

3 DELIVERING ON CANADA'S COMMITMENTS TO SUSTAINABLE AGRICULTURE



Photo: Arnaldo Aldana

Recommendation Summary

Agricultural pollution, land conversion and climate change are increasingly jeopardizing the competitiveness and resilience of our agricultural sector — a sector that is key to our thriving economy. Canada is already committed to minimizing the environmental impacts of our working agricultural landscapes, through various international and domestic targets on sustainable agriculture and on-farm biodiversity conservation, such as the UN Sustainable Development Goals (SDGs) and Canada's 2020 Biodiversity Targets. However, as noted by the federal Commissioner of Environment and Sustainable Development Spring 2018



**GBC Feature
Recommendations –
Alignment with
Political Priorities**

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**Sustainable
Agriculture**

Meeting Public
Expectations ✓

Improving
Health &
Wellbeing ✓

Reducing GHG
Emissions ✓

Climate
Resilience ✓

Reconciliation
with Indigenous
Peoples ✓

Healthy
Waters ✓

Protecting
Nature &
Wildlife ✓

Clean Growth &
Innovation ✓

Economically
Sustainable
Rural & Remote
Communities ✓

reports,¹² Canada will fail to meet both these targets unless it takes decisive action through strategic and targeted investments beyond announcements already made under the new Canadian Agricultural Partnership and a Food Policy for Canada.

The Green Budget Coalition recommends that the Government of Canada invest **\$117 million per year for the next five years (2019-2024)** to improve the sustainability, resilience and competitiveness of the agricultural sector via the following programs:

1. Agri-Environmental Programs: **\$109 million per year**
2. R&D in Environmentally Sustainable Agriculture: **\$4.4 million per year**
3. Food Waste Prevention Program: **\$3.6 million per year**

These programs and their rationale are outlined in the following pages and detailed online at **www.greenbudget.ca/2019Agriculture**.



Photo: © Georgia McNeil, Ecology Action Centre

12. The Commissioner of the Environment and Sustainable Development released the following 2 reports in Spring 2018: Canada’s Preparedness to Implement the United Nations’ Sustainable Development Goals, and Conserving Biodiversity. http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201804_02_e_42993.html, http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201804_03_e_42994.html.

Recommendation Summary (continued)

PROGRAM	COST/PROGRAM DETAIL	MAIN OUTCOMES
<p>AGRI-ENVIRONMENTAL PROGRAMS</p> <p>Create positive incentives for on-farm conservation.</p>	<p>\$109 million/year for five years for:</p> <ul style="list-style-type: none"> • Impact assessment of agriculture on biodiversity in Canada (\$2M/year for 5 years) • Improvement of indicators/metrics for biodiversity (\$4M/year for 5 years) • Creation of incentives for provinces to develop Safe Harbour Program (\$5M/year for 5 years) • Establishment of a Pollinator Conservation Initiative (\$12M/year for 5 years) • Development of a National Pesticide Reduction Strategy (\$12M/year for 5 years) • Establishment of a National Perennial Cover Incentive Program (\$24M/year for 5 years) • Establishment of a National Land Management & Stewardship Program (\$50M/year for 5 years) 	<ul style="list-style-type: none"> • Sustainably conserve and enhance on-farm biodiversity • Protect soils and water against degradation, loss and pollution • Increase sector competitiveness • Increase climate resilience for farmers
<p>R&D IN ENVIRONMENTALLY SUSTAINABLE AGRICULTURE</p> <p>Accelerate the development and adoption of best environmentally sustainable practices</p>	<p>\$4.4 million/year for five years for:</p> <ul style="list-style-type: none"> • On-farm participatory R&D to conserve, breed and adapt seeds that perform well under low-input and organic practices (\$2M/year for 5 years) • R&D in agro-ecological climate change mitigation and adaptation practices (\$2.4M/year for 5 years) 	<ul style="list-style-type: none"> • Sustainably conserve and enhance on-farm biodiversity • Encourage the sustainable use of biodiversity • Contribute to climate change mitigation and adaptation and strengthen climate-resilience • Grow more high-quality food • Lower environmental footprint of agricultural practices • Increase sector competitiveness
<p>FOOD WASTE PREVENTION PROGRAM</p> <p>Align sectoral efforts and collaborate across the value-chain to prevent food losses and waste.</p>	<p>\$3.6 million/year for five years for:</p> <ul style="list-style-type: none"> • Food Waste Prevention Program (\$3.6M/year for 5 years) 	<ul style="list-style-type: none"> • Lower environmental footprint of the agri-food sector • Reduce greenhouse gas emissions associated with food loss and food waste • Reduce pressures on water, land and other resources • Improve economic opportunities for farmers and along the value-chain • Improve food system resilience and food security • Increase sector competitiveness
<p>TOTAL</p>	<p>\$117M/year for five years</p>	

***** For more details on these recommended investments** (e.g., program structure, and other trading partners that invest in similar programs), **please see www.greenbudget.ca/2019Agriculture** ***



Photo: Syda Productions

Background and Rationale

Investing in environmentally sustainable agriculture leads to a more productive and less polluting sector and creates more green jobs.

As the Barton report¹³ highlighted, Canada’s prosperity depends on a vibrant agriculture and food sector — that is a sector that is both financially and environmentally sustainable. Yet, the negative environmental impacts of this very large and important sector of our economy remain relatively un-checked. Our food system contributes about 30 percent of all greenhouse gas emissions,¹⁴ more than any other sector except energy production, yet agriculture is often overlooked in climate change discussions and action plans, including the Pan-Canadian Framework on Clean Growth and Climate Change. Worldwide, conventional farming practices cost the environment some \$3 trillion per year¹⁵ — almost twice Canada’s annual GDP.¹⁶ At the same time, agricultural productivity is impacted by climate change, such as through droughts, flooding, changing temperatures, new crop pests, and will increasingly be so.

Agriculture can play a more significant role in reversing climate change impacts. Research by the UN Environment Programme indicates that investing in the ‘greening’ of agriculture and fisheries, compared to continuing with ‘business as usual’, would produce \$293 billion more economic value-added per year by 2050 — an 11% increase¹⁷ — and doing so would also mean a more productive and less polluting sector that would create more jobs.

Agro-ecological approaches help us directly meet 15 of the 17 SDGs

...and many of the CBD's Alchi Biodiversity targets

Source: FAO, (2018): Catalysing Dialogue and Cooperation to Scale Up Agroecology: Outcomes of the FAO Regional Seminars on Agroecology, p. 70-71

13. Advisory Council on Economic Growth (2017). Unleashing the Growth Potential of Key Sectors. p. 8: <http://www.budget.gc.ca/aceg-ccce/pdf/key-sectors-secteurs-cles-eng.pdf>

14. According to Environment and Climate Change Canada, in Canada, one tenth (10.3%) of Canada’s GHG emissions are linked to agriculture. Agriculture also accounts for 27% and 70% of the national CH₄ and N₂O emissions, respectively, mostly due to the use of synthetic fertilizers. See the National inventory report 1990-2014: Greenhouse Gas Sources and Sinks in Canada, p.10. http://publications.gc.ca/collections/collection_2016/eccc/En81-4-1-2014-eng.pdf

15. Food and Agriculture Organization of the United Nations (FAO) (2015). Natural Capital Impacts in Agriculture. http://www.fao.org/fileadmin/templates/nr/sustainability_pathways/docs/Natural_Capital_Impacts_in_Agriculture_final.pdf

16. Canada’s GDP amounted to 1.53 trillion in 2017.

17. International Sustainability Unit (2011). What Price Resilience? Towards Sustainable and Secure Food Systems : https://pcfisu.org/wp-content/uploads/pdfs/TPC0632_Resilience_report_WEB11_07_SMALLER.pdf, p. 5



Photo: Foto Kostic

What is environmentally sustainable agriculture?

The goal of environmentally sustainable agriculture is to meet society's needs for nutritious and accessible food for everyone in a way that maintains ecosystem functions and also does not compromise the ability of future generations to meet their own needs. Environmentally sustainable agriculture:

- Relies on innovative practices that conserve, protect and enhance on-farm biodiversity, as well as soil, water and air quality and minimize downstream impacts;
- Seeks no net loss of natural cover;
- Minimizes the use and aims to move away from toxic synthetic fertilizers, pesticides and herbicides;
- Strengthens the resilience of agricultural ecosystems to cope with disturbance and climate change; and
- Aims to equally address the environmental, social and economic dimensions of agriculture.

Because it is context specific, environmentally sustainable agriculture takes many forms in Canada such as organic and diversified ecological farming, rotational grazing, cover cropping, sustainable agro-forestry, and agroecology.

Yielding multiple benefits for the environment, for our health and for the economy — including increased productivity under environmental stresses and better income for farmers — environmentally sustainable agriculture is thriving and growing quickly. For instance, organic agriculture, which has innovated some of the well-known environmentally sustainable practices, is one of the fastest growing sectors in the industry, with double-digit growth rates over the past decade¹⁸ and no signs of slowing down. Demand for environmentally sustainable agriculture is growing globally. Preparing our Canadian farmers for these domestic and international markets through Research and Development of agri-environmental techniques and knowledge transfer would help to position Canada as a global leader in agri-food systems.

18. <http://www.agr.gc.ca/eng/industry-markets-and-trade/canadian-agri-food-sector-intelligence/organic-products/canada-s-organic-products-industry-overview/?id=1276292934938>



Gender Analysis: The female face of farming

Women, and especially this generation of young women, are playing an increasingly larger role in agriculture. The 2016 Census of Agriculture showed that:

- While the number of farm operators in Canada is going down, the proportion of women is going up.
- Women accounted for 28.7% of all farm operators in 2016 (up from 27.4% in 2011) — nearly 78,000 of nearly 272,000 farmers in total. Women were most prevalent among farm operators between the ages of 35 and 54, representing nearly a third of the group.
- The percentage of farms with sole female and/or female & male operators is higher in organic (45%) compared to non-organic (40%).

Yet, women face important social and economic barriers to entering farming, including: that agriculture is still a male-dominated sector (with very few women in senior roles or positions), the challenges of balancing career and family, and the high capital cost of farmland and farm equipment. Low income women, new immigrants, young and aspiring female farmers, many of whom are not from farming backgrounds and carry student debt, simply cannot afford to take on the high costs of land and equipment, which can cost upward of a million dollars. Furthermore, an increasing number of women are choosing environmentally sustainable agriculture (organics, small ecological diversified farming)- sectors that are still vastly underfunded and for which Business Risk Management Programs are poorly adapted.

Supporting the leadership of women in agriculture, particularly environmentally sustainable agriculture in which they are leaders, has great potential for the future of farming and women in Canada.



Photo: Izf Studio

It is time for Canada to support greater innovation in this sector through investments that promote greater resilience and sustainability in our food system, especially in the face of climate change. Canada has the potential to become a world leader in environmentally sustainable agriculture that delivers critical environmental and social benefits. Doing so will also help better support gender equality, economic development and green jobs for Indigenous Peoples and new immigrants to Canada, as well as the next generation of farmers, all of whom are increasingly choosing environmentally sustainable agriculture.

Canada is already a signatory to a number of international agreements that recognize the importance of sustainable agriculture (e.g., Agenda 2030, Convention on Biological Diversity, Paris Agreement) and has developed several related national strategies (e.g., 2020 Biodiversity Targets). Canada has also committed to investments in sustainable agriculture and biodiversity through the Canadian Agriculture Partnership and A Food Policy for Canada. Yet, as the Commissioner of the Environment & Sustainable Development highlighted in her Spring 2018 reports,¹⁹ Canada is falling short and requires more strategic investments, beyond announcements already made, to achieve meaningful impact and meet its targets.

In recent years, Canada's agricultural sector has made efforts to become more environmentally sustainable. Yet, environmentally sustainable agriculture²⁰ — that delivers results on multiple fronts, including: yields, crop resilience, soil health, and reduced pollution — has been largely underfunded and the outcomes clearly reflect this insufficient level of support. As such, more investments in environmentally sustainable agriculture are urgently required.

For more details on these recommended investments, please see **www.greenbudget.ca/2019Agriculture**

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19. The Commissioner of the Environment and Sustainable Development released the following two reports in Spring 2018: Canada's Preparedness to Implement the United Nations' Sustainable Development Goals and Conserving Biodiversity. http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201804_02_e_42993.html & http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201804_03_e_42994.html

20. Canada's largest and most defined environmentally sustainable agriculture is its organic sector. Canada's total organic market (including food and non-food items) is estimated at \$5.4 billion, up from \$3.5 billion in 2012: <https://ota.com/sites/default/files/Canadian%20Organic%20Market%20Report%202017%20teaser.pdf>