



**FARMERS
FOR CLIMATE
SOLUTIONS**



A better future starts on the farm

**Recommendations for recovery from
COVID-19 in Canadian agriculture**

August 2020

Canadians know we need resilience in our food system.

The COVID-19 pandemic has shone a spotlight on our food system. Headlines have captured vulnerabilities and raised alarm bells among Canadians: outbreaks at beef-packing plants and bottlenecks in the meat supply chain; dairy farmers dumping milk; Canadian potatoes deteriorating in storehouses and contracts cut on the eve of a new season; ongoing farm labour shortages exacerbated by border closures; farm workers falling ill and dying.

The government's response to date has been rapid and commendable, but has mostly focused on temporary deferral of debt repayment or increased access to credit. This may provide short-term relief, but ultimately worsens the debt problem in agriculture, with total farm debt in Canada currently sitting at **\$115 billion after having nearly doubled in the past two decades**¹. A recent survey by the Canadian Federation of Independent Business (CFIB) reveals that 48% of farmers worry about the indebtedness of their business while 40% are concerned that the “new normal” will threaten the sustainability of their business.

Farm debt is not the only rising trend in Canadian agriculture. **Greenhouse gas (GHG) emissions are projected to increase over the next decade, already up 22% over the last 28 years. And, our farmers are on the front lines of increasing impacts from climate change.**

COVID-19 recovery should prioritize climate resilience in agriculture.

According to the United Nations' *Emissions Gap Report 2019*², the world is on track to warm by 3.2 degrees Celsius this century. This projection takes into account all current policies and all emission-reduction commitments, including those made in Paris where Canada committed to reducing emissions by 30% by 2030. A 3.2 degree rise will create major uncertainties for Canadian farmers. But the reality may be even worse: higher latitudes and continental interiors—areas such as the Canadian Prairies—**are warming at twice the global average**³. *The path we are on would have most of Canada's food producing lands warm by 6.4 degrees Celsius this century—nearly one degree per decade.*

This must be the subtext for Canada's COVID-19 recovery efforts in agriculture.

The past several months of the pandemic have revealed some long-hidden problems, but much larger risks loom. The biggest impacts threaten to arrive quickly, unless we change course.

COVID-19 recovery is an opportunity to create change in a sector that has seriously lagged in its climate response. Now is the time to support farmers to adopt low-emission, high-resilience approaches that benefit farmers and provide ecological goods and services such as clean water, air, biodiversity, and renewable energy from which all Canadians benefit.



Farmers want help in building climate resilience. Farmers also want to lead.

Farmers for Climate Solutions (FCS) is a rapidly growing, farmer-led coalition driven by an aim to lower agricultural emissions, increase resilience and increase net farm incomes, supporting and revitalizing rural economies and communities. Leading farmers in Canada are ready to set an example with tried-and-tested climate resilient practices that are ready to scale.

In the context of a green recovery from COVID-19, Farmers for Climate Solutions recommends the following five priorities:

- 1 Encourage on-farm renewable energy generation, fuel switching and building retrofits**
Farmers can help propel Canada toward a green energy transition. This investment supports new revenue generation and savings for farmers, and creates new rural green jobs.
- 2 Scale up agri-environmental incentives**
Stimulate a transition toward lower-emission, highly resilient agriculture with more capital for farmers to adopt new approaches.
- 3 Invest in agri-environmental agrology services, especially through farmer-to-farmer training, demonstrations and mentorship**
Spread climate resilient practices from field to field to field by empowering farmer leaders to be role models and teachers in their communities.
- 4 Adapt risk management programs to encourage risk-reducing practices**
Adding bonus structures to risk management programs is an innovative way to offer savings and extra capital to farmers while building resilience.
- 5 Support for young and new farmers**
The future of our food and its ecological footprint depends on youth and new entrants. Encourage young and new farmers to enter and thrive in the sector.

These priorities are detailed in the following pages.

Section references

- 1 Tackling the Farm Crisis and the Climate Crisis. National Farmers Union. 2019. <https://www.nfu.ca/wp-content/uploads/2020/01/Tackling-the-Farm-Crisis-and-the-Climate-Crisis-NFU-2019.pdf>
- 2 Emissions Gap Report 2019 by the UN. <https://www.unenvironment.org/resources/emissions-gap-report-2019>
- 3 Data on warming is found here https://epe.lac-bac.gc.ca/100/201/301/weekly_checklist/2014/internet/w14-26-U-E.html/collections/collection_2014/rncan-nrcan/M174-2-2014-eng.pdf



1 Encourage on-farm renewable energy generation, fuel switching and building retrofits



Fourteen percent of Canada's agricultural emissions are derived from on-farm fuel and electricity use. The carbon price as well as multiple other public supports (e.g. [EV](#) and [renewable energy subsidies](#))¹ encourage a transition to renewables in Canada. The agriculture sector is [exempt from carbon pricing in many ways](#)², and support for fuel switching and on-farm renewable energy generation is piecemeal. The pace of energy transition in agriculture is slow.

The pandemic has tightened margins and heightened risks for Canadian farmers, which has led to [calls to increase sector exemptions](#) from the carbon price. However, the immediate context of COVID-19 should not sideline efforts to reduce GHGs and meet climate commitments³.

RECOMMENDATION

Encourage widespread transition to on-farm renewable energy generation, fuel switching through adoption of battery-electric farm equipment, and farm building retrofits.

This would reduce sector emissions while improving farmer and rural livelihoods by generating green jobs in rural communities in the installation of renewable energy systems, and creating savings and potentially new revenue streams for farmers in the long-term.



On-farm renewable energy generation

With large land areas, farmers are well-placed to consider renewable energy generation as a source of revenue. COVID-19 recovery presents an opportunity and an imperative to propel this transition. Just over 10,000 farms in Canada have already adopted some form of renewable energy generation, as of the last Canadian census (2016)⁴. This is about four percent of farms. On-farm renewable energy generation projects are federally supported under the Canadian Agricultural Partnership (CAP), but only two provinces ([British Columbia](#) and [New Brunswick](#)) offer programs⁵. In the first year of CAP, only one farm in New Brunswick made use of these programs.

These programs are piecemeal and uptake has been low. The green recovery from COVID-19 in agriculture could consider investments that encourage adoption of renewable energy technology through awareness campaigns delivered by farmer-to-farmer demonstrations, and further financing of the installation of on-farm renewable energy systems.

Farmers are farmers' most trusted messengers, and innovative Canadian farmers are ready to lead. "These days, I believe that farmers need to plan with a more long-term sustainability plan, rather than just an economic one. Farmers need to look to what we can do to keep running and growing in the future, instead of focusing on what will put a dollar in our pockets today. It can be a hard way to plan, and not all decisions need to be made in this way, but to remain doing what we love—farming—will take patience and long-term sustainability planning."

- Courtney van Assem of Vaudet Dairy in Ferintosh, Alberta, with 144 solar panel system ([Rural Routes to Climate Solutions](#), member of Farmers for Climate Solutions)



Fuel switching and adoption of battery-powered machinery

While some leading-edge Canadian farmers have purchased battery-powered tractors (and solar photovoltaic arrays to charge them) there exist very few options for farmers who want to replace fossil fuels in tractors and other machinery. That said, the few battery-electric tractors that are available are highlighting the significant advantages of more widespread adoption. One Ontario farmer who purchased a tractor with the equivalent of 40 horsepower reports that they retail for



a price comparable to a new diesel tractor⁶, have a runtime of five to eight hours on a charge and reduce operating costs significantly. California⁷ is taking significant strides to increase uptake. Because of the pressing timelines for emissions reduction and lagging availability of low-emission tractors and machinery, several policies are needed, including: government-funded research and development efforts in collaboration with Canadian tractor and machinery makers and agencies such as the Prairie Agricultural Machinery Institute (PAMI); incentives for early adopters; programs to increase awareness of the benefits of battery-electric machinery; and production and sales mandates requiring that some minimum percentage of new tractors sold be battery-electric by a certain date.

Energy efficiency upgrades

Innovative farmers are advancing building retrofits. For example, David Webb of Egg Farmers of Alberta constructed Canada's [first net-zero chicken barn](#) as featured in the video by Prairie Climate Centre, a Farmers for Climate Solutions partner. This building offers energy savings and acts as a demonstration barn to showcase the potential economic and environmental benefits of energy efficiency and energy-saving building retrofits. The Canadian Agricultural Partnership offers some support for energy efficiency upgrades, and farm buildings prioritized within a national retrofit program.



*Brant Colony in Brant, Alberta
(Prairie Climate Centre)*

Section references

- 1 For example, NRCAN offers the National Zero Emission Vehicle Infrastructure program and the Emerging Renewable Power Program
- 2 The price on pollution only applies to about seven percent of operating expenses. There are many exemptions, including on diesel and gas. (http://multimedia.agr.gc.ca/pack/pdf/carbon_price_presentation-eng.pdf)
- 3 The [financial impact](#) of the carbon price on farmers has been studied by Agriculture and Agri-Food Canada.
- 4 Farms reporting having renewable energy producing systems in the year prior to the census, in the 2016 Census of Agriculture. (<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210044901>)
- 5 Provinces may also have their own incentive programs, separate from cost-shared agricultural policies. Eg. Ontario: <http://www.omafra.gov.on.ca/english/engineer/energy.html> Nova Scotia: <http://www.nsfa-fane.ca/efp/wp-content/uploads/2018/08/Farm-Energy-Resource-Kit-Think-Farm.pdf> Alberta: http://www.agpartners.ca/aepa/Portals/0/CAP_FEAP_Solar%20programming%20for%202018.pdf. Alberta has some of the most potential to scale-up on-farm solar energy generation however, the provincial on-farm solar power program was recently cancelled by the UCP government.
- 6 Tony Neale, Ontario farmer, describes his experience in [The Star](#) and on Farmers for Climate Solutions member - Rural Routes to Climate Solutions - [podcast](#)
- 7 California's [FARMER program](#) funds purchases of cleaner agriculture equipment like harvesting equipment, heavy duty truck, agricultural pump engines, tractors, and other machinery, and has [high adoption rates](#).



2

Scale up investments in agri-ecological incentives



The long-term trend in Canadian agriculture has been decreasing biodiversity in soils and cropping systems across the rural landscape, and a steady increase in GHG emissions. While progress on agri-environmental indicators has been mixed across Canada, many regions are seeing persistent or increasing nutrient runoff, loss of wetlands, soil erosion, degradation of local ecosystems and loss of soil organic matter. Meanwhile, farm debt has doubled in the past two decades and farm margins are tight, in some cases exacerbated as a result of COVID-19. There is a need to increase the environmental performance of the sector, even in these difficult times, but this cannot be done without the right support for farmers. There is also an urgent need to build resilience in the face of future economic and ecological shocks.

There is ample evidence from Canada and other jurisdictions that increasing biodiversity, improving soil health and fostering healthy ecosystems on farms can reduce GHG emissions, increase carbon sequestration, and improve farmer livelihoods by decreasing the need for purchased inputs and increasing resilience during weather extremes.

RECOMMENDATION

Rapidly scale up incentives for on-farm practices such as cover cropping, diversified crop rotations, holistic grazing, decreased tillage, and tree planting.



By scaling-up agri-environmental incentives, the Green Recovery from COVID-19 can help to create new jobs in agriculture and associated services and provide capital to farmers during a time of tight margins, while building resilience to climate impacts.

Agri-environmental incentives in Canada are currently delivered through cost-shared programs and market-based structures, but they have been modest in scale and inconsistent across the country. They have not yet been sufficient to stimulate behaviour change that significantly reduces emissions, increases carbon sequestration, or improves environmental performance across the sector. There are a large number of Canadian farmers, however, who are successfully adopting agri-environmental practices on their farms with great results. With strong incentives, adoption rates of these practices can scale.

Agri-environmental incentives are not just good for farmers, they enhance environmental goods and services benefiting all Canadians

Numerous peer-reviewed studies have shown that investments in agri-environmental incentives can increase farm income and reduce GHG emissions. Researchers in the United States found that simply switching from a two-year rotation of corn and soybeans to a four year rotation that included a small grain and cover crop reduced fossil energy use by 50%¹, nitrate runoff by 30 to 57%, herbicide use by 25 to 51% and soil erosion losses by up to 60%², while increasing yields and improving soil health. Adaptive multi-paddock or holistic grazing practices have been shown to decrease overall GHG emission per kilogram of finished weight in cattle by over 30%³, and grazing cattle exclusively on permanent pasture can sequester carbon and significantly reduce total emissions⁴.

In 2019, the Ecological Farmers Association of Ontario supported four vegetable farms to conduct randomized trials of reduced tillage techniques that showed dramatic reductions in labour required for weeding, increased yields and shorter time from sowing to harvest ([EFAO, 2019](#))⁵. The Canadian Organic Growers have gathered data from their members that shows substantial savings for farmers from reduced input costs resulting from the adoption of agroecological practices such as cover cropping and diversified rotations.



[Kath Clark/SeedChange]



Delivering cleaner air, water and biodiversity through tried-and-tested practices. Incentives help to scale adoption.

A program to incentivize farmers in Iowa to add a small grain and leguminous cover crop to their two-year corn-soy-bean rotation resulted in an 88% reduction in synthetic fertilizer use, a 54% reduction in energy use, and an increase in organic soil carbon of 31% ([Practical Farmers of Iowa](#))⁶.



With many ecological indicators moving in the wrong direction, and unprecedented financial pressure on Canadian farmers, now is the time to incentivize agroecological practices that will reduce input use, reduce GHG emissions and increase profitability for farmers. It is difficult to see how the agricultural sector can remain viable in the long term without a sustained focus on increasing resilience and profitability. Investing in practices that improve soil health and increase biodiversity is a cost-effective way to achieve these goals, while contributing to Canada's overall commitment to reduce GHG emissions.

Section references

- 1 Davis, A. S, Hill, J.D., Chase, C.A., Johanns, A.M., Liebman, M. 2012. Increasing Cropping System Diversity Balances Productivity, Profitability and Environmental Health. PLOS ONE. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0047149>
- 2 Hunt, N.D., Hill, J.D., Liebman, M. 2019. Cropping System Diversity Effects on Nutrient Discharge, Soil Erosion, and Agronomic Performance. Environ. Sci. Technol. 53, 3, 1344–1352 <https://pubs.acs.org/doi/10.1021/acs.est.8b02193>
- 3 Stanley, P.L., Rowntree, J.E., Beede, D.K., DeLonder, M.S., Hamm, M.W. 2018 Impacts of soil carbon sequestration on life cycle greenhouse gas emissions in Midwestern USA beef finishing systems. Agriculture Systems, 162.
- 4 Teague, W.R., Lal, A. R., Kreuter, U.P., Rowntree, J., Davies, C.A., Conser, R., Resmussen, M., Hatfield, J., Wang, T., Wang, F., Byck, P. 2016. The role of ruminants in reducing agriculture's carbon footprint in North America Journal of Soil and Water Conservation, 71 [2] 156-164 <https://www.jswnonline.org/content/71/2/156>
- 5 EFAO Horticulture 2019. Do different soil covers differ in their efficacy for production of organic greens? <https://efao.ca/wp-content/uploads/EFAO-TarpLettuce-2019.pdf>
- 6 Practical Farmers of Iowa offers \$25/acre as an incentive. The incentive started at \$40/acre but demand was so high that they reduced the payment while still ensuring strong adoption rates. Small Grains, Large Grains. Five reasons why diverse crop rotations are good for Iowa. <https://practicalfarmers.org/wp-content/uploads/2018/10/Small-Grains-Large-Gains-Web-Version-2-1.pdf>



3

Invest in agri-environmental agrology services, especially through farmer-to-farmer training, demonstrations and mentorship



DENISE BONIN-MOUNT, *Flat Earth Farm in Osgoode, Ontario*
AABIR DEY, *SeedChange (Kath Clark/SeedChange)*

One of the most significant barriers farmers face in transitioning to climate resilient practices is a lack of knowledge of what to do, how to do it, what it will cost, and a lack of support throughout implementation¹. Knowledge sharing, on-farm demonstration and mentorship help farmers build confidence and increase likelihood of success. Behavioural economics research shows that farmers are more likely to adopt new practices if information comes from trusted messengers².

Until the 1980s, agrology services in Canada were publicly delivered, but have been largely defunded³, leaving a void now predominantly filled by private industry. These seed, crop and input advisors have private interests, and often benefit personally from bonus structures linked to sales⁴. Services offered and information shared tends to be biased towards practices that favour their products⁵. At a much smaller scale, farmer-led agriculture stakeholders offer farmer-to-farmer training, demonstration and mentorship services. These programs are some of the only sources of information and follow-up on climate resilient practices in Canada.

RECOMMENDATION

Invest in farmer-to-farmer training, demonstrations and mentorship programs through third party program delivery.

Rebuilding public agrology services specific to climate resilient agriculture is a longer-term need. In the short-term, there is good potential to scale-up existing local and regional programs that compensate innovative and climate resilient farmers for their leadership as trainers, and mentors in their communities.



Since 2013, SeedChange has organized more than 400 farmer-to-farmer training events including workshops, field days, webinars, and conferences attracting over 9,000 participants from farming communities in Canada.

LISE-ANNE LÉVEILLÉ, BeetBox Co-op Farm in Ottawa, Ontario [Kath Clark/SeedChange]



Many members of Farmers for Climate Solutions offer farmer-to-farmer training, demonstrations and mentorship with impressive outcomes. For example, Young Agrarians, an educational resource network for new and young ecological, organic and regenerative farmers, runs the B.C. Business Mentorship Network that compensates mentor farmers for working with new entrants to transfer knowledge during start-up. Over six years, this program has demonstrated a 43% increase in land in production, 50% more revenues generated, and 66% more food produced⁶. The Bauta Family Initiative on Canadian Seed Security, a program of SeedChange, offers training for farmers to enhance biodiversity conservation and adapt crops to a changing climate and ecological practices. The Canadian Organic Growers runs numerous farmer education programs, including a current three-year transition project in southern Ontario that provides advisory services and training for 25 conventional farms per year to adopt more climate resilient practices and transition to organic production. Quebec's Club Conseils en agroenvironnement are voluntary groupings of producers that exchange information and informal mentorship on environmental and climate resilient practices. These examples from across the country show the presence of existing structures with proven outcomes. Program delivery could be scaled up quickly with an infusion of investment.

COVID-19 green recovery investments in farmer-to-farmer training, demonstrations and mentorship would

- Directly compensate farmers offering mentorship, training and demonstration of climate resilient practices. This means money for Canadian farmers who are charting the course for the future of our agriculture sector.
- Train more farmers to be leaders in their communities. Farmers are trusted messengers for farmers, and we need farmer demonstrators and mentors in all communities to fuel the transition.



- Inspire community-building through knowledge-sharing across the country. This is particularly important to combat rising mental health challenges in farming communities.
- Build social networks in rural communities during particularly challenging times of isolation.

This COVID-19 green recovery investment honours the knowledge and experience of Canadian farmers who have taken risks as early adopters, who are ready to set an example and share the benefits and opportunities of highly resilient, low-GHG agriculture. Based on Farmers for Climate Solutions' member data on farmer-to-farmer training, demonstration and mentorship program outcomes, there is a real potential for climate resilient practices to spread from field to field to field with new and scaled-up investment now.



GILLIAN FLIES, *The New Farm in Creemore, Ontario*

Section references

- 1 A growing body of research points to the importance of knowledge brokers, including extension and advisory services, in enabling consideration of climate change impacts and emission mitigation in agricultural decisions. (http://www.climateontario.ca/doc/p_OCAAF/OCAAF-PolicyBriefOnAgriculturalExtension_FINAL.pdf)
- 2 One of the primary factors that shape a farmer's willingness to access climate-related information is the quality of interactions between generators and users of information.
- 3 The stated reason for the decline in public funding was a lack of effectiveness, because of: "the changing nature of producers (e.g., increased levels of education, decrease in the number of full time farmers); challenges of proving value for money; technological advances; the loss of political support for pro-rural policies; and the evolution of the university system toward a focus on research and teaching, which undermined the value of service and outreach." (Milburn, L.A.S., S.J. Mulley and C. Kline. [2010]. The end of the beginning and the beginning of the end: The decline of public agricultural extension in Ontario. *Journal of Extension*, v48-6. <https://www.semanticscholar.org/paper/The-end-of-the-beginning-and-the-beginning-of-the-Milburn-Mulley/5145da3eea1c8db92d1d6434a9b749a12c15d738>)
- 4 In 2019, Quebec's "Ordre des Agronomes" took action after the media published information about bonuses (trips, vacations, other extras) offered to agronomists based on sales (<https://www.laterre.ca/actualites/les-agronomes-ne-devront-plus-etre-remuneres-en-fonction-de-leurs-ventes>)
- 5 Research shows that they are only inclined to share climate-related information with farmers if it does not conflict with the sale of their product (Lemos, M.C., Y.L. Lo, C. Kirchhoff and T. Haigh. [2014]. Crop advisors as climate information brokers: Building the capacity of US farmers to adapt to climate change. *Climate Risk Management* 4- 5, 32-42 (<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1144&context=droughtfacpub>)
- 6 Young Agrarians also runs an on-farm training in regenerative agriculture in Alberta, that will scale-up to Saskatchewan and Manitoba in 2021-2022, and a B.C. Land Matching Program.



4

Adapt risk management programs to encourage risk-reducing practices



Canada's Business Risk Management (BRM) programs provide critical income support for farmers, and are designed to protect farmers when they suffer unexpected risks from changes in the market, weather events, or natural disasters. The sudden changes to supply chains and health and safety procedures caused by COVID-19 accentuated the underlying vulnerabilities and risks in our food system, and several provinces reacted quickly to adjust the implementation of BRM programs to meet needs. One of Canada's lead scholars on BRM explains that the COVID-19 pandemic is adding fodder to an ongoing government review of the BRM programs¹. These expensive programs should not be overlooked in the context of COVID-19 recovery².

COVID-19 impacts are not the only risks farmers are facing this year. [Alberta farmers were faced with a severe hail storm in June³](#), Quebec is experiencing the [hottest and driest summer on record](#), and Farmers for Climate Solutions partner, [Prairie Climate Centre⁴](#), and [Agriculture and Agri-Food Canada](#)'s data show that climate risks, such as more severe and more frequent floods, droughts and extreme weather events, are increasing.

Risk management programs under review

While we may not be able to predict impacts of sudden pandemics like COVID-19, we can predict climate risks. Our risk management programs must be adapted to respond to these increasing risks.

RECOMMENDATION

Add bonus structures to BRM programs to incentivize risk-reducing practices that enhance climate resilience.



The current BRM programs do not incentivize risk-reducing behaviours, and in fact, some encourage risk-increasing behaviours (Ker 2020⁵) or encourage practices that reduce environmental performance (Jeffrey, Trautman, Unterschultz 2017; Rude and Ker 2013), which is particularly problematic in the face of known increasing climate risks.

NEIL TURNER and ARZEENA HAMIR,
Amara Farm in Courtenay, British Columbia
[Michaela Parks]



From a climate change perspective, low-risk agriculture is not only resilient to climate impacts but is also committed to reducing emissions. Encouraging the former—adaptation to climate impacts—is evidently associated with reduced risk. The latter—reducing emissions—is perhaps less so. However, Canada’s agriculture sector is currently projected to increase emissions over the next decade, which is not viable in the face of increasing supply chain pressure and national and international emission reduction targets. It is therefore high-risk if it doesn’t shift course.

Crop insurance discounts are bonus structures that benefit farmers and increase resilience

Farmers in Iowa who plant a cover crop in the previous year receive \$5/acre off their crop insurance premium. Cover cropping is a practice known to improve soil health, reduce emissions and increase resilience. [The crop insurance discounts](#) motivate resilience-building behaviour change, and offer savings to farmers. The [Agricultural Resilience Act](#) is a bill before the US congress that would legislate crop insurance discounts for practices that reduce risk⁶.

Prince Edward Island also has a long history of using crop insurance discounts to incent changes in practices for environmental reasons. This has led to widespread adoption, is well-liked by producers and is seen as a powerful policy tool to motivate change. Canada can draw on these models to adapt the delivery of AgriInsurance to encourage the adoption of resilience-building, low-risk practices on farms. This would benefit farmers by reducing annual expenses, minimizing the pressure of tight margins now and into the future.



These kinds of bonus structures would not impede any farmers from participating in risk management programs, but farmers that reduced risks and built resilience would be rewarded.

The time for change is now: financial institutions and insurance companies in most other sectors are increasingly [accounting for climate risks in investments](#) and premium prices, in order to fuel the transition to a stable and sustainable economy while remaining financially viable. Risk and uncertainty are front of mind in agriculture, now more than ever. The COVID-19 green recovery has a responsibility to address longer-term, underlying and increasing vulnerabilities in support of farmer livelihoods.



**SHELLEY SPRUIT, *Against the Grain Farms*
in Mountain, Ontario (Kath Clark/SeedChange)**

Section references

- 1 According to Ker 2020, “It is very likely that the COVID-19 pandemic will provide fodder, however, translucent and unwarranted, for additional rent-seeking efforts for more lucrative BRM programming. Furthermore, it is likely that these efforts will be successful at a time when governments are trying to funnel money to the public to stave off a serious recession or depression.” (<https://onlinelibrary.wiley.com/doi/full/10.1111/cjag.12232>) The BRM programs are currently under review by the federal government, because both farmers and provincial governments have concerns over the ways in which they are delivered, the accessibility of the programs, and the cost-effectiveness of the programs (Slade 2020, <https://onlinelibrary.wiley.com/doi/full/10.1111/cjag.12218>)
- 2 The BRM programs demand 50% of the \$3 billion Canadian Agricultural Policy.
- 3 Alberta’s “monster” hailstorm demolished every crop in its path, farmer says, CBC News <https://www.cbc.ca/news/canada/calgary/alberta-hailstorm-crop-damage-hail-rain-farmers-insurance-storm-1.5613571>
- 4 Prairie Climate Centre’s Climate Atlas maps changing temperatures, precipitation, frost dates, growing days, and other factors that impact farming (https://climateatlas.ca/map/canada/firstfall_2030_85#lat=50.74&lng=-95.01)
- 5 As one example, the whole-farm approach of AgriStability discourages on-farm diversification
- 6 The Agriculture Resilience Act describes the risk-reduction based discount and risk reduction-based premium discount for producers who uses risk reduction farming practices, including: the use of cover crops, resource-conserving crop rotations, management-intensive rotational grazing, composting, and other risk-reducing and soil health promoting farming practices (<https://pingree.house.gov/netzero-agriculture/agriculture-resilience-act.htm#:~:text=%E2%80%9CThe%20Agriculture%20Resilience%20Act%20is, supporting%20farmers%20where%20they%20are.&text=Currently%2C%20agricultural%20activities%20contribute%208.4,total%20U.S.%20greenhouse%20gas%20emissions>).



5

Support young and new farmers



COVID-19 quickly exposed some of the demographic, labour and employment vulnerabilities of our food system. Canadian farms [depend increasingly](#) on temporary foreign workers who have to cross multiple borders to work in Canada¹. Getting these workers to Canada and ensuring safe working conditions while minimizing the spread of the virus has been fraught with difficulties. The need for farm labour was so strong that Canada launched a [recruitment campaign](#)². Yet still, tens of thousands of jobs in the farm sector go unfilled even in a regular year.

These labour challenges in the context of COVID-19 overlay already concerning demographic trends in the agriculture sector: the average age of the Canadian farmer is 55 years old, and less than 10% of farmers have a succession plan³. There are more farmers over the age of 70, than under the age of 35⁴. Canada risks not having a next generation of farmers unless careful attention is paid to young and new farmers, many of whom want to join the sector but face significant barriers to entry and to staying in business.

Young farmers and new entrants tend to farm in more diversified and ecological ways, in part because they have grown up with climate change and understand that the status quo is no longer viable. Many are not only inspired to join the sector to produce food for communities but are also motivated by the career choice for its potential to provide environmental goods and services and stewardship of soil and water.

RECOMMENDATION

Invest in young and new farmers to help them overcome barriers as new business owners.



While somewhat regionally differentiated, new and young farmers currently experience significant barriers. These barriers include access to land⁵, limited on-farm training and mentorship opportunities, and business planning for diversified operations (as opposed to single-crop production)⁶. Approximately 68% of new entrants are coming from non-farming backgrounds, which means that they do not have access to inherited land and know-how from their parents⁷.

Young and new entrants also face barriers accessing public support programs. For example, cost-share programs are inaccessible to many new and young farmers because they cannot leverage the capital necessary to access matching public funding. These programs are often offered to help strengthen environmental performance and build climate resilience, which are both critical tenets of the future of farming in Canada. Given that the first five years set the foundation for farm management, and that they are also the most challenging to survive, public support programs must adapt to ensure that they meet the needs of this demographic.

The green recovery from COVID-19 can draw from Canadian precedents that support Canada's newest and next generations of farmers.

Since 2013, Quebec has implemented the most comprehensive strategy in Canada targeted to young and new farmers. It includes a suite of grants for aspiring farmers to help overcome start-up financial barriers⁸, as well as other training and mentorship support. As a result, Quebec has the youngest farm population in Canada⁹.

**PAUL SLOMP, *Grazing Days Farm*
in Saint-André-Avellin, Quebec
[Kath Clark/SeedChange]**



The last Agriculture Census in 2016 shares good news: new and young farmers are slowly starting to represent an increasing proportion of the farming sector¹⁰ in Canada. But this demographic is still far too underrepresented and the COVID-19 pandemic has exposed such significant demographic and labour concerns that sector renewal and employment requires a targeted focus.

The green recovery from COVID-19 can help to propel the future of the sector with tailored supportive conditions for young and new farmers to succeed and thrive.



BLAKE HALL, *Prairie Gold Pastured Meats in Red Deer County, Alberta*

Section references

- 1 Statistics Canada data shows the growing reliance on temporary foreign workers in the agriculture sector, from 340,000 in 2017 to 470,000 in 2019. <https://ipolitics.ca/2020/06/04/the-sprout-need-for-more-local-labourers-on-farms-cfa-says/>
- 2 Step Up To The Plate is a recruitment platform to help Canadians identify jobs in the agri-food sector <https://www.agr.gc.ca/eng/canadian-agri-food-sector/step-up-to-the-plate-help-feed-canadians/?id=1587057952017>
- 3 <https://www.cbc.ca/news/canada/toronto/family-farm-aging-farmers-canada-1.4207609#:~:text=A%20Statistics%20Canada%20study%20found,age%2070%2C%20than%20under%2035>
- 4 <https://www.cbc.ca/news/canada/toronto/family-farm-aging-farmers-canada-1.4207609#:~:text=A%20Statistics%20Canada%20study%20found,age%2070%2C%20than%20under%2035>
- 5 According to Farm Credit Canada and Young Agrarians, the price of land has gone up by 132% since 2007.
- 6 These barriers are drawn from research completed by Young Agrarians.
- 7 Laforge, J., Fenton, A., Lavalee-picard, V., and McLauchlan, S. 2018. New Farmers and Food Policy in Canada. Canadian Food Studies. 5(3): 128-152.
- 8 Quebec's Financial Support for Aspiring Farmers supports new farmers entering the sector <https://www.fadq.qc.ca/en/financial-support-for-aspiring-farmers/description/>
- 9 <https://www.country-guide.ca/guide-business/does-canada-have-enough-young-farmers/>
- 10 The average age of the Canadian farmer is 55 years old, and under 10% have a succession plan. There is growing interest by young people to join the sector, but the barriers are often insurmountable. The most recent census (2016) shows the first absolute increase in farmers under the age of 35 years old since 1991. (<https://www150.statcan.gc.ca/n1/daily-quotidien/170510/dq170510a-eng.htm>)



About Farmers for Climate Solutions

Launched February 11, 2020, Farmers for Climate Solutions is an unprecedented collaboration of Canada's most progressive farming organizations with the ultimate goal to advance climate solutions in agriculture policy. Farmers for Climate Solutions has three main objectives:

- To position farmers as leading voices calling for climate solutions in agriculture
- To build a strong constituency of non-farming Canadians who support their vision
- To engage decision-makers to adopt policies in agriculture that help Canada meet national climate targets.

Farmers are ready to lead but they need support. Farmers for Climate Solutions will provide a platform for farmers to share stories about climate impacts and solutions, engage Canadians to support their vision, and advance programs, policies and practices that are good for agriculture, for all people, and for the planet.

Composition of Farmers for Climate Solutions

There is no one-size-fits all approach to farming in Canada, nor is there a one-size-fits-all approach to climate solutions. A sector-wide approach is essential. Farmers for Climate Solutions represents all regions, scales, and types of farming. Our strong provincial and national representation is particularly important considering the diversity of the sector and that agricultural policy is co-negotiated between provincial, territorial and federal governments.

Current members of Farmers for Climate Solutions include:

Atlantic Canada Organic Regional Network	National Farmers Union
Canadian Organic Growers	Organic Council of Ontario
Canadian Forage and Grasslands Association	Regeneration Canada
Coopérative d'Agriculture de Proximité Écologique	Rural Routes to Climate Solutions
Ecological Farmers Association of Ontario	SaskOrganics
Ecology Action Centre	SeedChange (Secretariat)
Equiterre	Young Agrarians
FarmFolk CityFolk	

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