



Support for Sustainable Food Systems



Unsustainable farming and fishing practices have put a huge strain on our land, air, waterways and oceans, threatening the viability of our food-production systems and other ecosystem services. Our current food system is a leading contributor to climate change, and we do not properly recognize the environmental costs of the current food-production and distribution systems - namely water and air pollution, soil contamination, and loss of biodiversity.

The 2011 Biodiversity Compound Index of Canada's agricultural sector is rated at 44 (Moderate). While a slight increase from 2006, it illustrates that far more can and should be done to improve biodiversity. Improvements were seen in air quality from 2006-2011, while water quality has decreased. Despite commitments to increase environmentally sustainable agricultural practices, the number of acres in Canada subject to fertilizers, herbicides, insecticides and fungicides continues to rise¹. Since the beginning of the 20th C, some 75 percent of plant genetic diversity has been lost at a global level and 30 percent of livestock breeds are at risk of extinction.

Sustainability is about much more than the environment - it is about ensuring decent livelihoods, vibrant communities and resilient regional economies. Across the country, new farmers are struggling to access farmland, training and start-up capital. The value of land and buildings increased nearly 40 percent from 2011, and Farm Credit Canada predicts farm debt will soon reach one billion dollars. There is also a pressing labour shortage in Canada's food system, along with an urgent need to address working conditions, particularly those of migrant workers.

Vital statistics

Canadians waste 40% of the food we produce, costing us \$31 billion yearly.²

Crop and animal production accounted for 12% of all industry greenhouse gas emissions in Canada in 2013.

Only 1/4 of Canada's fish stock are considered to be at healthy levels, and the lack of species diversity in Canada's seafood industry leaves many coastal communities vulnerable to further stock declines (Oceana 2016).³

The average age of Canadian farmers continues to rise, now at 55, while the number of farms continues to drop, down 6% from 2011.⁴

A 2005 meta-analysis found that organic farms have approximately 30% higher species richness and 50% higher abundance of organisms than conventional farms.⁵

There is a significant imbalance between investments and research in organics compared with conventional approaches: only 0.25% of Agriculture and Agri-Food Canada's 2015 R&D budget went towards organic agriculture, despite the sector's accounting for 2% of Canadian agriculture.⁶





What needs to be done

A national food policy should encourage food production and provisioning practices that enhance, rather than depleting, the natural environment and that contribute to an overall vision where all people in Canada have access to long-term, reliable, resilient and culturally appropriate food systems. This requires not only the conservation of our soil, water and air but also the conservation and protection of agricultural land, forests and wetlands and the protection and enhancement of biodiversity. Indigenous peoples and communities have been leaders in protecting our land and natural resources and should be recognized for this leadership.

The federal government has acknowledged the importance of shifting Canadian agriculture to more ecological and climate-resilient practices as part of the next Agricultural Policy Framework (The Calgary Statement 2016). This prioritization needs to be applied through the national food policy to all sectors of food production, distribution and processing and waste management. In particular, we need to maintain and properly manage our marine environment so that it is able to support commercially viable fisheries and aquaculture, and to mitigate climate change and support food security for coastal communities.

Climate change is a key consideration of environmental sustainability, but it is not the only pressing concern. A narrow focus on climate change adaptation will not be sufficient to ensure long-term sustainability of our agri-food system and the broader biodiverse ecosystems upon which it relies. To create a truly sustainable future for food, we need to catalyze a paradigm shift that re-orientes our food policies away from a strict prioritization of large-scale, export-oriented growth to embrace a more diverse and agro-ecological approach that will ensure prosperity for farmers, fishers and ranchers for generations to come.

A key part of this is developing a food-systems lens that connects the different points along the production and consumption pathways, so that we understand the interrelation between different environmental indicators, such as soil quality, biodiversity and greenhouse gas emissions. Sustainability and economic growth can be mutually supportive, but this will require a rethink on priorities (eg. valuing both domestic and international markets) and a shift to more long-term thinking.

National food policy is an opportunity to further develop and enhance innovative food production and provisioning methods that protect our land, air, water and forests, enhance biodiversity and contribute to a diverse, resilient food system that can respond effectively to the challenges presented by a changing climate.





National Food Policy Priority Actions

Initiate a review of food and agricultural policies to ensure that programs and supports are inclusive of a diversity of food and agricultural operations across different scales, production practices and market channels, particularly those that promote sustainable practices.

Establish supports and training opportunities for farmers and fishers to transition to more agro-ecological production regimes, including significant new support for new entrants and public funding for farmer-led R&D in organics and knowledge transfer.

Direct a revision of Canada's Fisheries Act to better protect fish habitats and support sustainable fisheries in coastal communities.

Establish a national synthetic pesticide reduction strategy that includes research and development, regulation, knowledge transfer and fiscal incentives to make Canada a leader in sustainable low-risk pest management.

Improve the independent assessment and transparency around the genetically modified foods approval processes and address the pollution of non-GM crops by GM producers.

Protect and enhance biodiversity by implementing the International Treaty on Plant Genetic Resources for Food and Agriculture (adopted in 2001), which outlines an Access and Benefit Sharing regime for the use of genetic plant materials in food and agriculture and recognizes the contribution of farmers to the diversity of crops.

Key resources

USC Canada. [How Canada can support more diverse and resilient food systems](#). June 2017

[Report of the Special Rapporteur on the right to food: Effects of pesticides on the right to food](#). Report to the Human Rights Council. January 2017.

IPES. [From Uniformity to Diversity: A paradigm shift from industrial agriculture to diversified agroecological systems](#). 2016.

Canadian Organic Growers, USC Canada, Canadian Organic Trade Association and the Organic Federation of Canada. [Investing in Organic Agriculture: A Path to Clean, Inclusive Economic Growth. Recommendations for the Next Agricultural Framework](#). November 2016.

Charles Z. Levkoe, Rachael Lefebvre and Alison Blay-Palmer. [Food Counts: Pan-Canadian Sustainable Food Systems Report Card](#). May 2017.

Agriculture and Agri-Food Canada. [Environmental Sustainability of Canadian Agriculture: Agri-Environmental Indicator Report Series – Report #4](#)

Ross, Karen [Bringing innovation to pest management policy](#). May 2017

¹ Levkoe et al (2017). [Food Counts: A Pan-Canadian Sustainable Food Systems Report Card](#)

² Gooch and Felfel (2014). "\$27 Billion Revisited: The Cost of Canada's Annual Food Waste." Value Chain Management International Inc.

³ Oceana (2016). [Here's the Catch: How to Restore Abundance to Canada's Oceans](#)

⁴ Statistics Canada (2017). [2016 Agricultural Census](#).

⁵ Bengtsson et al. (2005). [The effects of organic agriculture on biodiversity and abundance: a meta-analysis](#).

⁶ Agriculture and Agri-Food Canada's 2016 overview reports that \$649.5 million were invested in agricultural research and development in 2015. Only \$1.6-million of it went to organic agriculture in that same year—that's a mere 0.25 percent of the R&D budget.

