

Agriculture, Eating, and Ecological Justice in 2050

Bryan Dale, Matilda Dipieri, Madeleine Frechette, and Hannah Klemmensen

Version 1.0, April 2021



Visions of the Food System to Come

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Feeding the City: Pandemic & Beyond | www.utsc.utoronto.ca/projects/feedingcity Project Lead: Jayeeta Sharma Culinaria Research Centre, University of Toronto Scarborough (UTSC)

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FOREWORD

This document, which we are referring to as a 'report,' is actually partly a discussion paper and partly a rallying cry. We have been writing this in the midst of a global pandemic that has disrupted food systems to an extent and scale that has not been seen in our lifetimes. Yet COVID-19 has, perhaps more than anything, exacerbated and made visible longstanding problems in our food system in Canada and beyond. While many great food system thinkers and advocates are discussing specific issues and potential responses that can be taken through policy measures, grassroots actions, and other initiatives, we wanted to take a different approach.

Our goals for this report are twofold:

- 1. To draw connections between the many and varied aspects of food system change that need to be undertaken in complementary ways in order to build a just, ecological, and resilient food system. Given that the food system is complex and multifaceted, and can seem overwhelming, we wanted to draw these connections without burdening the reader with too many specifics about policy levers, possible funding mechanisms, and other details.
- To paint a picture of a potential food system in Canada that brings together a wide range of suggestions and ideas from researchers, advocates, and others across the country, in order to motivate and inspire solution-focused work based on the complex problems that are evident today.

With these goals in mind, we want to stress that this is a *discussion paper* in the sense that we are not presenting solutions that we deem to be flawless or complete. We are researchers based at an academic institution (the University of Toronto Scarborough and Trinity College), and only one of us comes from a family that has a background in farming. We are therefore cognizant of both the different forms of relative privilege that we have as individuals, as well as the limitations of our lived experiences and bases of knowledge. We want this to be a paper that will provoke discussion, and we welcome feedback so that we may perhaps be able to continually update this document with new and better ideas that people contribute. To provide specific or general feedback on this report, please visit https://forms.gle/XFQJp4QpCEbFiBMp7 or email us at feedcity2020@gmail.com.

As we stress in different places in the pages that follow, a just, ecological, and resilient food system is a process, not an outcome. It is for this reason that we have sought, and will continue to seek, feedback on different versions of this report. As indicated on the cover page, we have started with 'Version 1.0', released publicly in April 2021, and we will aim to update the report as we receive input. We are very grateful for those who are willing to offer their comments and suggestions.

We also want to thank Darrin Qualman and Cathy Holtslander of the National Farmers Union (NFU), who helped to inspire the approach we have taken here, and to refine our thinking along the way. In March 2021, the NFU in fact released a complementary report, *Imagine If: A Vision of a Near-Zero-Emission Farm and Food System for Canada*, which we highly recommend. The report is set in the

year 2030 and it offers a much more expansive view of some of the topics we take up here, particularly in our second and fifth chapters. We are also grateful to Jayeeta Sharma, Jackie Rohel, and the rest of the *Feeding the City: Pandemic & Beyond* team, with whom we have been working since the spring of 2020, and who also helped to inspire this work. With this gratitude in mind, we take full responsibility for any shortcomings that still remain in this report.

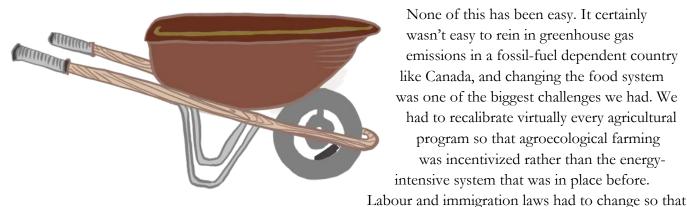
We emphasize that this report is a *rallying cry* in the sense that we hope it will be a resource for those have either already united, or are in the process of uniting, to contribute to food system change in Canada. There are many tensions and divisions that can be pointed to in today's food system, for example when it comes to farmers' and farm workers' livelihoods versus consumers' desires for affordable food, or when it comes to Indigenous approaches to relating to land and foodways versus settler-colonial interests and adherence to private property regimes. We hope to see such divisions overcome and have therefore tried to articulate in the pages that follow various approaches that are 'relational' in that they interrelate with different aspects of our food system. It is clear to us that the kinds of solutions we have presented here, while they may not be perfect, are urgently required. The COVID-19 pandemic has disrupted food supply chains, caused widespread food insecurity, and underscored the potential for deadly zoonotic diseases to emerge at a global scale as a result of the industrial agricultural system's encouragement of monocultures and encroachment into spaces where wildlife is increasingly being disturbed.

In each chapter that follows, we begin each section with a fictional sketch that presents an image of what an aspect of the Canadian food system could look like in approximately thirty years from now, and then follow this with "editors' notes," wherein we elaborate on research and references that inform the feasibility of such changes taking place. We know that some readers may find the fictional sketches that we have included to seem idealistic or far-fetched. As indicated, we welcome feedback and constructive critiques about what we have written here, though we also encourage readers to consider the various sources we have consulted in preparing these fictional sketches. After all, while one could suggest that what we have imagined here is not based on reality, let us remember that before COVID-19 struck, the idea of a global pandemic that would be so disruptive and deadly seemed to be the stuff of science-fiction writing... and then it happened.

Here's to a brighter future food system.

1. INTRODUCTION: Reflections

Rutabaga chips with rosemary. Pasture-raised beef from down the road. Kale salad and pickled beets. Delicious. A generation ago they probably wouldn't have imagined that eating in season could be so good, but here we are. Many people have relearned how to not only grow food but also how to cook it. Of course, eating seasonally has changed somewhat given the fact that rising global temperatures have extended seasons and made it possible to grow foods this far north longer than we could thirty or fifty so years ago. It's 2050 though, so I certainly hope that we'll soon be seeing the end of the 'feedback mechanisms' and rising carbon dioxide levels that have continued to make it so difficult to farm. Weather is more unpredictable than it has ever been here, and we all know how hard some people have had it in other parts of the world, where massive humanitarian efforts have been required to relocate people or otherwise help them cope with climate disasters.



None of this has been easy. It certainly wasn't easy to rein in greenhouse gas emissions in a fossil-fuel dependent country like Canada, and changing the food system was one of the biggest challenges we had. We had to recalibrate virtually every agricultural program so that agroecological farming was incentivized rather than the energyintensive system that was in place before.

people were drawn to farming again, and so that we would stop exploiting migrant workers who had become so embedded in food production here. It's hard to believe that people can work four reasonable-length days a week and get by but, hey, we convinced people to eat less meat (almost

eliminating it from their diets in the summer months) so anything seems possible. Educating people about the realities of the global food system and the need for food sovereignty was another enormous task of course, and one that continues to this day. We still have much to figure out, as food sovereignty does not yet exist in every country, and it can be hard to maintain the just trading relationships with those countries providing us the coffee, chocolate and other foods that we cannot grow here.

Yes, there's still a lot to learn. I gather that interesting experiments are taking place to expand sugar beet production in Alberta now that all of the genetically modified varieties have been eradicated. Of course, some genetic modification and gene editing experiments continue to this day but, since plant life and other foods can no longer be patented, these experiments are happening alongside other public research, and traditional and participatory plant breeding have been showing the most promise for years now. We could probably grow sugar beets on this farm, in fact, but we already have quite the diversity of crops to wrap our heads around.

You know, I think that it may actually have been our repaired relationships with Indigenous peoples in Canada that most affected our views on education about the food system and agricultural science. The process of decolonization and the widespread acceptance of traditional Indigenous knowledges went hand-in-hand. We no longer look at agriculture as our only source of food, with local fish, forest-based plants, and hunted meat (what we call 'country' food) contributing not only to Indigenous diets but to the rest of ours as well. Economies are social, based on meeting people's needs rather than making profit, and Indigenous communities have been leaders in that regard. Also, most people now see themselves as part of nature, rather than separate from it—no longer thinking we're able to 'manage' or dominate nature as we used to pretend that we could. We stopped poisoning the soils with chemicals, not only because we knew this was contributing to climate change, but also because we saw that we were killing the lands and waters that were there to sustain us.

Speaking of lands and waters, perhaps the biggest reason that we were able to align and advance Indigenous food sovereignty and agroecology is because we finally figured out how to get land relations sorted out. When popular movements came to realize the insanity of Indigenous peoples only being able to access 0.2 percent of Canada's land mass, we were able to mobilize and pressure the government to return land that had been unjustly taken. None of that would have been possible, of course, unless we also struggled to make collective land access a legitimate model, with tenure not being based on private 'ownership.' Governments at various levels still oversee land regulations of course, but a popular agrarian reform (something we never thought possible in Canada) has been making sure that you don't need to be rich in order to access your fair share of soil if you were ready to look after it and let it look after you. In most cases, money actually doesn't enter into it at all since land normally isn't treated as a commodity these days.

Just look at this farm that we're on. Beyond that passive greenhouse (where we have some delicious spinach growing, by the way, even in February!) is our cooperative's biggest house. All eight of the young people who live there used to be city dwellers. But the fact that we needed more people on the land to grow food agroecologically, and their ability to come join us here without having to buy land, gave them the incentive to make the move. It hasn't been simple for all of them to learn how to farm, of course. It takes a lot of know-how to raise a diversity of animals, grains and veggies like we're doing here. But, fortunately, those people are able to access public courses while at the same time learn the practical aspects of agroecology here on the farm. Heck, there's still a lot for me to learn too, but at least I can access government extension service people when I need to troubleshoot a problem that we can't seem to figure out.

The government supports are also important for ensuring production and distribution are organized at local, provincial and national scales. We aren't growing *all* the food we need, of course, and we have our specialties (like carrots) that do really well in these soils, so we have customers for all those surpluses we come up with. The government programs were able to take the best experiments that had been happening before—from Community Supported Agriculture (or CSA) programs to supply

management—that needed to be tweaked or replicated in order to make sure we were feeding Canadians and trading what we didn't need here at home. Fortunately, you no longer have huge corporations controlling food retail like they once did. All those processed 'pseudo' foods are a thing of the past since it stopped being profitable to base food production on GM corn (no longer being subsidized) and all those artificial flavourings, colourings and such (that the government began taxing the heck out of). Did you ever hear about Hostess Twinkies? No? I guess I shouldn't be surprised. You probably haven't heard of 'food banks' either, which were a big thing before we started making sure that every single person would be guaranteed a liveable income so that they could afford the basic necessities of dignified living.

This isn't to say that everything is resolved and static. As we know, food sovereignty is such a *process*, not an end goal, and so there is much work to do to continually govern the food system, especially since it is related to so many other decisions that need to be made and problems that need to be resolved. We've got our local workers' council, our foodshed's board, and the food policy council for Ontario—all subnational decision-making bodies that need to both keep things organized and also make sure it doesn't all get tied down in paperwork and bureaucracy. I sat on the board of our foodshed group for eight years, and I can tell you it's a *lot* of work. There are simply so many logistics to sort out, for example when a local food hub is getting established, or when one of the food processing co-ops wants to start experimenting with new products or techniques. Plus, we had fairly regular exchanges with folks from all over the world—Venezuela, India, Japan; you name it—so that we could compare agroecological models, governance at the local scale, and that kind of thing.

Well, as delicious as these rutabaga chips are, I had best be getting back to work. There are chores to be done in the barn, and I can see the others have wrapped up their lunches and are heading back to it. (I think those two over there are making sauerkraut from our cabbage this afternoon. They recently cooked up a couple batches of samosas using our own lamb and potatoes, which were unbelievable!) Nice to take a break once and a while though, where you can steal away and reflect on where we're at and how much has changed. Indeed, so very much has changed...

Editors' Notes

- This introduction was originally included in Dale (2018: Ch 6), and has been slightly modified for inclusion here.
- We acknowledge that there are many valid critiques of utopian thinking, yet we would argue for a 'utopianism of process' rather than a 'utopianism of form' (see Harvey 2000), meaning that we do not envisage a perfect or ideal 'end state' for the food system or societal relations. Instead, we are imagining significantly improved approaches that will always be under

- development, and wherein work will continually (and democratically) be needed to address flaws and ongoing inequalities.
- For information on 'real' utopias and their importance, see Olin-Wright (2010, 2015), and to read about 'food utopias' specifically, see Stock, Carolan and Rosin (2015).
 - On 'rural futurism,' see Spanier (2021).
- For more on 'pseudo foods' see Winson (2017).
- For discussions of food sovereignty and agroecology in Canada see Dale (2020), Desmarais (2019), Desmarais and Wittman (2014), Laforge et al. (2021), Isaac et al. (2018), and Wittman, Desmarais and Wiebe (2011).

2. ECOLOGICAL RESILIENCE

What does a climate-friendly agricultural system look like?

2.1 An Agroecological Framework

Hello, stranger! Nice to have you back. Come up here and have a seat. It's a nice view of the hustle and bustle from here. I think the last time you were here it wasn't even warm enough to sit outside... It's been a few months, eh? Well, I'm glad to see I didn't scare you off with all of my reminiscing about how much things have changed in recent years.

I have to say though, things are constantly changing. It seems that even though we have a more 'climate-friendly' food system than we used to, we still need to keep responding to unpredictable weather. Did I mention the unpredictable weather the last time you were here? Well, I'm getting older, so I tend to repeat myself, but you can't blame farmers for talking about the weather.

The nice thing about working on such a mixed farm with so many different veggies and such, is that when you have a sudden cold spell or a long dry period, for example, while some plants may struggle, others will flourish. Just in the six plots that I can see here from the porch, I think we have two dozen varieties of veggies, with another dozen or so in the four plots beyond that line of trees. These plots weren't much to look at a couple of months ago, but now that it's June you're beginning to see signs of the colourful bounties that these gardens will soon become. Now, those bell peppers, for example—they don't deal well with a lack of water when the rain showers are few and farbetween, but the field tomatoes we're growing over here on the right sure love the blazing heat we've been having. Either way, it's a lot of work to keep on top of irrigation, so that means we have to constantly be monitoring and responding to the weather. I swear I have dreams sometimes about racing around the farm with the pluviometer in hand—the rain gauge, that is.

I suppose what I'm trying to say is that agroecology isn't just about leaving mother nature to do her thing and seeing what food we happen to be lucky enough to harvest despite fluctuating weather, pest infestations, and weeds. No, we work just about non-stop on this farm to produce the food we do, but we work *with* nature, knowing that we're part of this big beautiful system and that we can't just deplete the soils of all their nutrients, or draw down the water tables, without there being long-term consequences.

Take insects, for example. We have to contend with aphids, potato beetles, carrot rust flies, cutworms, cucumber beetles, and more. Years ago, it was most common in Canada to spray all of these critters with chemicals, and when you had a monoculture of one kind of plant row-upon-row, it seemed like you kind of had to. The agroecological approach that we use is to control these insects through other means: using mesh netting, handpicking them, encouraging beneficial insects that control them, using trap crops to keep them away from your main crops, or other such techniques. It all takes a lot of time and sweat. Weeds are similar. We don't spray herbicides, but we do spend a

lot of time on our hands and knees hand-weeding our rows of veggies. We also try to keep our gardens nice and tight—Intensively growing crops close together so that there isn't much room for the weeds to take up space. Sometimes of course, we know we have to let some weeds be, especially those that aren't so invasive, and I've learned from some impressive agroecologists from Cuba to start thinking about them simply as 'plants that grow between our crops'. Did you know that some plants can also be used themselves to control weeds? It's called allelopathy, and that's part of the reason why we have sunflowers growing every year; they have 'biochemicals' that help us supress unwanted plants naturally.



It's a good thing we have neighbouring farms that are also agroecological too. We learn a lot from exchanges with the people nearby and try to help them as best we can when they need to troubleshoot new challenges. It didn't used to be this way.

Agroecological farms in Canada used to be nestled in between

endless acres of so-called 'conventional' growing—kind of like oases in the desert. That was before we all got serious about replicating the models that were working well, and not contributing to climate change and biodiversity loss. I'll tell you more about the details of how we got here later, but I can say that we had a lot of challenges to figure out, with some of the big ones being the increased labour required to farm like we're doing, the need for better food distribution systems and economic measures to make sure everyone can access and afford this food, and the issue of ensuring people of all stripes could access land in a way that's fair and equitable. Along the way, government programs and policies helped a lot, but it was really people and communities organizing and pressing for change that drove the political willpower to change the food system.

Before I get into those specifics though, I want to stress that even though agroecological farming used to be marginal in Canada, it was working. It looked different from farm to farm, and from province to province, but it sure worked. People used to worry that we weren't going to be able to feed 10 billion people worldwide without all of the industrial-scale agricultural approaches that took hold in the twentieth century. But folks soon realized that those concerns were really a talking point from the agri-business corporations that was meant to scare us into continuing to rely on GM seeds, chemical fertilizers, and massive diesel-powered farm machinery. Sure, from a certain perspective it's more efficient to have fossil fuels do the work rather than people, but when we look at overall yields, we're not doing too badly at all. It helped that we cut back on food waste radically, but now we're over the 9½ billion population mark globally, and we have a lot fewer hungry mouths than we did thirty years ago, let me tell you.

I can say that a farm like ours is so productive because we work hard at it, and we know what we're doing, but it's also the systems we have in place that help keep the system humming. Soil fertility is a big part of the equation, and it was a real challenge for a lot of farms to transition away from nitrogen-based and other fertilizers that were contributing enormously to greenhouse gas emissions, or 'GHGs'. Fertility is also a big reason as to why we have mixed farms like ours. While our neighbours on one side have a goat dairy operation along with grain production, and our other neighbours are doing rotational grazing of beef cattle along with veggies, we have pasture-raised sheep and a flock of chickens in addition to everything else that's going on here. The sheep wander through the fields and keep them trimmed, which contributes to carbon sequestration, while the chickens follow along, picking at the bugs and distributing the manure. Together, they provide us with much of the fertility that we need to keep our veggie plots productive, though we also have 'green manures' that keep our grain fields flourishing. Green manures are mixes of things like oats and peas that we plow back into the fields rather than harvesting them, adding a lot of nitrogen and other nutrients to the soils.

You may be surprised to hear this, but apart from cutting out synthetic fertilizers and pesticides, a big change that happened on farms in terms of reducing GHGs had to do with the energy we use in our different buildings. Sure, we have an electric tractor, whereas they mostly used to be dieselfuelled, but we also had to improve our energy use across the rest of the farm. That meant insulating the buildings better, putting up that solar array that you see on the roof of the barn, and relying on the community-level geothermal system that we and our neighbours use. It also helps that a lot of farms can access cleaner grids than they used to be able to, and while not everyone has access to a geothermal system like ours, in some places they're doing other things that make sense based on their geographies. A good example is the tidal energy projects out in Nova Scotia.

It took a lot of smart people to figure out all of these different approaches, just as it takes a lot of know-how to farm agroecologically, but ...I've been talking for quite a while already. Why don't we take a break for a coffee before I tell you a bit about how people learn and share knowledge about on-farm practices like the ones we're using?

Editors' Notes

• Much has been written about how agroecology is a practice, a science, and a movement. The section above focuses on on-farm practices, while the next one takes up topics regarding agroecological science in more detail. The movement aspect is woven throughout this report, but it is worth stressing that agroecology and food sovereignty are two concepts that are integrally tied to each other, and that agroecological systems ideally incorporate all three dimensions (practice, science, and movement) relationally.

- o For more information on agroecology, see, e.g., Gliessman (2015), Méndez et al. (2013), Rosset and Altieri (2017), and La Vía Campesina (2015).
- o For information on agroecology in Canada specifically, see Dale (2020), Laforge et al. (2021), and Isaac et al. (2018). The National Farmers Union also has information on agroecology (NFU 2015) and on the transition to farming models that will help deal with the climate crisis (Qualman and the NFU 2019; NFU 2021).
- o For additional information on how farmers can help tackle the climate crisis, see Farmers for Climate Solutions (n.d.), and regarding a post-pandemic vision for the agricultural system, see NFU (2020).
- There are many terms that complement, but are not identical to, agroecology, including permaculture, biodynamic, organic, regenerative, or ecological farming. See Massicotte and Kelly-Bisson (2019), e.g., regarding some of the differences and similarities between these terms. Here we will simply stress that one strength of agroecology conceptually is its focus on integrating the three aspects mentioned above (practice, science, movement), as well as its emphasis on closing both ecological and economic loops in agri-food systems, while striving for a continual improvement of processes on-farm and system-wide.
 - We use 'conventional' in quotation marks throughout this report when talking about agriculture, as a longer historical view of agriculture makes it clear that the industrial practices that came to the fore during the twentieth century are actually very new developments, relatively speaking. Agricultural traditions have been changing and developing for approximately 10,000 years after all.
 - O At the same time, we recognize that in practice, there is a broad spectrum of agricultural techniques, and that actual farms do not tend to fit neatly into an ecological/industrial binary. Agroecology emphasizes a methodology that can be applied to all farm types.
- Regarding climate change 'feedback mechanisms' and climate models specific to Canadian agriculture, see the Prairie Climate Centre's (n.d.) Climate Atlas of Canada.
- Regarding concerns regarding the productivity of agroecological or organic farms versus 'conventional' agriculture, much investigation has shown that smaller-scale farms which cultivate ecological systems and services can in fact be *more* productive than their conventional alternatives. Many analysts have therefore concluded that an agroecological transition could both better redistribute food while keeping up, or even outpacing, the production of 'conventional'/industrial farms. More on this can be found in the works of Altieri, Funes-Monzote, and Petersen (2012), Altieri (1999), Altieri, Rosset, and Thrupp (1998), De Schutter (2010), IPES-Food (2016), and Khadse et al. (2017).

2.2 Knowledge Development

It has really been quite revolutionary when you think about the changes that have taken place in terms of knowledge development and knowledge sharing around farming. Yes, indeed, it sure felt like a revolution was happening when people were continually marching in the streets and carrying out civil disobedience to push for food system change. I suppose that's the first thing that changed: Non-farmers started asking tough questions about where and how their food was

grown, why it was contributing so much to climate change overall, and what could be done about the millions of Canadians who were experiencing hunger amid so much wealth. Farmers also started acting on some long-standing questions, like why we were struggling to make ends meet—including by working off-farm—when all of the big corporations that were selling everything from seeds to groceries were raking in the dough.

Food Sovereignty Ultimately farmers' and food advocacy organizations helped bring farmers and non-farmers together so that a real political education could take place. People began to understand that the inequality in the food system was a reflection of broader injustices happening in society. Non-farmers also realized that, since there were so few farmers at that time, their solidarity efforts would be needed in order to push politicians into making some transformative changes. Some of the initial changes were really low-hanging fruit, when you think about it. The Quebec government gave in to pressure to make food-system education a part of the public curriculum, right from the time kids enter kindergarten, and eventually other provincial governments followed suit. With more young people aware of what important changes were needed in the world of food and farming, more urban folks actually considered ecological farming as a worthy career (even though it took time for it to become one where a

fair livelihood would be likely). With the increase in interest in agriculture as a career, and with continued pressure on politicians, public colleges and universities began to expand post-secondary offerings so that people didn't just have to learn about agroecological approaches through informal networks. More people learned about the science of agroecology, ensuring that their research programs were developed with and for farmers, rather than being stuck within an institutional setting. Colleges also began supporting tradebased certification that recognized the incredible amount of knowledge required to farm in an ecological way: 'Agricultural Technician' became a new Red Seal trade, with governments subsidizing the wages for people in this stream to work on agroecological farms outside of their

classroom learning. With continued public pressure, and rising numbers in this field, the federal government finally allowed for these technicians to be eligible for income supports in the off-season, which helped many more people to feasibly earn a decent living in farming.

Post-secondary institutions also changed significantly in terms of the *public* benefits of *public* research. You see, it used to be, years ago, that government-supported universities and colleges would produce all of these innovations and insights that ultimately went to agri-businesses. I'm not kidding. Plant breeding is a good example. With people outraged that their tax dollars were going to line the pockets of corporate executives of seed companies and so on, rather than supporting Canadian farmers directly, the federal government started introducing measures that restricted industry control over agricultural knowledge development. Soon public plant breeding and seed development was working for farmers again. Scientists collaborated with farmers across the country to develop locally resilient seeds and plants that worked for the area's climate and soil conditions. Ensuring that these research projects were about growing food to feed people as opposed to growing profits to feed bank accounts, seeds became much more affordable (and better overall due to their diversity), which also helped with farmers' livelihoods.

Similar changes took place with genetic modification and genome editing. With more people knowledgeable about the food system, folks demanded that foods containing GMOs be labelled as such, so that they could make informed choices if they wanted to avoid them. In many cases, consumers were avoiding GMOs not because of health concerns, but because they knew that GMOs were part of a system of farming that relied on chemical inputs and which supported corporate profiteering. With governments supporting public education and research to advance agriculture, corporations actually struggled to compete with the options that were out there on the market for farmers. As part of the 'just transition' in agriculture, which I'll come back to later, the government eventually moved to have GM technologies and similar genome editing approaches part of public research, which ultimately rendered existing corporate patents on all of those modified seeds more or less worthless.

How's the coffee by the way? Good? Yeah, I find it delicious too. Nice dark roast with single-source beans from a cooperative in Peru. Boy, am I sure glad we've been able to re-localize food systems in a big way, while also maintaining and expanding fairer trading relationships. But don't let me digress—I'll come back to food trade later.

Overall, I would say that farmers have more control over their farming practices, given that so many farmers in Canada used to essentially get told what to do by the big companies out there: Use these seeds that we've patented. Spray these chemicals at these times during the growing season. Raise your chickens in this way with this particular feed. You get the picture. With so many farmers farming agroecologically though, and many people getting into agriculture from non-farming backgrounds, some pretty substantial changes had to be made to help people trouble-shoot when things went awry. Sure, it helped to have college training programs and those other changes that I

mentioned, but unexpected issues will always pop up around a farm when you're trying to work with the biology and the micro-climate that you've been given.

The fact that we got extension services re-established across Canada, and re-oriented toward agroecology, made a huge difference. These publicly funded services had been scaled back so far in most places that farmers had to try to work their way through problems on their own. Now, when we have issues come up on the farm, we can contact our local extension officer and ask for advice. Her name's Afua, by the way—wonderful woman. Her parents immigrated from Ghana, and I guess the long line of agricultural expertise in their family kind of trickled down to Afua. Somehow between her formal training and that family history, it seems that she is never stumped when we have a question to ask her. She was just here a few weeks ago actually, helping us to figure out how to run our own tests on sheep feces to detect any parasites early on, before things go sideways.

I know a lot of other farmers rely on extension officers for help periodically too, and of course, we talk to each other. Fortunately though, due to online forums and listservs, we don't have to only talk to our neighbours for advice, or to compare notes; we can also connect with farmers running similar operations around the province and across the country. Some things differ from place to place, of course, but the sharing through those online networks can be so invaluable—Even when you didn't know something was 'broken' in a lot of cases, someone shares an idea about some innovation they're using that could make your life a lot easier. And these online connections are supported and complemented by farmers' organizations that operate at different scales, offering in-person workshops on farms, provincial and national conferences where you can learn about everything from seed saving to cooperative distribution models, and more.

I guess that farmer-to-farmer knowledge sharing has always been a huge part of what makes agroecology work, but I think that what is key to the farming systems we have in place today, is that there are a whole host of approaches and public services that support agroecology and the knowledge it takes to continually improve what we're doing. We don't just have to do this at the fringes of agriculture like when I was a young one just getting started.

Can I take your coffee mug? Thanks. I'm on dish duty today, so I'll wash these up at lunchtime. And that rhubarb loaf is pretty spectacular, isn't it? Young guy, Ahmed, who we saw earlier weeding in the field out front, does a lot of the baking. He's always coming up with something new, depending on what's being harvested. Now, why don't we have a walk around the property and talk a little about the land we're on...?

Editors' Notes

- On political education and connections to agroecology and food sovereignty, see e.g., Meek (2020), Meek et al. (2019), and Tarlau (2015). Arguably, with less than 2% of the population in Canada farming, political education that inspires non-farmers to action will be an essential component of movement-building for food system change.
- As of early 2020, food insecurity in Canada was affecting approximately 4.4 million people, or nearly 12% of the population on average, with significant regional variations evident.
 Throughout the COVID-19 pandemic, those rates soared as a result of job losses and other economic troubles.
 - For more on food insecurity in Canada, see the PROOF Food Insecurity Policy
 Research website at www.proof.utoronto.ca, as well as, e.g., Collins et al. (2016),
 Dachner and Tarasuk (2018), Loopstra and Tarasuk (2015), and Tarasuk, Dachner,
 and Loopstra (2014).
- For more on farmers' livelihood struggles and the farm income crisis, see Qualman and the NFU (2019). For an excellent analysis of social movement organizing written by an Ontario farmer, see McBay (2019a, 2019b).
- With thanks to Sarah Elton for the suggestion regarding 'Agricultural Technician' as a formal training program.
- On public plant breeding and its importance, see Kloppenburg (2004) and also: www.seedsecurity.ca
- For a discussion of GMOs and their use in Canada, see Clark (2017), as well as the work of the Canadian Biotechnology Action Network (CBAN) (www.cban.ca).
- On the need for improved training opportunities for existing and aspiring ecological farmers, see Laforge and McLachlan (2018), and Laforge and Levkoe (2018); and, regarding tensions around learning agroecological techniques through 'informal' networks and methods such as internships and volunteering, see Ekers et al. (2016), and Ekers (2019).
- We revisit the just transition in Section 4.2, and discuss international food trade in more detail in Section 3.2.

3. SOCIAL EQUITY

What does a socially just food system look like?

3.1 Land Relations

As I walk around this farm, I realize that sometimes it's easy to forget that not so long ago things looked very different for food growers. It's easy to forget that we were in fact in a period of crisis for quite some time. Land consolidation and financial speculation were pushing families out of farming. The ballooning costs of inputs and land, huge debt loads, low farm-gate prices—the list goes on—were making farming inaccessible to most... And these trends made farming a constant struggle when it came to securing a livelihood. Overall, we were losing farms, depleting soils, and for a while there it looked like we would miss one of the things we most needed to change: the system we were all used to, of privately held, commodified land, just wasn't working.

It didn't come as a surprise to me—or my farmer friends—that such commodification and privatization made land completely inaccessible for most folks. And we knew the problem was deeper than that too. For us to look back on the evolution of land use in this country meant to look back on a shameful legacy of colonial violence. It was a legacy that dispossessed Indigenous nations from traditional territories and poisoned the land and waterways. As a long-time farmer myself, it's fair to say that I was ashamed to realize the extent of my own complacency in this ongoing colonial history. For generations, land and agriculture were weaponized against Indigenous peoples, who were incapacitated from engaging in traditional methods of sustenance through forced relocation and assimilation, while colonial governments exploited the land in the name of 'progress' and capitalist profit-accumulation. As a result, systems of land access emerged that were not only predicated on the dispossession and oppression of the rightful keepers of the land, but that operated as an extension of modern-day colonialism.

But over time things have changed considerably. Indigenous people's struggles, and some important solidarity efforts, made sure of that. Yes, over time new ways to understand land, how we value and relate to it, have emerged. I would be lying if I said there was one quick fix, one method to solve the land issues we were facing. It took a lot of dedicated people, who saw how fundamental it was to have fair and just land relations, and who pushed for the changes needed in the areas where things had to be reorganized. For example, community land trusts and government land banks started opening ways to see land not as a commodity, but a community responsibility. I mean, just look around... All of this land that we're farming on is part of a land trust, and that's something that used to be pretty rare a few decades ago. Yet these kinds of alternatives became an important part of our fights for justice, in the process building a different way of viewing land and how we care for it.

I've got to say that, personally, it's a relief to know my retirement doesn't require the stress and headache of trying to sell this place. I know people who had to go through that back in the day—trying to find a buyer just to have the money to survive in your last years. Maybe that's a selfish way

land organized and controlled by community trusts and government-operated land banks; and it certainly gives me peace to know this land will keep growing food ecologically for generations once I'm gone, letting new hotshots take the reins without financial burdens either.

If you ask me, this new system is leading to money being taken out of

the equation all together—I wouldn't be surprised to see this next generation not spending a dime in the process of acquiring some farmland. These systems further gave us the mechanisms to understand the need to respect the environment we grow on, recognize its strengths, and grow what is suited to it. PEI really showed us that there's a lot more to valuing land than money, and we risk losing its fertility if we don't see that. As many Islanders will tell you though, it wasn't enough to have policies on the books that reined in corporate land consolidation in that province—It took a lot of public pressure to tighten up the legal loopholes before a profound land reform really took place. We sure learned a lot from those struggles, and today these processes that are in play across the country mean land is finally in the hands of communities. It's a big reason as to why both crops and farmers are beginning to thrive, as they are right here on this farm.

It would be entirely naïve of me to tell you about this newfound understanding of how we relate to the land without acknowledging the social movements that advocated for the widespread decolonization and recognition of whose land this truly is. If not for the enduring advocacy of the Land Back movement, I don't think that this land could have ever been placed back into the hands of communities. For decades, the Land Back movement organized and advocated for the renegotiation and actualization of treaties. This work resulted in the emergence of a social relationship between Indigenous and non-Indigenous populations that recognized not only the intrinsic value of the traditional Indigenous lands on which our food is grown, but also all of our social relations that play out in connection to that land. The people in power began to realize that many of their policies had to go... particularly the ones that made land inaccessible to Indigenous food providers (be they harvesters or farmers), given that such policies suppressed the health and well-being of Indigenous communities. Slowly but surely, barriers were repealed through the restoration of land title to Indigenous communities, which was an important part of efforts to compensate for many decades of cultural genocide and political and economic marginalization.

Community control also grew through our cooperatives, which even before had been showing us ways that farming could be oriented not to profit but to community strength. I'll admit I was a bit skeptical about the whole system back in the day; I thought all that collective decision making sounded like a lot more talking and negotiating than I was up for... I was always much better at growing crops than those administrative types of things. But looking back, co-ops really showed us possible ways forward. I guess it's not surprising, being built off of community input, collective

pooling of resources, collective knowledge and strength; it's no wonder they've become so successful. Their flexibility and versatility were things I didn't really see back then. There are so many ways people are organizing co-op farming, and it's not the simple image I had in my head of a big happy 'family' collectively tending crops. No, it really depends on the place you go and what their needs are.

Of course, part of the fight was ensuring the transformation of our governments, making them recognize that they were perpetuating a lot of unsustainable and unjust policies that were hurting communities. It seems odd to imagine that zoning laws and land use planning used to work *against* food growers, making urban farming a struggle, and placing rural land at risk of destruction due to sprawl and development projects. My youngest is farming down in the city now, and it always makes me smile to think that those years of struggle mean she's able to live that lifestyle without the headache of the farmers before her, with all the restrictions and rules that once placed yet another suburban housing development higher on the priority list than community gardens or an urban farm. I remember a big win that really made me feel like we were getting somewhere was when Toronto and Vancouver started deliberately allocating the land surrounding the city as protected spaces for farmers to access. Now, as I'm sure you've noticed, that's pretty common practice for large and mid-size urban centers. At that time though it was a radical move, and it really showed me the power of our voices, and it showed me the possibility of our governments responding to pressure to work collaboratively with communities to build a better system.

It's a little easier to imagine that land-linking networks didn't always exist, giving farmers options if they wanted to leave or enter farming, seeing as I think most of us take our connections for granted. I remember meeting a youngster back in the day while I was in the city who was looking for land, and joking that I wished he could come have a coffee with me and all my neighbours—an hour of chatter sitting around the table and we'd certainly think of someone looking to transfer or parcel out some land. Well, now there's a system for that! Formal networks, I mean, where those looking to get established in farming can reach out either to those needing help or those looking to pass on their ranch or growing operation to a newbie.

One of the biggest fights of all was ensuring that everyone had a seat at the table during these transformations. Just as our governments had to recognize that their policies were contributing to the poisoning of lands and communities, they also had to recognize who did—and who didn't—have a say in policy making. Through the renegotiation and actualization of treaties, the government ensured that the rightful keepers of this land would be involved in all decision-making processes regarding how individuals and communities could use, access, and relate to the land. Although it feels like a lifetime ago, I remember when zoning and land use laws were first reimagined, and when land trusts, land banks, cooperatives and land-linking networks started to grow. The first network of decentralized councils for localized Indigenous land management and jurisdiction were created to ensure that Indigenous peoples had control over the policy processes that would affect them and the land. It would be ignorant of me to say that these councils have done enough to undo the legacy of

colonization, but I do think that they have been a significant step forward in the direction of decolonizing land access.

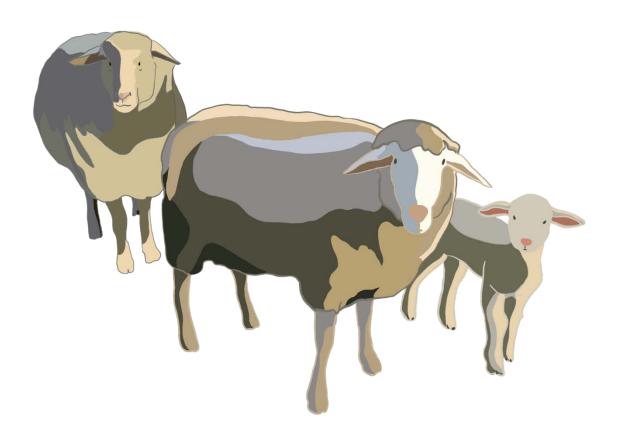
Overall, these developments remind me of the work that has been done to shift us away from seeing food as a matter of private consumption and for-profit entrepreneurship, to seeing it as a public, community affair. There is of course always more to do—truly equitable land access has yet to materialize—but I think we can be proud of what we have managed so far.

How are your legs? Not tired of walking yet, are you? Great... Let's carry on up around the sheep paddocks. There's still more to see!

Editors' Notes

- Unfortunately, in contrast to this narrative, we are living in an era of intense agricultural land loss, financialization, and consolidation. For more information on these current challenges, see: NFU (2010, 2015), Demarais et al. (2016), Miller/RUAF Foundation (2016), FarmFolk CityFolk (2016).
 - Similarly, there are many challenges to urban growing that are blocking its proliferation. See, e.g., Miller/RUAF Foundation (2016), IPES-Food (2017), Mulligan et al. (2018), and Wekerle and Classsens (2015).
- For more information on...
 - o Land banks and their feasibility, see Arsenault (2019) and FarmFolk CityFolk (2016)
 - Land trusts and their viability/potential regarding agricultural land, see Hamilton (2005), TLC (2010), FarmFolk CityFolk (2016)
 - Cooperatives in food and agriculture, see Stephens, Knezevic, and Best (2019), Sumner, McMurtry, and Renglich (2014), Mount and Andrée (2013), Miller/RUAF Foundation (2016), Levkoe (2017), Rosset et al. (2011); as well as Local Food and Farm Co-ops (LFFC) at www.localfoodandfarm.coop
 - o Land linking, see Laforge et al. (2018)
 - The global agrarian reform movement and other movements bringing farmers together globally, see: Borras (2008), Holt-Gimenez & Shattuck (2011), Moragues-Faus (2017).
- Thank you to Darrin Qualman for raising the possibility of city governments buying and leasing surrounding land as a form of farmland protection and guaranteed accessible land tenure. This idea, which we have adapted slightly here, is discussed in more detail in the NFU's (2021) report, *Imagine If: A Vision of a Near-Zero-Emission Farm and Food System for Canada*.

- The reference to PEI refers to the ongoing discussion within the province regarding land banking as a way to combat land ownership concentration, as well as a conduit to ensure the restoration of depleted soils, due to the oversight and non-monetary valuation that such a system provides (see Arsenault 2019).
- Our optimism for a vision of land as a commons comes from both the documented possibilities and current cases noted in much of the literature cited above, as well as the thoughtful analysis and examples provided by Ostrom (1990).
- To familiarize yourself with Canada's colonial history and its impacts on the food system, see: Coté (2016), Desmarais & Wittman (2014), Grey & Patel (2015), Kepkiewicz (2017), Kepkiewicz and Dale (2019), Levkoe, Ray & Mclaughlin (2019), and Matties (2016).
 - o For more information on the Land Back movement specifically, see Gouldhawke (2020), Gray-Donald (2020), Lopez (2020), Martens (2016), Riddle (2019), and Wadden (2010).



3.2 Food Beyond Canada

Just look at these sheep... chewing away on the grass and legumes. Looks like they don't have a care in the world. They do, of course, such as coyotes and cougars (and that's why we have the dogs! Ha ha), but, no, they're pretty happy little creatures.

Maybe I'm just rambling now, but doesn't it strike you sometimes how history seems to repeat itself? ... How folks are faced with challenges in what feels like a cycle? All of our talking so far has really got me thinking about this long history of our food system and how it sometimes feels like we have gone back to our roots, back to the ways different societies around the world were doing things for centuries. And, yet, at the same time, we're constantly moving forward, always striving to advance.

Now, going to your local public market might bring on the same mixture of sentiments. Markets are as old as agriculture itself, and yet we have clearly embraced *global* food distribution systems... allowing ourselves the joy of a cup of coffee, or a nice juicy mango here and there. I guess what I'm getting at is that the value of land, the value of food, and the value of community are so much more central to how things are now. We've collectively realigned our priorities. We understand who is feeding us, providing for us, and caring for the land. I suppose we've gone both backward and forward at the same time, if you know what I mean.

Don't get me wrong—There's still room to improve. But seeing the transition that communities and governments have brought about so far has really made a difference. For example, reforming marketing boards and supply management, and broadening their scope too, has done us a lot of good. The changes have really worked for us farmers and for non-farmers, both here in Canada and elsewhere, and I would say that much of the progress that has come about has had to do with rethinking what, when and how we want to import and export when it comes to food.

You know the term 'alternative' trade? I suppose it's not as 'alternative' as it once was. When the government started to embrace so-called alternative trade, that's what really got the ball rolling. It sure took a lot of community-level innovations and grassroots organizing to both show what was possible and to drive real change at a national level. I will forever be grateful for all the important work that was put forth by early agricultural cooperatives, for example, and those who fought corporate power in the food and agriculture sector—even when it seemed like no one was on their side.

You see, voluntary market-based models were always portrayed as the way to go—take the Fairtrade movement, for example. While it seemed to address the concern of smallholder farmers, especially in terms of achieving some kind of economic justice, it just couldn't achieve the breadth and range necessary to influence and improve the lives of all farmers within a given commodity sector. With certifications like Fairtrade, the protection and consideration of farmers' livelihoods were limited to a select few. And with that, I don't mean to dismiss the activism and challenges to the pre-existing

status quo that came with the Fairtrade movement. At the end of the day, it questioned the processes behind the growing of certain crops around the world—from cocoa and coffee to bananas. It raised questions about the unthinkable working conditions many farmers were facing and the monopolistic control that corporations had over these crops. And more importantly, it paved the way for the more accessible certifications we have today.

But these non-government-affiliated certifications really left a lot to be desired for many years. Some farmers in the global south struggled with the administrative burden associated with achieving and maintaining certified status. Others complained about the fact that these programs just didn't cover enough farmers and crop types, or that they didn't offer enough in terms of livelihood supports for those farmers who were covered.

And consider us farmers here in the global north. Once they dissolved the Canadian Wheat Board in 2012, for example, wheat farmers had a lot less say in how the market was being governed, and boy were those farmers left unprotected from price shocks. While it was far from perfect, the Wheat Board had been an institution stabilizing prices, ultimately protecting the farmers involved from the whims of the global marketplace. This level of government intervention, and this scale, was what was necessary in a system of international trade that so ridiculously disadvantaged farmers from around the world and made them compete with one another. It was a level and scale that made Fairtrade's reach look meek in comparison.

Fortunately, sustained public pressure not only brought back an organized marketing board for Canadian grains, but also extended this to other agricultural products including meats and veggies as well. And while some countries followed suit with similar approaches at a national scale, we also saw the gradual development of international institutions that ensured truly fair trade could be extended to a broad range of food products, with these trade regimes supported by the states involved.

There's no doubt about it—food sovereignty hasn't meant the end of trade at all. The reality is that there are countries and regions fully dependent on food imports, and similarly, there are countries constantly producing a surplus. In terms of countries that have to rely on food trade, take Japan as an example. It's a relatively small island with a population density unimaginable to us here in Canada. With the limited amount of productive land that they have available, it would be ridiculous to think they would be able to localize their food system enough to feed even half of Tokyo. Instead, they depend on farmers from around the world, including many of us here in Canada, to provide them with their grains, veggies, and meat.

Over here, we've long been lucky enough to have vast amounts of agricultural land that allows us to produce a lot of food for our domestic population, while also exporting a considerable amount of food to other countries. What we really needed to cut back on though is what people call 'redundant' trade. Shifting our priorities, and understanding the social and ecological consequences of treating food as a commodity, really changed things. It became clear that importing certain foods

was redundant, unnecessary, and often wasteful. Why were we importing tomatoes to Ontario, when those were easily grown here for much of the year? Why were farmers in the province exporting carrots at the same time that consumers in Toronto would find imported carrots at their local grocery stores? Organized marketing boards really helped put a stop to such illogical approaches to trade. It was important, of course, that these boards had governance structures that brought together farmers' groups, consumer advocates, and public sector experts. They really had to function democratically and consider different viewpoints in terms of making sure we had our priorities straight as we collectively reorganized trade in this country.

Now, through all of these changes that were taking place, we also had to consider our relatively short growing season in Canada, and the fact that some foods can be stored or preserved longer than others. Folks certainly can't just expect to have the same produce available all year long. It didn't come easy; I'll tell you that. A ton of awareness building was needed to change the way people were eating. I don't want to get into detail about how our diets have changed over the years just yet, but let me stress that organized food marketing and trade had to be complemented by more transparent labelling and pricing approaches, so that people were more aware about when they were eating imported, off-season produce and other foods. Sometimes it's obvious what food has been imported to Canada, of course. I'm sure you didn't need a label to let you know that the coffee I served you earlier wasn't grown here! No, but the label on the bag could let you know about the Peruvian cooperative that it came from.

That raises another important point, actually. With how culturally diverse our cities and towns have become, it was essential to take into account cultural considerations when re-localizing our food system. Apart from things like coffee and tea, who is to say that folks shouldn't be able to eat mangoes, plantains, cassava, and all kinds of culturally important foods that are important to specific ethnic communities, even though we'll never be able to grow those foods here? I mean, we have been able to do a certain amount of 'import substitution,' by growing crops like callaloo and okra, since those are possible to grow in parts of southern Canada, but there are plenty of other culturally important foods that need be brought in from warmer climates. The trick overall, I would say, has been to strike a balance between local production and imports—in other words between seasonal, local eating and fair, organized trading systems that bring in wonderfully diverse foods that make eating so enjoyable!

Let's start to make our way back down toward the farmhouse, now. I won't carry on with all of these reflections for too much longer... I'm just about ready for a break anyhow.

I have to say though, the same kind of solidarity and awareness we see here in our approach to localized food and food trade is now seen on a global scale too. I guess you may be aware of all of the activism and grassroots organizing in different countries that has been bringing an end to many of the so-called 'free' trade agreements that have worked more in the favour of corporations than of farmers and consumers. Heck, even institutions like the World Trade Organization have been reined

in when it comes to food trade and agricultural production. The new sense of collectivism growing across all kinds of multilateral agencies has called for equity and fairness to be prioritized across international agriculture and food sectors.

Nothing is perfect, but the positive changes have been very noticeable. Farm-gate prices, for one, now allow small-scale producers to earn a decent income. Different quotas and tariffs that have been implemented guarantee these fairer—and definitely more stable—prices to farmers, which is a big change from how things used to be. Perhaps one of the most important things though, was that international trade regimes were realigned to complement, rather than conflict with, systems like the government-supported supply management programs we have here in Canada. To be sure, there was a lot of work to do to reform (and expand!) supply management to make sure it encouraged diversity in farming, and ecological practices overall... but it really helped that all of these programs weren't going to be compromised by 'free' market approaches to international trade.

As with everything, it has taken a fair bit of trial and error, and we're still figuring out how to keep trade just and transparent, but at the end of the day, we have learned a lot from our mistakes. We really questioned our history in terms of how we approached food and agriculture in the 20th century and beginning of the 21st century. We realized there are certain things we should be doing that are not necessarily 'new' or 'innovative' but that work for people and environments, and which are more important than corporate profits. We also realized, I would say, that cursing globalization wasn't going to get us anywhere. Globalization, after all, has brought us a richness of culture, community, information sharing, and, of course, delicious foods!

Ah, here we are. Honestly, I don't think I can talk about food any longer without getting a bite to eat! Are you hungry? Perfect. Let's get some lunch.

Editors' Notes

- For more on a reimagined vision for governance, see Section 4.1: Governance and Government Relations.
- For a more detailed description of supply management and how it would play out when supporting smallholder and agroecological producers, see section 4.2: A Just Transition in the Food System.
 - For more on supply management's contribution to a more just and ecological vision for international trade, see: Aerni (2011), Desmarais & Wittman (2014), Gambling (2016), Koning & Jongeneel (2006), Magnan (2013), Pimbert (2009).
- This section highlights the changes in approach needed to ensure that international trade ultimately benefits smallholder producers, while remaining transparent about the true costs of trade (whether they be ecological or social) in pricing. This vision requires government intervention and multilateral trade rules that promote a plurality of markets, under the recognition that corporate control of the food system is ultimately detrimental.
 - O This assertion is based on the research and analysis of Burnett & Murphy (2014), NFU (2016), Pimbert (2009), and Raynolds et al. (2007).
- Mechanisms of alternative trade are discussed throughout this section, with a particular emphasis on single-desk marketing, as exemplified by the now dismantled Canadian Wheat Board. While imperfect (and further discussed in section 4.2: A Just Transition in the Food System), this system demonstrated engagement between agricultural producers and the state, along with transparency to the public, which can be better streamlined through the valuation of just and ecological production and processing. For more information, see Fridell (2013), Magnan (2013), Pimbert (2009), Schiavoni (2014).
- For more information on the deficiencies of Fairtrade, and other voluntary, market-based, models, see Bacon (2010), Burnett & Murphy (2014), Fridell (2013), Holt-Gimenez et al. (2010), and Pimbert (2009).
- This section highlights the ways in which Canadian agriculture relies on a vast system of
 agricultural and agri-food imports and exports to feed domestic populations and participate
 in the global economy. Highlighting greater reflection and consideration for when
 international trade is necessary, rather than redundant and inefficient, puts farmers first
 (both in Canada and abroad) and allows for a more realistic vision for a strengthened,
 localized food system.
 - For more information on redundancy and inefficiency in export-driven trade, see Bajzelj et al. (2020), Bellows & Hamm (2001), Fitzpatrick & Willis (2015), and Friedmann (2020).
 - Current reports on the status of Canada's agri-food system can be found in Agriculture and Agri-Food Canada (2017).

4. INCLUSIVE GOVERNANCE

What does democratic food-system decision making look like?

4.1 Governance and Government Relations

Well, wasn't that lunch delicious? Mm-hmm... and a great example of what we were just talking about—You know, in terms of balancing re-localized food systems and fair trade regimes? I forgot that Kevin was taking the lead on lunch today, but his *bibimbap* is always a treat. Now, the veggies, mushrooms, and eggs were about as local as you get, seeing as most of it came from our own farm, but the spices and rice were imported. Now... What was it that I wanted to come back to that we were discussing a bit before? Ah, yes, governance.

Let me tell you, I have been in this line of work for a very long time, and it took years before I finally reached a point where I didn't distrust or otherwise resent the government. When I first started farming, some of my older counterparts called me a hippie, and I'm pretty sure that had a lot to do with my lack of respect for the government. I wasn't just blindly anti-authoritarian though. For the longest time, the federal and provincial governments were not in our corner. You would think that they would want to support, including financially, the people who put food on their table each morning and each night, but they rarely ever did. You know that saying, "don't bite the hand that feeds you"? My farmer friends and I used to joke around that, when it came to agriculture, biting our hands was the government's primary purpose.

I think I was so uncomfortable with the influence that government had on the agricultural sector because so much of the behind-the-scenes politics really affected our farms. The approaches they took really made it difficult for all of the farmers like me who were trying to move away from the corporate domination of the foodscape. Part of it was the indirect policies and incentives that disadvantaged those of us who wanted to contribute to a food system that prioritized human and environmental health and well-being, rather than the interests of massive corporations. Had it not been for the governmental policies and regulations that were put in place over the years, I doubt that the corporate influence in the food system would ever have gotten to the point of almost unbridled and unchecked control. Corporations were able to dominate the market and exploit both people and the lands, and in doing so, the food system oppressed farmers, food workers, and those experiencing food insecurity, with people of colour often being the hardest hit on all counts.

It was so disturbing to see those trends unfold. As corporations grew stronger, they were really able to have a significant influence on government policies, including by spending enormous sums of money on lobbying—often through industry associations—and by supporting select politicians as they ran for office. Us farmers and consumers just couldn't compete with that kind of influence on

our own. As a result, different levels of government found new and inventive ways to support corporations, and to ignore or excuse their worst behaviours when social and ecological problems were exposed. Overall, policies in the agri-food sector were pretty much entirely focused on scaling up production and maximizing exports. It was all about the economic contributions of the sector—the agri-food *industry*—not providing food for people. As you know, this policy and governance approach contributed a great deal to the climate crisis, given that maximizing outputs meant exponentially increasing fossil-fuel-intensive fertilizers and other synthetic inputs in agriculture.

Rather than succumb to the power of the corporations and the governing bodies that were in their pockets though, we changed course. We refused to be shut out. Rather than complain amongst ourselves—something I can admit I have been guilty of doing many times—we farmers and our allies redirected our thinking toward lasting solutions. Nothing about implementing those solutions was easy though. I probably owe most of my grey hairs and wrinkles to those years of struggle. One of the biggest challenges from the beginning was organizing to tackle consumer complacency within the Canadian foodscape. At the time, most non-farmers were unaware of what was going on behind the scenes in terms of how food arrived at grocery store shelves (...And yes, in those days, grocery stores were the primary way for people to access food—especially the big, corporate food retailers).

It took a lot of work and, ultimately, consistent, unrelenting pressure from alliances of farmers and non-farmers to disrupt the corporate food regime, and to bring about the rise of inclusive governance within the Canadian food system. So many of us had to take an active role in organizing against the structures and elected officials that had been holding up the status quo in this country. We organized for a future rooted in food sovereignty, where food would be recognized as a public good, a human right, and a necessity of life and livelihoods. At the same time though, we knew that our organizing wasn't going to end. We're *still* constantly organizing and struggling to make things better in our food system. Even with all of the improved processes, institutions, and structures in place, we cannot be complacent in terms of ongoing advocacy that makes sure we have a foodscape that works for our communities and the ecological systems that sustain us.

Fortunately, some very practical, positive steps toward inclusive governance have been made. Food policy councils are one of the key types of institutions that have been instrumental in this transition. At first, these councils were small in size and number. They first brought together people actively involved within the food system in major cities like Toronto and Vancouver to push for policies and policy processes that were rooted in inclusion and resilience. Members included farmers and urban growers, elected officials, public health experts, farmers market organizers, food security advocates, and more.

These councils made (and still make) decisions regarding the logistics of processing and distribution, rules for urban agriculture, and public procurement of healthy, ecologically grown food—among many other topics. On the whole they paved a way for a successful transition away from the governance models of the past. Eventually, more food policy councils were established across the

province and the rest of the country, including our regional, foodshed-level food policy councils, which—as you likely know—operate between the municipal and provincial levels. I served on one for many years and could finally appreciate just how much work it was. It's one thing to *want* an inclusive governance approach, and it's another to actually make it happen. I don't think I'd be the same farmer I am today though, had I not gained the experience and insights that came with collaboratively contributing to food system decisions for our area.

Now, I was never involved with the national food policy council, but I know it had a crucial role to play too, in terms of bringing together so many departments, ministries and institutions at different jurisdictional levels that all somehow relate to food. The national council worked particularly well, I have to say, when those involved took steps to make sure that corporate actors (who had been involved at the beginning) were not able to dominate the agenda and water down or delay the initiatives that others were trying to move forward.

Indeed, I can't emphasize enough just how important it was for the government, with the social mandate from food policy councils and engaged citizens, to be able to penalize corporations that would poison agricultural lands and waterways, compromise animal welfare, or exploit food and farm workers. Finally, government bodies had the means to hold massive corporations to account for their bad behaviour, and they acted on that power. They had 'sticks' in other words, as well as the 'carrots' that were needed to incentivize ecological farming, food security, labour justice, and localized food distribution. Policy priorities were shifted so that smaller farms actually had a chance to provide a livelihood without certain members of the household working off-farm!

Over the last few decades, food policy councils and similar institutions have led the way for what-was-once 'alternative,' localized food initiatives to find their way into the mainstream. There's no denying that many farmers have worked co-operatively in one way or another for decades, but for a long while, so many initiatives in food and agriculture were either not economically viable in Canada or they were marginalized, out at the fringes of the food system. Transformations undertaken in terms of governance and food politics have made it clear how essential it is to have active participation from farmers and non-farmers, and to make sure that cooperation runs through all aspects of the food system—from the seeds that go into the ground to the waste that you're left with after preparing a delicious meal. It's a great picture to think of: how producers, distributors, and consumers work together to make decisions regarding the food that they grow and eat. Once upon a time it would have been hard to imagine such a thing being possible.

Editors' Notes

- For more information on the ever-evolving role of the federal, provincial, and municipal governments in Canada's foodscape, see, e.g., Andrée, Clark, & Levkoe (2019), and Knezevic et al. (2017).
- For more information on the social, economic, and ecological impacts of the maximization of agricultural inputs and exports, and the consequent exacerbation of the climate crisis in Canada, see Qualman and the NFU (2019).
 - O Note that for the sake of simplicity, throughout this report we use phrases like "social and economic" or "social and ecological," however, as many scholars observe, it makes sense to say "socio-ecological" or "socio-economic," for example, as these categories are integrally related and overlapping.
- Transformations in the foodscape will require social movement organizing, and perhaps civil disobedience, in favour of positive change and against those currently dominating the Canadian food system—such as corporations and government actors who support them. To learn more about food activism and organizing see, e.g., Andrée, Clark, & Levkoe (2019), Block et al. (2012), and Wittman (2015).
- The implementation of a food sovereignty framework within the Canadian food system will be essential to achieve a more democratic system of governance. To learn more about food sovereignty and the institutionalization of this framework, see Block et al. (2012), Desmarais (2015), Desmarais, Claeys, & Trauger (2017), and Wald & Hill (2016).
- In order to achieve a more democratic system of governance, various localized forms of management and governance must be implemented at all levels of the food system, including food policy councils. For more information, see Blay-Palmer et al. (2013), Fischer, Pirog, & Hamm (2015), Friedmann (2007), Levkoe et al. (2018), and Mah (2012).

4.2 A Just Transition in the Food System

Well, you've had a tour now, we've had lunch, and the dishes are done. How would you feel about helping me out in the greenhouse with a few things? There are some tomato plants I was meaning to tend to this afternoon. ...Thanks, I knew you'd be game! And don't worry—I can keep talking your ear off while we work. Ha!

Continuing on the topic of decision making, I have to say, there was a *lot* to think about in terms of making sure that people could change the way they were doing things, but while also ensuring that nobody was left behind. Honestly, can you imagine trying to take your farm from vast fields of monocrops, where you're relying on the regular use of chemical fertilizers and pesticides, and turn the whole thing into an agroecological system? Oh, and to boot, you're straddled with massive debts, your farm infrastructure may not be suited for this new system, and you've got no experience with farming any other way. That's what a lot of farmers were faced with back when folks started talking about a 'just transition' in agriculture.

Sure, you know the term now, but thirty or forty years ago most people had only really heard about it in terms of the fossil-fuel sector. "How do we make sure we shift our society and economy to be more climate-friendly, but while not screwing over the workers whose jobs depend on polluting industries?" That was essentially the question folks were asking. You know what I mean—Think about all the people who used to work in oil extraction and processing, natural gas projects, and the like. It wasn't the fault of the people employed in those sectors that that was where the work opportunities were. But before long, people realized that the 'just transition' question needed to be asked about the agricultural sector too. This was particularly true given that about 30 percent of GHG emissions back then were connected with our food system, directly or indirectly, and the vast majority of these emissions were tied to the industrial approaches we'd taken to farming. Just like in other sectors, it wasn't the farmers' fault that they were contributing to climate change. No, it was really economic models and long-term government policies that had pushed them into farming that way.

My point is that a great deal had to be sorted out, which is why it was so key for us to develop governance structures that allowed for these issues to be raised, and for solutions to be figured out collectively. Do you remember what I was saying earlier about education and training programs that shifted to support ecological farming? As I said, everything from post-secondary programs and public research to extension services and on-farm learning opportunities were incredibly important to supporting the process of moving toward agroecology. Well, those supports weren't just there for new entrants to farming; established farmers—so-called 'conventional' farmers—also needed a lot of help in terms of training and know-how to move away from the more polluting and soil-depleting practices that they had been relying on. They needed financial supports too. Well, all the details that needed to be considered, and all of the possible solutions to the challenges at hand, wouldn't have come to light if farmers weren't involved in the decision-making processes that steered the

transition. Between special committees, the food policy councils I mentioned, and a range of consultations and community-based research, the governance processes that spurred on the just transition were *inclusive*. They had to be.

And it wasn't just farmers... Non-farmers had a big role to play too, because it soon became clear that the just transition wasn't only about agriculture—It was the whole food system that needed to change. I can tell you that it wouldn't have been possible to really change things at that scale if people weren't given the chance to step back and reorient. In large part that reorientation was possible because of what we called Guaranteed Livable Income, or Basic Income Guarantee, which really wasn't an income at all, but more of a social assistance program ensuring everyone had the financial means to get by. So, with this, people actually had the chance to pursue retraining. People could educate themselves for better job opportunities without worrying about making ends meet. Food insecurity rates plummeted, and there was a noticeable increase in people getting involved in different economic activities as health and well-being improved. Social inequality, which had been growing steadily for over fifty years, finally began to subside. Farmers could now start shifting what and how they grew without needing to worry as much about the immediate impacts it could have on their livelihoods.

I also think the Guaranteed Livable Income program helped incentivize more young people to get into growing food. As you can imagine, the seasonality of the work would previously really put people in a precarious situation, given that they only had a secure income for part of the year; but with these income supports they could choose that type of work without those same financial worries. And while many farmers were trying out different growing practices, the same kind of experimentation was enabled among consumers... Honestly, it's easier to be convinced to get your food a different way if you know you have a steady cash flow to rely on.

But, as you probably know, we've moved away from that income program. And personally, I'm quite excited that we've gotten to a point where we can. After all, people shouldn't need the government sending them cheques just to keep their heads above water; a system that truly works for them means they are never in that situation to start with. That's why it was really our fights for things like full employment, living wages, free education and healthcare, affordable housing... Those were the struggles that were really essential in the long term. It's through those fights that we started to build a truly equitable society, and I believe it will be those types of interconnected issues that we will need to keep revisiting and working on as we move forward.

Oh, and of course the big elephant in the room was the corporations. I know, I know... I've already said a lot about corporate control and what an insurmountable obstacle it once seemed to be. But fighting that power was so crucial for ensuring a better situation for everyone, including, of course, us farmers and food workers. What I haven't gotten into in detail yet though is how marketing boards and supply management came into the fight against corporate power and for better food system governance.

Well, as I've said, farmers had almost no voice and no say at one point. Economically, politically—you name it—it was the corporations who were calling the shots. But organized marketing boards helped change that. Sure, the original ones had pretty much all been dismantled by my time, but I had heard a lot about them. I remember my aunt and uncle out west in Saskatchewan, for example: they would always put a crop of wheat in because they knew it was a safe bet. The Wheat Board, as a single-desk marketing board, was in place so they knew they would get a steady income at a fair price from it. Similarly, certain agricultural sectors, like dairy, eggs, and meat birds, they were under supply management. Now, I could talk all day about the issues with supply management back then... It was so geared towards mass production, and the quotas to produce under the system were so ridiculously expensive that many people thought it should be scrapped entirely. But supply management did have its advantages too, not the least of which being that it allowed a lot of financial stability and ensured that the government didn't have to spend buckets of money just to keep farmers afloat (like other countries were needing to do). In fact, in hard times—even during global crises—those supply-managed sectors showed themselves to be as resilient as can be.

So, reforming and expanding marketing boards and supply management helped change the dynamic of corporations pushing farmers around. Under marketing boards, suddenly we weren't a bunch of scattered farmers; we had collective power, and we didn't need to fight amongst ourselves trying to find buyers, since we were able to unite together. It was a real turning of the tables; we could begin to challenge the domination of the corporations. The agricultural co-ops and the pools have helped ensure there is stability and regularity to what we distribute, and they also help structure the whole governance side of things to ensure that all of us have a voice and can raise it. So, for food producers, there's this structure now that means that no matter what kind of farm operation you have, you'll be supported. It also really helps us learn together—the network and the community aspect mean that we keep each other informed about a whole range of marketing and distribution challenges and approaches. We're a tough crowd to fool is what I say! I truly feel that, if it weren't for these marketing boards and the benefits they offer, trying to bring about a just transition in Canadian agriculture would have been impossible.

Same goes for supply management too, especially in terms of figuring out the ways we could collectively start shifting our production towards actual social needs and desires. There was a lot that had to change from the way the system used to run—such as ensuring the quotas didn't become so commercialized that they would push people toward farming a certain way, or prevent new entrants into the sector altogether. No, as supply management expanded it was no longer possible to

capitalize on quota. There were other changes too. Checks and balances had to be in place to avoid consolidation and to keep farmer numbers up; specific programs were needed to allow new farmers in; and, of course, social and ecological considerations had to integrated into the structures guiding supply management decisions.

As I've suggested, it was also important that we were able to start integrating more types of food into the system. Moving the management direction away from a large-scale production model meant people started to make space for diversity, like small- and medium-sized farmers wanting to raise different varieties of chickens better suited to, for example, the Manitoba winters, rather than us all needing to raise the same breed. From there, we were able to see how the system could expand even further, including different types of crops like fruits and vegetables (such as these very tomatoes we're working with now!).

Overall, the marketing boards and supply management organizations were a key part of building our food sovereignty. They allowed us democratic control over our decisions surrounding production, local distribution, and trade. The structure of these institutions also meant that there was a network and channels for coordinating similar shifts that needed to happen elsewhere in the system, like ensuring the infrastructure was actually in place to allow for more localized food chains. Through these systems we ultimately had an orderly way to determine what we ought to produce. And I really think that the democratic processes that we had in place nicely complement, and maybe even supported, the kinds of governance that was happening at smaller, local levels—from worker-run food cooperatives to collective farms like this one.

When I think about all of these changes that have taken place, I have to laugh about certain things too... I don't know if it was that people didn't understand the consequences of all that corporate power, or that they saw it as inevitable, or what, but I remember when you used to speak about the changes that needed to happen to ensure justice in the food system, you'd often hear the same thing: "Oh, yes, that's terribly important, but consumers won't want to pay for that!"

Well, I'll tell you one thing, it's pretty obvious now that consumers didn't really have to pay for a lot of those things—like more sustainable farms, or fair pay and support for food producers—often it was these corporations' endless quest for profits that was really driving up the prices! What I mean is that, even with advances before the transition that were supposed to be improving farmer livelihoods, almost all the revenue was getting funneled off to all the other links of the supply chain. Take the organic food 'movement' for example. There was often so much corporate consolidation there that agribusiness profits would keep rising while farmers got the crumbs.

Fighting that control meant we could actually see those of us growing food compensated fairly without those buying the food paying much more at all. Between fighting that corporate power and ensuring full employment and livable wages to all, and those sorts of things I mentioned, there really wasn't this drastic shift in the real costs of food. I know some folks worried there might be such an

increase, but luckily there wasn't the big issue of sustainable, ethical food only being a luxury the relatively rich could afford. Honestly, considering that many people used to have to line up for hours for substandard food at what we called 'food banks,' I'd say consumers really couldn't afford to keep things the way they were! It's no wonder that the people who ran food banks were out there with the rest of us, pushing for the systemic changes that helped change the foodscape altogether.

Yeah, the finances really bogged people down now that I think of it. Because there was another response that you'd get a lot when you called for change: "But where will the money come from?"

And it's a good question really: How will you set up all these systems of support, and who will pay for them? Well, I think that back then people often thought that there was simply no money for farmers. That was never exactly true though, was it? There was actually a fair bit of financial support in agriculture; it's just that most of it was tailored around a strategy that wasn't sustainable or effective. There were these big farm credit and insurance programs for example, but that money was mostly going to the farms with these massive operations. Now, I'm not critiquing those farmers involved—they were doing what they could to keep food on the table for their families; it's just that it was pretty clear that if you wanted to deviate from this consolidated, mega industrial norm then you weren't going to get a cut of those financial supports. And I haven't even mentioned all the subsidies that went to fossil fuel companies, many of them massive corporations! So, really, part of finding the funds to better support everyone, and especially farmers, wasn't even about finding more money, it was about re-evaluating the money currently out there, and how it could be repurposed to serve a more sustainable, equal vision for the future—how to put it to better use.

There was, of course, a lot of other places the money came from other than existing programs and approaches that were directly and indirectly sustaining 'conventional' agriculture. I guess the biggest point that needs to be made is that taxes and government spending here were anything but fairly organized for ages. You probably hear people talk about that a lot, but it's really important to keep in mind. Heck, I remember back during the COVID-19 pandemic, when we saw the richest in Canada get even richer, while the poorest were largely left to fend for themselves. Sure, there was a lot of money splashed around in those days, but clearly our country's wealth was not being redistributed in a way that was going to counter the long-term trends of increasing inequality. The struggle to change those trends was so essential. We had to ensure those with the most, including ultra-rich families and giant corporations, were contributing fairly. You remember everyone talking about the one percent, don't you? Well, it took a lot of public pressure before the government finally started putting those 'one percenters' in check, including by tightening up rules around tax avoidance, and going after those who were evading taxes altogether. That definitely helped to open up more funds for expanded social programs, a shift in food-system infrastructure, and the like.

As well, in some ways disincentivizing certain behaviors helped free up money for transformation too, like for example through carbon taxes. Certain areas were starting to implement carbon pricing measures way back about forty years ago, but to fight climate change properly it was clear that we

didn't just need more programs like this, but more fairly organized ones. A big issue was figuring out how to ensure that those creating the most damage were being penalized, but that those doing their best, yet unintentionally contributing to the problem because they had no other options, weren't punished. In the case of us farmers, carbon taxes were of course necessary to push us away from fossil-fuel-heavy methods, but there was a lot of fear that those taxes would simply lead the input companies to offload that burden onto farmers through higher prices. This was certainly a valid fear, as those companies had the capability to do so because of their power in the market. So, in this case for example, it was key to ensure all the revenue collected from those carbon taxes in agriculture was being returned to farmers to help us improve our methods—including ecological farmers like me—and look after things like energy conservation in farm buildings, and to programs to provide more affordable renewable energy systems. After all, the truth is that we were the ones shouldering the burden. The 'polluter pays' approach just made sense. Getting the price on carbon high enough to have an impact was a whole other struggle.

I feel I should say that, while we do deserve a big pat on the back, we shouldn't get ahead of ourselves. We've started the process towards improving the way things run, but it's an ongoing process of course. I think we have made good progress, and I hope that our structures, like our governance committees of food processing co-ops and food policy councils, can help ensure nobody is falling through the cracks in the future. If anything, what I think has really been made clear in these last decades is that we have to maintain our sense of humility, and be willing to accept the challenges out there even in our most aspirational of plans, so we can keep this momentum going and keep the future as bright as it can be.

Speaking of 'bright'... That sun sure is heating it up in here. What do you say we step outside for some fresh air?

- For more on questions of training, extension services, and other retraining considerations, see section 2.2: Knowledge Development and 5.1: Labour Justice.
 - For more on fighting corporate power, see section 5.2: Social Economies.
 - On the general topic of a just transition, see Heffron and McCauley (2018) and Newell and Mulvaney (2013), and for related discussions specific to food and agriculture see, e.g., Carlisle et al. (2019), Dale (2020), and Rossman (2013).
- This vignette hopes to convey that, while Basic Income Guarantee or Guaranteed Livable Income reforms can be useful short-term solutions, they should not be seen as a 'silver bullet'. They are but one small, transitional step in building a more just society, and such programs must be implemented in a way that does not allow for other forms of social assistance and social support systems to be eroded.
 - For more on both the possibilities and potential drawbacks of a Basic Income Guarantee see, e.g., Hampel et al. (2017), Himelfarb and Hennessy (2016), Malmaeus, Alfredsson and Birnbaum (2020), Stevens and Simpson (2017), Macdonald (2016), and Ferdosi et al. (2020).
- This vignette highlights the ways in which single-desk marketing has the possibility to both challenge current corporate power while providing a strong democratic network for food grower solidarity and organization. This has been inspired by the possibilities of such a mechanism in action, as seen in the Canadian Wheat Board (prior to its dismantling by the Conservative government under Stephen Harper in 2012). Here, we imagine the possibility of such a body that embodies agroecological principles and justice in its mandate.
 - For information on single desk marketing, see Magnan (2011, 2016, 2019), Fulton (2006), Furtan (2005), and NFU (2014).
- The vignette further highlights possibilities for a well-managed food system transition via supply management. This draws on the voices in our food system that, while articulating the flaws in current supply-managed sectors, also stress that there is great potential for the system to function well if current values and goals are transformed to focus on support for small and agroecological producers, with social and ecological considerations integrated into management decisions.
 - For more information on supply management, as well as proposals on what these changes could look like more specifically, see Mount (2017), Union Paysanne (2014), NFU (2016, 2020), FarmStart/Metcalf Food Solutions (2010), and Gibson (2016).
- The vignette highlights that corporate control is a key cause for high consumer food prices under our current system. This is particularly referring to the fact that most of the price hikes seen in the last four decades have not been associated with the farmer link of our food system 'value chain,' but rather the highly concentrated, oligopolistic corporate actors on either side of them. This is to emphasize that by finding ways to challenge corporate control of our food systems, there are possibilities for 'win-win' situations wherein farm-gate prices can increase while consumer prices in fact decrease or remain stable.

- This assertion draws on the economic analyses of the NFU (2020), Qualman (2001), and Qualman and Tait (2004).
- For information on current agricultural supports, and how they can be reoriented to better serve food growers and our food system's transition, see CCPA (2020), and NFU (2020).
- For more information on tax reform and carbon taxes, see Qualman and the NFU (2019), NFU (2020), Osberg (2015), CCPA (2020), MacRae et al. (1990), and ActionAid (2019).
- This vignette briefly mentions the need to re-localize infrastructure to ensure more local food systems. For more on this, see CCPA (2020), NFU (2020), Gibson (2016), and FarmStart/Metcalf Food Solutions (2010).

5. ECONOMIC JUSTICE

What do equitable, sustainable economic strategies and cultural approaches to food look like?

5.1 Labour Justice

the situation.

You know, working in the greenhouse just now makes me think about the significant proportion of Ontario veggies that used to be grown by migrant workers, who at the time had no path to citizenship, and whose employment was tied to a single employer. I imagine folks in the city going to their grocery store in those days and feeling good about buying tomatoes, peppers, apples, and other produce labelled with the little trillium logo to let them know these things were grown within the province. I imagine people being comforted by the 'organic' label as well. Sure, I mean, we *should* be celebrating food that is grown locally and ecologically, but back then so few people were considering the labour conditions behind their food, and no labels were there to inform you of the realities of

It was the arduous, persistent fight of those demanding migrant worker justice that did a lot to pave the way for where we are today. At its very core, Canada's agricultural system had for decades been heavily reliant on the labour of migrants, which was really the labour of those forced out of their countries to come work here.

So-called 'free' trade agreements were often behind the economic desperation that compelled people to leave their homes in Mexico, Jamaica, Trinidad, and a few other countries, even though it meant being away from their families for eight or so months of the year. These so-called 'temporary' workers had been a mainstay of Canada's agricultural system for several decades, working for low wages so that our food could remain relatively cheap, and so agri-food businesses could profit handsomely.

For a long time, it was hard to see what we were doing wrong. Bringing in workers from outside seemed like the obvious way to tackle the apparent lack of farm labour within Canada. The Temporary Foreign Worker Program, and the Seasonal Agricultural Worker Program (SAWP), brought distant workers to Canada's farmlands, and this benefitted the farms that employed them tremendously since these folks were highly skilled—with most of them having extensive backgrounds in agricultural work. It was only through the sustained advocacy of migrant justice movements that people became aware of the terrible working conditions these farmworkers were often subjected to—everything from health risks such as exposure to pesticides, to slum-like housing on-farm and restrictions put on their ability to do simple things like go to town for



groceries. There's no doubt that some employers were fair and respectful, but the system made it so that there were virtually no options for migrant workers who wanted to see conditions improved when employers were putting them at risk.

Ultimately, the public awareness and pressure spread, and migrant workers were given spaces to voice their concerns and make apparent the differences between their experiences and those of their Canadian counterparts. It took time, but now migrant workers' voices help shape the reality of our food system. Instead of limiting and incriminating them for speaking out against injustices, migrant contributions to Canadian agriculture are respected and seen in high regard. What we came to realize is that we could not conceive of a sustainable and equitable food system without their labour, but also (and just as importantly) their ideas at the decision-making table. We needed to hear about their visions and expertise on everything from crop planning to long-distance trade. To do so, we had to rethink and rebuild our communities.

One massive change in this regard was when there was a successful campaign that had the government enable migrant workers to be eligible to apply for permanent residency (and, ultimately, citizenship). The 'status for all' movement really pushed this along, with a lot of Canadians identifying with the argument that, "if they're good enough to work here, they're good enough to stay here." Of course, it also helped that we fundamentally reformed our approaches to international trade, as I discussed earlier, which helped cut back on the 'push' factors that had been compelling migrant labourers to leave their homes. But the path to residency and citizenship was really key for the workers who *chose* to keep coming here to work. They could now, for one, have their families join them in Canada after a certain period, not to mention the fact that they could leave an employer who wasn't ensuring for safe, decent working conditions.

One related adaptation that went pretty well, in fact, had to do with the changing seasons. As you can imagine, given our winters, we don't require the same number of farmworkers here in Canada year-round—and thank goodness for that, I enjoy the bit of a break I get in the colder months! Fortunately though, our community food-system planning efforts led to opportunities for farmworkers to transition into food packaging and processing work in the off-season, which included dealing with the veggies, fruits and other foods we import more in the winter. It was through discussion that we realized that we didn't have a problem on our hands when it came to fluctuating needs for farm labour, but rather a promising opportunity. Through a bit of innovation, we've finally embraced our fluctuating seasons in agriculture.

None of this shift was easy, as you might have guessed, and it certainly wasn't only the issue of migrant farm labour that needed to be tackled. I mean, just think of all the workers throughout the food system: the folks in abattoirs and meat packing plants; the people doing food processing; warehouse workers and delivery drivers; grocery store cashiers; cooks, dishwashers, and other restaurant workers... These are just a few examples in fact, but these come to mind because these used to be some of the least glamorous jobs connected to food. And who was doing most of this

work that was often dirty, dangerous, and/or degrading? In a lot of places, it wasn't white people like me. No, indeed, people of colour were often disproportionately represented in some of the most challenging, and low-paid, jobs in the food system. Women, too, had more than their fair share of these jobs. But you can see why the struggle for food sovereignty and food justice went hand-in-hand with struggles for racial justice. I know I already spoke about land issues and colonialism, but it was really the attention that activists drew to the fact that we had a *white-supremacist* food system overall that really shook people up. It made people think twice about how morally pure they could be by 'shopping responsibly,' without contributing to more fundamental changes.

I won't remind you of how a lot of these issues have been pretty much resolved, including food insecurity (which was also hitting communities of colour the hardest), because I've already covered that when I talked about livable income programs and all of the systemic changes that made affordable living more of a priority than corporate profits. But I think you can see my point that so many of these struggles had to happen together—maybe not all simultaneously, but at least relationally.

It took a lot of effort, sometimes more direct, confrontational struggles, and some behind-the-scenes advocacy and education. Some people demonstrated that practical social and economic alternatives were possible and built up networks around those initiatives. Others were specifically pushing for food sovereignty, agroecology and related concepts, drawing links between local and global struggles. Maybe these movements looked fringe, or 'too radical' or impractical when they started—I know I got my fair share of odd looks from time to time—but slowly, as these networks strengthened, things began to change. Based on embracing diversity, and social, practical learning, these movements caused what it means to be a farmer to begin to change. What it means to be a consumer (though I prefer the term 'eater') has also changed, especially as more and more of these non-farmers began to grow at least some of their own food, including in big cities. Every person can bring something to the table (including literally!) and they often just need to know they have a seat at the table. Overall, there has definitely been a noticeable cultural shift since I was a young person because of all the food-related activism that has taken place.

My point is that changing the food system has taken a great deal of labour itself, from the work of engaging in advocacy and educational efforts, to the increase in people actually growing food. Throughout all of this, the issues of labour justice were fundamentally important, and they relate to many of the things I've already talked about. Think about the points I made earlier about how learning to grow food requires practical experience, mentorship, and on-the-ground experimentation. Since ecological growing required more people working on farms (in place of all the chemicals), folks had to be trained up, and they had to know what it meant to do labour on a farm.

I don't think I mentioned specifically this morning about the farm schools that popped up in response to this need for more labour in agriculture. Sometimes I get a little jealous I didn't get to

attend one of these when I was young: having a place to get your hands dirty, with all that knowledge from mentors, and not to mention all those connections the student farmers make with like-minded peers. I remember back when most people never set foot on a farm or saw how food was grown. That was when farming was not thought about as a viable career or offered to students as an option by their guidance counsellors. And now I have a niece going to college, studying to be an agricultural technician through one of those programs I mentioned earlier! I can only imagine what it would have been like if these programs existed when I was young... actually having the chance to learn the technical skills behind all this work.

- The call for migrant worker justice is echoed across multiple collaborating organizations in Canada, which include but are not limited to the Agriculture Workers' Alliance, Caregivers' Action Centre, Coalition for Migrant Workers' Rights Canada, Fuerza Puwersa Migrant Solidarity, Migrante Canada, Migrant Workers Alliance for Change, Radical Change for Migrants in Agriculture, La Vía Campesina, and Justicia for Migrant Workers.
 - o For reports on conditions and status of agricultural migrant work in Canada, see UFCW Canada & AWA (2020), Otero & Preibisch (2015), Hennebry (2012), Fairey et al. (2008), Encalada Grez (2009), and McLaughlin & Hennebry (2013).
 - o For discussions on the SAWP and other federal and provincial programs, see Binford (2019), Weiler & McLaughlin (2019), and Vosko (2019).
- For discussions on addressing seasonality and fluctuations in labour forces, see CAHRC (2020) and NFU (2020).
- Agroecology is mentioned throughout this report, notably Chapter 2: Ecological Resilience. This sketch refers to the movement's power as an organizing force for change through local to global networks. For information on agroecology networks, as well as informal growing networks, see Anderson, Maughan, and Pimbert (2018), Levkoe (2018), Laforge and Levkoe (2018), Levkoe et al. (2018), and Reynolds et al. (2020).
- For discussions on the importance of diversity and changing identities within agricultural communities, as well as the need to incentivize a new generation of farmers, see Laforge and Levkoe (2018), and Qualman et al. (2018).
- For more information on farm schools, and the importance of social, experiential learning in farming, see Laforge and McLachlan (2017), Laforge and Levkoe (2018), Anderson, Maughan, and Pimbert (2018), and Worden-Rogers et al. (2019).

- We also discuss Knowledge Development in Section 2.2, including extension services. We imagine extension services to not only include 'top down' approaches, although government supports are important, but also initiatives that allow various actors to horizontally disseminate knowledge produced by farmers. Farmers are thus seen more as partners than recipients of knowledge. This closely mirrors successful South and Central American government extension programs for agroecology.
- o For information on these systems, as well as government extension programs in agriculture, see Rosset et al (2011), Rivera and Sulaiman (2009), Laforge and McLachlan (2017), Drexler (2020), and Laforge, Anderson, and McLachlan (2016).

5.2 Social Economies

Okay, I have a treat for you. You get to hear from someone else for a change since it has just been me rambling on for most of the day! And, oh, there he is! ...Bill, here, is one of my earliest Community Supported Agriculture members—from back when I was still delivering CSA boxes all on my own (Imagine that!).

"Hi! You've got to excuse my tardiness, it's hard for me not to get turned around when driving out here. As many times as I've visited the farm, I always seem to make a wrong turn somewhere down the road! But boy, does being out here on a day like today ever remind me of that first summer I came down here. Do you remember ... That first summer you agreed to have me help out? Most people I know couldn't believe it—me working on a farm. And I knew where they were coming from; I couldn't believe it either! But let me tell you, that was one of the most challenging and yet best summers I've ever had. It was my second year subscribed to the program; I was absolutely enamoured with the concept of CSAs, and I gushed about how much I loved the food boxes. Lo and behold, I needed some summer work, these folks needed an extra hand on the farm, and the rest was history. I spent the summer picking strawberries, blueberries, zucchinis... weeding between the many rows of onions and spinach down on my hands and knees, and I learned why so many farmers were starting to use the CSA model."

I think you realized too, Bill, that it's a lot of hard work, eh?! And the black flies and deer flies can be a pain, right? ...But, yes, for many farms like ours, CSA programs provided the most predictable source of income for the year. It works because our members have to subscribe in advance, so we're at ease knowing that our produce is sold before it's even been grown. And as hesitant as I was to have non-farmers lending a hand on the farm—especially a real urbanite like Bill here—I've learned

to embrace the work-share model when it works for our members. The sharing and community-building that comes from these opportunities is so great. There are also some farmers in the area who also make use of farm-based agritourism initiatives to get city folks involved. For some time, we've really taken any chance we can to get urban dwellers to better understand food production, and this started far before this was reflected in the education system. CSAs and other community programs really have created a shift—at least in my lifetime.

"I cannot stress enough how much I learned that summer. I remember coming to understand how income gained from the CSA boxes is a huge help on the farm, especially in terms of covering additional labour and up-front supply costs. And, while I may not have been the best farm worker—"

You can say that again—ha!

"—these folks definitely appreciated the help, and I appreciated the opportunity to learn and expand my gratitude. Not only did the experience shift my understanding of food marketing, but it shifted the value I placed on the food that I was harvesting! It didn't take me too long to realize that it all comes down to value."

No kidding, Bill. I remember you telling me that the value you placed on food before was almost non-existent.

"That is so true. I would eat whatever I could afford, and that was pretty much that. I left locally grown, organic produce to those living a couple of neighbourhoods over with their weekly farmers market, which didn't seem worth the trouble to shop at."

I can understand that. It really took regional and municipal investments in public market infrastructure to truly make a difference in how markets were distributed and made accessible. Some real spending in the sector was needed to make sure that those operating and organizing markets were not volunteering their hours, but able to sustain themselves, placing real value on the work they were doing in terms of logistics, promotions, and so on. I know things changed for you though, which is clear from the fact that you've even served as a market manager for your community, doing that good work, like helping to build more connections with growers and producers.



"The truth is that widespread use and availability of these public markets—from neighbourhood farmers markets to larger, central infrastructures—has completely transformed the way people talk about and understand food, making us all food experts in our own way. These markets have given me a space to meet people, including neighbours and food entrepreneurs but also farmers themselves. But as I said, I wasn't quick to embrace farmers markets and locally grown food, either. Having grown up with huge supermarket chain store just around the corner, I always found it very convenient just to buy everything in one place and rush home. (It was always rush, rush, rush when it came to food.) But looking back, I don't think these corporate mega retailers had my well-being in mind at all... especially the way the stores were laid out with popular items like milk and eggs way at the back so that you had to make your way through all of the aisles of heavily processed foods. You may find this hard to believe, but it was only when I was 25-years-old that I first tried a peach that didn't come from a can—and I'm sure a lot of other city folks my age could give you similar examples."

Canned peaches are one thing, but it still baffles me to think of the extent to which people used to eat all that ultra-processed food, without a clue what they were really eating at all. But, as you're saying, with the way those supermarkets were laid out, and all the advertising dollars spent by the big food companies, it was pretty much impossible for folks not to be drawn toward that high-fat/high-salt/high-sugar 'food.' Community-controlled food processing units have really changed that for the better. Of course, we still get our breads, crackers and cereals—don't get me wrong. But, boy, do we have a better clue of where our food is coming from, and what we are even putting in our mouths!

"Tell me about it. I'm one to speak of canned peaches: my son has a stand with jams, jellies and preserves at the public market now. While I admire all the hard work that he puts into preserving those things, I sure am glad I can just be a consumer sometimes. And to think that people were worried that relying on locally produced food would limit what we have access to!"

Now, let me tell you, the issue of convenience was one of the hardest battles we had to fight when we first started with our CSA box program. I had people asking me: "Why would I want to pay for food that I have to pick up from a farm or drop-off point at a specific time? Why would I want to pay for a box that I have no choice in designing? Why would I want to do any of that when I could just go to the nearest grocery store and pick up a bunch of bananas whenever I wanted?" There were so many times that I had to explain that, although CSA programs are based on variability, that's not because I don't want folks to have bananas when they want them. At the end of the day, the point is that people are subscribing because they are actively choosing to eat more locally and seasonally! And members still have the opportunity to make some choices about what foods end up in their boxes, based on what we're harvesting at that time.

"In my summer boxes, for example, I tend to avoid some of the more bitter salad mixes, but I always make sure to get some delicious zucchini whenever I can. (You should try my zucchini bread sometime; it's absurd)."

Yeah, over time, the CSA concept really started to grow on people, and the model quickly expanded.

"It took a while for me to realize that the reasons people were telling me to subscribe to a CSA program were the same reasons why I now love going to the farmers market. I'm not only supporting a local farm, but I'm also building community, and getting a much better sense of how my food is grown, what's in season at a given time, and what challenges farmers face."

Well said, Bill. I always say that the priority taken to shorten food supply chains and promote locally grown and produced food was necessary to sustain both our urban and rural lives. We've built much more 'social' economies than we ever used to have. Food is more about relationships than transactions. And, of course, we've talked a lot about CSA programs and public markets, but those other institutions like various food cooperatives were really essential to making sure farmers could earn a living, while non-farmers could also enjoy diverse and healthy foods, without too much trouble or expense. Just think about all the services, institutions, and infrastructure used to only exist in short supply, if at all: small-scale abattoirs and butchers, local fresh-water fish cooperatives, community-run food processing plants, food hubs and community kitchens, food aggregators and delivery services... All of this used to be squeezed out by food infrastructure that was so centralized, and so corporate. It's amazing what can happen when you don't focus on profit for profit's sake, but rather investing in people and their needs, the land, and community.

"Yes, indeed. In my lifetime, I have felt a true shift, from being a consumer to an active member of a food community."

- Building up social economies has been shown to both strengthen urban-rural relations, while rebuilding connections between producers and consumers. See Fonte & Cucco (2017), Gillespie et al. (2008), Pimbert (2019), Smithers & Joseph (2009), Smithers et al. (2005), and Thomsen et al. (2014).
 - Giving agriculture a social function strengthens the foundation of social cooperation through alternative food network systems. See the works of Anderson et al. (2014), and Fonte & Cucco (2017).
- Networks of public markets, including farmers markets and independent stands, can be replicated, or 'scaled out', to promote localized food retail and social economies. Building up market infrastructure requires significant investment in the sector, but this would

complement initiatives such as CSA subscriptions, good food markets, community kitchens, and other components of the alternative food system.

- o For more information on farmers market clusters, CSAs and other components of the social economy of food initiatives see Anderson et al. (2014), Beckie et al. (2012), Connelly et al. (2011), and Wittman et al. (2012). Our thanks in particular to Marina Queirolo for her collaboration on the *Feeding the City: Pandemic and Beyond* project, and for helping to inspire some of our thinking around public markets that we have tried to effectively capture here (see Queirolo 2020).
- Agritourism initiatives, as mentioned above, serve as alternative income sources for
 producers and can strengthen rural economies. These initiatives, which can also fall under
 the category of "eco-tourism," can strengthen urban-rural relationships and connect
 consumers/eaters to sites of food production. For examples and further information, see
 Brune et al. (2020) and Pimbert (2019).
- It is important to emphasize here that strengthening alternative food networks and social economies will not independently limit mainstream food retail and processing, creating social change (Anderson et al., 2014; Zoll et al., 2017). Refer to Chapter 4 for further information on what an inclusive and less-corporate system of governance would look like in practice.
- The rise of ultra-processed foods and their subsequent effects on population health are driven by highly industrialized and corporate food processing and retail. Nevertheless, it is important to stress that this is not an issue inherent to food processing. For more information on alternative food processing that supports social economies and communities, see Berman (2011), Connelly et al. (2011), Queirolo (2020), Weaver et al. (2014), Winson (2014).
- For more information on corporate land-grabbing and corporate control on food retail, see Akram-Lodhi (2015), Anderson et al. (2019), Clapp & Fuchs (2009), Connelly et al. (2011), Coscieme et al. (2016), Holt-Gimenez (2019), and Smithers & Joseph (2009).
- Farmers across Canada have identified Community Supported Agriculture (CSA) programs
 as an agricultural marketing innovation. To learn more about the personal experience of
 farmers running CSA programs, including their experience with distribution logistics,
 infrastructure requirements, and changes to income, refer to Devlin & Davis (2016) and
 EFAO (2020).
 - Barriers to the viability of CSA programs exist in both rural and urban settings. For details on such barriers, including lack of public awareness and distributions logistics, see Evans & Miewald (2016) and Patel & MacRae (2012).
- The enhancement of alternative food initiatives and social economies in relation to CSA programming will require changes to government regulations on all levels, with regard to food regulation, zoning, and distribution logistics. See Beckie, Kennedy, & Wittman (2012), Devlin & Davis (2016), Evans & Miewald (2016), Patel & MacRae (2012), and Wittman, Beckie, & Hergesheimer (2012).

5.3 Diets and Relationships to Food

I'm glad you had a chance to meet Bill. I think he provides such an important perspective when it comes to thinking through all the changes that have happened in regard to the food system, and how we got here. One thing that he touched on that is worth exploring further is diets.

As he was talking at point, I was remembering how, when I was young (well before I started farming), I used to have strawberry shortcake on my birthday. Every February 15th, without fail, my mom would make me that delicious dessert, covered in strawberries. I believe her recipe would take about three cups of strawberries. The first year that I didn't have strawberry shortcake on my birthday was the same year that the provincial government introduced seasonal-consumption incentives targeted at the household level. Living in Southern Ontario, where strawberries don't reach their peak until June or July, my mom had to rely on imported strawberries from California. So, in my first attempt to participate in these seasonal-eating incentive programs, I had carrot cake for my birthday. The carrots came from a nearby farm that was involved in the pilot project. Until that year, I don't think I'd ever really thought so much about what was local and in-season at a given time. Now that I'm older (much older!), I still find solace in carrot cake. It reminds me of how far we've come in terms of seasonal eating—not to mention the fact that it's absolutely delicious, and that local strawberries are such a treat when they're available... way tastier than those big but bland things from California.

Of course, a widespread increase in seasonal eating took much more than incentive programs like that one. In the early days, the government started numerous initiatives to support seasonal diets across Ontario, ranging from food literacy workshops to CSA partnership programs. These initiatives were first launched in response to public pressure on the government to institutionalize seasonal eating... The food activists campaigning at the time knew that humanity's impact on the environment was increasing, and that seasonal eating could be a key component in minimizing our collective ecological footprint. Still, getting people to eat seasonally definitely wasn't the easiest undertaking, especially given that we were extremely accustomed to imported foods being readily available at every major grocery retailer. But ultimately, the government's initiatives worked, and local and seasonal consumption have made diets much healthier and much more sustainable.

A big way we were able to start changing up our food system in terms of diets was by getting the institutions involved. Of course, individuals' food habits are important, but having hospitals, universities, seniors' homes, childcare centres, and all those places jump on board was massive, simply because they need so much food! It seems absolutely ludicrous nowadays, but back in the day a lot of these institutions didn't actually put a lot of thought into the food they were serving; well, other than to try to cut costs as much as possible. So, they'd get these big corporate contracts that

would ensure they consistently had food at a cheap price, and which didn't take much work to prepare, but the quality of that food was quite questionable. People used to actually make jokes about the poor quality of hospital food—Can you imagine that? Nowadays, a nourishing diet is just so tied to our understandings of health, and not just *at* the hospital of course, but in order to prevent you from having to go there in the first place.

University and college students were actually pretty key in pushing for institutional change. They'd had it with the lousy food on their campuses, and started to really organize and pressure their schools to change, which helped open the door for other institutions to follow suit. There were a lot of details to sort out, of course, especially in terms of figuring out adaptive menu planning and ways to ensure quality standards, while still allowing small farms to get in on the action. As you might guess, it certainly takes a lot of logistical and administrative work nowadays, both in terms of preparing more food on-site, and coordinating among the higher number of growers and food vendors from which foods are sourced. Campus dining halls and the like were at one point used to having one big truckload pull up each week, but now there needed to be a certain degree of upstream aggregation of food and ingredients, in a way that required some shifts and innovations. Food hubs were actually helpful in resolving some of those challenges, so don't let me forget to tell you about those.

First though, I should note that public schools were an important piece of this transition too. You know, back when I was a kid, we didn't have any sort of school food program at all! If you were lucky your school might have had some sort of snack program, or maybe a breakfast program, but it was all scattered and uncoordinated. The presence of one of these programs usually depended on whether teachers, and sometimes parent volunteers, were able to organize it themselves. It's not that we didn't know the benefits of school meals, because we certainly did. Study after study showed the health and educational benefits; it just didn't seem that there was the political will to put in place a holistic, universal program. So, in a lot of ways when we created our national school food program we were starting from scratch. But this was a bit of a blessing actually, because right off the bat we could be considering how such a program could feature local, healthy, community-grown food. Plus, we also had examples of what had worked in other countries, and a lot of dedicated people who had been pushing for the program for years—folks who could help iron out the details.

In fact, having school partnerships (at the younger and post-secondary levels) helped a lot of growers get by back when we were still in the early stages of the just transition. It was hard for some to find markets for what they were growing at the time, but having a nationally coordinated school food program meant that long-term relationships were possible, providing more security for farmers. And schools at all levels were happy to have such diverse, ecologically grown food available for their students. You should have seen how overall educational performance improved among young people who had been dealing with food insecurity before these programs rolled out.

It didn't really dawn on me until I saw it in practice that these initiatives are about more than just getting good food into schools; they also strengthen our community connections. For example, the kids come out here a couple of times a year and I show them how everything is grown. It's always pretty special when one of the young kids who I've taken on a tour here decides to come help out around here when they're at the right age! Actually, I'm not sure if you've met Luiza, but she's working here through an internship program at her high school; and we actually met about a decade ago when she was here for a school tour. As I said, it's really nice to see that kind of thing happen. It has made us all a little closer.

Most schools don't need to source all their food externally anymore either... I imagine your school had a small farm, or maybe just a garden, eh? Yeah, I have to say I'm pretty jealous that I missed out on playing around in the soil and learning about plants when I was in school; I would've killed for the chance! Obviously, not every school is able to grow 100% of the food it needs, but I'm sure you would agree that learning about food, from how to grow it to how to prepare it, from a young age is so important. Heck, I remember when you used to meet fully grown adults who barely knew how to

growing food unless that was your full-time job. When I

cook, and of course almost none of us knew anything about

started hearing from my kids about what they

were eating in school through the universal food programs, I realized there's a cultural benefit there too.

They learned about diverse dishes because the program was attuned to the different culinary traditions of the students at the school, including dishes I had never prepared. I have to say, it all sounded a lot tastier than the peanut butter and jelly sandwiches I grew up on!



As I was starting to say, food hubs have helped a lot with the logistics of all this. Especially for institutions that had just been contracting out that whole side of their food operations for so long, they needed help with the procurement side of things since this was all beyond their field of expertise. So, having a sort of 'middleman' that could coordinate the logistics of acquiring the food from diverse places, and maintain relationships with local growers, was really useful. They're pretty ingenious actually, food hubs; they have the solid organization and structure to allow for things to happen efficiently at a certain scale, but also the flexibility and diversity that is key when you're working with local small-scale operations. And the cherry on top is that these hubs are firmly in the hands of the community, not behind closed doors where a CEO or a bureaucrat makes all the decisions.

They are also great for the average person and family too, because, while it's great to have public markets and CSA programs, at the end of the day a lot of people wanted other options. So, these initiatives allowed for a more coordinated way to connect with local producers, including at the neighbourhood-level. I love hearing about groups of neighbours that coordinate *en masse* with farmers and food vendors through food hubs. The hubs really become about more than just food or sustainability in a lot of ways. They're more community hubs, and they're organized to meet the specific needs of the community in question. For example, I've heard of some hubs that are growing their own food and raising chickens, whereas other hubs are there for the convenience that comes with connecting eaters and growers at a larger scale.

You know, food hubs to me demonstrate one of the biggest changes I've seen since I was your age, which is how we relate to our food. When I was young, food was just something you ate, and sure it had cultural importance, but you didn't know the story behind the food in your cupboards or fridge. A tomato was a tomato; milk was milk; a hamburger was a hamburger; and it was all pretty much the same because the industrial system couldn't handle diversity—not really. Now, today, milk isn't just milk; it's milk from the regional agroecological co-op, and even though it's part of the larger supply management system, I still know farms that are part of that co-op, like Silvia's, which is just two concession lines over from here. I guess what I'm trying to say is that our food is grounded now; it links to our identities and our community so strongly.

Now, I mentioned hamburgers just now, so let's talk about the elephant in the room: meat. I know that even today it's a prickly topic for some folks. Don't get me wrong here, I love a good slice of roast beef as much as the next person, but most of the meat that I had access to for the first forty years of my life was dirty. When I say dirty, I'm referring to the industrial livestock production practices that were poisoning society and nature. Slurry lagoons. Methane emissions. Antibiotics. Animal monocultures that played a big part in the emergence of zoonotic diseases. When I was in my twenties, I remember people becoming much more aware that the industrial livestock sector was one of the biggest polluters, both nationally and globally. The carbon footprint from the actual production of livestock was unbelievable, but the issue went way beyond what was directly involved with raising cows, pigs, and chickens. The amount of land that was used to feed these livestock populations, typically supporting industrial soy, corn, and other grain operations, was astounding. I often heard people arguing that we could solve world hunger if the land used to grow food for cattle and such was used instead to grow grains and other food for humans. Makes a lot of sense, doesn't it?

For a long while though, a fair number of people argued that the only way to fix the problems with industrial livestock production was to get people to stop eating meat completely. They thought that mitigating emissions would require all of us to go vegan—to switch to an entirely meatless diet. But at the end of the day, it's not exactly smart or realistic to ask *everyone* to permanently cut meat out of their diets. If I'm being totally honest with you, I think that trying to compel everyone to adhere to a universalized diet like that is pretty problematic. When you insert yourself into another person or

community's diet and tell them what you think is best for their health and well-being, you risk completely devaluing their cultural practices and dietary traditions. This was especially true for Indigenous communities within Canada. For many of them, hunting and trapping animal sources is not only foundational to cultural traditions, but plays an integral role in community-based nutrition and ecosystem management. Let's face it, animals play incredibly important roles on agroecological farms around the world too—from nutrient cycling to animal traction (that is, ploughing and such without the use of tractors). If we had, as a society, focused on critiquing those who choose to eat meat, instead of dedicating our time, energy, and resources to making sustainable livestock practices a priority, I don't think we would have ever got meat consumption down in Canada.

I think that the biggest factor that led to decreased meat consumption, and the consequent reduction in GHG emissions, had to do with the policies implemented by the government to penalize the big players behind intensive livestock operations. This was essentially the institutionalization of the polluter-pays principle that I brought up earlier. By implementing policies based on this principle, the big livestock industry associations and corporations were forced to pay for their emissions and localized pollution, and it suddenly stopped being so lucrative to raise animals in the way they'd been doing for decades. As the economists would say, 'externalities' were now being 'internalized', and so dirty meat production quickly declined.

There's no doubt, it was important for these efforts to be accompanied by educational initiatives, many of which were also government-supported, as well as programs to ramp up agroecological livestock operations. Helping farmers to shift from industrial to ecological animal-rearing practices was a big puzzle piece in terms of the just transition too. Yet, as industrial meat prices increased, and its availability declined, people went looking for what I call 'happy' meat. Sure enough, over time, folks started eating less meat altogether. After all, ecologically raised meat takes up more space on farms, and takes more time to 'finish'—to get reach slaughter weight—so people had to cut back, regardless of a lot of the price and other considerations.

Here on the farm, we tend to eat meat about once a week—sometimes less—and that's even though it's ecologically raised meat, some of which is our own. At the same time, we eat a bit more meat in the winter and early spring since we don't have the same abundance of veggies that we do at other times of the year. That comes back to seasonal eating, doesn't it? Well, before I start talking in circles, I think we'd better wrap this up... I don't want to start repeating myself!

- Many have pointed out the potential of institutions to catalyze food-system change due to their immense buying power. This vignette highlights the possibilities, as well as practical challenges, of institutional transitioning to more localized, sustainable food procurement.
 - This draws upon the work of Friedmann (2007), Stahlbrand (2016), Gray et al. (2017), Resque et al. (2019), Morgan and Morley (2002), and Classens and Sytsma (2020).
- The vignette notes the potential of university student pressure to influence institutional procurement changes. This is to highlight the growing movement across Canadian campuses for change, led by organizations such as Meal Exchange, and as articulated in the National Student Food Charter (2012).
- Here, we echo the call of an increasingly loud chorus calling for a national school food program. To learn more about why universal school food programs are important, and what they should or could look like in practice, see Hernandez et al. (2018), and the Coalition for Healthy School Food (n.d.).
 - O Moreover, we highlight how a national food program can be tied to a public procurement program that most helps local, sustainable farmers as well as provides quality local food for schools. This possibility particularly draws inspiration from Brazil's national school program, as examined by Wittman and Blesh (2017), Resque et al. (2019), and Melo, Sa and Filho (2016).
- In describing food in schools, this report envisions a reality similar to the vision of the Farm-to-School movement: locally sourced food and food grown on-site at schools, along with food literacy teaching, and the fostering of community connections. For more on both the feasibility of this vision, as well as the success of current farm-to-school programs, see Hoyer and Do (2020), Classens and Sytsma (2020), Powell and Wittman (2018), Bagdonis, Hinrichs and Schafft (2009), Hernandez (2018), and Nowatschin, Landman and Nelson (2017).
- Food hubs are highlighted here as a possible factor that can facilitate more local food systems, especially linking public procurement schemes and households to local farmers. The vignette aims to highlight the variety of forms and purposes food hubs can take on, from aiding in public procurement to facilitating communities in shifting to local eating. We see the strength and unifying thread of food hubs to be their community-driven nature, which allows social improvement beyond simply food concerns, and their capacity to be a 'gobetween' for different actors facilitating localized food system transition.
 - o This draws on the work of Franklin, Newton and McEntee (2011), Morley, Morgan and Morgan (2008), Knezevic, Landman and Blay-Palmer (2013), Ballamingie and Walker (2013), Connelly, Markey and Roseland (2011), Berti and Mulligan (2016), Fischer, Pirog and Hamm (2015), and Stroink and Nelson (2013).

- In this section, we have also attempted to highlight that, beyond narrowly considered ecological benefits, localized eating also has social benefits, particularly in terms of strengthened community ties and a sense of belonging, both to the food we eat, and the communities to which we are connected through it. This draws on the observations of Knezevic, Landman, and Blay-Palmer (2013), and Franklin, Newton and McEntee (2011).
 - O Moreover, we suggest the benefits of the diversity of taste and flavour, which localized farming and food arguably facilitates, rather than the current regime of highly homogenized products. This draws from the writings of Union Paysanne (2014), and Knezevic, Landman and Blay-Palmer (2013).
- On the question of meat, and the burden of industrially raised livestock's 'ecological hoofprint,' see Weis (2013), as well as Gerber et al. (2013). On the role that animals can play in agroecological farming systems, see Altieri and Nicholls (2012), Gliessman (2015: Ch. 19), Schwartz (2013), Teague et al. (2016), and Toensmeier (2016).

6. CONCLUSION

Well, I sure am glad that you were able to make it back out to the farm while the growing season is underway. It sure is different here when everything is humming along at full capacity compared to the winter months. And thanks for your interest in hearing my reflections on the changes that have come about in agriculture and the food system over the years. Really, it was nice to think through just how far we've come, and how we got here. I can't say I normally take the time to mull over all the developments that have happened over the last few decades. It reminds me though of both the incredible amount of effort it has taken to get us to this point, as well as all of the work that still needs to be done to keep us on track and keep improving things. It's a process!

Thinking through all of this has also really highlighted for me just how interconnected everything is in our food system. I suppose that has been the strength of having the concepts of food sovereignty and agroecology underpinning our motivation for change. Both are just such holistic ideas and help to tie together all of the complexities.

That said, I think you'll have to come back another day and hear from some of my friends and neighbours if you want an even more complete picture of food system change. I've been able to share what I can from the perspective of a white woman who began farming well before all of the significant changes took place in agriculture and beyond. But I've been relatively privileged through all of this. I've only touched on some of the things that I don't have personal experiences with... like the struggle of Indigenous peoples to regain control of their food, land, and governance systems. Same for the struggles of Black folks and people of colour in terms of labour justice and efforts to overcome systemic racism linked to food and farming.

So, you just let me know if you'd like to come again, okay? We could also try to have people around to talk to you about their experiences with other parts of Canada's food system too. I have a friend, Darlene, for example, who now just lives about 20 minutes from here, but who used to be involved with the fishing industry in Nova Scotia. I haven't said much at all about fisheries, have I? And I'm sure there are all kinds of details you could hear from people who experienced food-system changes out west, or up north, for that matter. The geography and politics of this country are just so vast.

Heck, I'm sure I could share plenty more details about my experiences too, you know? ...Like some of the issues around gender and what it meant being a woman farmer through all of this. Sometimes I get so used to the way things are now though, that I forget that patriarchy used to be so embedded in our systems, and so in-your-face (at least, if you were dealing with all of the B.S. that women used to experience regularly—from sexual harassment in the workplace to the ever-present 'glass ceiling' that used to prevent many of us from holding positions of power).

I tell you what... You just come up with a long list of questions that you'd like to have answered, and the next time you drop by we'll be ready to talk your ear off some more. Does that sound alright? ... Perfect. You know you're welcome to visit any time.

- To emphasize how much it seems that people are presently contemplating future prospects
 for a more just, ecological food system, the International Panel of Experts on Sustainable
 Food Systems (IPES-Food) released a report in collaboration with the ETC Group just prior
 to us completing this document.
 - The IPES-Food group's report is entitled 'A Long Food Movement? Transforming Food Systems by 2045,' and it imagines both the prospects for a (fairly dystopian) business-as-usual scenario, as well as the possible food system we may see in the coming decades if food movement organizing is successful (see IPES-Food & ETC Group 2021).
 - Again, this also complements the NFU's (2021) 'Imagine If...' report, released in March 2021. We highly recommend both reports.
- To reiterate the invitation that we offered in our Foreword, to provide specific or general feedback on this report, please visit https://forms.gle/XFQJp4QpCEbFiBMp7 or email us at feedcity2020@gmail.com. We will be very grateful for any constructive critiques and other comments that we receive.

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