct and fertile agricultural landscape, the region has been the object of conservation efforts by the Nature Conservancy of Canada and Ducks Unlimited and more recent landscape level work by Nature United.

⁴ The Nature Conservancy. (2021). *Foodscapes: Toward food system transition*. https://www.nature.org/content/dam/tnc/nature/en/documents/TNC_FoodscapesReport.pdf; CDP. (n.d.). *Meeting nature goals: Landscape and jurisdictional approaches*. <https://www.cdp.net/en/forests/meeting-nature-goals-landscape-and-jurisdictional-approaches>.

More generally, agricultural production levels can vary widely within provinces, due to significant differences in soil type, climatic conditions and regional support. For example, though Northern Ontario accounts for over 85% of the province's total land, the majority of agricultural production is concentrated in the southwestern region of the province, particularly within the Greenbelt. In the Prairies, there are significant variations in temperatures (higher in the south) and precipitation (more in the north) causing production differences despite similarities in landscapes.

Environmental impact and opportunity of agriculture: There is a significant connection between environmental impact and agricultural productivity. For example, the highly productive, large-scale nature of agriculture in the Prairies also coincides with the highest total quantities of fertilizers and pesticides applied; the region represents 63% of Canada's nitrogen fertilizer emissions.⁵ At the same time, there is a major opportunity for the Prairies to provide environmental solutions such as climate mitigation.⁶

With regard to biodiversity broadly (beyond only agricultural biodiversity), British Columbia has the highest number of endangered species of both plants and animals in Canada. However, when looking at species density—the number of species relative to the area—Prince Edward Island, Nova Scotia and New Brunswick emerge as the most species-rich regions.⁷

Regional identity – Many regions across the country have rich connections to agriculture as a defining aspect of identity. This can include entire provinces, such as Prince Edward Island (PEI), known as "[Canada's Food Island](#)," which offers a vibrant culinary scene with numerous farm-to-table restaurants that showcase the island's agricultural abundance. PEI's deep agricultural heritage is reflected in its landscape, culture, economy and tourism, with events such as the *PEI Potato Blossom Festival* celebrating the island's staple crop. As a source of over 25% of Canada's total potato production and home to more than 100 different varieties of potatoes, PEI's potato industry plays a central role in the region's identity.⁸

⁵ Fertilizer Canada. (2023). *Response to the consultation on the environmental risk assessment framework*. https://fertilizercanada.ca/wp-content/uploads/2023/01/Fertilizer-Canada_ERI-Consultation-Response.pdf

⁶ Drever, C. R., et al. (2019). *Natural climate solutions for Canada*. *Science Advances*, 7(23). <https://www.science.org/doi/10.1126/sciadv.abd6034>

⁷ National General Status Working Group. (2021). *Wild species 2020: The general status of species in Canada*. <https://www.wildspecies.ca/reports>

⁸ Farm & Food Care Prince Edward Island. (n.d.). Potatoes. <https://farmfoodcarepei.com/crop/potatoes/>

2. Supportive regional environment

On questions of community engagement, funding opportunities and relevant policies related to sustainable agriculture, several regions in Canada provide ongoing initiatives to support regional food work. For example, the Montérégie region in Québec is supported by a [region-specific food strategy and fund](#) in addition to several programs funded by provincial and federal governments, philanthropy and the Union de producteurs agricoles (farmers' union). In Ontario, the [Experimental Acres](#) initiative in three counties facilitates a micro-grant programme to encourage on-farm transition to regenerative practices, along with soil testing and community events.

Provinces can vary significantly in their support of regenerative agriculture, with some offering tailored programs or strategies for regional adaptation. For instance, the Government of British Columbia has developed a strategic framework aimed at promoting sustainable agriculture through the adoption of regenerative practices, with a particular emphasis on leveraging agri-tech innovations. Provinces also differ in their support for agronomic and peer-to-peer learning supports. For example, the Quebec government provides significant support for independent crop advisors; in other provinces a range of technical and peer-to-peer programs have emerged in the vacuum created by the gutting of government and university extension services.

3. Diverse organizations working in sustainable agriculture

Certain regions demonstrate a deep-rooted commitment to sustainable agriculture, as evidenced by the number of sustainable agriculture focused initiatives, active organizations and regional investments. This identity is often connected to a longstanding history of engagement with transition-focused practices. For example, Wellington County, Ontario, is home to a diverse range of long established agricultural groups, including government bodies, NGOs and local farming networks. The University of Guelph, a hub of agricultural research and innovation, hosts the Arrell Food Institute, the Guelph Centre for Urban Organic Farming and Soils@Guelph, all of which work to advance sustainable agriculture in Ontario.

4. Vibrant multi-stakeholder collaborations

There are many instances of innovative regional initiatives or networks involving diverse stakeholders that reflect a combination of bottom up and top down approaches to markets and agribusiness, including a growing number of partnerships between companies and non-profits. In southern Manitoba, for example, numerous initiatives are driving the adoption of sustainable agricultural practices and several reach across sectors. The *Growing Roots* program, led by ALUS and General Mills, supports farmers and ranchers in transitioning to regenerative practices by creating on-field projects, fostering peer-to-peer learning opportunities and building local producer networks. The annual *Direct Farm Manitoba Conference* unites producers, organizations and businesses to discuss emerging marketing strategies, stay informed on the latest trends and strengthen peer-to-peer relationships.

In summary, fostering agri-food regions that unite the strengths of both mainstream and alternative approaches is essential for driving sustainability transitions at scale. With focus on local and regional coalitions, we can leverage common values across stakeholder groups and advance sustainability practices that align with both economic and environmental priorities. This strategy not only enhances the resilience and prosperity of agri-food systems but can also support soil health, water quality, biodiversity and reduced greenhouse gas emissions, building a strong foundation for the future of food production in Canada.